



Postgraduate Institute of Science University of Peradeniya



**ANNUAL REPORT
2022**

ANNUAL REPORT
&
ACCOUNTS
OF
PGIS
2022

Vision

To be an internationally renowned centre of excellence for Postgraduate Training, Innovative Research & Development in Sciences

Mission

To contribute to the development of a globally recognized society with social sensitivity, ethical rectitude and economic prosperity to promote innovative research and outreach activities in an intellectually stimulating and a conducive academic environment

DIRECTOR'S REPORT

MESSAGE FROM THE DIRECTOR



The Postgraduate Institute of Science (PGIS) has successfully expanded over time to offer several M.Sc., M.Phil., and PhD programs in addition to postgraduate diploma and certificate courses under 11 Boards of Study, with the participation of a large number of postgraduate students from various Universities in Sri Lanka and abroad. The main objective of the Postgraduate Institute of Science is to promote and advance scientific research, provide postgraduate instruction, training, and research in various scientific specialties, and enhance the graduate academic experience.

Being situated on the University of Peradeniya premises, it provides the ideal environment for academic pursuits, particularly in interdisciplinary disciplines. Academic staff members with postgraduate degrees from some of the best universities of the world are available to provide services to PGIS. The members of the teaching panels are selected from other universities and institutes as well as from nine faculties at the University of Peradeniya. The excellent research facilities available at the Faculty of Science and other Faculties of the University of Peradeniya and Research Institutions in the country are used to provide research training to students. PGIS conducts in-service training programmes, short courses, outreach programmes and workshops. The Institute also offers consultancy services to local industry and public and private sector institutions. The PGIS indeed plays a unique and leading role among the other Institutes of Sri Lanka. The Institute continues to help the advancement of science and society by concentrating on solutions to both domestic and global problems. The long-term objective of the PGIS is to establish itself as a premier centre for science and technology in South Asia. By facilitating partnerships and resources with professional bodies, industries, research institutions, governmental agencies, other universities, and institutions from both the public and private sectors in Sri Lanka, the PGIS addresses the growing need for, manpower in the "Science and Technology" industry. The high caliber of postgraduate degree programs has drawn a large number of postgraduate students over the years from both domestically and abroad. Over this period, student enrollment has increased at a greater rate at PGIS. A large number of postgraduates are providing their expertise to national development while being associated with both the private and public sectors. The PGIS is currently Sri Lanka's leading postgraduate degree-awarding Institute. Over the past 26 years, the PGIS has awarded over 3674 postgraduate degrees (PhD, M.Phil., M.Sc., and Diploma) in various scientific disciplines, and over 18,000 professionals have attended workshops, conferences, short-term training courses, and other

programmes. Due to the pandemic situation and the critical financial situation in the country, most of the prescheduled workshops could not be conducted, but adhering to the COVID-19 prevention guidelines on the virtual platform and in hybrid mode, several national and international conferences and workshops were conducted in 2022. PGIS attracted many students from abroad and was able to prepare curricula for several masters and M.Sc. programmes. By establishing sophisticated analytical instruments and awarding research grants with the acquired funds, it was also able to improve the PGIS research culture.

Activities for the strategic plan for the next 3 years have been carried out in accordance with the mission and vision of PGIS. We are working to enhance postgraduate education by strengthening connections and relationships with other relevant Sri Lankan institutions and increasing the global opportunities accessible to our students. Additionally, we desire for our students to gain from the active learning processes of applying, reflecting, sharing, and observing both inside and outside the classroom. The following are the broad objectives for the next three years : (i) create a strong and sustainable learning environment; (ii) engage in internationally recognized and impactful research activities; (iii) have active research groups collaborating with other institutes; (iv) achieve diversity goals for both staff and students; (v) stay in touch with alumni to encourage future collaborations; (vi) foster stronger partnerships with industry and other key stakeholder groups; (vii) develop demanding future postgraduate programmes; (viii) increase student intake and (vii) promote a respectful and broad workforce. Initial steps for introducing a sophisticated Management Information System (MIS) have been implemented for efficient administration and smooth functioning of academic programmes and other related activities in the recent past. PGIS expects to use the MIS system in 2023.

Prof. H. M. T.G.A. Pitawala

Director/PGIS

TABLE OF CONTENTS

1. BRIEF INTRODUCTION	7
2. ORGANIZATIONAL STRUCTURE	8
3. BOARD OF MANAGEMENT	9
4. COORDINATING COMMITTEE	10
5. ACHIEVEMENTS	13
6. CONFERENCES & SHORT-TERM PROGRAMMES	56
7. DEVELOPMENT OF HUMAN & PHYSICAL RESOURCES	60
8. ADMINISTRATIVE AND FINANCIAL ACHIEVEMENT	65
9. FAILURES & JUSTIFICATIONS	71
10. FUTURE PLANS OF PGIS	71
11. SUSTAINABLE DEVELOPMENT	72
12. INSTITUTIONAL GOALS AND OBJECTIVES	
13. FINANCIAL STATEMENT - 2022	
14. REPORT OF THE AUDITOR GENERAL	
15. REPLIES TO AUDIT REPORT	
16. REPORT OF THE AUDIT & MANAGEMENT COMMITTEE – PGIS - 2022	

1. BRIEF INTRODUCTION



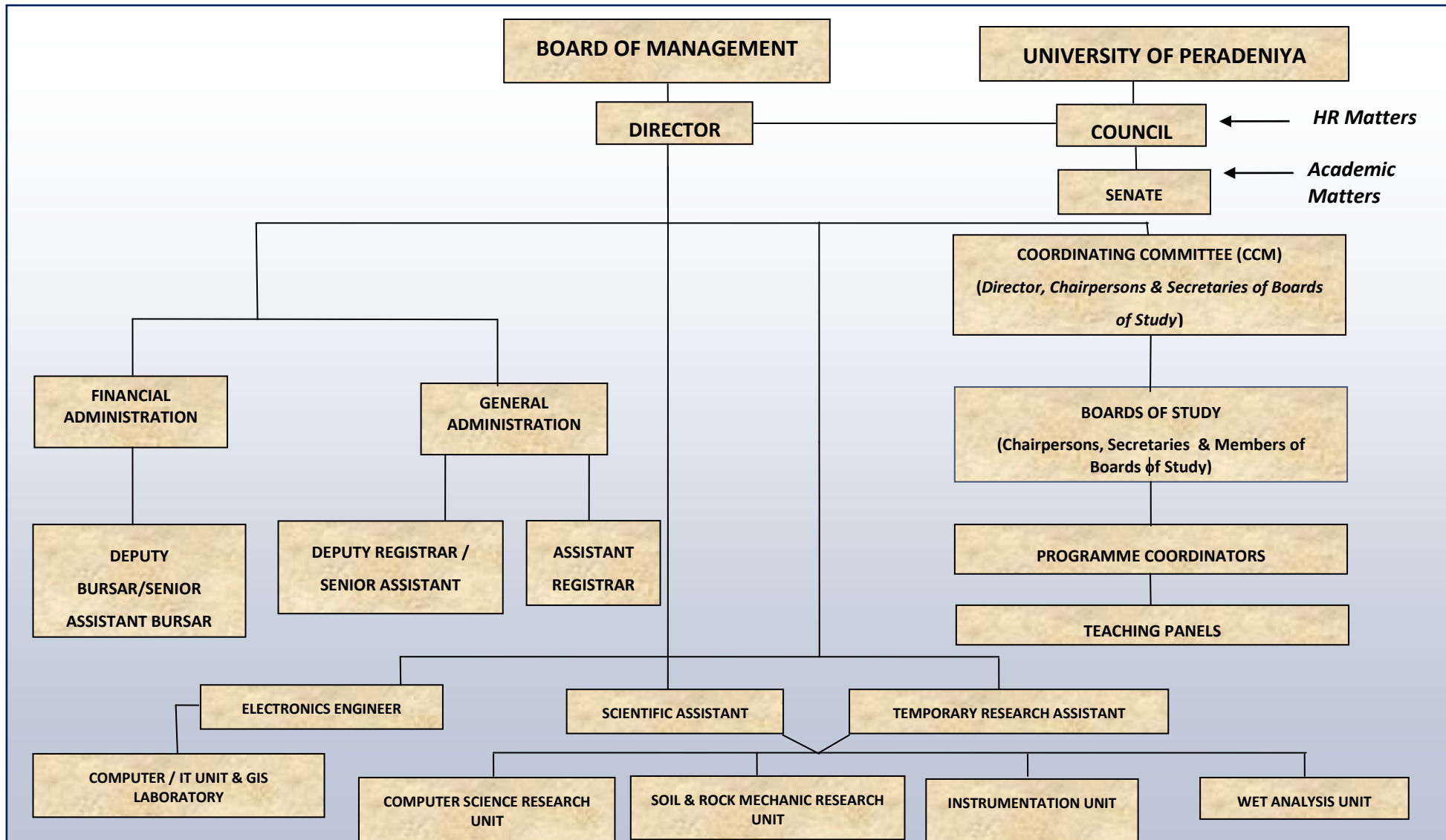
The Postgraduate Institute of Science (PGIS) is a National Institute attached to the University of Peradeniya, Sri Lanka. It was established in 1996 by an ordinance from the Ministry of Higher Education and enables university graduates to gain knowledge and competence in the science disciplines of their choice through postgraduate studies. Currently, about 2713 students are

enrolled at the PGIS. The principal objective of the Postgraduate Institute of Science is to promote and provide postgraduate instruction, training, and research in various scientific specialties, thus enhancing the graduate academic experience.

To fulfill the demand in the public and private sectors of the country and other nations, the PGIS offers Masters, M.Sc., M.Phil., and Ph.D. degree programmes in addition to postgraduate diploma and certificate courses. The M.Sc., M.Phil. and Ph.D. programmes require the completion of a research project, while the other programmes require the completion of coursework. Provisions are available to conduct research work at either in the University System or at a relevant research institution in Sri Lanka. Under sandwich programs, there are options for conducting research both nationally and abroad at a relevant institution. On a number of research projects, the PGIS collaborates with the Faculty of Science, the University of Peradeniya, and other national institutions. Local and international graduates from various science disciplines constitute the student population. In addition, structured and tailor-made training programmes, such as short courses and workshops, are also conducted frequently. The PGIS offers a variety of popular short-term programs in accordance with the demand and requirements of the nation, and they are conducted through 11 Boards of Study, covering all science disciplines. The institute also offers consultancy services to local industry and public/private sector institutions. The annual PGIS Research Congress and other research conferences and symposia are organized by the Institute with the academic collaboration of participants from abroad and locally.

In collaboration with other top universities around the world, the PGIS seeks to become a premier platform for education and research that advances human knowledge. It also provides training programs for scientists and other professionals with high levels of responsibility and specialization. For the past 26 years, PGIS has focused on and continuously pursued internationalization due to the capacity of well-trained staff to provide effective services to its stakeholders. The goal of our Institute is to be one of the most well-known postgraduate Institutes in Asia.

2. ORGANIZATIONAL STRUCTURE



3. BOARD OF MANAGEMENT

3.1 Ex-Official Members

1. Prof. HMTGA Pitawala, Director, Postgraduate Institute of Science (PGIS), University of Peradeniya
2. Prof. U Sonnadara, Dean, Faculty of Science, University of Colombo
3. Mr. GMRD Aponso, Director (Planning), Ministry of Higher Education, 18, Ward Place, Colombo 7
4. Mr. DMBG Diyagama, Deputy Director, Department of National Planning, Ministry of Finance, Colombo
5. Mrs. KAP Perera, Director, Sri Lanka Planetarium, State Ministry of Skills Development, Vocational Education Research & Innovation
6. Dr. S Sudasinghe, Acting Director General, National Science Foundation, 47/5 Maitland Place, Colombo 07
7. Dr. SW Gamage, Secretary/Chamber of Commerce and Industry of Central Province, No.5, Mulgampala Road, Kandy
8. Prof. RGSC Rajapakse, Dean/Faculty of Science, University of Peradeniya
9. Dr. P Samaraweera, Chairman/BoS in Biochemistry & Molecular Biology, Department of Molecular Biology & Biotechnology
10. Prof. MMAN Navaratne, Chairperson/BoS in Biomedical Sciences, Department of Chemistry
11. Prof. MYU Ganehenage, Chairperson/BoS in Chemical Sciences, Department of Chemistry
12. Prof. NWB Balasooriya, Chairman/BoS in Earth Sciences, Department of Geology
13. Prof. GWAR Fernando, Chairman/BoS in Environmental Science, The Open University of Sri Lanka
14. Prof. AAI Perera, Chairman/BoS in Mathematics, Department of Mathematics
15. Dr. JP Liyanage, Chairman/BoS in Physics, Department of Physics
16. Prof. DMD Yakandawala, Chairperson/BoS in Plant Sciences, Department of Botany
17. Prof. HMSP Madawala, Chairperson/BoS in Science Education, Department of Botany
18. Prof. SR Kodituwakku, Chairman/BoS in Statistics & Computer Science, Dept of Statistics and Computer Science
19. Prof. WAIP Karunarathne, Chairperson/BoS in Zoological Sciences, Department of Zoology

3.2. UGC Nominees

20. Prof. Nimal Gunathilake, 179/1A, Eriyagama, Peradeniya
21. Prof. Prasad Jayaweera, Department of Computer Science, Faculty of Applied Sciences, University of Sri Jayawardenapura

4. COORDINATING COMMITTEE

Members of the Coordinating Committee of the PGIS

- Prof. HMTGA Pitawala, Director/PGIS
- Prof. RGSC Rajapakse, Dean, Faculty of Science
- Senior Assistant Librarian, Science Library
- Chairpersons and Secretaries

Invitees

- Programme Coordinators of the M.Sc. Programmes (as per the table below)

No.	Board of Study	Chairperson	Secretary	M.Sc. Programme	Programme Coordinators Co-coordinator
1	Board of Study in Biotechnology and Molecular Biology	Dr. P Samaraweera	Dr. MPCS Dhanapala	Clinical Biochemistry	Prof. HKI Perera
					Dr. WIT Fernando
				Experimental Biotechnology	Prof. JGS Ranasinghe
				Molecular Biology & Biotechnology	Dr. MPCS Dhanapala
2	Board of Study in Biomedical Sciences	Prof. MMAN Navaratne	Dr. WRP Wijesinghe	Biomedical Sciences	Dr. WRP Wijesinghe
3	Board of Study in Chemical Sciences	Prof. MYU Ganehenage	Dr. JMS Jayasinghe	Analytical Chemistry	Prof. MMAN Navarathne
					Dr. JATC Ariyaratne
				Industrial Chemistry	Dr. C Gunathilake
					Dr. MB Wijesinghe
				Nanoscience & Nanotechnology	Prof. RMG Rajapakse
	Dr. WASS Gunathilake				
	Dr. HCS Perera				
4	Board of Study in Environmental Science	Prof. GWAR Fernando	Dr. GAN Suranjith	Environmental Science	Prof. GWAR Fernando
					Dr. GAN Suranjith
				Biodiversity Ecotourism & Environmental Management	Ms. CS Munasinghe

5	Board of Study in Earth Sciences	Prof. NWB Balasooriya	Dr. PL Dharmapriya	Disaster Management	Dr. B Athurupana
				GIS and Remote Sensing	Dr. AAJK Gunatilake
				Gemology & Industrial Minerals	Prof. SW Nawaratne
					Dr. PL Dharmapriya
				Engineering Geology & Hydrogeology	Dr. AAJK Gunatilake
					Dr. B Athurupana
Water Resources Management	Prof. HA Dharmagunawardhana				
	Prof. MP Perera				
6	Board of Study in Mathematics	Prof. AAI Perera	Dr. THKR De Silva	Industrial Mathematics	Dr. PGRS Ranasinghe
7	Board of Study in Physics	Dr. JP Liyanage	Dr. T Ranawaka	Physics of Materials	Dr. BMK Pemasiri
				Medical Physics	Dr. NL Dissanayake
					Mr. TRCK Wijayarathna
8	Board of Study in Plant Sciences	Prof. DMD Yakandawala	Prof. SCK Rubasinghe	Medical Microbiology	Prof. F Noordeen
					Dr. S Athukorala
				Pharmaceutical Botany	Prof. GAD Perera
					Dr. HACK Ariyaratne
					Dr. BS Nanayakkara
				Biodiversity Conservation Management	Dr. AMTA Gunaratne
					Prof. KMGJ Jayasuriya
				Postharvest Technology of Fruits & Vegetables	Prof. WAM Daundasekara
Prof. Jilushi Damunupola					

9	Board of Study Science Education	Prof. HMSP Madawala	Prof. WAP de Silva	Overall Programme Coordinators	Dr. WD Chandrasena Prof. SY Ekanayake
				Science Education (Biological Education)	Dr. S Athukorala
				Science Education (Chemistry Education)	Dr. AP Welegedara
				Science Education (Mathematics Education)	Dr. AK Amarasinghe
					Dr. GWRMR Palamakumbura
				Science Education (Physics Education)	Dr. TP Ranawaka
Diploma in Science Education	Dr. ARGAM Abeykoon Menike				
10	Board of Study in Statistics & Computer Science	Prof. SR Kodituwakku	Dr. SP Abeysundara	Applied Statistics	Dr. SP Abeysundara
					Prof. YPRD Yapa
				Computer Science	Dr. RD Nawarathne
				Data Science	Dr. HTK Abeysundara
					Dr. PMPC Gunatilake
				Information Technology	Dr. UAJ Pinidiyaarchchi
Dr. DMMB Dehideniya					
11	Board of Study in Zoological Sciences	Prof. WAIP Karunaratne	Dr. Piyumali K Perera	Applied Epidemiology	Dr. S Kumburegarma
					Dr. C Mendis
				Fish & Wildlife Management	Dr. LG Lokugalappaththi
					Dr. R Vandercone

5. ACHIEVEMENTS

5.1 Awards and Research Publications

85 Research publications have resulted from the work carried out by academics/scientists affiliated to PGIS, out of which 65 publications have appeared in international journals including e-journals and in local journals. In addition, many abstracts have been published based on the presentations made by the scientists at conferences.

Several scientists have won awards for outstanding research, including National Science Foundation awards and National Research Council awards.

The initial arrangements to issue International Journal of Environmental Issues (IJEI) had commenced and the launching ceremony had held in January 2023. The arrangements had made to offer 10 PGIS research grants and to provide financial assistance for 2 URC research grants

5.1.1 Research Publications by PGIS affiliated members

1. Madawala, S., 2022. Science Education in Sri Lanka: Current Status and Challenges Ahead.
2. Abey Siri, H.A.S.N., Dilrukshi, K.T., Perera, I.C. and Pathmalal, M.M., 2022. CYTOTOXICITY OF CYLINDROSPERMOPSIN, MICROCYSTIN-LR, MICROCYSTIN-RR AND NODULARIN ON RENAL CELLS.
3. Gunarathna, W.A., Nasir, H.M. and Daundasekara, W.B., 2022. Quasi-compact fourth-order approximations for fractional derivatives and applications. *Ceylon Journal of Science*, 51(5).
4. Saseevan, S., Rajapakse, S. and Magana-Arachchi, D.N., 2022. RNA extraction from urine sediment: A cost-effective protocol for gene expression analysis in renal pathology. *Ceylon Journal of Science*, 51(5).
5. Tharshan, R. and Wijekoon, P., 2022. Performance of various sub-models of a new Lindley family of distributions: A comparative study based on the simulated data sets. *Ceylon Journal of Science*, 51(2), pp.111-120.
6. Thilakarathne, S.S., Wijayawardhane, N., Perera, P.K., Mallawa, C. and Rajakaruna, R.S., 2023. Filariasis in dogs brought to the Veterinary Teaching Hospital, University of Peradeniya, Sri Lanka. *Parasitology Research*, 122(2), pp.461-469.

7. Defence, G.S.J.K. and Ranatunga, R.J.K.U., In silico INVESTIGATION OF COMPLEXATION BEHAVIOUR OF CYCLODEXTRINS.
8. Gunawardana, S.M., 2022, January. About the lab. In *Proceedings of the 26th International Forestry and Environment Symposium*.
9. Parakatawella, S., Gogoi, D., Deka, P., Xu, Y., Sandaruwan, C., Jayasundera, A.C., Arhangelskis, M., Thakuria, R. and Adassooriya, N.M., 2022. Mechanochemical Synthesis of Polymorphic Urea· Adipic Acid Cocrystal as a Sustained-Release Nitrogen Source. *ChemSusChem*, 15(3), p.e202102445.
10. Thennakoon, C.A., Rajapakshe, R.D., Malikaramage, A.U. and Gamini Rajapakse, R.M., 2022. Factors Affecting the Hydrophobic Property of Stearic Acid Self-Assembled on the TiO₂ Substrate. *ACS omega*.
11. Shihab, S.R.M., Iqbal, B.N., Arunasalam, S. and Noordeen, F., 2022. Quality and quantity of RNA extracts and the correlation between gross RNA load and the Ct values in a real time RT-PCR used for the detection of SARS CoV-2. *Sri Lankan Journal of Infectious Diseases*, 12.
12. Karunaratne, A.M. and Nanayakkara, B.S., 2022. Providing a sound theoretical base and appropriate skills at early ages through nutrition education to improve food consumption patterns in Sri Lanka. *Ceylon Journal of Science*, 51(1), pp.3-19.
13. Abeykoon, Y.K., Lakmal, A.A.I., Munasinghe, M.A.H.M., Dassanayake, B.S. and Gunawardhana, N., 2022. Chemical Bath Deposited ZnO Nanowires for H₂ Gas Sensors: Optimisation of Deposition Time.
14. Vishwanath, A. and Jayasundera, A.C.A., 2022. Leaching of Trace Elements, Heavy Metals and Antimony from Polyethylene Terephthalate Bottled Drinking Water in Sri Lanka.
15. Katz, M., 2022. Building field trips to small scale mines into university undergraduate degrees: The case of gemstone extraction in Sri Lanka. *The Extractive Industries and Society*, 11, p.101131.
16. Welarathna, S., Velautham, S., Wanninayake, M. and Sarasanandarajah, S., 2022. Evaluation of patient doses for routine digital radiography procedures toward establishing an institutional diagnostic reference levels: A case study in Sri Lanka. *Journal of Applied Clinical Medical Physics*, p.e13852.
17. Bandara, C., Herath, S.B., Gopallawa, B. and Attanayake, A., 2022. Impatiens jacobdevlasi (Balsaminaceae), a new species from Knuckles massif of Sri Lanka. *Phytotaxa*, 543(3), pp.181-187.
18. Jayakantha, D.R., Bandara, H.M.N., Gunawardana, N.M., Rajapakse, R.J., Thilakarathne, D.S., Comini, E., Gunawardhana, N. and Karunarathne, S.M.M.L., 2022. Design and construction of a

- low cost air purifier for killing harmful airborne microorganisms using a combination of a strong multi-directional electric-field and an ultra violet light. *HardwareX*, 11, p.e00279.
19. Sudasinghe, H., Ranasinghe, T., Wijesooriya, K., Pethiyagoda, R., Rüber, L. and Meegaskumbura, M., 2022. Molecular phylogeny and phylogeography of ricefishes (Teleostei: Adrianichthyidae: Oryzias) in Sri Lanka. *Ecology and evolution*, 12(6), p.e9043.
 20. Hettiarachchi, S.S., Kumari, W.M.T. and Amarakoon, R., 2023. Extraction of Xyloglucan Polymer from Tamarind (*Tamarindus indica*) Seeds. *European Journal of Advanced Chemistry Research*, 4(1), pp.15-21.
 21. Gamage, K.A. and Gunawardhana, N. eds., 2022. *The Wiley handbook of sustainability in higher education learning and teaching*. John Wiley & Sons.
 22. Wickramasinghe, H.M.N., Wijayarathne, K. and Bandara, T.M.W.J., 2022. Preliminary optimization of low-cost quasi solid-state dye sensitized solar cells with multilayer photoanodes, and graphite-based counter electrodes. *Sri Lankan Journal of Physics*, 23(1), p.36.
 23. Rathnayake, R.M.H.W. and Ranasinghe, J.G.S., Comparative evaluation of the nutritional compositions of different Sri Lankan rice varieties on glycaemic regulation.
 24. Athukorala, S.S., Liyanage, C.J. and Jayasundera, A.C., 2022. Hydroxyapatite incorporated bacterial cellulose hydrogels as a cost-effective 3D cell culture platform. *Soft Materials*, 20(2), pp.183-192.
 25. Subasinghe, M.M., Kankanamge, K.K.J.B., Navarathne, A. and Jayakody, S., 2022. Potential health risk assessment of selected metal concentrations of Indian backwater oyster, (*Crassostrea madrasensis*) from Puttalam lagoon, Sri Lanka.
 26. Dahanayake, M.H., Athukorala, S.S. and Jayasundera, A.C.A., 2022. Recent breakthroughs in nanostructured antiviral coating and filtration materials: a brief review. *RSC advances*, 12(26), pp.16369-16385.
 27. Tharshan, R. and Wijekoon, P., 2022. A new mixed Poisson distribution for over-dispersed count data: Theory and applications. *Reliability: Theory & Applications*, 17(1 (67)), pp.33-51.
 28. Tharshan, R. and Wijekoon, P., 2022. Ridge estimator in a mixed Poisson regression model. *Communications in Statistics-Simulation and Computation*, pp.1-18.
 29. Hettigedara, N.M., 2022. Sustainable Development Goals and the Role of Chemists and Chemical Sciences.
 30. Hettigedara, N.M., 2022. Sustainable Development Goals and the Role of Chemists and Chemical Sciences.
 31. Lakmal, A.A.I., Kumarasinghe, R.K.K.G.R.G., Seneviratne, V.A., Thanihachelvan, M. and Dassanayake, B.S., 2022. Effect of CdS Layer Thickness on Thermally Evaporated-CdS/CdTe

- Solar Cell Efficiency. *Journal of Materials Science: Materials in Electronics*, 33(19), pp.15627-15637.
32. Rathnayake, R.A., Wijekoon, H., Pemasiri, B.M.K. and Subasinghe, N.D., 2022. Time-dependent finite-difference model for transient and steady-state analysis of thermoelectric bulk materials. *Physica Scripta*, 97(12), p.125008.
33. Naik, N., Sooriyaperakasam, N., Abeykoon, Y.K., Wijayarathna, Y.S., Pranesh, G., Roy, S., Negi, R., Aakif, B.K., Kulatunga, A. and Kandasamy, J., 2022. Sustainable Green Composites: A Review of Mechanical Characterization, Morphological Studies, Chemical Treatments and their Processing Methods. *Journal of Computers, Mechanical and Management*, 1(1), pp.66-81.
34. Dayarathna, N.N., Gama-Arachchige, N.S., Damunupola, J.W., Xiao, Z., Gamage, A., Merah, O. and Madhujith, T., 2023. Effect of Storage Temperature on Storage Life and Sensory Attributes of Packaged Mustard Microgreens. *Life*, 13(2), p.393.
35. Wijesinghe, C., Jabeer, A.A., Iqbal, B.N. and Noordeen, F., 2022. Relationship between clinical and laboratory features with infecting dengue virus serotypes in a sample of dengue suspected adult patients from 2015-2017 in Sri Lanka. *Journal of Clinical Virology Plus*, 2(4), p.100112.
36. Indeewari, K.M., Dunuweera, S.P., Dunuweera, A.N. and Rajapakse, R.M.G., 2022. Synthesis and Characterization of 2D Magnesium Oxide Nanoflakes: A Potential Nanomaterial for Effective Phosphate Removal from Wastewater. *ChemistrySelect*, 7(8), p.e202103973.
37. Nissanka, B. and Jayasundara, D.R., 2022. Nanocomposite of graphene oxide decorated Al-waste sludge for removal of rhodamine B from water. *RSC advances*, 12(55), pp.35685-35694.
38. De Silva, T.K., Rajakaruna, R.S., Mohotti, K.M., Rajapakse, R.P.V.J. and Perera, P.K., 2022. First Molecular Identification of Ancylostoma Species in Dogs in a Rural Tea Estate Community in Sri Lanka and the Detection of Other Zoonotic Gastro-intestinal Parasites. *Acta Parasitologica*, 67(3), pp.1086-1096.
39. Thiruthaigesan, K., Nawarathna, R.D. and Ragel, R.G., 2023. Detection of Suspicious Objects in Unconstrained Environments to Effectively Manage a Security System in Sri Lanka. *Multisectoral Approaches to Accelerate Economic Transformation in the Face of Crisis in Sri Lanka*, p.255.
40. Hu, Y., Karunarathna, S.C., Li, H., Galappaththi, M.C., Zhao, C.L., Kakumyan, P. and Mortimer, P.E., 2022. The Impact of Drying Temperature on Basidiospore Size. *Diversity*, 14(4), p.239.
41. Abeykoon, Y.K., Lakmal, A.A.I., Munasinghe, M.A.H.M., Dassanayake, B.S. and Gunawardhana, N., 2023. Optimization of seed layer thickness for the growth of the one dimensional vertically oriented ZnO nanowires. *Journal of Materials Science: Materials in Electronics*, 34(5), p.352.

42. Thilakarathne, D. and Hirimuthugoda, G., 2022. Can the Sri Lankan endemic-endangered fish *Labeo fisheri* (Teleostei: Cyprinidae) adapt to a new habitat?. *Journal of Threatened Taxa*, 14(8), pp.21579-21587.
43. Bandara, U.C., Diyabalanage, S., Barth, J.A. and Chandrajith, R., 2023. Recharging Mechanisms and Seawater Intrusion in Karst Aquifers in Northwest Sri Lanka, Based on Hydrogeochemistry and Water Isotopes. *ACS ES&T Water*.
44. Bandaranayaka, K.O., Dissanayake, U.I. and Rajakaruna, R.S., 2022. Diversity and geographic distribution of dog tick species in Sri Lanka and the life cycle of brown dog tick, *Rhipicephalus sanguineus* under laboratory conditions. *Acta Parasitologica*, 67(4), pp.1708-1718.
45. Rangama, B.N.L.D., Abayasekara, C.L. and Gordon, D.M., 2022. Bacterial Phylogenetics. *www.nsf.gov.lk*, 50, p.137.
46. Tharshan, R. and Wijekoon, P., 2022. Zero-modified Poisson-Modification of Quasi Lindley distribution and its application. *Statistics in Transition New Series*, 23(4), pp.113-128.
47. Jayawardhane, J. and Gunaratne, A.M.T.A., 2022. INFLUENCE OF ALSTONIA MACROPHYLLA SPREAD ON THE RESTORATION SUCCESS OF PINE CONVERSION PROGRAMS IN SRI LANKA. *Journal of Tropical Forest Science*, 34(3), pp.285-295.
48. Lakmali, S.M.M., Nawarathna, L.S. and Wijekoon, P., A heteroscedastic Bayesian model for method comparison data. *Journal of Applied Mathematics, Statistics and Informatics*, 18(2), pp.57-75.
49. Herath, L., Meedeniya, D., Marasingha, J. and Weerasinghe, V., 2022, February. Optimize Transfer Learning for Autism Spectrum Disorder Classification with Neuroimaging: A Comparative Study. In *2022 2nd International Conference on Advanced Research in Computing (ICARC)* (pp. 171-176). IEEE.
50. Sampath, S.N.T.I., Sampath, S.N.T.I., Jayasinghe, S., Jayasinghe, S., Attanayake, A.A.A. and Karunaratne, V.K.V., 2022. Antioxidant and Antidiabetic Potentials of a Standardized Polyherbal Mixture Used in Traditional Medicine. *Jordan Journal of Chemistry (JJC)*, 17(1), pp.13-26.
51. Wickramasinghe, G.C., Perera, V.P.S., Senthilnithy, R. and Nupearachchi, C.N., Research Article Comparison of ZnO nano particles synthesized using sodium hydroxide and triethylamine for photovoltaic applications.
52. De Silva, J.W.E.W. and Abeyesundara, S.P., 2023. Functional Data Analysis on Global COVID-19 Data. *Asian Journal of Probability and Statistics*, 21(1), pp.12-28.
53. Wijesinghe, W.M.D.C. and Withanage, W.K.N.C., Application of the GIS-MCDA to identify land suitability for legume crops cultivation: an empirical investigation based on Thalawa DSD, Sri Lanka.

54. Ye, L., Karunarathna, S.C., Li, H., Wanasinghe, D.N., Kumla, J., Xu, J., Galappaththi, M.C. and Mortimer, P.E., 2022. A New Tropical Species of Lycoperdon Subgenus Morganelia (Agaricales, Basidiomycota) From Yunnan Province, China. *CHIANG MAI JOURNAL OF SCIENCE*, 49(3), pp.641-653.
55. Juman, Z.A.M.S., M'Hallah, R., Lokuhetti, R. and Battaia, O., 2023. A multi-vendor multi-buyer integrated production-inventory model with synchronised unequal-sized batch delivery. *International Journal of Production Research*, 61(2), pp.462-484.
56. Nasdala, L., Sameera, K.A., Fernando, G.W.A., Wildner, M., Habler, G., Erlacher, A. and Škoda, R., 2022. THE SHAPE OF EKANITE. *Gems & Gemology*, 58(2).
57. Tharshan, R. and Wijekoon, P., 2022. Poisson-Modification of Quasi Lindley regression model for over-dispersed count responses. *Communications in Statistics-Simulation and Computation*, pp.1-16.
58. Sugumar, T., Weerasekera, D.S., Ranawana, K.B. and Jayawardana, N.U., 2022. Characterization of mitochondrial 12S rRNA gene of yellow-striped chevrotain (*Moschiola kathygre*) and white-spotted chevrotain (*Moschiola meminna*) and development of a PCR-RFLP marker for the unambiguous identification of the species. *Animal Biotechnology*, pp.1-8.
59. Thennakoon, C.A., Rajapakshe, R.B.S.D., Rajapakse, R.M.G. and Rajapakse, S., 2022. Anti-stain and durable superhydrophobic/antistatic dual functionality surface for fabric materials based on F-ZnO/TiO₂ composite. *Journal of Sol-Gel Science and Technology*, 101(3), pp.529-538.
60. Rathnayake, D.T., Karunadasa, K.S., Wijekoon, A.S., Manoratne, C.H. and Rajapakse, R.G., 2022. Low-cost ternary composite of graphite, kaolinite and cement as a potential working electrode for general electrochemical applications. *Chemical Papers*, 76(10), pp.6653-6658.
61. Ishaq, M., Galappaththi, M.C.A., Khan, M.B., Ullah, S., Fiaz, M. and Khalid, A.N., 2022. *Lentinus squarrosulus* an edible macro-fungus reported from Pakistan. *Studies in Fungi*, 7(1), pp.1-3.
62. Dasanayaka, B.I., Jinadasa, R.N., Jayasuriya, K.M.G.G. and Phartyal, S.S., 2022. Seed ecophysiology of Elephant Apple (*Dillenia indica*)—An important tree species of the Indomalayan realm. *Ecological Research*, 37(4), pp.532-543.
63. Wijenayake, A., Abayasekara, C., Pitawala, A. and Bandara, B.M., 2022. Antimicrobial potential of four mica drugs and their chemical and mineralogical properties. *BMC Complementary Medicine and Therapies*, 22(1), pp.1-10.
64. Rathnayake, D.T., Karunadasa, K.S., Wijekoon, A.S., Manoratne, C.H., Gamini Rajapakse, R.M. and Pitawala, H.M., 2023. Polyaniline-conjugated graphite–montmorillonite composite electrode

- prepared by in situ electropolymerization for supercapacitor applications. *Chemical Papers*, pp.1-6.
65. Herath, L., Meedeniya, D., Marasingha, J., Weerasinghe, V. and Tan, T., Autism Spectrum Disorder Identification Using Multi-Model Deep Ensemble Classifier with Transfer Learning. *Available at SSRN 4192591*.
 66. Gunawardana, S.M., Aloysius, N. and Chandrika, C., 2022. Challenges and Opportunities for Ecotourism Development: A Study in the Post-war Context in the Northern Province of Sri Lanka: Cabaran dan Peluang kepada Pembangunan Eko-Pelancongan: Satu Kajian dalam Konteks Pasca-Perang di Wilayah Utara Sri Lanka. *GEOGRAFI*, 10(1), pp.20-51.
 67. Rangama, B.N.L.D., Abayasekara, C.L. and Gordon, D.M., 2022. Predominance of phylogenetic group B2 among commensal *Escherichia coli* in humans from Kandy District, Sri Lanka. *Journal of the National Science Foundation of Sri Lanka*, 50(1).
 68. Jegatheesan, V., Pachova, N., Velasco, P., Mowjood, M.I.M., Weragoda, S.K., Makehelwala, M., Trang, N.T.D., Dang, B.T., Tran, C.S., Vo, T.K.Q. and Trang, N.T.T., 2022. Co-development of an integrated assessment framework to evaluate the effectiveness and impact of selected nature-based water treatment technologies in Sri Lanka, The Philippines, and Vietnam. *Environmental Quality Management*.
 69. Swarnamalie, M.U., Rajapaksha, J. and Gunatilake, J., Effect of Ocean Currents and Temperature Variability on Yellowfin Tuna Catch Rates of Sri Lankan Longline Fishery.
 70. Randima, G., Atapaththu, K., Sanjaya, K., Masakorala, K. And Gamage, S., Co-Occurrence Of Microcystin And Cylindrospermopsin In Hypereutrophic Mahakanadarawa And Nachchaduwa Reservoirs Mhmasv Gunawardana1, Mm Wijesooriya1.
 71. RUKLANI, N.S. and Rubasinghe, S.C., 2022. Thalloid Liverworts (Marchantiopsida) of Sri Lanka. *Phytotaxa*, 551(1), pp.1-82.
 72. Sandaruwan, C., Madugalla, N., Adikaram, M., Pitawala, A. and Udagedara, T., 2023. Microtexture and grain size characteristics of lagoonal and riverine coastal deposits along the southeastern coast of Sri Lanka: implication for paleoenvironment. *Arabian Journal of Geosciences*, 16(2), p.111.
 73. Jarashanth, S.T. and Nawarathna, R.D., 2022, February. Applying Transformer Models for Disease Named Entity Recognition. In *2022 2nd International Conference on Advanced Research in Computing (ICARC)* (pp. 272-277). IEEE.
 74. Bandara, T.M.W.J., Hansadi, J.M.C. and Bella, F., 2022. A review of textile dye-sensitized solar cells for wearable electronics. *Ionics*, 28(6), pp.2563-2583.
 75. Sambavathas, S., Amarasinghe, N.R., Jayasinghe, L. and Fujimoto, Y., 2022. 7 Acetylcholinesterase inhibitory activity of spices and culinary herbs. *Chemistry of Natural Products: Phytochemistry and Pharmacognosy of Medicinal Plants*, p.139.

76. Jayasinghe, R.M.N.P.K. and Pitawala, H.M.T.G.A., 2022. Geomorphological and Drainage Morphometrical Relationship of Gem Potential Alluvial Deposits in Upper Kalu Ganga Basin, Sri Lanka: A Remote Sensing and GIS Based Approach. *Journal of Geological Society of Sri Lanka Vol, 22(2)*, pp.15-26.
77. Somasiri, I.S., Hewawasam, T. and Rambukkange, M.P., 2022. Adaptation of the revised universal soil loss equation to map spatial distribution of soil erosion in tropical watersheds: a GIS/RS-based study of the Upper Mahaweli River Catchment of Sri Lanka. *Modeling Earth Systems and Environment, 8(2)*, pp.2627-2645.
78. Gunarathne, K.M.R.U., Marikkar, J.M.N., Mendis, E., Yalagama, C., Jayasinghe, U.L.B., Liyanage, R. and Jayaweera, S., 2022. Bioactivity studies of different solvent extracts of partially defatted coconut testa obtained from selected coconut cultivars. *The Journal of Agricultural Sciences-Sri Lanka, 17(1)*, pp.171-184.]
79. Thivakarasarma, T., Lakmal, A.A.I., Dassanayake, B.S., Velauthapillai, D. and Ravirajan, P., 2022. Thermally Evaporated Copper Iodide Hole-Transporter for Stable CdS/CdTe Thin-Film Solar Cells. *Nanomaterials, 12(14)*, p.2507.
80. Thaneeshan, R., Thanikasalam, K. and Pinidiyaarachchi, A., 2022, December. Gender and Age Estimation From Facial Images using Deep Learning. In *2022 7th International Conference on Information Technology Research (ICITR)* (pp. 1-6). IEEE.
81. Bandara, K.M.G.C., Abeywardena, M.R. and Karunaratne, D.G.G.P., 2022. Effect of Nano-Mg (OH) 2 on the Mechanical and Flame Retardant Properties of Nano-Mg (OH) 2-Ribbed Smoked Sheet Rubber Composite. In *ICSBE 2020: Proceedings of the 11th International Conference on Sustainable Built Environment* (pp. 423-436). Springer Singapore.
82. Juman, Z.S., Nawarathne, N.G.S.A. and Hisam, M.S.M., 2022. Attaining a good primal solution to the uncapacitated transportation problem. *Journal of Sustainable Development of Transport and Logistics, 7(1)*, pp.51-61.
83. Poornima, A.M.N.S., Weerasekara, W.M.L.S., Vinobaba, M. and Karunarathna, K.A.N.K., 2022. Community-level awareness and attitudes towards human-monkey conflict in Polonnaruwa district, Sri Lanka. *Primates, 63(3)*, pp.261-270.
84. Narangammana, L.K., Bandara, Y.M.D.C.Y., DeSilva, L.A., Subasinghe, N.D. and Bandara, T.M.W.J., 2022. Organic-Inorganic Hybrid Thermocouple Intended for Thermoelectric Generators Using Low-Cost Nontoxic Materials. *Journal of Electronic Materials, 51(9)*, pp.5462-5472.
85. Selvarajah, J. and Nawarathna, R., 2022. Identifying Tweets with Personal Medication Intake Mentions using Attentive Character and Localized Context Representations. *JUCS: Journal of Universal Computer Science, 28(12)*.

5.1.2 Publications in refereed journals by PGIS affiliated members

No.	Title of the paper	Name of the author	Name of the journal
1.	Quasi-compact fourth-order approximations for fractional derivatives and applications	Gunarathna, W.A., Nasir, H.M. and Daundasekara, W.B.	<i>Ceylon Journal of Science</i>
2.	RNA extraction from urine sediment: A cost-effective protocol for gene expression analysis in renal pathology	Saseevan, S., Rajapakse, S. and Magana-Arachchi, D.N	<i>Ceylon Journal of Science</i>
3.	Performance of various sub-models of a new Lindley family of distributions: A comparative study based on the simulated data sets	Tharshan, R. and Wijekoon, P.	<i>Ceylon Journal of Science</i>
4.	Filariasis in dogs brought to the Veterinary Teaching Hospital, University of Peradeniya, Sri Lanka.	Thilakarathne, S.S., Wijayawardhane, N., Perera, P.K., Mallawa, C. and Rajakaruna, R.S	<i>Parasitology Research</i>
5.	About the lab	Gunawardana, S.M.	<i>In Proceedings of the 26th International Forestry and Environment Symposium</i>

6.	Mechanochemical Synthesis of Polymorphic Urea· Adipic Acid Cocrystal as a Sustained-Release Nitrogen source	Parakatawella, S., Gogoi, D., Deka, P., Xu, Y., Sandaruwan, C., Jayasundera, A.C., Arhangelskis, M., Thakuria, R. and Adassooriya, N.M.	<i>ChemSusChem</i> ,
7.	Factors Affecting the Hydrophobic Property of Stearic Acid Self-Assembled on the TiO ₂ Substrate	Thennakoon, C.A., Rajapakshe, R.D., Malikaramage, A.U. and Gamini Rajapakse, R.M.	<i>ACS omega</i>
8.	Quality and quantity of RNA extracts and the correlation between gross RNA load and the Ct values in a real time RT-PCR used for the detection of SARS CoV-2.	Shihab, S.R.M., Iqbal, B.N., Arunasalam, S. and Noordeen, F	<i>Sri Lankan Journal of Infectious Diseases</i>
9.	Providing a sound theoretical base and appropriate skills at early ages through nutrition education to improve food consumption patterns in Sri Lanka	Karunaratne, A.M. and Nanayakkara, B.S.	<i>Ceylon Journal of Science</i>
10.	Building field trips to small scale mines into university undergraduate degrees: The case of gemstone extraction in Sri Lanka	Katz, M.	<i>The Extractive Industries and Society</i>
11.	Evaluation of patient doses for routine digital radiography procedures toward establishing an institutional diagnostic reference levels: A case study in Sri Lanka	Welarathna, S., Velautham, S., Wanninayake, M. and Sarasanandarajah, S	<i>Journal of Applied Clinical Medical Physics</i>
12.	<i>Impatiens jacobdevlasii</i> (Balsaminaceae), a new species from Knuckles massif of Sri Lanka	Bandara, C., Herath, S.B., Gopallawa, B. and Attanayake	<i>Phytotaxa</i>

13.	Design and construction of a low cost air purifier for killing harmful airborne microorganisms using a combination of a strong multi-directional electric-field and an ultra violet light	Jayakantha, D.R., Bandara, H.M.N., Gunawardana, N.M., Rajapakse, R.J., Thilakarathne, D.S., Comini, E., Gunawardhana, N. and Karunarathne, S.M.M.L.	<i>HardwareX</i>
14.	Molecular phylogeny and phylogeography of ricefishes (Teleostei: Adrianichthyidae: Oryzias) in Sri Lanka	Sudasinghe, H., Ranasinghe, T., Wijesooriya, K., Pethiyagoda, R., , Rüber L. and Meegaskumbura, M.	<i>Ecology and evolution</i>
15.	Extraction of Xyloglucan Polymer from Tamarind (Tamarindus indica) Seeds	Hettiarachchi, S.S., Kumari, W.M.T. and Amarakoon, R.	<i>European Journal of Advanced Chemistry Research</i>
16.	Preliminary optimization of low-cost quasi solid-state dye sensitized solar cells with multilayer photoanodes, and graphite-based counter electrodes	Wickramasinghe, H.M.N., Wijayarathne, K. and Bandara, T.M.W.J.	<i>Sri Lankan Journal of Physics</i>
17.	Hydroxyapatite incorporated bacterial cellulose hydrogels as a cost-effective 3D cell culture platform	Athukorala, S.S., Liyanage, C.J. and Jayasundera, A.C.	<i>Soft Materials</i>
18.	Recent breakthroughs in nanostructured antiviral coating and filtration materials: a brief review	Dahanayake, M.H., Athukorala, S.S. and Jayasundera, A.C.A.	<i>RSC advances</i>

19.	A new mixed Poisson distribution for over-dispersed count data: Theory and applications	Tharshan, R. and Wijekoon, P.	<i>Reliability: Theory & Applications</i>
20.	Ridge estimator in a mixed Poisson regression model	Tharshan, R. and Wijekoon, P.	<i>Communications in Statistics-Simulation and Computation</i>
21.	Effect of CdS Layer Thickness on Thermally Evaporated-CdS/CdTe Solar Cell Efficiency	Lakmal, A.A.I., Kumarasinghe, R.K.K.G.R.G., Seneviratne, V.A., Thanahaichelvan, M and. Dassanayake, B.S.	<i>Journal of Materials Science: Materials in Electronics</i>
22.	Time-dependent finite-difference model for transient and steady-state analysis of thermoelectric bulk materials	Rathnayake, R.A., Wijekoon, H., Pemasiri, B.M.K. and Subasinghe, N.D.	<i>Physica Scripta</i>
23.	Sustainable Green Composites: A Review of Mechanical Characterization, Morphological Studies, Chemical Treatments and their Processing Methods	Naik, N., Sooriyaperakasam, N., Abeykoon, Y.K., Wijayarathna, Y.S., Pranesh, G., Roy, S., Negi, R., Aakif, B.K., Kulatunga, A. and Kandasamy, J.	<i>Journal of Computers, Mechanical and Management</i>
24.	effect of Storage Temperature on Storage Life and Sensory Attributes of Packaged Mustard Microgreens	Dayarathna, N.N., Gama-Arachchige, N.S., Damunupola, J.W., Xiao, Z., Gamage, A., Merah, O. and Madhujith, T.	<i>Life</i>

25.	Relationship between clinical and laboratory features with infecting dengue virus serotypes in a sample of dengue suspected adult patients from 2015-2017 in Sri Lanka.	Wijesinghe, C., Jabeer, A.A., Iqbal, B.N. and Noordeen, F.	<i>Journal of Clinical Virology Plus</i>
26.	Synthesis and Characterization of 2D Magnesium Oxide Nanoflakes: A Potential Nanomaterial for Effective Phosphate Removal from Wastewater	Indeewari, K.M., Dunuweera, S.P., Dunuweera, A.N. and Rajapakse, R.M.G.	<i>ChemistrySelect</i>
27.	Nanocomposite of graphene oxide decorated Al-waste sludge for removal of rhodamine B from water	Nissanka, B. and Jayasundara, D.R.	<i>RSC advances</i>
28.	First Molecular Identification of Ancylostoma Species in Dogs in a Rural Tea Estate Community in Sri Lanka and the Detection of Other Zoonotic Gastro-intestinal Parasites	De Silva, T.K., Rajakaruna, R.S., Mohotti, K.M., Rajapakse, R.P.V.J. and Perera, P.K.	<i>Acta Parasitologica</i>
29.	Detection of Suspicious Objects in Unconstrained Environments to Effectively Manage a Security System in Sri Lanka.	Thiruthaigesan, K., Nawarathna, R.D. and Ragel, R.G.	<i>Multisectoral Approaches to Accelerate Economic Transformation in the Face of Crisis in Sri Lanka</i>
30.	The Impact of Drying Temperature on Basidiospore Size	Hu, Y., Karunarathna, S.C., Li, H., Galappaththi, M.C., Zhao, C.L., Kakumyan, P. and Mortimer, P.E.	<i>Diversity</i>

31.	Optimization of seed layer thickness for the growth of the one dimensional vertically oriented ZnO nanowires	Abeykoon, Y.K., Lakmal, A.A.I., Munasinghe, M.A.H.M., Dassanayake, B.S. and Gunawardhana, N.	<i>Journal of Materials Science: Materials in Electronics</i>
32.	Can the Sri Lankan endemic-endangered fish <i>Labeo fisheri</i> (Teleostei: Cyprinidae) adapt to a new habitat?.	Thilakarathne, D. and Hirimuthugoda, G.	<i>Journal of Threatened Taxa</i>
33.	Recharging Mechanisms and Seawater Intrusion in Karst Aquifers in Northwest Sri Lanka, Based on Hydrogeochemistry and Water Isotopes	Bandara, U.C., Diyabalanage, S., Barth, J.A. and Chandrajith, R	<i>ACS ES&T Water</i>
34.	Diversity and geographic distribution of dog tick species in Sri Lanka and the life cycle of brown dog tick, <i>Rhipicephalus sanguineus</i> under laboratory conditions <i>Rhipicephalus sanguineus</i> under laboratory conditions	Bandaranayaka, K.O., Dissanayake, U.I. and Rajakaruna, R.S.	<i>Acta Parasitologica</i>
35.	Zero-modified Poisson-Modification of Quasi Lindley distribution and its application	Tharshan, R. and Wijekoon, P.	<i>Statistics in Transition New Series</i>
36.	INFLUENCE OF ALSTONIA MACROPHYLLA SPREAD ON THE RESTORATION SUCCESS OF PINE CONVERSION PROGRAMS IN SRI LANKA	Jayawardhane, J. and Gunaratne, A.M.T.A.	<i>Journal of Tropical Forest Science</i>

37.	A heteroscedastic Bayesian model for method comparison data	Lakmali, S.M.M., Nawarathna, L.S. and Wijekoon, P.	<i>Journal of Applied Mathematics, Statistics and Informatics</i>
38.	Antioxidant and Antidiabetic Potentials of a Standardized Polyherbal Mixture Used in Traditional Medicine	Sampath, S.N.T.I., Sampath, S.N.T.I., Jayasinghe, S., Jayasinghe, S., Attanayake, A.A.A. and Karunaratne, V.K.V.	<i>Jordan Journal of Chemistry</i>
39.	Functional Data Analysis on Global COVID-19 Data	De Silva, J.W.E.W. and Abeysundara, S.P.	<i>Asian Journal of Probability and Statistics</i>
40.	A New Tropical Species of Lycoperdon Subgenus Morganella (Agaricales, Basidiomycota) From Yunnan Province, China	Ye, L., Karunaratna, S.C., Li, H., Wanasinghe, D.N., Kumla, J., Xu, J., Galappaththi, M.C. and Mortimer, P.E.	<i>CHIANG MAI JOURNAL OF SCIENCE</i>
41.	A multi-vendor multi-buyer integrated production-inventory model with synchronised unequal-sized batch delivery	Juman, Z.A.M.S., M'Hallah, R., Lokuhetti, R. and Battaïa, O.	<i>International Journal of Production Research</i>
42.	THE SHAPE OF EKANITE	Nasdala, L., Sameera, K.A., Fernando, G.W.A., Wildner, M., Habler, G., Erlacher, A. and Škoda, R.	<i>Gems & Gemology</i>

43.	Poisson-Modification of Quasi Lindley regression model for over-dispersed count responses.	Tharshan, R. and Wijekoon, P.	<i>Communications in Statistics-Simulation and Computation</i>
44.	Characterization of mitochondrial 12S rRNA gene of yellow-striped chevrotain (<i>Moschiola kathygre</i>) and white-spotted chevrotain (<i>Moschiola meminna</i>) and development of a PCR-RFLP marker for the unambiguous identification of the species.	Sugumar, T., Weerasekera, D.S., Ranawana, K.B. and Jayawardana, N.U.	<i>Animal Biotechnology</i>
45.	Anti-stain and durable superhydrophobic/antistatic dual functionality surface for fabric materials based on F-ZnO/TiO ₂ composite	Thennakoon, C.A., Rajapakshe, R.B.S.D., Rajapakse, R.M.G. and Rajapakse, S.	<i>Journal of Sol-Gel Science and Technology</i>
46.	Low-cost ternary composite of graphite, kaolinite and cement as a potential working electrode for general electrochemical applications	Rathnayake, D.T., Karunadasa, K.S., Wijekoon, A.S., Manoratne, C.H. and Rajapakse, R.G.	<i>Chemical Papers</i>
47.	<i>Lentinus squarrosulus</i> an edible macro-fungus reported from Pakistan.	Ishaq, M., Galappaththi, M.C.A., Khan, M.B., Ullah, S., Fiaz, M. and Khalid, A.N.	<i>Studies in Fungi</i>
48.	Seed ecophysiology of Elephant Apple (<i>Dillenia indica</i>)—An important tree species of the Indomalayan realm	Dasanayaka, B.I., Jinadasa, R.N., Jayasuriya, K.M.G.G. and Phartyal, S.S.	<i>Ecological Research</i>

49.	Antimicrobial potential of four mica drugs and their chemical and mineralogical properties	Wijenayake, A., Abayasekara, C., Pitawala, A. and Bandara, B.M.	<i>BMC Complementary Medicine and Therapies</i>
50.	Polyaniline-conjugated graphite–montmorillonite composite electrode prepared by in situ electropolymerization for supercapacitor applications	Rathnayake, D.T., Karunadasa, K.S., Wijekoon, A.S., Manoratne, C.H., Gamini Rajapakse, R.M. and Pitawala, H.M.	<i>Chemical Papers</i>
51.	Autism Spectrum Disorder Identification Using Multi-Model Deep Ensemble Classifier with Transfer Learning.	Herath, L., Meedeniya, D., Marasingha, J., Weerasinghe, V. and Tan, T.	<i>Available at SSRN 4192591</i>
52.	Challenges and Opportunities for Ecotourism Development: A Study in the Post-war Context in the Northern Province of Sri Lanka: Cabaran dan Peluang kepada Pembangunan Eko-Pelancongan: Satu Kajian dalam Konteks Pasca-Perang di Wilayah Utara Sri Lanka.	Gunawardana, S.M., Aloysius, N. and Chandrika, C.	<i>GEOGRAFI</i>
53.	Predominance of phylogenetic group B2 among commensal Escherichia coli in humans from Kandy District, Sri Lanka.	Rangama, B.N.L.D., Abayasekara, C.L. and Gordon, D.M.	<i>Journal of the National Science Foundation of Sri Lanka</i>

54.	Co-development of an integrated assessment framework to evaluate the effectiveness and impact of selected nature-based water treatment technologies in Sri Lanka, The Philippines, and Vietnam	Jegatheesan, V., Pachova, N., Velasco, P., Mowjood, M.I.M., Weragoda, S.K., Makehelwala, M., Trang, N.T.D., Dang, B.T., Tran, C.S., Vo, T.K.Q. and Trang, N.T.T.	<i>Environmental Quality Management</i>
55.	Thalloid Liverworts (Marchantiopsida) of Sri Lanka.	RUKLANI, N.S. and Rubasinghe, S.C.	<i>Phytotaxa</i>
56.	Microtexture and grain size characteristics of lagoonal and riverine coastal deposits along the southeastern coast of Sri Lanka: implication for paleoenvironment	Sandaruwan, C., Madugalla, N., Adikaram, M., Pitawala, A. and Udagedara, T.	<i>Arabian Journal of Geosciences</i>
57.	A review of textile dye-sensitized solar cells for wearable electronics	Bandara, T.M.W.J., Hansadi, J.M.C. and Bella, F.	<i>Ionics</i>
58.	Acetylcholinesterase inhibitory activity of spices and culinary herbs	Sambavathas, S., Amarasinghe, N.R., Jayasinghe, L. and Fujimoto, Y.	<i>Chemistry of Natural Products: Phytochemistry and Pharmacognosy of Medicinal Plants</i>

59.	Geomorphological and Drainage Morphometrical Relationship of Gem Potential Alluvial Deposits in Upper Kalu Ganga Basin, Sri Lanka: A Remote Sensing and GIS Based Approach	Jayasinghe, R.M.N.P.K. and Pitawala, H.M.T.G.A.	<i>Journal of Geological Society of Sri Lanka</i>
60.	Adaptation of the revised universal soil loss equation to map spatial distribution of soil erosion in tropical watersheds: a GIS/RS-based study of the Upper Mahaweli River Catchment of Sri Lanka.	Somasiri, I.S., Hewawasam, T. and Rambukkange, M.P.	<i>Modeling Earth Systems and Environment</i>
61.	Bioactivity studies of different solvent extracts of partially defatted coconut testa obtained from selected coconut cultivars	Gunarathne, K.M.R.U., Marikkar, J.M.N., Mendis, E., Yalegama, C., Jayasinghe, U.L.B., Liyanage, R. and Jayaweera, S.	<i>The Journal of Agricultural Sciences- Sri Lanka</i>
62.	Thermally Evaporated Copper Iodide Hole-Transporter for Stable CdS/CdTe Thin-Film Solar Cells	Thivakarasarma, T., Lakmal, A.A.I., Dassanayake, B.S., Velauthapillai, D. and Ravirajan, P	<i>Nanomaterials</i>
63.	Attaining a good primal solution to the uncapacitated transportation problem	Juman, Z.S., Nawarathne, N.G.S.A. and Hisam, M.S.M.	<i>Journal of Sustainable Development of Transport and Logistics</i>
64.	Community-level awareness and attitudes towards human-monkey conflict in Polonnaruwa district, Sri Lanka	Poornima, A.M.N.S., Weerasekara, W.M.L.S., Vinobaba, M. and Karunarathna, K.A.N.K.	<i>Primates</i>

65.	Organic-Inorganic Hybrid Thermocouple Intended for Thermoelectric Generators Using Low-Cost Nontoxic Materials	Narangamma, L.K., Bandara, Y.M.D.C.Y., DeSilva, L.A., Subasinghe, N.D. and Bandara, T.M.W.J.	<i>Journal of Electronic Materials</i>
66.	Identifying Tweets with Personal Medication Intake Mentions using Attentive Character and Localized Context Representations	Selvarajah, J. and Nawarathna, R.	<i>JUCS: Journal of Universal Computer Science</i>

Ph.D., M.Phil. and M.Sc. Degrees Awarded

5.2.1 Ph.D. DEGREES AWARDED

No.	Degree Awardees	Titles of Theses	Supervisors
1.	Ms. Kumarasinghe KDMSPK	IMPROVEMENT OF DYE-SENSITIZED SOLAR CELLS USING NOVEL LOW-COST MATERIALS AND TECHNOLOGIES	Prof. GRA Kumara Prof. RMG Rajapakse
2.	Mr. Mendis ASS	REMOVING TOXIC METALS USING CHELATING AGENTS FROM BIOLOGICAL TREATMENT PLANT SLUDGE OF GLOVE DIPPING INDUSTRIES TO MANUFACTURE BIO-FERTILIZERS	Prof. R M G Rajapakse Prof. Shantha Walpalage
3.	Mr. De Silva DI	SOFTWARE COMPLEXITY MEASURES: A NOVEL APPROACH BASED ON HUMAN COGNITION FOR ADEQUATE QUANTIFICATION OF COMPLEXITY IN SOFTWARE PROGRAMS	Prof. S D Kodituwakku Dr. U A J Pinidiyaarachchi Dr. Nuwan Kodagoda
4.	Gunasekara RDA	NATIVE TREE ISLAND ESTABLISHMENT TO RESTORE LOWER MONTANE FORESTS IN KNUCKLES CONSERVATION AREA, SRI LANKA	Dr. A M T A Gunarathna Prof. G Senevirathna Prof. C V S Gunathilake
5.	Mr. Dissanayake DMSN	CHARACTERIZATION AND VALUE ADDITION TO SRI LANKA LATERITES WITH	Prof. H M T J A Pitawala

		SPECIAL EMPHASIS ON ADVANCED MATERIALS	Prof. K M N De Silva Prof. G A J Amarathunga
6.	Ms. Samarasinghe BRCP	SEED BIOLOGICAL TRAITS OF SELECTED RAINFOREST SPECIES FROM SRI LANKA: TOWARDS CONSERVATION OF BIODIVERSITY	Prof. K M G G Jayasuriya Dr. A M T A Gunarathne
7.	Ms. Balasooriya BMRS	IMPLICATIONS ON SELECTED ENVIRONMENTAL AND GEOGENIC FACTORS ON CHRONIC KIDNEY DISEASES OF UNCERTAIN ETIOLOGY (CKDu)	Prof. R L R Chandrajith Prof. O A Ileperuma Prof. S K Yatigammana
8.	Jayasekara Mudiyansele Kalpani Wasana Kumari	DEVELOPMENT OF NOVEL POLY (ETHYLENE OXIDE)/CONDUCTING POLYMER BASED ELECTROLYTES AND GRAPHITE BASED COUNTER ELECTRODES FOR DYE/Q-DOT SENSITIZED SOLAR CELLS	Prof. M. A. K. L. Dissanayake Prof. G. K. R. Senadeera
9.	Mr. Nugapola NWNP	ACHIA IN AEDES VECTOR MOSQUITO POPULATION AND THE EFFECT OF INSECTICIDE FOGGING ON INSECT POLLINATORS	Prof. S H P P Karunarathne Prof. W A P P DE silva

5.2.2 M.Phil. DEGREES AWARDED

<i>No</i>	<i>Degree Awardees</i>	<i>Titles of Theses</i>	<i>Supervisors</i>
1.	Ms. Abeysinghe DUGSN	DEVELOPMENT OF METAL ORGANIC FRAMEWORKS AS PHOTOANODE MATERIALS FOR PHOTOVOLTAIC APPLICATIONS	Prof. C V Hettiarachchi Prof. H A I R Perera
2.	Ms. Deen FA	THE EFFECT OF SIMULATED GASTROINTESTINAL DIGESTION ON ANTIOXIDANTS/ANTIOXIDATIVE CAPACITY AND FERMENTATIVE PROPERTIES OF COMMONLY CONSUMED RAW AND BOILED LEGUMES IN SRI LANKA	Prof. Ruvini Liyanage Prof. Lalith Jayasinghe Prof. B C Jayawardane
3.	Ms. Wijesinghe WMKEH	REMOVAL OF NITRATE AND PHOSPHATE FROM WATER USING BIO POLYMER - MINERAL BASED MATERIALS AND PHYTOREMEDIATION BY SELECTED AQUATIC PLANTS	Prof. S S Iqbal Prof. Namal Priyantha Prof. M C M Iqbal
4.	Mr. Karunaratne DGBC	FABRICATION OF LOW-COST PEROVSKITE SOLAR CELLS USING POWER PRESSING METHOD	Prof. G R A Kumara Prof. R M Rajapakse
5.	Ms. Suraweera RK	FORMULATION AND CHARACTERIZATION OF AN ANTI-OXIDIZING VIRGIN COCONUT OIL BASED CREAM CONTAINING CHITOSAN ENCAPSULATED VITAMIN A, C, E AND Zingiber officinale Roscoe (GINGER) EXTRACT	Prof. D N Karunaratne Prof. D B M Wickramaratne

6.	Ms. Shakoor IF	BIOPOLYMER BASED MICRO-/NANO-VEHICLES FOR SAFE DELIVERY OF FOOD BIO-ACTIVITIES AND NUTRACEUTICALS	Prof. Nedra Karunanaratne Dr. K M G K Pamunuwa
7.	Mr. Baheej MAA	DRUG REPOSITIONING AND SYNTHESIS OF NEW TRIAZOLES, AMAIDES, AND ESTER DERIVATIVES OF FDA-APPROVED DRUGS FOR NEW BIOLOGICAL ACTIVITIES	Dr. M H Haroon Prof. U L B Jayasinghe
8.	Mr. Abeykoon AMKL	SYNTHESIS AND CHARACTERIZATION OF COPPER ZINC TIN SULFIDE (CZTS) NANOSTRUCTURED THIN FILMS FOR PHOTOELECTROCHEMICAL WATER SPLITTING	Prof. J M S Bandara Dr. A C A Jayasundara
9.	Mr. Jarashanth ST	AUTOMATED EXTRACTION OF INSIGHTS FROM SOCIAL MEDIA DATA WITH DEEP LEARNING TECHNIQUES FOR PUBLIC HEALTH MONITORING AND SURVEILLANCE	Dr. R D Nawarathna
10.	Mr. Jayasinghe RMNPK	GEOCHEMISTRY AND SEDIMENTOLOGY OF SECONDARY GEM DEPOSITS AT RATHNAPURA, SRI LANKA AND GEM EXPLORATION MODELING	Prof. H M T G A Pitawala Dr. A L T Hewawasam
11.	Ms. Nanayakkara NGLNU	RECONSTRUCTION OF QUATERNARY CLIMATE VARIABILITY IN SRI LANKA USING MARINE PROXICS	Dr. P N Ranasinghe Prof. R Mahanama Dr. Thilak Hewawasam

12.	Mr. Rifkhan MNM	INTRODUCING EFFECTIVE AND EFFICIENT COLOUR AND CLARITY ENHANCEMENT TECHNIQUES FOR SEMI-PRECIOUS AND NON-GEM QUALITY MINERALS IN SRI LANKA	Prof. R L R Chandrajith Prof. M A S P K Malaviarachchi
13.	Ms. Liyanage NMN	ENVIRONMENTAL EFFECT ON DEFFERENT TISSUE PARTS AT DIFFERENT MATURITY STAGE IN BIOSYNTHETIC GENE EXPRESSION AND BIOCHEMICAL COMPOSITION OF <i>Cinnamomum zeylanicum</i> Blume	Prof. Pradeepa Bandaranayake Prof. D K N G Pushpakumara
14.	Ms. Paranavithana TM	DEVELOPMENT OF BASELINE SOIL INFORMATION SYSTEM FOR PADDY GROWING SOILS OF SRI LSNKA BASED ON SOIL CARBON AND OTHER SELECTED SOIL MACRO- AND MACRO-NUTRIENTS	Prof. Renuka Ratnayake Prof. S K Gunathilake Dr. Senani Karunaratne
15.	Ms. Rukshagini P	IDENTIFICATION OF GROUNDWATER EVOLUTION AND DEVELOPMENT OF A GROUNDWATER PROTECTION PLAN FOR THE SOURCE WATER IN NEETIYAGAMA VILLAGE, ANAURADHAPURA DISTRICT	Prof. T Hewawasam Prof. Rohana Chandrajith Prof. Rohan Weerasooriya Dr. S K Wearagoda
16.	Isurunandage Lakmini Udayangani Chandrasiri	CORRELATION BETWEEN AREA-BASED MAMMOGRAPHIC BREAST DENSITY AND PATIENT-RELATED FACTORS	Prof. P. B. Hewavithana Dr. U. J. M. A. L. Jayasinghe Dr. B. S. Weerakoon

17.	Lahanda Purage Givanthika Sherminie	MORPHOMETRY-BASED RADIOMICS FOR PREDICTING THERAPEUTIC RESPONSE FOR GLIOMAS AND PREDICTING PROGNOSIS FOR SOFT TISSUE SARCOMAS OF EXTREMITIES IN RADIOTHERAPY	Prof. P. B. Hewavithana Dr. M. L. Jayatilake Dr. B. S. Weerakoon
18.	Mr.Sakeetharan T	CONSTRUCTIVIST APPROACH OF LEARNING CHEMISTRY THROUGH LABORATORY WORK FOR GRADES 10 AND 11	Prof. A D L C Perera Prof T M S S K Yatigammana
19.	Mr.Bandara AMRS	SCIENCE LEARNING AND ACHIEVMENTS OF INDIGENOUS SECONDARY STUDENTS IN SRI LANKA	Prof T M S S K Yatigammana Dr. ZANE MA RHEA
20.	Ms.Tharmarajan M	TAXONOMIC REVISION AND PHYLOGENETIC OF SELECTED GENERA OF COBWEB SPIDERS (ARANEAE: THERIDIIDAE) OF SRI LANKA BASED ON MORPHOLOGY AND MOLECULAR MARKERS	Prof. S P Benjamin Prof. P Samaraweera
21.	Ms.Satkunanathan A	MOLECULA PHYLOGENY AND TAXONOMIC REVISION OF SELECTED JUMPING SPIDER GENERA (FAMILY: SALTICIDAE) SRI LANKA	Prof. S P Benjamin Prof. P Samaraweera

5.2.3 M.Sc. DEGREES AWARDED

No.	Degree Awardee	Title of Thesis	Supervisor(s)
Analytical Chemistry			
1.	Ms. Chandrasiri TWGSU	ASSESSMENT OF WATER QUALITY AND ITS SUITABILITY FOR DRINKING PURPOSE IN KALAWEWA TANK, ANURADHAPURA, SRI LANKA	Dr. D M S H Dissanayake Mr. S M S Samarakoon
Industrial Chemistry			
2.	Ms. Sarangi KAN	INTEGRITION OF FOOD AND COLD CHAINS: LIFE CYCLE ASSESSMENT OF FRUIT AND VEGETABLE MARKETS IN SRI LANKA	Prof. M Danthurebandara Prof. Leelananda Rajapaksha
3.	Ms. Dilhani KGSS	DEVELOPMENT OF SAMPLE SYNTHESIS PROCESS OF SUPER HYDROPHOBIC NANO MATERIAL FROM CALCINE DOLOMITE AND THEIR APPLICATION	Prof. D G G P Karunaratne Dr. Aruna Manipura
Nanoscience & Nanotechnology			
4.	Ms. Rathnayake PGDV	DEVELOPMENT OF TRANSPARENT HYDROPHOBIC SURFACE ON GLASS SUBSTRATE	Dr. K G C Senaratne Prof. R M G Rajapakse
5.	Ms. Bani GGAS	DIELECTRIC BEHAVIOUR OF CYANOETHYLATED CELLULOSE-HYDROXYAPAPTITE NANCOMPOSITES	Dr. N M Adassooriya Prof. R M G Rajapakshe
6.	Ms. Rajapaksha MCM	SYMTHESIS AND CHARACTERIZATION OF REDUCED SrTiO ₃ PHOTOCATALYST FOR WATER SPLITTING UNDER VISIBLE LIGHT IRRADIATION	Prof. J M S Bandara Dr. A C A Jayasundera
7.	Ms. Gonapaladeniya GDMC	PREPARATION OF ANTI-MICROBIAL IRON OXIDE NANOSTRUCTURES FROM GALVANIZING EFFLUENT	Prof. R M G Rajapakse Dr. R B S Dilan Rajapakse
8.	Mr. Dissanayake SMB	CARBON BASED SUPERCAPACITOR FOR ENEGY STORAGE	Prof. G R A Kumara Prof. R M G Rajapakse
9.	Ms. Hettiarachchi SS	SYNTHESIS OF CURCUMIN NANOPATICLES FROM RAW TURMERIC RHIZOME AND COMPARISON OF ITS PHYSICOCHEMICAL AND ANTIBACTERIAL PROPERTIES WITH NATURAL BULK CURCUMIN	Prof. R M G Rajapakse Prof. R G S C Rajapakse
10.	Ms. Hettiarachci HAIM	SOFTWARE INTERFACE FOR DESIGNED PARTICLE SIZE ANALYSER	Dr. R J K U Ranatunga Prof. H M N Bandara
11.	Mr. Bandara HMA	MECHANICAL EXFOLIATION TECHNIQUES FOR SCALABLE PRODUCTION OF NANOFKAKES OF LAYERED MATERIALS	Dr. Nadeesh Adassooriya Prof. R M G Rajapakshe
12.	Ms. Bandara MMAG	INCREASING THE STABILITY OF DYESENSITIZED SOLAR CELLS BY	Prof. G R A Kumara Dr. H A I R Perera

		REDUCING THE VOLUME OF IODIDE/TRI-IODIDE REDOX MEDIATOR	
13.	Ms. Hettiarachchi NM	DIFFERENT MORPHOLOGIES OF CARBON NANOSTRUCTURES WITH EXTENDED SONICATION	Prof. K M N De Silva Prof. R M G Rajapakse
Applied Statistics			
14.	Ms. De Silva JWEW	FUNCTIONAL DATA ANALYSIS ON GLOBAL COVID-19 DATA	Dr. S P Abeyesundara
Computer Science			
15.	Ms. Wijewardhana AMSK	A NOVEL MODEL TO PREDICT THE AGE OF SRI LANKAN CHILDREN USING ERUPTION STATUS OF PERMANET DENTITION	Dr. R D Nawarathna Prof. S R Kodituwakku Dr. L S Nawarathna
16.	Ms. Darshani THD	A MACHINE LEARNING APPROACH TO PREDICT PHOSPHATE SOLUBILIZING BACTERIA (PSB) VIABILITY IN THE SOIL ENVIRONMENT	Mr. P M P C Gunathilake
17.	Ms. Nandasiri W P B	PREDICTIVE ANALYTICS ON INTERPRETATION OF FOURIER TRANSFORM INFRARED SPECTROSCOPY	Mr. P M P C Gunathilake
18.	Mr. Vijayakanthan G	IMAGE CLASSIFICATION OF PESTS FROM VEGETABLE PLANT IMAGES USING DEEP LEARNING	Dr. U A J Pinidiyaarachchi Dr. J Kokul Dr. K Pakeerathan
19.	Ms. Rukshani P	TALADETECT: PREDICTION OF CARNATIC TALAS USING SMARTPHONE SENSORS	Dr. H R O E Dayaratna Mr. T Kartheeswaran
20.	Mr. Rathnayake TGRMLR	SEMI-SUPERVISED LEARNING APPROACH TO MULTI-CLASS OBJECT DETECTION WITH OBSCURE AND OVERLAPPING BOUNDARIES	Dr. R D Nawarathna
Information Technology			
21.	Ms. Jayaratne SS	USING LEARNING ANALYTICS TO PREDICT THE ACADEMIC OUTCOME OF THE ADVANCED LEVEL STUDENTS	Dr. D Elkaduwa
22.	Mr. Pinnawala HAKB	DECISION TREE ALGORITHMS IN IDENTIFYING PERFORMANCE FACTORS OF G.C.E. ORDINARY LEVEL STUDENTS	Dr. H R O E Dayaratne
Engineering Geology & Hydrogeology			
23.	Mr. Kumara S M S P	BEST SUITED GROUT CURTAIN DESIGN FOR THE PROPOSED HASALAKA PYA DAM PROJECT	Dr. Jagath Gunathilake
24.	Mr. Karunarathne KMPC	EVALUATION OF TUNNEL STABILITY USING Q METHOD PRE AND POST CONSTRUCTION STAGE OF BROADLANDS HYDROPOWER PROJECT SRI LANKA	Dr. J Gunathilake
25.	Ms. Rathnayake RMIU	INFLUENCE OF GEOLOGICAL SETTING ON PROGRESSION OF DUREKKANDA AND GALABODA LANDSLIDES IN RATNAPURA DISTRICT, SRI LANKA	Dr. Jagath Gunathilake

26.	Mr. Bandara PMGR	DEBRIS FLOW PATHS DETERMINATION BASED ON SENSITIVITY ANALYSES USING HYPERKANAKO-A CASE STUDY IN PITAKANDA MICRO CATCHMENT FROM AYAGAMA,RATNAPURA DISTRICT ,SRI LANKA	Dr. J Gunathilake Dr. H A G Jayathissa
27.	Mr. Sayakkara HSP	ASSESSMENT OF GROUNDWATER QUALITY OF KILINOCHCHI AREA DURING PRE-MONSOON AND POST-MONSOON IN 2015-2016	Dr. J Gunathilake
28.	Mr. Ariyakumara WAKS	CHARACTERIZATION OF MAWATHAWATTA, DALKEITH ESTATE LANDSLIDE AT KALUTARA DISTRICT, SRI LANKA	Dr. P Jayasinghe
29.	Ms. Lakmali DGED	MONITORING SPATIAL OF LANDSLIDE OCCURRENCES-A CASE STUDY IN KANDYDISTRICT	Dr. Jagath Gunatilake
GIS & Remote Sensing			
30.	Mr. Dissanayake HMAS	ESTIMATION OF PADDY FIELD IN BADULLA DISTRICT USING REMOTE SENSING AND GIS	Dr. J Gunathilake
31.	Mr. Madurasinghe MAPS	FLOOD HAZARD & RISK ASSESSMENT USING GIS AND REMOTE SENSING	Dr. P M P C Gunathilake
32.	Ms. Anushiya J	DROUGHT HAZARD ASSESSMENT USING GIS AND REMOTE SENSING CASE STUDY OF NORTHERN PROVINCE,SRI LANKA	Mr. S Sivanantharajha
33.	Ms. Swarnamalie MU	EFFECT OF OCEAN CURRENTS AND TEMPERATURE VARIABILITY ON YELLOWFIN TUNA CATCH RATES OF SRI LANKAN LONGLINE FISHERY	Dr. Jagath Gunathilake Dr. Jagath Rajapaksha
34.	Ms. Banadara DGTI	MONITORING OF FOREST COVER CHANGES A CASE STUDY FROM VAUNIA DISTRICT	Dr. Jagath Gunathilake Dr. Malika Gunawardena
35.	Ms. Pinthuja K	THREE DIMENSIONAL GEOGRAPHICALLY WEIGHTED REGRESSION MODEL FOR SATELLITE DERIVED BATHYMETRY USING SENTINEL 2 OBSERVATIONS	Dr. Jagath Gunathilake Mr. S. Sivanantharajah
36	Mr. Gamage AK	AUTOMATE THE GENERALIZATION OF LARGE SCALE MAP DATA TO OBTAIN SMALL SCALE MAP DATA	Mr. S Sivanantharajah
Disaster Management			
37.	Mr. Hewamanne A U	UNDERGROUND DISASTERS IN SRI LANKA :PREPARING FIRST RESPONDERS FOR UNDERGROUND SEARCH AND RESCUE(USAR)MISSIONS MASED ON CASE STUDY ANALYSIS	Prof. N W B Balasooriya
38.	Ms.Kodithuwakku A I	THE IMPACT OF THE DISASTER MANAGEMENT TRAINNING PROGRAMS ON THE MEDICAL AND NON MEDICAL PERSONNEL AND THE PUBLIC DURING CRISES	Prof. M D Lamawansa Prof. S P K Malavirachchi

39.	Ms. Munasinghe GCMK	APPLICATION OF RAINWATER HARVESTING ON THE ROOFTOPS ON RESIDENTIAL BUILDINGS TO REDUCE THE URBAN FLOODS – CASE STUDY ON GREGORY’S CANAL AND SURROUNDING AREAS IN COLOMBO MC	Prof. K D W Nandalal
40.	Mr. Tennakoon TMPSB	APPLICATION OF RAINWATER HARVESTING ON THE ROOFS TOP OF RESIDENTIAL BUIDINGS TO REDUCE OF URBAN FLOODS	Dr. Jagath Gunathilake Mr. Malika Gunawardena
41.	Mr. Lathiscumar S	COMMUNITY RESILIENCE TO DROUGHT HAZARD IN THE THODDUVANKODDY GN DIVISION IN KILINOCHCHI DISTRICT	Prof. K W G Rekha Nianthi
Medical Microbiology			
42.	Mr. Iththisham H S M	EFFECTIVENESS OF POOLED RNA EXTRACTION AND RT-PCR FOR SARS-COV-2DETECTION FOR LARGE -SCALE TESTING IN ASYMPTOMATIC INDIVIDUALS	Dr. Ajith Pitawala Prof. F Noordeen
43.	Ms. Kumari H B A U	INCIDENCE AND IDENTIFICATION OF CRYPTOSPORIDIUM SPECIES IN POSTRENAL TRANSPLANT PATIENTS	Prof. W M D R Iddawela Prof. S Wickramasinghe
44.	Ms. Rahumath M S S	PURITY AND CORRELATION BETWEEN TOTAL RNA IN THE THROAT SWABS OF COVID-19 SUSPECTED INDIVIDUALS AND REAL TIME RT-PCR RESULTS	Prof. Faseeha Noordeen
45.	Ms. Sathgurupathi I I U I B M	A DESCRIPTIVE STUDY ON PREVALENCE OF RESPIRATORY VIRUSES IN PATIENTS WITH RESPIRATORY SYMPTOMS DURING SARS-CoV-2 PANDEMIC IN NORTH CENTRAL PROVINCE, SRI LANKA	Dr. S Sumathipala Dr. V C Liyanapathirana
46.	Mr. Punchihewa P J P	COMPARISON OF A RAPID ANTIGEN DETECTION TEST WITH A RAPID POINT OF CARE REAL-TIME RT-PCR ASSAY FOR THE DETECTION OF SARS COV-2 INFECTION	Prof. F Noordeen
47.	Kuthubdeen S B	MOLECULAR CHARACTERIZATION OF SELECTED ANTIBIOTIC RESISTANT BACTERIA ISOLATED FROM HEALTHY YOUNG ADULTS	Dr. V C Liyanapathirana
48.	Ms. Rathnayake RAMK	STUDY ON CRYPTOSPORIDIUM INFECTION IN GOATS AND GOAT FARMERS IN SELECTED LOCATIONS OF MULLAITIVU DISTRICT, SRI LANKA	Prof. D Iddawela Prof. S Wickramasinghe
Gemology and industrial Minerals			
49.	Ms. Dasanayaka DL	SOCIC ECONONMIC IMPACT OF GEM INDUSTRY IN SRI LANKA A CASE STUDY OF RATHNAPURAAND MONARAGALA DISTRICTS	Dr. S W Nawarathne
50.	Ms. Jayamali MKC	SEDIMENTOLOGICAL AND GIS BASED COMPOSITE APPROACH TO APPRAISE GEMS AND GOLD	Dr. S W Nawarathne

		POTENTIALGIN GANGA RIVER FLOODPLAIN AT TAWALAMA SRI LANKA	
51.	Mr. Wewegedara WGCN	QUALITY ENHANCEMENT OF INTENSIVELY SILKY AND MILKY MINERAL INCLUDED SAPPHIRE BY THERMAL TREATMENT	Dr. S W Nawarathne
52.	MS. Wijewardane S	OCCURRENCE OF GEM MINAERALS AND GOLD IN EHELIYADODA GEM FIELD SRI LANKA	Dr. S W Nawarathne
<i>Clinical Biochemistry</i>			
53.	Ms. De Silva DPM	CHANGES OF HAEMATOLOGICAL PARAMETERS IN PATIENTS WITH CHRONIC KIDNEY DISEASE OF UNCERTAINETIOLOGY (CKDu) ADMITTED TO DISTRICT BASE HOSPITAL, DAMBULLA, SRI LANKA	Prof. R Sivakanesan Dr. L Rasnayake
54.	Ms. Kumari GCP	A STUDY ON GLYCEMIC INDICES OF COMMERCIALY AVAILABLE BREAKEFAST CEREAL-BASED PRODUCTS	Prof. J G S Ranasinghe
<i>Biodiversity, Ecotourism & Environment Management</i>			
55.	Mr. Gunawardena W M C	COMMIUNITY-BASED SUSTAINABLE TOURISM DEVELOPMENT:A CASE STUDY OF GALATHARE VILLAGE, KURUNEGALA, SRI LANKA	Mr. C C Wijesundara
56.	Ms. Kumari GRVH	PROMOTION AND DEVELOPMENT OF ECOTOURISM IN DUMBARA VILLAGE, RATNAPURA DISTRICT, SRI LANKA	Mr. M Ekanayake Mr. C Wijesundara
57.	Ms. Aberathne MASUM	ESTIMATION OF BIOMASS AND CARBON STOCK IN DUNUMADALAWA FOREST RESERVE IN KANDY DISTRICT, SRI LANKA	Prof. S K Yatigammana Ms. A M S K Abeysekara
58.	Ms. Ranaweera RMKSR	COMMUNITY PERCEPTIONS ON DEVELOPING A POTENTIAL AGROTOURISM CENTER: A STUDY OF THE HALYALA VILLAGE IN HUNNASGIRIYA SRI LANKA	Prof. C M Madduma Bandara
59.	Ms. Lakmali WPD	STUDY ON ECOTURISM POTENTIAL OF THE MINIPE AREA IN THE CENTRAL PROVINCE TO DEVELOPED IT AS AN ECOTURISM DESTINATION	Prof. MWSK Yatigammana
60.	Mr. Kumar BPR	DY SEASON POPULATION STRUCTURE OF THE ASIAN ELEPHANT (<i>Elephas maximus maximus</i>) IN PROPOSED KALAWEWA NATIONAL PARK, SRI LANKA	Dr. Chaminda S. Wijesundara Dr. Sandun J. Perera
61.	Ms. Siriwardhane HMSD	EXPLORING THE POTENTIALS OF ADRITOURISM AS A TOOL FOR SUBSTANABLE RURAL DEVELOPMENT	Prof. H M D R Hearath

<i>Environmental Science</i>			
62.	Ms. Sithumini PI	SPATIAL AND TEMPORAL VARIATIONS OF GROUNDWATER QUALITY IN GAMPAHA DISTRICT, SRI LANKA: A CASE STUDY FROM RATHUPASWALA	Prof. G W A R Fernando Dr. Anushka U Rajapaksha
63.	Mr. Galappathi MCA	FACTORS AFFECTING ON DIE-BACK OF MANILKARA HEXANDRA IN BUNDALA NATIONAL PARK	Prof. G W A R Fernando Prof. Sumedha Madawala Prof. Gamini Seneviratne Dr. D D G L Dahanayake
64.	Ms. Jayawardena SBADY	FRACTAL ANALYSIS OF RIVER NETWORKS FOR HYDROMETEOROLOGICAL DISASTER MANAGEMENT	Prof. N D Subasinghe
65.	Ms. Sritharan T	ASSESSMENT ON WATER ACCESSIBILITY AND WATER QUALITY FOR DOMESTIC USAGE ALONG WITH THE SANITATION PRACTICES IN BANDARAWELA REGION	Prof. Nadeeshani Nanayakkara
<i>Physics of Materials</i>			
66.	Yalagalage Thilini Poornima Pieris	ANILINE DOPED MOF-199 AS AN EFFICIENT LIGHT HARVESTER IN DYE SENSITIZED SOLAR CELLS	Dr. H. A. I. R. Perera
67.	Hewa Munasinghage Buddhika Induwana Gunathilaka	DEVELOPMENT OF LiClO ₄ BASED ELECTROLYTES AND THEIR APPLICATIONS IN ELECTROCHROMIC DEVICES	Dr. H. N. M. Sarangika Dr. V. A. Seneviratne
<i>Medical Physics</i>			
68.	Navarathna Mudiyanselage Malith Srilal Rathnayake	EVALUATION OF THE RELATIONSHIP BETWEEN PRETREATMENT SERUM THYROGLOBULIN LEVEL AND THE DOSE RATED OF ¹³¹ I TREATED PATIENTS	Dr. D. K. K. Nanayakkara
69.	Bhuwan Mani Pokhrel	DOSE EVALUATION IN COBALT BEAN BREAST RADIOTHERAPY: DURING THE USAGE OF WEDGES AND HALF BEAM BLOCKS	Dr. V. Sivakumar Mr. T. R. C. K. Wijayarathna
70.	Yadu Nath Bhusal	VERIFICATION OF DOSE CALCULATION IN COBALT – 60 HIGH DOSE-RATE BRACHYTHERAPY TREATMENT PLAN	Dr. V. Sivakumar Mr. Y. P. Y. P. Ariyasinghe
<i>Science Education</i>			
71.	Ms. E M I N Jayawardane	SUCCESSFULNESS OF THE NEWLY INTRODUCED TECHNOLOGY STREAM IN GCE A/L :A CASE STUDY IN WESTERN PROVINCE	Prof. K M G G Jayasuriya
72.	Ms. F Amith Shamiya	INTRODUCING EFFECTIVE REVISION METHODS TO IMPROVE ACIEVEMENTS IN SCIENCE OF GRADE ELEVEN STUDENTS	Prof. Sanath Rajapaksha

73.	Ms. M R A S M Bandara	SELF REGULATED LEARNING STRATEGIES ON STUDENTS' PERFORMANCE IN LEARNING SCIENCE:A CASE STUDY FROM SELECTED IAB SCHOOL IN KELANIYA EDUCATION ZONE	Prof. S C K Rubasinghe
74.	Mrs. M W G Perera	ISSUES OF PRACTICING STUDENT CENTERED APPROACH IN SCIENCE TEACHING IN GRADE SEVEN : A CASE STUDY IN CHILAW EDUCATION ZONE	Dr. Sumudu Rubasinghe
75.	Mr. G R S Prabath Kumara	LEARNING SCIENCE IN BILINGUAL MODE :TRENDS AND ISSUES IN MONARAGALA DISTRICT	Dr. Sakunthala Yatigammana
76.	Mr . H K L B Virajith	VIEWS OF THE TEACHERS AND STUDENTS TOWARDS THE REVISED GRADE 6 SCIENCE CURRICULUM: A STUDY IN MULATIYANA EDUCATION ZONE, MATARA DISTRICT	Dr. Sakunthala Yatigammana
77.	Ms. G M H P Gajanayake	PERCEPTION OF SCIENCE AND MATHEMATICS AMONG GRADE EIGHT AND ELEVEN STUDENTS: A CASE STUDY IN BUDULLA EDUCATIONAL ZONE	Dr. Priyanka De Silva
78.	Mr. K H N Prasad	STRENGTHS AND ISSUES ON BIOLOGY LABORATORY PRACTICAL IN GCE (A/L) IN SOUTHERN PROVINCE	Dr. Seetha I Wickramasinghe
79.	Ms. A D N Karunadasa	EFFECTIVENESS OF TEACHING STRUCTURE AND MECHANISMS OF ALIPHATIC HYDROCARBONS (GCE (A/L)CHEMISTRY) THROUGH COMPUTER ASSISTED LEARNING TOOLS: A CASE STUDY IN EMBILIPITIYA EDUCATIONAL ZONE	R J K U Ranatunga
80.	Ms. G G H M H S Bandara	A STUDY TO DEVELOP GRADE SIX STUDENT'S BASIC SCIENCE PROCESS SKILLS AND ATTITUDES TOWARDS SCIENCE	Dr. P R K A Vitharana
81.	Ms D M M Dissanayake	USE OF ADVANCED MATHEMATICAL KNOWLEDGE: CASE OF TEACHING CURVE SKETCHING IN COMBINED MATHEMATICS	Dr. Shelton Perera Dr. Shelton Perera
82.	Ms. D M N K Dissanayake	EFFECTIVE TEACHING LEARNING METHODS TO INSPIRE STUDENTS TO LEARN COMPLEX NUMBERS: A CASE STUDY IN GAMPAHA EDUCATION ZONE	Dr. M I M Ishak
83.	Ms.P W I S Arampola	INVESTIGATION ON TEACHING AND LEARNING PROCESS IN COMBINED MATHEMATICS(A CASE STUDY OF GRADE 12 STUDENTS IN KANDY	Dr. Anushi Welivita

		EDUCATION ZONE)	
84.	Ms E A A Prishanthi	ACTIVITY -BASED LEARNING ON PERFORMANCE ENHANCING IN MATHEMATICS OF STUDENTS OF GRADE 9-11: CASE STUDY IN KALANIYA EDUCATION ZONE	Dr. W D Chandrasena
85.	Ms. S Parthipachuthan	IDENTIFYING MISCONCEPTIONS IN MENDELIAN GENETIC AND USE OF SIMULATION AS AN EFFECTIVE TEACHING AID IN GCE (A/L) BIOLOGICAL SCIENCE STUDENTS	Prof R G S C Rajapakshe
86.	Ms D M S K Somathilaka	USE OF ADVANCED MATHEMATICAL KNOWLEDGE: CASE OF TEACHING LIMITS IN CAMBINED MATHEMATICS	Dr. Gaya Jayakody Dr. Shelton Perera
87.	Ms. A N Sellar	THE EFFECT OF USING ICT IN LEARNING MECHANICS IN GRADE 10 SCIENCE	Dr. B M K Pemasiri
88.	Ms.H M S P Herath	APPLICATION OF AUTHENTIC ASSESSMENT IN JUNIOR SECONDARY SCHOOL BIIOLOGY IN SRI LANKA AN ILLUSTRATIVE STUDY ON COMPETENCY 3:MAJOR BIOLOGICAL PROCESSES IN ORGANISMS IN GRADE 10 SCIENCE	Dr. Upali M Sedera Prof. H M S P Madawala
89.	Ms. A M E K Abeyakoon	APPLICATION OF THREE-DIMENSIONAL LEARNING METHOD IN SCIENCE CURRICULUM IN SRI LANKA:A CASE STUDY OF GRADE 10 IN GALEWELA EDUCATION ZONE	Dr. H A I R Perera
90.	Ms.C C Weerasinghe	DEVOLOPMENT TEACHING MATERIAL ON SIMPLE HARMONIC MOTION	Dr. W D Chandrasena
91.	Ms.Y W H M Amarasinghe	A STUDY OF RELATIONSHIP BETWEEN STUDENT'S PERFORMANCE IN THIRD TERM TEST AND GCE (O/L) EXAMINATION FOR MATHEMATICS :A CASE STUDY IN ELPITIYA EDUCATION ZONE	Dr. A S Ambedgedara Dr. A K Amarasinghe
92.	Ms. A P Withanage	SECONDARY LEVEL STUDENTS MOTIVATIONAL BELIEFS COGNITIVE STRATEGIES AND MATHEMATICS PERFORMANCE: A CASE STUDY IN MAHOEDUCATION ZONE	Dr. A A I Perera
93.	Mrs. D W M H W I K Senevirathna	INVESTIGATION OF THE ACHIVEMENT LEVEL OF COMPETETENCIES RELATED TO PRIMARY SCIENCE EDUCATION ;A CASE STUDY ON GRADE 6 STUDENTS IN GIRIULLA ZONE	Dr. Sumudu Rubasinghe

94.	Mr. W A S Deshapriya	THE IMPACT OF GCE OL MATHEMATICS QUESTION PAPER BASED ON IDENTIFIED ESSENTIAL LEARNING CONCEPTS (ELCS)IN STUDENTS PERFORMANCE	Dr. W D Chandrasena
95.	Ms. A M G K K Alahakoon	EFFECTIVENESS OF INTERGRATING STEM EDUCATION IN TO GRADE 8 SCIENCE TEACHING AND LEARNING PROCESS	Prof. Sakunthala Yatigammana
96.	Ms. S Veeraputhiran	FACTORS AFFECTING STUDENT PERFORMANCE IN SCIENCE AT THE SECONDARY SCHOOL LEVEL; A CASE STUDY IN THE KANDY EDUCATION ZONE	Prof. Priyanka De Silva
97.	Mr. K A Premasiri	PHYSICS MISCONCEPTIONS OF STUDENTS AND TEACHERS IN THE SELECTED TOPICS RELETED TO GRADE TEN SCIENCE A CASE STUDY IN HOMAGAMA EDUCATION ZONE	Dr. W D Chandrasena
98.	Ms.D M M Niroshani	PERCEPTIONS OF STUDENTS AND TEACHERS AND STUDENTS PERFORMANCE IN GRADE FIVE AND SIX MATHEMATICS A CASE STUDY IN TRINCOMALEE EDUCATION ZONE	Dr. W D Chandrasena
99.	Ms. G G N Edirisinghe	THE EFFECT OF STUDENTS MATHEMATICS SKILLS ON PHYSICS PERFORMANCE IN GRADE 11 A CASE STUDY IN A SCHOOL SRI JAYAWARDENAPURA EDUCATION ZONE	Dr. T P Ranawaka Dr. W D Chandrasena
100.	Mrs. H A M Perera	RELATIONS OF GCE (ADVANCED LEVEL)STUDENTS PHYSICS RESULTS WITH SOME SELECTED FACTORS: A CASE STUDY OF VAVUNIYA SOUTH EDUCATION ZONE	Dr. W D Chandrasena Dr. T P Ranawaka
101.	Ms. T M L P Bandara	APPLICATION OF MULTIPLE REPRESENTATIONAL MODEL IN TEACHING CHEMICAL BONDS IN GRADE 10 CHEMISTRY	Dr. H A I P Perera
102.	Ms. A I Vidanapathirana	CONCEPTUAL UNDERSTANDING OF GENETICS AMONG GRADE TEN STUDENTS:A CASE STUDY IN THE KANDY EDUCATION ZONE	Prof. C L Abeyasekara
103.	Ms. M N Priyadarshani	USE OF PRACTICAL IN TEACHING CHEMISTRY COMPONENT OF GCE OL SCIENCE A CASE STUDY IN KEGALLE AND DEHIOWITA EDUCATION ZONES	Prof. C V Hettiarchchi
104.	Ms. E M C P Edirisinghe	IDENTIFY THE FACTORS AFFECT TO THE STUDENTS PERFORMANCES IN PHYSICS IN POLONNARUWA DISTRICT	Dr. B M K Premasiri

105.	Mr.H A N C Kulathilaka	FACTORS AFFECTING STUDENTS LOW PERFORMANCE IN DIFFERENTIAL CALCULUS A CASE STUDY IN COLOMBO AND GAMPAHA EDUCATION ZONE	Dr. A K Amarasinghe
106.	Ms. G A M Wasana	APPLICATION OF SELF DETERMINATION THEORY ON STUDENT'S CHEMISTRY LEARNING IN GRADE 12:A CASE STUDY IN TANGALLE EDUCATION ZONE	Dr. W D Chandrasena
107.	Mr. M K G L Chaminda	THE EFFECTIVENESS OF TEACHING LEARNING PROCESS OF INDUSTRIAL CHEMISTRY UNIT GCE(A/L) THROUGH PROBLEM BASED LEARNING (PBL):A CASE STUDY IN 1AB SCHOOL OF GALLE EDUCATION ZONE	Dr. Chamara Jayasundara
108.	Ms. S L N Manoranjani	FACTORS INFLUENCING THE PERFORMANCE OF STUDENT IN CHEMISTRY AT ANURADHAPURA DISTRICT	Prof A D L C Perera Dr W D Chandrasena
109.	Mr.P H Dhammika	E LEARNING READINESS OF STUDENTS AND TEACHERS IN BIOLOGY EDUCATION IN GCE ADVANCE LEVEL:SCHOOLS OF HOMAGAMA EDUCATION ZONE IN COLOMBO DISTRICT	Dr. Sakunthala Yatigammana
<i>Fish and Wildlife Management</i>			
110.	Mr.V P M K Abeywardana	ESTIMATION OF BODY WEIGHT OF SEMI CAPTIVE YOUNG SRI LANKAN ELEPHANTS (ELEPHAS MAXIMUS MAXIMUS) IN ELEPHANT TRANSIT HOME-UDAWALAWA	Prof. Ayona Silva Fletcher Dr. B V P Perera
<i>Industrial Mathematics</i>			
111.	SANDAMALI MS. R M I	OBTAINING BOUNDS TO A MULTI-OBJECTIVE TRANSPORTATION PROBLEM WITH VARYING DEMANDS AND SUPPLIES	Z A M S JUMAN

5.3 Postgraduate Output During the Year

5.3.1 Graduation

Even under Covid-19 pandemic situation, all academic activities have successfully been completed as per the scheduled in the calendar of dates , during the 2022 academic year as well . Accordingly , 354 graduands from Postgraduate Institute of Science received their postgraduate degrees.



Degree	No. of Students
Ph.D.	09
M. Phil.	16
M.Sc.	103
Masters	96
Diploma	130
Total	354

5.3.2 Output of Postgraduate Degree Programmes 2022 (from January to December 2022)

Programme of Study	Degree (PD/Master's/MPhil/ PhD)	No. Graduated Total
Diploma In Analytical Chemistry	Postgraduate Diploma	14
Diploma In Applied Statistics	Postgraduate Diploma	3
Diploma In Biodiversity, Ecotourism & Environment Management	Postgraduate Diploma	4
Diploma In Computer Science	Postgraduate Diploma	4
Diploma In Clinical Biochemistry	Postgraduate Diploma	2
Diploma In Disaster Management	Postgraduate Diploma	11
Diploma In Engineering Geology & Hydrogeology	Postgraduate Diploma	12
Diploma In Environmental Science	Postgraduate Diploma	4
Diploma In Experimental Biotechnology	Postgraduate Diploma	1
Diploma In GIS & Remote Sensing	Postgraduate Diploma	15
Diploma In Industrial Chemistry	Postgraduate Diploma	6
Diploma In Industrial Mathematics	Postgraduate Diploma	12
Diploma In Nanoscience & Nanotechnology	Postgraduate Diploma	9
Diploma In Physics of Materials	Postgraduate Diploma	4
Diploma In Science Education	Postgraduate Diploma	17
Diploma In Medical Microbiology	Postgraduate Diploma	4
Diploma In Water Resources Management	Postgraduate Diploma	1
Diploma In Applied Epidemiology	Postgraduate Diploma	6
Diploma In Gemology and Industrial Mineral	Postgraduate Diploma	1
		130
M.Sc. In Industrial Chemistry	Master of science	1
M.Sc. In Industrial Mathematics	Master of science	2
M.sc. In Information Technology	Master of science	2
M.sc. In Medical Physics	Master of science	4
M.sc in Fish and Wildlife Management	Master of science	1
M.Sc. In Applied Statistics	Master of science	1
M.Sc. In Clinical Biochemistry	Master of science	2
M.Sc. In Gemology and Industrial Mineral	Master of science	3
M.Sc. In Biodiversity, Ecotourism & Environment Management	Master of science	5
M.Sc. In Computer Science	Master of science	5
M.Sc. In Disaster Management	Master of science	5
M.Sc. In Engineering Geology & Hydrogeology	Master of science	8
M.Sc. In Environmental Science	Master of science	5
M.Sc. In GIS & Remote Sensing	Master of science	6

M.Sc. In Nanoscience & Nanotechnology	Master of science	7
M.Sc. In Physics of Materials	Master of science	3
M.Sc. In Science Education	Master of science	37
M.Sc. In Medical Microbiology	Master of science	6
		103
Masters of Analytical Chemistry (Course Work)	Master of science	5
Masters of Experimental Biotechnology (Course Work)	Master of science	2
Masters of Engineering Geology & Hydrogeology (Course Work)	Master of science	4
Masters of Pharmaceutical Botany (Course Work)	Master of science	6
Masters of Medical Physics (Course Work)	Master of science	4
Masters of Data Sciences (Course Work)	Master of science	15
Masters of Applied Statistics (Course Work)	Master of science	3
Masters of Biodiversity, Ecotourism & Environment Management (Course Work)	Master of science	6
Masters of Computer Science (Course Work)	Master of science	12
Masters of Environmental Science (Course Work)	Master of science	21
Masters of Industrial Chemistry (Course Work)	Master of science	3
Masters of Industrial Mathematics (Course Work)	Master of science	2
Masters of Information Technology (Course Work)	Master of science	3
Masters of Nanoscience & Nanotechnology (Course Work)	Master of science	6
Masters of Physics of Materials (Course Work)	Master of science	4
		96
Mphil in Biochemistry & Molecular Biology	Mphil	1
Mphil in Chemical Sciences	Mphil	6
Mphil in Environmental Science	Mphil	1
Mphil in Earth Sciences	Mphil	2
Mphil in Mathematics	Mphil	0
Mphil in Physics	Mphil	1
Mphil in Plant Sciences	Mphil	0
Mphil in Statistics & Computer Science	Mphil	1
Mphil in Science Education	Mphil	2
Mphil in Zoological Sciences	Mphil	2
		16
PhD in Biochemistry & Molecular Biology	PhD	0
PhD in Chemical Sciences	PhD	2
PhD in Environmental Science	PhD	2
PhD in Earth Sciences	PhD	1
PhD in Mathematics	PhD	0
PhD in Physics	PhD	0

PhD in Plant Sciences	PhD	2
PhD in Statistics & Computer Science	PhD	1
PhD in Science Education	PhD	0
PhD in Zoological Sciences	PhD	1
		9
Grand Total		354

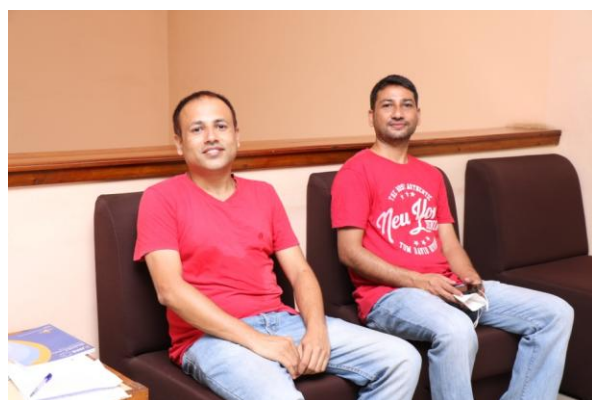
5.3.3 Local Students New Entrants and Enrolment (Total No. of Students) in Postgraduate Degree Programmes 2022

Programme of Study	New Entrants (January – December 2022)	Student Enrolment (Total no. of registered students - academic work in progress (as at 31st December 2022)
Postgraduate Diploma		
Science Education	38	38
Sub Total	38	38
Master's Degree (M.Sc.)		
M.Sc. In Analytical Chemistry	35	191
M.Sc. In Applied Statistics	18	123
M.Sc. In Biodiversity, Ecotourism & Environment Management	13	71
M.Sc. In Computer Science	63	350
M.Sc. In Clinical Biochemistry	0	43
M.Sc. In Disaster Management	12	72
M.Sc. In Engineering Geology & Hydrogeology	0	119
M.Sc. In Environmental Science	37	149
M.Sc. In Experimental Biotechnology	0	89
M.Sc. In GIS & Remote Sensing	58	203
M.Sc. In Industrial Chemistry	14	62
M.Sc. In Industrial Mathematics	20	68
M.Sc. In Information Technology	0	133
M.Sc. In Medical Physics	14	22
M.Sc. In Nanoscience & Nanotechnology	22	164
M.Sc. In Pharmaceutical Botany	8	38

M.Sc. In Physics of Materials	19	85
M.Sc. In Science Education	17	183
M.Sc. In Medical Microbiology	0	59
M.Sc. In Fish & Wildlife Management	0	0
M.Sc. In Gemmology & Industrial Minerals	0	34
M.Sc. In Water Resources Management	0	35
M.Sc. In Applied Epidemiology	13	40
M.Sc. in Data Science	5	77
M.Sc. In Analytical Chemistry	35	191
Sub Total	368	2410
M.Phil.		
M.Phil in Biomedical Sciences	1	1
Mphil in Biochemistry & Molecular Biology	4	18
Mphil in Chemical Sciences	9	54
Mphil in Environmental Science	3	31
Mphil in Earth Sciences	3	39
Mphil in Mathematics	3	10
Mphil in Physics	7	23
Mphil in Plant Sciences	2	15
Mphil in Statistics & Computer Science	3	15
Mphil in Science Education	5	12
Mphil in Zoological Sciences	1	15
Sub Total	41	233
Ph.D.		
PhD in Biochemistry & Molecular Biology	0	1
PhD in Chemical Sciences	1	5
PhD in Environmental Science	0	4
PhD in Earth Sciences	0	2
PhD in Mathematics	0	4
PhD in Physics	0	3
PhD in Plant Sciences	0	5
PhD in Statistics & Computer Science	0	4
PhD in Science Education	0	1
PhD in Zoological Sciences	0	3
Sub Total	1	32
Grand Total	448	2713

5.3.4 Foreign Students enrolment in Postgraduate Degree Programmes

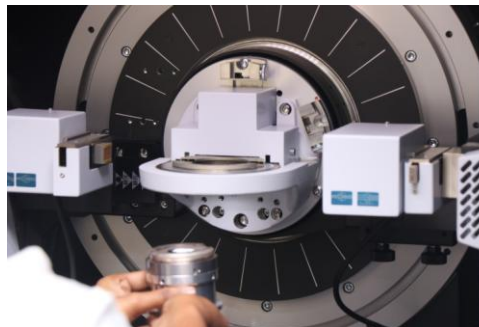
Programme of Study	Country	Student Enrolment (total no. of registered students) (as at 31st December 2022)		
		Male	Female	Total
Master's Degree				
Disaster Management	Canada/ Kuwait	1	1	2
Gemology & Industrial Minerals	India	1	1	2
GIS and Remote Sensing	Congo	1	0	1
Sub Total		3	2	5
M.Phil.				
Environmental Science	China	1	0	1
Sub Total		1	0	1
Ph.D.				
Earth Sciences	Australia	1	0	1
Sub Total		1	0	1
Grand Total		5	2	7



5.4 Research Facilities and Activities

5.4.1 Research facilities and laboratory functioning

Laboratories were prepared for students to conduct their research projects conveniently by providing facilities including needy equipments, chemical & consumable stores and storage areas.



5.4.2 PGIS research grants programme 2022

PGIS grant programme 2021 was successfully implemented and extensions have been granted. The arrangements had made to offer 10 PGIS research grants and to provide financial assistance for 2 URC research grants.

6. CONFERENCES AND SHORT-TERM PROGRAMMES

The PGIS annually conducts many short-term programmes including conferences and in-service training programmes; some of those programmes are conducted on a regular basis. The regular short-term programmes conducted in 2022 include three ‘**Online Workshops on Scientific Writing**’, ‘**Short Course on GIS and Applications**’ and the ‘**PGIS Research Congress (RESCON 2022)**’. Some additional short-term programmes conducted in 2022 were: Sensing Impulses, A workshop on Neuro Science, International Conference on Science Education, workshop on conducting research on mathematics education, PGIS Research Congress (RESCON) 2022, Scientific Writing Workshops and Joint workshops with URC and INRO.

The PGIS started 3 Minute Thesis Competitions (3MT) among the YRF(Young Research Forum) members of the PGIS Technical sessions of the PGIS Research Congress and all the other conferences were conducted through a virtual platform. The PGIS also offers consultancy services to local industries and state- and private-sector institutions



6.1 PGIS Research Congress (RESCON) – 2022



The PGIS Research Congress is the major annual research conference of the Postgraduate Institute of Science. The congress provides an excellent platform to share knowledge and network with scientists across the country and abroad through the presentation of cutting-edge research.

The Congress was held on the 29th, 30th, and 31st of October 2022. The Inauguration Ceremony, together with the keynote speech by Prof. Justin Dillon of University College, London, was held on the 29th of October 2022, and the Technical Sessions were held on 30th and 31st of October 2022.

Technical Sessions of RESCON 2022 were completely online, due to the health situation of the country. Even though the presenters were not physically present, the technical sessions were a resounding success with participants attending from all over the country.

6.2 Short-Term Programmes



Some additional short-term programmes conducted in 2021 were: A Sensing Impulses, A workshop on Neuro Science, International Conference on Science Education, workshop on conducting research on mathematics education, PGIS Research Congress (RESCON) 2022, Scientific Writing Workshops and joint workshops with URC and INRO.

The PGIS also offers consultancy services to local industries and state and private-sector institutions.

6.2.1 Workshops Held in 2022

	Programme/Theme	Organized by Fac./Dep./Center/Unit	Dates
1	A Sensing Impulses, A workshop on Neuro Science	Board of Study in Biochemistry and Molecular Biology	17 th and 18 th February, 2022
2	International Conference on Science Education	Board of Study in Science Education	19 th August 2022
3	Workshop on conducting research on Mathematics Education	Board of Study in Science Education	04 th November 2022
4	PGIS Research Congress (RESCON) 2022,	PGIS	29 th ,30 th and 31 st October 2022
5	24 th Scientific Writing Workshop	PGIS	20 th 21 st and 27 th ,28 th August 2022
6	joint workshops with URC and INRO	URC / INRO	22 nd - 24 th November 2022
7	25 th Scientific Writing Workshop	PGIS	10 th -11 th and 17 th , 18 th December 2022

7. DEVELOPMENT OF HUMAN AND PHYSICAL RESOURCES

7.1 Human Resources

During the year both faculty as well as non-academic staff of PGIS rendered valuable service to the achievement of institutional goals

7.1.1 Academic staff (Visiting)

Board of Study	Subject	Medium	Senior Professor/ Professor/Assoc. Professor	Senior Lecturer/ Lecturer	Instructor
Biochemistry of Molecular Biology	Clinical Biochemistry	English	10	13	-
	Experimental Biotechnology		09	05	10
Chemical Sciences	Analytical Chemistry		03	13	20
	Industrial Chemistry		16	15	05
	Nanoscience & Nanotechnology		22	22	05
Earth Sciences	Disaster Management		04	15	-
	GIS & Remote Sensing		02	06	08
	Water Resources Management		10	13	-
Environmenta l Science	Biodiversity, Ecotourism & Environment Management		08	08	01
	Environmental Science		14	07	01
Mathematics	Industrial Mathematics		03	13	-
Physics	Physics of Materials		06	11	-
	Medical Physics		04	18	03
Plant Sciences	Medical Microbiology		06	18	02
	Pharmaceutical Botany		06	09	08
Science Education	Diploma in Science Education		-	15	-
	Science Education		02	09	03

Statistics & Computer Science	Applied Statistics		02	12	-
	Computer Science		06	12	03
	Data Science		04	14	01
	Information Technology		04	10	05
Zoological Sciences	Applied Epidemiology		05	12	-
TOTAL			146	270	75

7.1.2 Approved Cadre and Present Staff 2022 - All Staff

*) Cadre positions of Temporary Research Assistant and Temporary Instructor are not permanently categorized

***) 4 Cadre positions of Management Assistant are in personal to holder basis

Service Category	Designation	Salary Code	DMS approved Cadre	Existing Cadre		Vacancies
				Permanent	Temporary	
Senior Level	Director	U - AC 5	01	01	-	-
	Professor	U - AC 5	05	-	-	04
	Associate Professor	U - AC 4			-	
	Senior Lecturer/Lecturer/Lecturer (Probationary)	U - AC 3			01 (Contract Basis)	
	Senior Assistant Registrar/Deputy Registrar	U - EX 2	01	-	-	01 [Committed for transfer]
	Senior Assistant Bursar/Deputy Bursar	U - EX 2	01	01	-	-
	Assistant Registrar	U - EX 1	01	01	-	-
	Electronics Engineer	U - EX 1	01	01	-	-
Tertiary Level	Scientific Assistant	U - AS 1	01	01	-	-
Secondary Level	Technical Officer (Audio Visual)	U - MT 1	01	01	-	-
	Technical Officer	U - MT 1	03	02	-	01
	Management Assistant	U - MN I	07	10	-	-
			04**			
	Management Assistant (Store Keeping)	U - MN I	01	01	-	-
	Management Assistant (Book Keeping)	U - MN I	01	01	-	-
Management Assistant (Shroff)	U - MN I	01	01	-	-	
Primary Level	Driver	U - PL 3	03	02	-	01
	Electrician	U - PL 3	01	-	-	01
	Lab Attendant	U - PL 2	01	-	-	01
	Works Aide	U - PL 1	04	03	-	01
	Office Machine Operator	U - PL 1	01	-	-	01
*)Temporary Research Assistant		Fixed	02	-	-	02
*)Temporary Instructor		Fixed	02	-	01	01

7.2 Physical Resources

The Data Science Unit of the PGIS was upgraded Hard disk Dell (2.4 TB RPM SAS 12 Gbps 2.5 in) and IT Infrastructure of the PGIS was further enhanced

7.2.1 Information on IT Utilization

Table 1: IT Infrastructure/ Labs/Internet

Number of labs for Students	Number of computers for Students	Number of labs for Education (Academics)	Number of computers for Education (Academics)
4	184	4	2

Table 2: IT Peripherals (as at 31st December 2022)

	No.
Number of Computers for students	
Desktop computers	129
Laptops/tabs	55
Number of Computers for Administrative Staff	
Desktop computers	3
Laptops/tabs	3
Number of Computers for Academic and Academic Support Staff	
Desktop computers	3
Laptops/tabs	1
Number of Computers for Non-academic Staff	
Desktop computers	25
Number of servers	13
Number of printers (heavy duty)	2
Number laser printers	15

Number of scanners	1
Other IT equipment - Digital cameras, etc.	
Smart Board	3
Web Cameras	5
Digital camera	2
Number of computer labs	4
Computers in each lab	56, 68, 55,5
Number of student computers for internet accessing	184
Number of staff Computers for internet accessing	28



8. ADMINISTRATIVE AND FINANCIAL ACHIEVEMENT

8.1 Details of the Infrastructure Facilities

8.1.1 Total Income in 2021 and 2022

	2022 (Rs.)	2021(Rs.) (Restated)
Recurrent Grant	25,998,000	24,000,000
Self-Financing Activities	99,465,726	112,823,689
All other Internal Income	259,792,454	54,833,332
Total	385,255,180	191,657,021

8.1.2 Capital Payments in 2021 and 2022

Capital Payments	Government Grant		Generated Income		Total Payments	
	2021	2022 (Rs)	2021 (Rs)	2022 (Rs)	2021 (Rs)	2022
Building	2,000,000	-	2,062,595		4,062,595	
Lab & Teaching Equipment	2,000,000	-	6,215,136	64,156,928	8,215,136	64,156,928
Office Equipment	-	-	8,796,209	131,745	8,796,209	131,745
Library Books	-	-	-	-	-	-
Sports Goods	-	-	-	-	-	-
Total	4,000,000		17,073,940	64,288,673	21,073,940	64,288,673

8.1.3 Recurrent Expenditure

Programme	Expenditure (Rs.)
Personal Emoluments –Academic	26,868,158
Personal Emoluments -Non Academic	34,742,878
Travelling Expenses	69,139
Supplies	3,579,368
Maintenance Expenses	3,398,294
Contractual Services	7,775,161
Other Recurrent Expenses	20,829,485
Depreciation	46,619,445
Grand Total	143,881,928

8.1.4 Financial Progress (Expenditure)

Subject	2022
Recurrent	100%
Capital	100%

8.1.5 Financial Performance Analysis

Subject	Exp. Per Student Rs.
Recurrent Expenditure per student (RE)	To be Calculated based on above mentioned recurrent expenditure

8.1.6 Fund Allocation, Utilization and Management

	Allocation (Mn)	Received and Utilized (Mn)
Capital Grants	-	-
Recurrent Grants	26.418	25.998

8.1.7 Research Grants Received (External Funds, 2018-2022)

Year	No. of Research Grants	Value (Rs.)
2018	4	14,001,100.00
2019	6	10,288,860.00
2020	4	995,000.00
2021	2	341,898.00
2022	-	-

8.1.8 Details of Research Grant Expenditure (Foreign Funded) Year 2022

Name of The Grantee	Title of the project	Total Grant Amount	Receipts in 2022 (Rs.)	Expenditure in 2022 (Rs.)
Prof.KBSN Jinadasa Department of Civil Engineering, Faculty of Engineering	LIEN Environmental Fellowship project Implementation Award-	SGD \$ 61,169	-	1,914,506.50
Prof. D Yakandawala Department of Botany Faculty of Science	Biogeography and Phylogenetics of Genus Piper	€192,310	1,308,188.75	635,353.14
Prof.KGN Nanayakkara	Anodic oxidation of organics present in industrial wastewater	USD \$ 12,000	-	949,784.02
Prof.R S Rajakaruna Department of Zoology Faculty of Science	Sea turtle egg sales and consumptive use in Sri Lanka	USD \$ 1,040	-	-
TOTAL				3,499,643.66

8.1.9 Details of Research Grant Expenditure (Local Funded) Year 2022

Name of The Grantee	Title of the project	Total Grant Amount	Receipts in 2022	Expenditure in 2022
			(Rs.)	(Rs.)
Prof.KMG Jayasooriya Ministry of Environment Research study	Comparative analysis of soil carbon sequestration capacity of different mangrove and associated plant communities in the Manduganga RAMZAR site and Madampa Vila sanctuary	343,900.00	103,170.00	86,204.00
Prof. RMG Rajapakshe, Department of chemistry, Faculty of Science	"In vitro biocompatibility & antimicrobial properties of Hydroxyapatite Nanoparticles & their composites derived."	2,940,000.00	50,000.00	396,695.33
Dr.S.C.K.Rubasinghe, Department of Botany, Faculty of Science	Biogeography and evolutionary relationships of Sri Lankan thalloid liverworts and hornworts	250,000.00	-	47,055.00
Prof. R M G Rajapakse Department of chemistry, faculty of Science	Technology Grants COVID cell 2020	1,155,000.00	-	124,814.05
Prof. H M S P Madawala, Department of Zoology Faculty of Science	"Study on Floristic Diversity of Ambokka Mountain Range"	275,000.00	-	23,097.00
Prof. A Pitawala, Department Of Geology Faculty Of Science	Research grant on safe use of Chrysotile Asbestos in Sri Lanka	4,392,000.00	-	243,000.00
Prof. A Pitawala, Department of Geology Faculty Of Science	Reconstructing the Prehistoric human diet using stable, palaeoproteomics & chemical analyses of human & faunal"	2,551,000.00	-	640,857.92
Ms. R W M G K Kapukotuwa (Scholarship Award)	Effect of physicochemical properties and Faecal indicator bacteria on the distribution diversity and abundance of freshwater fishes	3,476,300.00	410,000.00	839,766.96
Ms.Madushika Galabodage (Scholarship Award)	Biochemical Assessment of Quality of feeding resources and milk of cattle dependent on salt marsh pastures of manner District	3,421,700.00	989,500.00	1,268,005.80
Dr. NSP Kumburegama, Department of Zoology Faculty Of Science	Diversity of freshwater snails in the central province of Sri Lanka and their DNA bar coding and molecular phylogenetic analysis	232,000.00	-	7,000.00
Dr.PG Manthilake	Proposed Project on synthesis of value added products from Sri Lankan Zircon Sand	4,401,600.00	-	-
TOTAL			1,552,670.00	3,676,496.00

8.1.10 Details of Research Grant awarded by PGIS Year 2022

Name of the Grantee	Title of the project	Grant Amount		Receipts in 2022	Expenditure in 2022
		Year 1	Year 2	(Rs.)	(Rs.)
Dr.PA Dharmapriya Department of Geology, Faculty of Science	Micro paleontological and Litho-chemo Stratigraphical Characteristics of Sedimentary Sequence in the Manner Basin: probing the Potential of hydrocarbons and Constraints the Depositional Environments and Paleo climate during the Basin Filling	499,750.00	620,000.00	-	328,595.00
Prof.NWB Balasooriya Department of Geology, Faculty of Science	Sri Lanka Vein Graphite: Purification and Utilization for Advanced Application	500,000.00	500,000.00	-	50,000.00
Dr.TMWJ Bandara, Department of Physics, Faculty of Science	Optimizing quasi solid-state photo electrochemical solar cells by improving charge transport in electrolytes by utilizing mixed cations and electrodes by graphite/grapheme quantum dots.	485,000.00	610,000.00	610,000.00	295,800.00
Dr.BMK Pemasiri Department of Physics, Faculty of Science	Development of efficiency and stability of photo electrochemical solar cell by improving appropriate gel polymer electrolytes	495,000.00	480,000.00	-	103,635.00
Dr.WRP Wijesinghe Department of Botny, Faculty of Science	Genomic elucidation of antibiotic resistant Pseudomonas aeruginosa and Acinetobacter baumannii in livestock waste of Sri Lanka	500,000.00	500,000.00	-	419,097.48
Dr. HACK Ariyaratna Department of Botany, Faculty of Science	Diversity and distribution of fungal-borne, pathogens associated with prevailing diseases in finger millet and other major cereal crops in Sri Lanka	500,000.00	620,000.00	-	173,579.00
Prof. Deepthi Yakandawala, Department of Botny, Faculty of Science	Biogeography and Phylogenetics of Genus Piper	500,000.00	500,000.00	27,158.00	394,522.25
Prof.KB Ranawana, Department of Zoology, Faculty of Science	Population Structure and herb ivory of sambar deer (Rusa unicolor unicolor) in Horton plains National Park, Sri Lanka	490,000.00	490,000.00	-	150,467.50
Dr.TC Weeraratne, Department of	Insecticide resistant levels and resistant mechanisms in insect	495,000.00	498,000.00	-	77,600.00

Zoology, Faculty of Science	pests of stored grains in Sri Lanka				
Prof.WB Daundasekara Department of Mathematics, Faculty of Science	Multi-Vendor Multi-Buyer Integrated Inventory Supply Chain by incorporating some realistic factors with a better Synchronization: development of a realistic model and an efficient solution technique	410,000.00	410,000.00	-	310,000.00
Dr.THKR De Silva, Department of Mathematics, Faculty of Science	Mathematical Modeling of spread of Covid-19 with the Environmental Transmission of Corona virus and the Optimal	500,000.00	497,000.00	-	341,400.00
Dr. Amalka Pinidiyaarachchi , Department of Statistics & Science, Faculty of Science	Identification and classification of brain disease using deep learning on neuroimaging data	500,000.00	500,000.00	-	363,900.00
Dr.V Sivakumar , Department of Physics, Faculty of Science	URC Research Grant 280	600,000.00		600,000.00	200,000.00
Prof. SHPP Karunarathne, Department of Zoology, Faculty of Science	URC Research Grant 265	600,000.00		600,000.00	300,000.00
TOTAL				1,837,158.00	3,508,596.23

9. FAILURES AND JUSTIFICATIONS

The scheduled academic programmes and examinations for the year 2022 could not be conducted on time due to the delay occurred owing to the Covid-19 pandemic and the financial crisis. Online lectures were delivered and end semester examinations were conducted as remedial measures. Due to the financial crisis the expected construction work and procurements have to be postponed. Due to the issuance of government circulars restricting new recruitments the expected recruitment were on hold.

10. FUTURE PLANS OF PGIS

Future Plans

- Revision of curricula and courses that have not been revised; introduction of new industry-based degree programs and short-term training courses in light of the country's current and future needs
- Implementation of new standards and guidelines for quality assurance in PG Education at PGIS
- To expand avenues for research output dissemination by strengthening in-house publishing and access to peer-reviewed and indexed scientific journals, as well as introducing a rewarding system for outstanding researchers (3MT competition) and best-performing master students.
- A program for Postdoctoral Fellows and Visiting Scholars at the PGIS was started to be implemented.
- Development of infrastructure, smart classrooms, instrumentation, and laboratory facilities for advanced research in order to establish a national instrument centre at PGIS and to advance online academic program delivery
- Facilitating conducting international and national conference-workshops on a virtual platform
- Conducting a number of training programs on general and financial management to improve staff members' leadership, teamwork, and motivation

- Executed necessary action to signed MOUs with foreign universities and research institutes to offer postgraduate programs and collaborate on research Revision of existing examination procedures and streamlining of the diverse practices followed by different Boards of Study
- Obtaining feedback from students, graduates, academic staff, and other stakeholders in order to enhance the study programs as well as to develop the quality of administration-related issues.
- Increasing the number of PGIS research grants.
- Appropriate strategies to be further implemented to protect and minimize the damage to the environment adhering sustainable development policies
- Attraction and registration of more international students to improve university ranking.

11. SUSTAINABLE DEVELOPMENT

11.1 Sustainable Development Programmes Implemented at the Postgraduate Institute of Science in 2021

- Improve the garbage segregation process currently being practiced at the PGIS
- Conduct awareness programmes regularly on waste Management.
- Regular maintenance of laboratories to minimize the risk hazards.
- Researchers are asked to use fume hoods for their solvent based activities to avoid chemical poisoning and hazards. Fume hoods are designed to release air pollutants with proper mechanism.
- Conduct awareness programmes for Postgraduate students on using the chemical and instruments laboratories for reducing the possible risk and to maintain laboratories properly.
- Introducing guidelines for the disposal of hazadarous chemicals and bio hazardous waste.
- Landscaping of the surrounding area of the PGIS and interior renovations and reorganization.
- Launching the PGIS journal (International Journal on Environmental Issues.) and publishing the second special issue of Ceylon Journal of Science.
- Proper maintenance of chemical storage areas under the standard conditions and locations
- Take necessary action to relocate the exhauster fans and fire safety equipment
- Implementation of proper guidelines to minimize the usage of paper.
- Introducing Management Information System (MIS) in order to enhance the quality of academic and administrative work and to develop a paperless effective communication system.
- Identification of effective measures to minimize the usage of energy.
- Providing financial support to the University of Peradeniya for purchasing incisorator

- Providing financial assistance for support to the University of Peradeniya to improve the academic programmes.
- Align with policies and guidelines of the University of Peradeniya regarding the sustainable Management.

11.2 Sustainability Development Related Research Conducted During 2022

Name of the Student	Title of the Research
Ms. Kumarasinghe KDMSPK	IMPROVEMENT OF DYE-SENSITIZED SOLAR CELLS USING NOVEL LOW-COST MATERIALS AND TECHNOLOGIES
Mr. Mendis ASS	REMOVING TOXIC METALS USING CHELATING AGENTS FROM BIOLOGICAL TREATMENT PLANT SLUDGE OF GLOVE DIPPING INDUSTRIES TO MANUFACTURE BIO-FERTILIZERS
Gunasekara RDA	NATIVE TREE ISLAND ESTABLISHMENT TO RESTORE LOWER MONTANE FORESTS IN KNUCKLES CONSERVATION AREA, SRI LANKA
Ms. Wijesinghe WMKEH	REMOVAL OF NITRATE AND PHOSPHATE FROM WATER USING BIO POLYMER - MINERAL BASED MATERIALS AND PHYTOREMEDIATION BY SELECTED AQUATIC PLANTS
Ms. Shakoor IF	BIOPOLYMER BASED MICRO-/NANO-VEHICLES FOR SAFE DELIVERY OF FOOD BIO-ACTIVITIES AND NUTRACEUTICALS
Mr. Abeykoon AMKL	SYNTHESIS AND CHARACTERIZATION OF COPPER ZINC TIN SULFIDE (CZTS) NANOSTRUCTURED THIN FILMS FOR PHOTOELECTROCHEMICAL WATER SPLITTING
Ms. Nanayakkara NGLNU	RECONSTRUCTION OF QUATERNARY CLIMATE VARIABILITY IN SRI LANKA USING MARINE PROXICS
Ms. Paranavithana TM	DEVELOPMENT OF BASELINE SOIL INFORMATION SYSTEM FOR PADDY GROWING SOILS OF SRI LSNKA BASED ON SOIL CARBON AND OTHER SELECTED SOIL MACRO-AND MACRO-NUTRIENTS
Ms. Rukshagini P	IDENTIFICATION OF GROUNDWATER EVOLUTION AND DEVELOPMENT OF A GROUNDWATER PROTECTION PLAN FOR THE SOURCE WATER IN NEETIYAGAMA VILLAGE, ANAURADHAPURA DISTRICT
Ms. Liyanage NMN	ENVIRONMENTAL EFFECT ON DEFFERENT TISSUE PARTS AT DIFFERENT MATURITY STAGE IN BIOSYNTHETIC GENE EXPRESSION AND BIOCHEMICAL COMPOSITION OF <i>Cinnamomum zeylanicum</i> Blume
Mr. Jayasinghe RMNPK	GEOCHEMISTRY AND SEDIMENTOLOGY OF SECONDARY GEM DEPOSITS AT RATHNAPURA, SRI LANKA AND GEM EXPLORATION MODELING

12. INSTITUTIONAL GOALS & OBJECTIVES

Institutional Goals & Objectives	
Goals	Objectives
Goal 1: Ensure quality and relevance of postgraduate programmes complying with national and international standards	Our goals are to
	(i) become the most anticipated postgraduate institute, by attracting and enrolling top-performing local and international students who possess a strong inclination towards pursuing postgraduate studies
	(ii) Cultivate the necessary competencies in students, which can serve as a bridge between employer expectations and the skills acquired through postgraduate education. This will be achieved through outcome-based education
	(iii) Enhance our postgraduate study programmes by revising to meet both national and international quality standards and
	(iv) to enhance the employability opportunities of postgraduate students.
Goal 2: Enhance opportunities for education by ensuring postgraduate and continuing education programmes being more flexible, accessible, innovative and open	We plan to
	(i) implement strategies to promote potential candidates, thereby increasing the demand for and enrollment of local and international students in our postgraduate programmes
	(ii) expand the reach and improve the quality of our distance education programmes through an online platform, and to consistently provide in-demand educational and training programs and services that meet both national and regional needs, as well as national and international standards.
Goal 3: Enhance capacity for innovative research, scholarly work and partnerships	Our aims are
	(i) to create a favourable environment for high-quality research and innovation by fostering national and international collaboration in research, student training, and staff exchange programmes and
	(ii) encourage and incentivize the undertaking of multidisciplinary research.
Goal 4: Strengthen efficiency and effectiveness in Financial and Administration with in sustainability in Financial Management	Our aims are
	(i) to enhance the efficiency and effectiveness of our current administrative and financial management systems
	(ii) establish comprehensive monitoring, evaluation, and reporting systems that are pertinent to administrative and financial matters. This involves developing effective systems for tracking and assessing the performance of our administrative and financial operations, identifying areas for improvement, and reporting on progress towards achieving our objectives
	(iii) restructure our administrative systems, where necessary, to improve productivity and foster a culture of teamwork and service orientation.
	(iv) review and assess our current workforce, and request the necessary additions to ensure a sustainable and productive human resource plan and
	(v) enhancing the sustainable financial stability of our organization, as well as promoting transparency and accountability in our financial

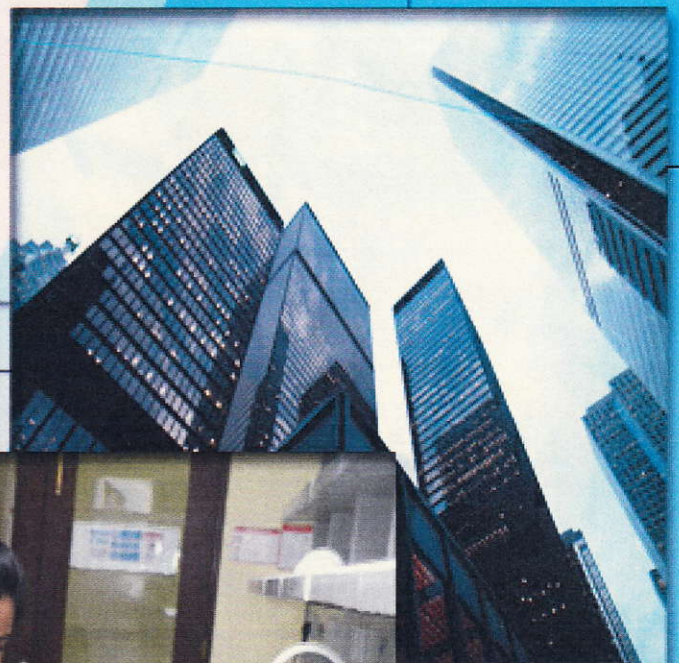
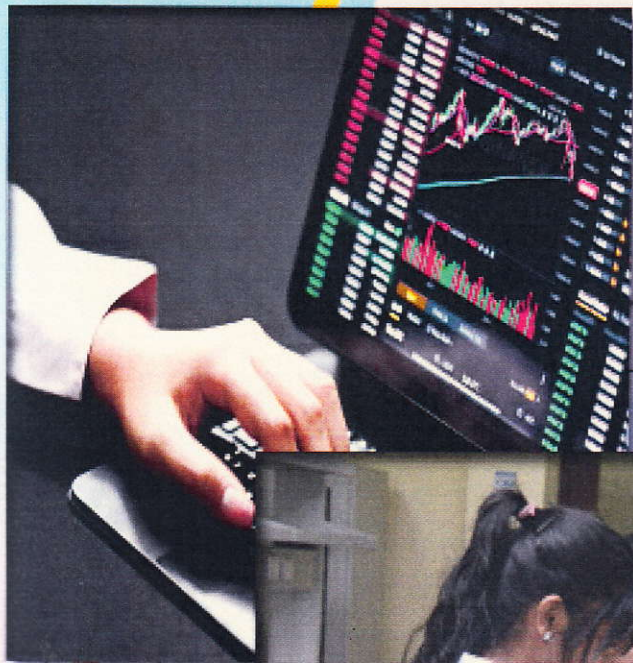
	operations. This will be achieved through the guidance of our Audit and Management Committee, as well as the Board of Management.
Goal 5: Upgrade learning, working and living environment conducive for high-quality academic pursuits, professional development and productivity	We aim to (i) promote active participation by students and staff of the PGIS in all aspects of university life, while also ensuring that they have access to upgraded welfare services and programs
	(ii) take further measures to strengthen our performance-based evaluation and reward system for teaching, research, and service activities of all staff
	(iii) embrace the concept of a green environment, while also preserving the historical and landscape features of our university. This involves implementing sustainable practices in our operations, such as reducing our carbon footprint, promoting the use of renewable energy, and practicing waste management. By doing so, we hope to create a healthy and environmentally-friendly Institute that will benefit both our students and the wider community and
	(iv) optimize both the digital and physical learning and working environments, to ensure that they are on par with global advances and challenges as well as equip our students and staff with the skills and knowledge required to thrive in the modern global landscape.
Goal 6: Enhance the capacity and range of outreach engagement	Our aims are to (i) improve our outreach engagements and expand our impact on local and global communities by developing and implementing outreach programs that are tailored to the needs of the communities and that address key social, economic, and environmental challenges
	(ii) to identify opportunities to share our resources and expertise with external stakeholders, including industry partners, community organizations, and government agencies. By working together, we can leverage our respective strengths to tackle complex challenges and achieve meaningful outcomes and
	(iii) align with national policy frameworks and actions, in order to promote social, economic, and environmental sustainability. This involves monitoring national policy developments, and identifying opportunities to contribute to policy implementation.

13 FINANCIAL STATEMENTS

2022



Postgraduate Institute of Science
University of Peradeniya



FINANCIAL STATEMENTS
2022

University of peradeniya
P.O.Box 25
Peradeniya

POSTGRADUATE INSTITUTE OF SCIENCE
STATEMENT OF FINANCIAL POSITION
AS AT 31ST DECEMBER 2022

	Note	As at 31/12/2022	Restated As at 31/12/2021
Current assets			
Cash & cash equivalents	1	17,348,015	41,989,765
Investments	2	673,899,545	466,579,690
Receivables & deposit	3	57,764,641	39,688,944
Loans & advances to staff	4	1,293,417	1,114,222
Inventories	5	4,537,466	2,969,933
Total current assets		754,843,084	552,342,554
Non current assets			
Loans & advances to staff	4	2,927,718	2,855,768
Financial misappropriation - (2008-2016)		50,119,123	50,338,160
Intangible assets	6	1,097,737	1,440,241
Property, plant & equipment	7	356,542,046	207,391,897
Total non current assets		410,686,624	262,026,066
Total assets		1,165,529,708	814,368,620
LIABILITIES			
Current liabilities			
Accrued expenses	8	16,720,852	3,035,008
Other payables	9	16,603,818	15,261,400
Refundable deposits	10	7,146,433	10,231,679
Deferred income		5,871,946	12,138,084
Provisions	11	12,012,191	20,739,916
Total current liabilities		58,355,240	61,406,087
Non current liabilities			
Provision for gratuity	12	7,204,069	8,823,126
Funds	13	4,434,029	5,514,118
Refundable deposits	10	2,365,500	3,076,500
Total non current liabilities		14,003,598	17,413,744
TOTAL LIABILITIES		72,358,838	78,819,831
NET ASSETS		1,093,170,870	735,548,789
EQUITY			
General reserves		955,627,381	602,318,280
Restricted funds	14	5,600,584	11,587,303
Capital grant		10,285,661	108,331,879
Revaluation reserve		121,657,245	13,311,327
TOTAL EQUITY		1,093,170,870	735,548,789

These financial statements are in compliance with the requirements of the Universities Act, No. 16 of 1978 and other statutory provisions.



.....
Mr.B.G.S.P. Jayakody
Deputy Bursar

The Board of Management is responsible for the preparation and presentation of these financial statements signed for and on behalf of the Board of Management



.....
Prof. H.M.T.G.A. Pitawala
Director/PGIS

The Accounting Policies and Notes on pages 7 to 13 form an integral part of these Financial Statements.

25 February 2023

POSTGRADUATE INSTITUTE OF SCIENCE
STATEMENT OF FINANCIAL PERFORMANCE
 FOR THE YEAR ENDED 31ST DECEMBER 2022

	Note	<u>2022</u> <u>Rs.</u>	Restated <u>2021</u> <u>Rs.</u>
Revenue			
Government grant (Recurrent)		25,998,000	24,000,000
Programme fees		73,614,056	89,992,972
Registration fees		3,904,000	3,436,857
Examination fees		2,397,800	1,479,400
Miscellaneous income	15	7,925,871	2,441,197
Research congress income		238,459	340,159
Medical fees		66,000	51,450
Services & facilities fees		60,000	113,000
Vehicle hiring charges		217,475	15,835
Library tickets		646,500	469,500
Supervision fees		1,101,000	1,062,500
Interest income	16	74,608,268	25,563,891
Bench fees		1,215,000	1,433,750
Exchange gain/loss		175,660,337	12,128,771
Amortization of capital grant	17	9,246,373	17,011,834
Research grant income		8,357,040	12,115,904
		385,256,180	191,657,021
Expenses			
Personal emoluments	18	61,611,036	69,633,671
Travelling	19	69,139	131,585
Supplies & consumables	20	3,579,368	3,086,834
Maintenance	21	3,398,294	3,571,843
Contractual services	22	7,775,161	7,152,439
Other expenses	23	20,829,485	20,016,096
Depreciation	24	46,619,445	39,601,759
		143,881,928	143,194,227
Net surplus / deficit for the year		241,374,252	48,462,794

	2022	Restated 2021
Cash flows from operating activities		
Surplus from ordinary activities	241,374,252	48,462,794
Non - cash movements		
Depreciation & amortization	46,961,949	39,753,792
Amortization of capital grants	(9,246,373)	(17,011,834)
Interest income	(74,608,268)	(26,419,015)
Increase / decrease in provision for audit fees	(295,500)	(420,000)
Increase / decrease in provision for gratuity	(1,619,057)	(532,345)
Increase / decrease in provision for security charges	(130,221)	130,221.00
Increase / decrease in provision for visiting lecture fees	(8,174,113)	12,014,255
Increase / decrease in provision for cleaning services	(127,890)	127,890.00
Operating surplus before the working capital changes	194,134,779	56,105,758
Increase / decrease receivables	(4,411,778)	(2,496,003)
Increase / decrease loans & advances	(251,145)	304,524
Increase / decrease inventories	(1,567,533)	(403,900)
Increase / decrease accrued expenses	11,985,844	(5,315,759)
Increase / decrease payables	2,409,316	2,298,634
Increase / decrease refundable deposits	(3,796,246)	204,613
Increase / decrease deferred income	(6,266,138)	(8,550,078)
Net cash flow from operating activities	192,237,099	42,147,789
Cash flows from investing activities		
Purchase of property, plant & equipment	(62,588,673)	(20,805,115)
Purchase of intangible assets	-	(1,358,522)
Investment in fixed deposits	(713,184,551)	(171,269,254)
Withdrawal of fixed deposits	505,864,696	134,557,629
Interest income	60,951,387	26,771,723
Net cash flow from investing activities	(208,957,141)	(32,103,539)
Cash flows from financing activities		
Government capital grants	-	4,000,000
Scholarship fund	(52,620)	53,477
Research grant receipts	2,810,858	9,190,658
Research grant payments	(10,679,945)	(12,879,899)
Net cash flows from financing activities	(7,921,707)	364,236
Increase / decrease in cash & cash equivalents	(24,641,750)	10,408,486
Cash & cash equivalent at the beginning of the year	41,989,765	31,581,279
Cash & cash equivalents at the end of the year	17,348,015	41,989,765

POSTGRADUATE INSTITUTE OF SCIENCE
STATEMENT OF COMPARISON BUDGET & ACTUAL
 FOR THE YEAR ENDED 31ST DECEMBER 2022

		<u>2022 Actual</u>	<u>2022 Budget</u>
	<u>Note</u>	<u>Rs.</u>	<u>Rs.</u>
Revenue			
Government grant (recurrent)		25,998,000	26,418,000
Programme fees		73,614,056	70,500,000
Registration fees		3,904,000	4,350,000
Examination fees		2,397,800	1,950,000
Miscellaneous income	15	7,925,871	1,070,000
Research congress income		238,459	250,000
Medical fees		66,000	115,000
Services & facilities fees		60,000	75,000
Vehicle hiring charges		217,475	345,000
Library tickets		646,500	1,100,000
Supervision fees		1,101,000	1,200,000
Interest income	16	74,608,268	22,271,000
Bench fees		1,215,000	1,230,000
Exchange gain/loss		175,660,337	-
Amortization of capital grant	17	9,246,373	-
Research grant income		8,357,040	-
		385,256,180	130,874,000
Expenses			
Personal emoluments	18	61,611,036	79,572,000
Travelling	19	69,139	2,050,000
Supplies & consumables used	20	3,579,368	8,247,000
Maintenance	21	3,398,294	6,020,000
Contractual services	22	7,775,161	10,385,000
Other expenses	23	20,829,485	24,600,000
Depreciation	24	46,619,445	-
		143,881,928	130,874,000
Net surplus/deficit for the year		241,374,252	-

POSTGRADUATE INSTITUTE OF SCIENCE
STATEMENT OF CHANGES IN NET ASSET/EQUITY
 FOR THE YEAR ENDED 31ST DECEMBER 2022

	Capital grant	Revaluation reserve	Retained earnings	Total
Balance as at 01.01.2022	108,331,879	13,311,327	602,730,942	724,374,148
Correction of accrued income & expenditure - retained earnings for the year 2021			(412,662)	(412,662)
Restated balance as at 01.01.2022	108,331,879	13,311,327	602,318,280	723,961,486
Surplus/deficit for the period	-	-	241,374,252	241,374,252
Revaluation gain as at 01.01.2022	-	131,480,921	-	131,480,921
Transfer to general reserve (remaining balance of capital grant as at 01.01.2022 on revaluation)	(88,799,845)	-	88,799,845	-
Transfer to general reserve (remaining balance of revaluation reserve as at 01.01.2022)	-	(13,311,327)	13,311,327	-
Transfer to general reserve	-	(9,823,677)	9,823,677	-
Amortization of grant	(9,246,373)	-	-	(9,246,373)
Balance as at 31 December 2022	10,285,661	121,657,245	955,627,381	1,087,570,286

NOTES TO THE FINANCIAL STATEMENTS

1. General information

1.1 Reporting entity

The Postgraduate Institute of Science (PGIS) was established in 1996 by an ordinance made by the University Grants Commission under section 18 with section 24 of the Universities Act, No. 16 of 1978.

1.2 Principal activities and nature of operations

The purpose of the PGIS is providing, promoting and developing higher education in science. The principle objective of the Institute is to provide postgraduate instructions and training and facilitate research in different disciplines of science.

1.3 Going concern

The Financial Statements have been prepared on a going concern basis. The Board of Management of the Institute has assessed the ability to continue as a going concern and has a reasonable expectation that the Institute has adequate resources to continue in operation for the foreseeable future. The Board of Management does not foresee a need for liquidation or cessation of operations, taking into account all available information about the future. Therefore, the Institute continues to adopt the going concern basis in preparing the financial statements.

1.4 Reporting period

The financial period of the Institute represents a twelve-month period from 1st January 2022 to 31st December 2022.

1.5 Basis of preparation of financial statements

1.5.1 Statement of compliance

The Financial Statements comprise the Statement of Financial Position, Statement of Financial Performance, Statement of Changes in Equity, Cash Flow Statement, Notes to the financial statements and Statement of comparison of budget and actual amounts.

The Financial Statements of the PGIS are prepared in conformity with Sri Lanka Public Sector Accounting Standards (SLPSAS) and relevant Sri Lanka Accounting Standards (SLAS). All accounting policies adopted by the PGIS are applied consistently with those of the previous year. Change in accounting policies have been disclosed separately.

1.5.2 Basis of measurement

The Financial Statements of PGIS have been on accrual basis and under the historical cost convention except where appropriate disclosures are made under relevant notes.

1.5.3 Comparative information

Comparative information including quantitative, narrative and descriptive information is disclosed in respect of the previous period for all amounts reported in the financial statements, in order to

enhance the understanding of the financial statements of the current period and to improve comparability. Where necessary, comparative figures have been rearranged to conform to the current year's presentation.

1.5.4 Approval of financial statements

The Financial Statements of the PGIS were authorized for issue by the Board of Management of the Institute at its 171st meeting held on 25th February 2023.

1.5.5 Materiality and aggregation

Each material class of similar items is presented separately in the financial statements. Items of a dissimilar nature or function are presented separately, unless they are immaterial.

1.5.6 Functional and presentation currency

The Financial Statements are presented in Sri Lankan Rupees, which is the Institute's functional and presentation currency. All financial information presented in Sri Lankan Rupees have been rounded to the nearest thousand, unless stated otherwise.

1.5.7 Offsetting

Assets & liabilities and income and expense accounts have not been offset unless required by or permitted by SLPSAS.

1.6 Significant accounting estimates and judgements

The preparation and presentation of financial statements, in conformity with SLPSAS, requires Management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets, liabilities, income and expenses. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised, if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods. Information about significant areas of estimates, uncertainty and critical judgments in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements is as follows.

Any changes in accounting estimates and critical judgements are disclosed in the relevant notes to the financial statements.

2. Summary of significant accounting policies

2.1 Assets and the basis of their valuation

2.1.1 Property, plant & equipment (PPE)

Lands, Buildings, Laboratory and Teaching Equipment, Furniture & Fittings, Library Books and Periodicals, Motor Vehicles, and Other Assets acquired out of government grants, internally generated funds and donations and shown under PPE.

a) Basis of recognition and measurement

PPE are recognized, if it is probable that future economic benefits associated with the item will flow to the entity and the cost of the items can be measured reliably. PPE are recorded at cost/revaluation less accumulated depreciation. The cost of property, plant and equipment is the cost of purchase or construction together with any incidental capital expenses there on.

An item of PPE that qualifies for recognition as an asset is initially measured at its cost. Cost includes expenditure that is directly attributable to the acquisition of the asset and subsequent costs. The cost of self-constructed assets includes the cost of materials, direct labour, any other costs directly attributable to bringing the asset to a working condition for its intended use, the costs of dismantling and removing the items and restoring the site on which they are located. Purchased software which is integral to the functionality of the related equipment is capitalized as part of that equipment. The cost of Property, Plant and Equipment comprises its purchase or construction cost and any directly attributable cost of bringing the assets working condition for its intended use.

The Institute adopts the revaluation model for the entire class of PPE after initial recognition at cost. If the carrying amount of a class of assets is increased as a result of a revaluation, the increase has been directly credited to revaluation surplus.

All buildings and motor vehicles belonging to the Institute were revalued as at 01st January 2022 by the Department of Valuation and other categories of assets except Laboratory and Teaching Equipment and Office Equipment were re-valued by internally appointed committees. The respective adjustments resulting from the above revaluations have been made in the financial statements of the Institute in accordance with the SLPSAS 07.

b) Subsequent expenditure on PPE

Expenditure incurred on tangible fixed assets are charged to the Statement of Financial Performance in the period it is incurred, unless it meets one or the following criteria, in which case it is capitalized and depreciated on the relevant basis.

- Fair value of fixed assets has subsequently increased.
- Capacity of the asset increases.
- Sustainable improvement in the quality of output or reduction in operating cost.
- Significant extension of the asset useful lifetime beyond that confirmed by repair and maintenance.

c) Depreciation

Depreciation is recognized in the Statement of Financial Performance on a Straight-Line method over the estimated useful life time of PPE from the date that they were made available for use. Lands are not depreciated.

The estimated useful life periods of each class of assets are as follows:

Description	Estimated Useful Life Time
Laboratory and Teaching equipment	5 Years
Motor Vehicles	5 Years
Library Books and Periodicals	5 Years
Telephone	10 Years
Other Equipment	5 Years
Buildings	20 Years
Sport Goods	5 Years

d) Land

The value of the lands of which the buildings of the PGIS constructed has not shown in the financial statements of the Institute as the ownership is not vested the transferred to the PGIS. Hence the value of the land has not taken in to account. However it is noted that PGIS is attached to the university of Peradeniya (PGIS ordinance No 01 of 1996 dated 12th February 1996).

2.1.2 Intangible assets

Intangible assets are recognized only when its cost can be measured reliably and it is probable that the expected future economic benefits are attributable to it will flow to the Institute. The cost of the Blue lotus 360 (upgraded version) Accounting software has been amortized over 5 years period commencing from year 2019. Amortization of payroll system and the pixdamapper Educational classroom software has been commenced from 2021 for five years keeping in line with the SLPSAS 19 (Intangible Assets).

2.1.3 Inventories

Inventories are stated at the lower of cost and net realizable value. The cost is determined on a first in first out basis and includes expenditure incurred in acquiring the inventories and bringing them to their existing condition and location.

2.1.4 Receivables

Receivables are stated at the amounts estimated to be realized.

2.1.5 Cash & cash equivalents

Cash & cash equivalents comprise cash & savings deposits at bank. The receipts & payments of the foreign currency of the RFC 2233593 US \$ account, maintaining at the Bank of Ceylon, Peradeniya is converted in to local currency at the exchange rate existing on the dates of receipts and payments. Exchange gain/loss has been calculated by using the Central bank year end exchange rate and recognized through the statement of financial performance.

2.1.6 Financial misappropriation amount of Rs 50,338,160.18

As per the special investigation audit report issued by Auditor General's Department on 26/07/2018, the Auditor General's Department has identified a capital loss incurred due to obtaining money anomalously by cancelling fixed deposits by the former Senior Assistant Bursar, Mr. W.M.M.S.M Iddawala as Rs 50,338,160.18 (Excluding redeposit amount of Rs 5,000,000.00). Further, it was identified in their report that interest income of Rs 24,346,723 has also been lost due to fraudulently withdrawn fixed deposit by Mr. W.M.M.S.M Iddawala from 14/03/2008 to 30/11/2017. Action has already been taken to recover an amount of Rs. 219,037.00 from the gratuity amount payable amount to Mr. W.M.M.S.M Iddawala and action is also being taken to recover the balance amount lying to the credit of University Provident Fund of Mr. W.M.M.S.M Iddawala.

Criminal case is going on at Kandy Magistrate Court under the case No: MC/B/43167/17. Attorney General's Department has lodged a civil case (No DC/1196/20) against Mr. W.M.M.S.M Iddawala to recover the losses. Lawyers are of the view that there is a high possibility of recovering the financial losses. Therefore financial misappropriation amount of Rs. 50,338,160 has been categorized under non-current assets.

2.1.7 Liabilities & provisions

All known liabilities as at the balance sheet date are included in the financial statements and adequate provisions have been made for liabilities which time and the amounts are uncertain. Liabilities payable after one year from the balance sheet date are treated as non-current liabilities in the statement of financial position.

2.1.8 Provision for gratuity

The provision for gratuity as at 31st December 2022 has been calculated by using Actuarial Valuation method prescribed under SLPSAS 19 (Employee Benefits). Followings disclosures are made in the accounts keeping in line with the requirements of the standard.

Actuarial Valuation of Gratuity Liabilities as at 31 December 2022

	Rs.
<u>Change in the Present Value of The Defined Benefit Obligation (PV-DBO)</u>	
Provision for PV-DBO as at 01 January 2022	= 8,823,126
Interest Cost for the period	= 1,014,660
Past Service Cost	= 370,063
Current Service Cost for the period	= 469,624
Gratuity paid/payable for those who left during the period	= (4,492,671)
Actuarial (Gain)/Loss on PV-DBO	= 1,019,266
Provision for PV-DBO as at 31 December 2022	= <u>7,204,069</u>

AMOUNTS RECOGNIZED IN THE BALANCE SHEET AND INCOME STATEMENT

Liability recognized in the balance sheet

Provision for Gratuity as at 31 December 2022	= 7,204,069
Unrecognized actuarial Gains/(Losses) as at 31 December 2022	= -
Liability recognized in the balance sheet as at 31 December 2022	= <u>7,204,069</u>

<u>Expenses recognized in the income statement</u>	
Past Service Cost	= 370,063
Interest Cost	= 1,014,660
Current Service Cost	= 469,624
Net Actuarial (Gain)/Loss recognized immediately	= <u>1,019,266</u>
Expenses recognized in the Income Statement	= <u><u>2,873,613</u></u>

<u>Movements in the Net Liability Recognized in the balance sheet</u>	
Opening Net Liability as at 01 January 2022	= 8,823,126
Expenses recognized in the Income Statement	= 2,873,613
Gratuity paid/payable for those who left during the period	= <u>(4,492,671)</u>
Closing Net Liability as at 31 December 2022	= <u><u>7,204,069</u></u>

2.1.9 University Provident Fund (UPF) & University Pension Fund

The PGIS and employees contribute 15% and 10% respectively, on the salary of each employee to the University provident fund in line with the respective statues and legislation in Sri Lanka and University Act. Also the university contributes 8% to the University Pension Fund in respect of pensionable employees in which case the contribution to the UPF from the PGIS is 7%.

2.1.10 Employees' Trust Fund (ETF)

The PGIS contributes 3% on the salary of each employee to the Employees Trust Fund.

2.1.11 Accounting for grants

Grants that compensate the PGIS for expenses incurred are recognized as revenue in the income statement in the same period in which the expenses are recognized. Grant that compensate the cost of assets are recognized in the income statement on a systematic basis over the useful life of the related asset as per the Sri Lanka Accounting Standard 20. (LKAS 20). The PGIS adopts income approach of the standard when identifying capital grants.

Where grants /donations are received for use in an identified project or activity, such funds are held in a restricted fund account and transferred to the statement of financial performance to match with expenses incurred in respect of that identified project. Unutilized funds are held in their respective fund accounts and included under restricted funds in the statement of financial position until such time as they are required.

2.1.12 Research and scholarships fund & work shop & event fund

Research and development fund has been established by transferring old research grant balances and workshop & event fund has been established by transferring old unclaimed workshops balances with the approval of the Finance Committee and the Board of Management in 2018 for used for the defined purposes approved by the Board of Management.

3. Statement of financial performance

3.1 Recognition of revenue in the statement of financial performance

a) Interest income

Interest income is recognized on accrual basis.

b) Programme fees income

Programme fees income is identified under accrual basis accounting principle. Accordingly, programme fees which are applicable to the current period are only identified as programme fees income for the reporting period. Adjustments were made in the accounts for unpaid programme fees (Receivables) and the excess course fees paid (Deferred income) for the year ended 31st December 2022.

c) Recurrent grants

Revenue from recurrent grants is recognized in the period in which grant is received.

d) Research grants income & expenditure

An equivalent amount of recurrent nature expenses of research grants has been identified as research grant income for the year since Research Grants are operated on a non-profit basis.

e) Other income

Other income are recognized on accrual basis.

f) Government grants

An amount of Rs. 25,998,000.00 has been received by the PGIS as recurrent grant for the year 2022. Government grants received during the year 2022 has been recognized as revenue in the Statement of Financial Performance.

g) Income from workshops, short courses, seminars etc

The administrative income from Workshops, Short courses and Seminars are disclosed under the miscellaneous income.

3.2 Recognition of expenditure in the statement of financial performance

Expenditure has been recognized on accrual basis and charged to the revenue in ascertaining the income over expenditure.

4. Cash flow statement

The cash flow statement has been prepared using indirect method in line with the Sri Lanka public sector Accounting Standards 2 (SLPSAS 2).

	Note	2022 Rs.	2021 Rs.
Cash & cash equivalents	1		
Cash at bank (A/C 0001273990)		879,062	885,422
Cash at bank (A/C 0001274002)		1,227,888	517,124
Cash at bank (A/C 057100191338034)		355,726	567,726
Cash at bank (A/C 81041788)		12,940,007	1,811,805
Savings A/C US \$ 2233593		1,087,391	21,602,693
Saving A/C- BOC-84023069		212,229	15,929,331
Saving A/C- 057-2-001-5-0031385		645,712	675,664
		17,348,015	41,989,765

	Note		
Investments	2		
Fixed deposits at BOC		133,801,609	46,614,896
Fixed deposits at NSB		134,639,876	119,460,674
Fixed deposits in US \$ at BOC		381,668,440	191,648,332
Fixed deposits at People's Bank		23,789,621	29,433,030
Fixed deposits at SMIB		-	79,422,758
		673,899,545	466,579,690

	Note		
Receivables & deposits	3		
Receivable-programme fees		34,589,400	30,140,292
Accrued interest		22,467,868	8,803,949
Vehicle hiring charges		41,219	11,501
Prepayments		447,441	564,489
Receivable - deposits		2,500	2,500
Sundry debtors		66,213	66,213
Deposits for services		150,000	100,000
		57,764,641	39,688,944

	Note		2022 Rs.	2021 Rs.
Loans & advances to staff	4			
	Current	Non current	Total	Total
Distress loan	1,037,487	2,549,437	3,586,924	3,315,791
Computer loan	82,000	106,500	188,500	180,500
Vehicle loan	160,840	249,851	410,691	434,599
Staff loan	13,090	21,930	35,020	39,100
	1,293,417	2,927,718	4,221,135	3,969,990

	Note		
Inventories	5		
Stationery		3,482,780	1,482,573
Chemicals		1,054,686	1,487,359
		4,537,466	2,969,933

	Note		
Intangible assets	6		
Computer Software			
Cost:			
Opening balance		1,712,522	354,000
Additions		-	1,358,522
Balance as at end of		1,712,522	1,712,522
Accumulated amortization			
Opening balance		272,281	120,249
Amortization charge		342,504	152,033
Balance as at end of		614,785	272,281
Net book value		1,097,737	1,440,241

(Note 7)

Property, plant & equipment

	Rs.									
	Buildings	Telephone	Laboratory & teaching equip.	Library books	Motor vehicle	Office equipment	Sport goods	Total		
Cost										
Opening balance as at 1 st January 2022	182,736,180	528,000	186,993,729	9,959,396	16,320,091	36,302,044	46,470	432,885,910		
Adjustments/ disposals	(182,736,180)	(528,000)	-	(9,959,396)	(16,320,091)	-	(46,470)	(209,590,137)		
Revalued amount as at 1st January 2022	240,350,000	153,000	-	5,028,770	17,000,000	-	34,800	262,566,570		
During the year additions	-	-	64,156,928	-	-	131,745	-	64,288,673		
Closing Balance as at 31st Dec. 2022	240,350,000	153,000	251,150,657	5,028,770	17,000,000	36,433,788	34,800	550,151,015		
Less: Depreciation										
Opening balance as at 1 st January 2022	52,106,616	519,424	127,237,627	9,545,055	16,316,283	19,751,897	17,111	225,494,012		
Adjustments/ disposals	(52,106,616)	(519,424)	-	(9,545,055)	(16,316,283)	-	(17,111)	(78,504,488)		
During the year additions	12,017,500	15,300	25,047,554	1,005,754	3,400,000	5,126,376	6,960	46,619,445		
Accumulated depreciation as at 31st December 2022	12,017,500	15,300	152,285,181	1,005,754	3,400,000	24,878,274	6,960	193,608,969		
Net book value as at 31st December 2022	228,332,500	137,700	98,865,476	4,023,016	13,600,000	11,555,514	27,840	356,542,046		

	Notes	2022 Rs.	2021 Rs.
Accrued expenses	8		
Accrued expenses - recurrent		15,020,852	3,035,008
Accrued expenses - capital		1,700,000	-
		16,720,852	3,035,008
Payables	9		
Stamp duty payables		12,800	17,950
Paye tax payables		300,336	204,551
Other payables-boards of study	9.1	1,688,596	1,595,926
Other payables-short courses & workshops	9.2	13,240,067	11,948,154
Security bonds		16,589	14,977
Retention Money		1,345,430	1,479,843
		16,603,818	15,261,401
Other payable-boards of study	9.1		
Board of study in chemical sciences		74,700	20,300
Board of study in earth sciences		1,418,836	1,290,836
Board of study in enviromental sciences		1,625	1,625
Board of study in physics		11,740	11,740
Board of study in plant sciences		4,346	4,346
Board of study in science education		99,537	76,362
Board of study in statistics computer science		-	138,755
Board of study in zoological sciences		60,212	51,962
Board of study in biomedical sciences		17,600	-
		1,688,596	1,595,926

	Notes	2022 Rs.	2021 Rs.
Other Payables-short courses,workshops & others	9.2		
Advance certificate course in org.chemistry		200,222	585,122
23 rd Advance S/C on GIS application		-	756
72 nd S/C on GIS application		-	106,794
24 th Advance S/C on GIS		692,830	692,830
W/S on effecet of climate change on biodiversity		-	4,724
25 th Advance S/C on GIS		-	11,530
73 rd S/C on GIS application		-	50,954
76 th S/C on GIS application		-	791
77 S/C on GIS & application		-	12,604
S/C on ICTA		2,237,004	2,237,004
Tailor-made S/C on GIS		-	150,000
DMC training programme		570,450	570,450
79 th S/C on GIS application		-	47,118
111 th S/C on GIS & application		-	20,591
112 th S/C on GIS & application		401,362	401,362
114 th S/C on GIS & application		-	26,717
ICEMS-2020		-	73,738
S/C on application GIS for survey		-	35,000
Curriculum dev.In data science		3,320,055	6,125,238
121 st S/C on GIS & application		-	82,357
122 nd S/C on GIS & application		-	9,864
Atlas water bottled project		45,000	45,000
E-Workshop on application of molecular techniques		-	62,140
ICMME-2021		79,995	113,837
Traininig programme on digital case mgt system		-	58,200
W/S on career guidance - 2021		-	24,987
W/S on current status & future prospects of P/I in SL		-	83,000
Consultancy project-GSMB		784,425	
W/S on value added product		127,875	127,875
125 th S/C on GIS & its application		340,742	187,570
W/S on neuro science - 2022		53,585	-
Consultancy project-Mahaweli Authority		59,060	-
International conference on SE-2022		49,205	-
128th S/C GIS & application		4,278,257	-
		13,240,067	11,948,154

			2022 Rs.	2021 Rs.
	Notes 10			
Deposits	Current	Non current	Total	
Library deposits	3,850,000	1,230,000	5,080,000	7,242,614
Science deposits	3,099,500	1,135,500	4,235,000	5,815,358
Other deposits	196,933	-	196,933	250,207
	<u>7,146,433</u>	<u>2,365,500</u>	<u>9,511,933</u>	<u>13,308,179</u>
Provisions		11		
Provision for audit fees			544,500	840,000
Provision for lecture fees			11,467,691	19,641,804
Provision for security service			-	130,221
Provision for cleaning service			-	127,890
			<u>12,012,191</u>	<u>20,739,916</u>
		12		
Retiring gratiuty				
Balance as at 1 st January			8,823,126	9,355,471
Charge for the year		12.1	2,873,613	558,963
			11,696,740	9,914,434
Payments made during the year			(4,492,671)	(1,091,308)
Balance as at end of December			<u>7,204,069</u>	<u>8,823,126</u>
Charge for the Year		12.1		
Past service cost			370,063	-
Interest cost			1,014,660	748,438
Current service cost			469,624	570,089
Net actuarial (gain)/loss recognised immediately			1,019,266	(759,563)
Expenses recognizeed in the income statetment			<u>2,873,613</u>	<u>558,963</u>
Funds		13		
Scholarship fund-amarasinghe			1,358,409	1,345,354
Research & scholarship funds			219,080	2,083,789
Workshop & event fund			2,856,541	2,084,975
			<u>4,434,029</u>	<u>5,514,118</u>

Restricted funds

			Note	2022	2021
G. No.	Grantee Name	Grant Name	14	Rs.	Rs.
6225	Prof.H.M.D.N.Priyantha	Collaborative research		215,755	215,755
6242	Prof.H.M.T.G.A.Pitawala	Value addition to SL laterites		67,250	67,250
6270	Dr.S.C.K.Rubasinghe	Biodiversity secretariat grant		-	47,055
6275	Prof.R.M.G.Rajapakse	RG/2017BS/03		-	346,695
6279	Prof.H.M.S.P.Madawala	Biodiversity secretariat grant		50,726	73,823
6281	Ms.P.M.Weeraratne	NSF/NCH/2018/11		-	640,858
6282	Prof.A.Pitawala	NRC grant AB 19-004		523,540	766,540
6283	Ms M G K Kapukotuwa	NSF/SCH/2019/04		-	429,767
6284	Dr K G N Nanayakkara	IFS Sweden grant		-	949,784
6286	Dr K B S N Jinadasa	LEF project for Kurunegala lake		-	1,914,507
6287	Dr NPS Kumburegama	03/05/BD/19/011/2019-06		146,621	153,621
6288	Ms.M.M.K Galabadage	NSF/SCH/2019/09		235,815	514,321
6289	Prof.R.M.G.Rajapakse	TG/2020/covid/HS-01		-	124,814
6290	Prof.R S Rajakaruna	BCG conservation grant		50,238	50,238
6291	Dr.G.P.G.Manthilake	Lankan zirocon grant		106,250	106,250
6292	Prof: D Yakandawala	AustriaP 33148 B		870,861	198,025
6293	Dr.T.M.W.J Bandara	PGIS/2020/05		537,000	222,800
6294	Dr.H.A.C.K.Ariyaratne	PGIS/2020/23		86,421	260,000
6295	Dr.B.M.K.Pemasiri	PGIS/2020/10		391,365	495,000
6296	DR T.H.K.R. De Silva	PGIS/2020/04		122,700	464,100
6297	DR.W.R.P.Wijesinghe	PGIS/2020/17		15,639	434,736
6298	Prof.U.A.J.Pinidiyaarchchi	PGIS/2020/06		118,100	482,000
6299	Dr.N.W.B.Balasuriya	PGIS/2020/18		394,900	444,900
6300	Dr.T.C Weeraratne	PGIS/2020/12		418,150	495,750
6301	Prof.D.M.D.Yakandawala	PGIS/2020/21		92,327	459,691
6302	Dr P.L Dharmapriya	PGIS/2020/03		21,155	349,750
6303	Prof.W.B.Daundasekara	PGIS/2020/24		100,000	410,000
6304	Prof.K.B.Ranawana	PGIS/2020/22		174,933	325,400
6305	Prof..K.M.G.G.Jayasuriya	Madugaga ramzar		160,839	143,873
6306	Prof.S.H.P.P.Karunaratne	URC grant -280		300,000	-
6307	Dr V.Sivakumar	URC grant -265		400,000	-
				5,600,584	11,587,303

	Notes	2022 Rs.	2021 Rs.
<u>Miscellaneous income</u>	15		
Printing income		72,673	139,902
Administration charges		758,435	1,513,792
Certificate fees		193,870	93,460
Application processing fees		1,256,000	1,852,750
XRD analysis income		1,021,750	537,250
XRF analysis income		345,000	-
Other income		4,278,144	786,972
		7,925,871	4,924,126
<u>Interest income</u>	16		
Fixed deposit interest		73,632,525	24,539,835
RFC interest		523,691	373,343
Staff loan interest		169,155	163,391
Savings interest		282,898	487,323
		74,608,268	25,563,891
<u>Amortization of capital grant</u>	17		
Buildings		-	5,130,664
Lab & teaching equipment		6,423,238	8,764,787
Library books		-	196,106
Office equipment		2,823,135	2,920,276
		9,246,373	17,011,834
<u>Personal emoluments</u>			
<u>Personal emoluments (Academic)</u>	18		
Salaries and wages		2,699,613	4,425,094
University provident fund		849,012	1,151,422
Pension fund		64,641	314,757
Employee Trust Fund		182,730	293,236
Academic allowance		3,592,110	5,010,419
Other allowances		264,137	295,983
Additional allowance - 20%		418,087	639,351
Gratuity		-	129,988
Cost of living		198,523	339,015
Research allowance		731,653	1,118,864
Academic monthly allowance		135,968	-
Visiting lecture fees		17,731,684	25,557,993
		26,868,158	39,276,122
<u>Personal emoluments (non academic)</u>	18		
Salaries and wages		12,817,639	12,998,047
University Provident Fund		1,525,129	1,603,129
Pension fund		1,610,239	1,576,514
Employee Trust Fund		627,074	635,929
Overtime		1,647,917	1,042,844
Holiday payments		189,842	175,858
Other allowances		101,400	191,900
Monthly Compensation Allowance - MCA		5,770,391	5,849,461
Gratuity		2,873,613	428,975
Research allowance		380,328	391,230
Additional allowance - 20%		2,564,618	2,599,760
Cost of living		2,309,840	2,349,360
Monthly allowance		1,480,667	-
Acting pay		107,850	-
Staff benefits		117,832	131,542
		34,124,379	29,974,549

	Notes	2022 Rs.	2021 Rs.
Personal emoluments (casual)	18		
Casual wages		618,500	383,000
		618,500	383,000
Travelling and subsistence	19		
Travelling expenses (domestic)		69,139	131,585
		69,139	131,585
Supplies	20		
Stationery & office requisites		1,041,036	1,421,879
Fuel & lubricants		954,775	489,996
Uniform & tailoring		103,463	1,500
Mechanical & electrical		824,071	238,861
Chemicals & glassware		656,024	934,598
		3,579,368	3,086,834
Maintenance	21		
Vehicles		730,746	1,246,572
Plant, machinery & equipment		2,413,554	2,207,391
Buildings & structure		253,994	117,880
		3,398,294	3,571,843
Contractual services	22		
Telecommunications		2,551,248	2,961,147
Postal charges		237,180	207,975
Electricity		1,593,974	1,179,991
Security services		1,561,354	1,397,909
Water charges		22,734	44,946
Cleaning services		1,808,671	1,360,472
		7,775,161	7,152,439
Other recurrent expenditure	23		
Printing and advertising		543,688	1,282,712
Audit fees		619,500	420,000
Special services, councils & committees		1,602,646	1,299,636
Special services, professional & others		77,525	36,000
Workshops & seminars		680,636	288,020
Staff development		65,625	-
Holiday warrants		30,750	86,400
Bank charges		331,273	351,688
Awards & indemnities		1,500,000	-
Examination expenses		3,944,088	1,919,757
Other expenses		1,091,246	192,945
Staff welfare		319,217	94,893
Legal & documentation charges		177,665	779,570
PGIS research congress		987,956	839,338
Stamp duty expense		26,125	28,800
Intangible asset amortization expenses		342,504	152,033
University insurance scheme		132,000	128,400
Research grant expenditure		8,357,040	12,115,904
		20,829,485	20,016,096
Depreciation	24		
Buildings		12,017,500	9,258,004
Telephone		15,300	52,800
Lab & teaching equipment		25,047,554	26,061,056
Books and periodicals		1,005,754	196,106
Office equipment		5,126,376	4,010,870
Motor vehicles		3,400,000	13,628
Sports goods		6,960	9,294
		46,619,445	39,601,759
		143,881,928	143,194,227

POSTGRADUATE INSTITUTE OF SCIENCE

TRIAL BALANCE AS AT DECEMBER 2022

ACCOUNT CODE	ACCOUNT NAME	DR AMOUNT (RS.)	CR AMOUNT (RS.)
00003	CASH BOOK A/C 057100191338034	355,726	
00002	CASH BOOK A/C 0001274002	1,227,888	
00001	CASH BOOK A/C 0001273990	879,062	
00007	CASH BOOK A/C NO 81041788	12,940,007	
10320	SAVING-BOC NO: 84023069	212,229	
10310	SAVING-P.AMARASINGHE SCH.FUND	645,712	
05000	US \$ SAVING A/C	1,087,391	
10100	FIXED DEPOSIT - BOC	133,801,609	
10200	FIXED DEPOSITS - PEOPLES BANK	23,789,621	
10110	FIXED DEPOSIT - BOC - RFC	381,668,440	
10500	FIXED DEPOSIT- NSB	134,639,876	
03000	ACCRUDE INCOME	22,467,868	
3100	RECEIVABLE VEHICLE HIRING CHARGES	41,219	
04000	DEPOSIT FOR SERVICES- FUEL	150,000	
01006	PREPAYMENTS	447,441	
03200	RECEIVABLE PROGRAMME FEE	34,589,400	
01009	RECEIVABLE-DEPOSIT	2,500	
01001	SUNDRY DEBTORS	66,213	
02000	DISTRESS LOAN	3,586,924	
02002	COMPUTER LOAN	188,500	
02004	VEHICLE LOAN	410,691	
02003	STAFF LOAN	35,020	
01004	STOCK AS AT 31ST DECEMBER	4,537,466	
10040	ACCOUNTING SOFTWARE	1,712,522	
10000	BUILDING	240,350,000	
10003	LAB & TEACHING EQUIPMENTS	251,150,657	
10004	LIBRARY BOOKS	5,028,770	
10005	MOTOR VEHICLES	17,000,000	
10006	OFFICE FURNITURE EQUIPMENTS	36,433,788	
01011	SPORTS GOODS	34,800	
10002	TELEPHONE	153,000	
10095	FINANCIAL MISAPPROPRIATION A/C	50,119,123	
35000	PROVISION FOR DEPRECIATION - BUILDING		12,017,500
35200	PROVISION FOR DEPRECIATION - LAB TEACHING EQUIPMENT		152,285,181
35300	PROVISION FOR DEPRECIATION - LIBRARY BOOKS		1,005,754
35500	PROVISION FOR DEPRECIATION - OFFICE EQUIPMENT		24,878,274
35600	PROVISION FOR DEPRECIATION - TELEPHONE		15,300
35400	PROVISION FOR DEPRECIATION - MOTOR VEHICLES		3,400,000
35652	PROVISION FOR DEPRECIATION-SPORT GOODS		6,960
35650	PROVISION FOR DEPRECIATION-SOFTWARE		614,786
30400	ACCRUED EXPENSES		15,020,852
31954	PAYEE TAX		300,336
31950	STAMP DUTY		12,800
23020	BOARDS OF STUDY CHEMICAL SCIENCE		74,700
23030	BOARDS OF STUDY EARTH SCIENCE		1,418,836
23040	BOARDS OF STUDY ENVIRONMENTAL SCIENCE		1,625
23060	BOARDS OF STUDY PHYSICS		11,740
23070	BOARDS OF STUDY PLANT SCIENCE		4,346
23080	BOARDS OF STUDY SCIENCE EDUCATION		99,537

ACCOUNT CODE	ACCOUNT NAME	DR AMOUNT (RS.)	CR AMOUNT (RS.)
23100	BOARDS OF STUDY ZOOLOGICAL SCIENCE		60,212
23112	BOARD OF STUDY-BIOMEDICAL SCIENCE		17,600
30200	SECURITY BOND		16,589
23110	5% RETENTION ON CAPITAL WORKS		1,345,430
32119	112TH S/C ON GIS & APPLICATION		401,362
32096	24TH ADVANCE S/C ON GIS		692,830
32139	ATLAS WATER BOTTLED PROJECT		45,000
32147	ICMME-2021		79,995
32141	CONSULTANCT PROJECT -GSMB TECHNICAL SERVICE		784,425
32142	W/S ON VALUE ADDED PRODUCT		127,875
32148	W/S ON NEUROSCIENCE-2022		53,585
32144	125TH S/C ON GIS & ITS APPLICATION		340,742
32150	CUNSLTANCY PROJECT-MAHAWELI AUTHORITY		59,060
32151	INTERNATIONAL CONFERENCE ON SE-2022		49,205
32152	128TH S/C ON GIS		4,278,257
32108	DMC TRAINING PROGRAMME		570,450
31520	ADVANCE COURSE IN ORGANIC CHEMISTRY		200,222
6285	CURRICULUM DEV. IN DATA SCIENCE-PROF.PUSHPA & DR IMALKA		3,320,055
32103	S/C ON ICTA		2,237,004
23200	DEFERRED INCOME		5,871,946
30100	DEPOSITS		196,933
30004	LIBRARY DEPOSIT		5,080,000
30005	SCIENCE DEPOSIT		4,235,000
30700	SUNDRY CREDITORS		1,700,000
35700	PROVISION FOR AUDIT FEES		544,500
35760	PROVISION FOR LECTURE FEES		11,467,691
32082	PROF.P AMARASINGHE SCHOLARSHIP FUND		1,358,409
35720	PROVISION FOR GRATUITY		7,204,069
21500	RESEARCH & SCHOLARSHIP FUNDS		219,080
6287	03/05/BD/19/011(2019)-06-DR NPS KUMBUREGAMA		146,621
6290	BCG CONSERVATION GRANT		50,238
6291	BIODIVERSITY SECRETARIAT GRANT-PROF.H M S P MADAWALA		50,726
6292	COLLABORATIVE RESEARCH		215,755
6293	MELSIRIPURA GRANT		67,250
6294	NRC GRANT-AB19-004		523,540
6295	NSF/SCH/2019/09-MS GALABADAGE		235,815
6296	SRI LANKA ZIRCON SAND		106,250
6297	PGIS/2020/23		86,421
6298	PGIS/2020/24 - PROD.W.B.DAUNDASEKARAE		100,000
6299	AUSTRIA-PROF: D YAKANDAWALA		870,861
6300	MADUGAGA RAMZAR & MADAMPE VILA SANCTUARY-PROF.K.M.G.G.JAYASURIYA		160,839
6301	PGIS/2020/03 - DR P.L DHARMAPRIYA		21,155
6302	PGIS/2020/04-DR T H K R DE SILVA		122,700
6303	PGIS/2020/05-DR.T.M.W.J BANDARA		537,000
6304	PGIS/2020/06 - PROF.PINIDIYAARCHCHI		118,100
6305	PGIS/2020/10		391,365
6306	PGIS/2020/12 - DR.T.C WEERARATHNE		418,150
6307	PGIS/2020/17-DR W R.P WIJASINGHE		15,639
6308	PGIS/2020/18-DR.N.W.B.BALASURIYA		394,900
6309	PGIS/2020/21 - PROF.D.M.D.YAKANDAWALA		92,327
6310	PGIS/2020/22 - PROF.K.D.RANAWANA		174,933

ACCOUNT CODE	ACCOUNT NAME	DR AMOUNT (RS.)	CR AMOUNT (RS.)
6306	UNIVERSITY RESEARH GRANT-URC 280		300,000
6307	URC GRANT-265		400,000
20600	WORKSHOPS & SHORT COURSE FUND		2,856,541
21000	CAPITAL GRANT - SPENT		10,285,661
20000	GENERAL RESERVES		714,253,129
21500	REVALUATION RESERVE		121,657,245
90275	STAMP DUTY EXPENSE	26,125	
84108	ACA-ACADEMIC ALLOWANCES	3,592,110	
84112	ACA-ADDITIONAL ALL. 20%	418,087	
84120	ACA-COL	198,523	
84104	ACA-E. T. F	182,730	
84110	ACA-OTHER ALLOWANCE	264,137	
84103	ACA-PENSION	64,641	
84113	ACA-MONTHLY ALLOWANCE	135,968	
84121	ACA-RESEARCH ALLOWANCE 25%	731,653	
84101	ACA-SALARIES & WAGES	2,699,613	
84102	ACA-U .P.F	849,012	
84106	VISITING LECTURE FEES	17,100,592	
84108	NON- OVER TIME	1,647,917	
84103	NON-ACA PENTION	1,610,239	
84104	NON-ACA- E.T.F	627,074	
84102	NON-ACA- U P F	1,525,129	
84101	NON-ACA-SALARIES	12,817,639	
84109	NON-HOLIDAY PAYMENTS	189,842	
84102	NON-ACA-MCA.20%	5,770,391	
84104	GRATUITY	2,873,613	
84106	NON ACA. RESEARCH ALL. 25%	380,328	
84107	NON-ADDITIONAL ALLOWANCE	2,564,618	
84108	NON-COL	2,309,840	
84103	NON ACA-MONTHLY ALLOWANCE	1,480,667	
84101	NON-STAFF BENIFIT	117,832	
84109	NON-ACTING PAY	107,850	
84101	STATIONARY & OFFICE REQUISITES	1,041,036	
84105	CHEMICAL & GLASSWARE	656,024	
84102	FUELL & LUBRICANT	954,775	
84103	UNIFORM & TAILORING	103,463	
84104	MECHANICAL & ELECTRICAL GOODS	824,071	
84101	TRAVELLING EXPENSES (DOMESTIC)	69,139	
84103	BUILDING & STRUCTURES	253,994	
84102	PLANT , MACHENARY & EQUIPMENT	2,413,554	
84101	VEHICLES	730,746	
84102	TELECOMMUNICATION	2,551,248	
84106	WATER CHARGES	22,734	
84104	ELECTRICITY	1,593,974	
84105	SECURITY SERIVES	1,561,354	
84103	POSTAL CHARGES	237,180	
84107	CLEANING SERVICES	1,808,671	
84150	DEPRECIATION - BUILDING	12,017,500	
84153	DEPRECIATION - LAB & TEACHING EQUIP	25,047,554	
84154	DEPRECIATION - LIBRARY BOOKS	1,005,754	
84155	DEPRECIATION - OFFICE EQUIPMENTS	5,126,376	

ACCOUNT CODE	ACCOUNT NAME	DR AMOUNT (RS.)	CR AMOUNT (RS.)
80956	DEPRECIATION - MOTOR VEHICALS	3,400,000	
80951	DEPRECIATION - TELEPHONE	15,300	
80811	AUDIT FEES	619,500	
80910	BANK CHARGES	331,273	
84249	CASUAL VAGES	618,500	
80958	DEPRECIATION-SPORT GOODS	6,960	
80957	DEPRECIATION-SOFTWARE	342,504	
80914	EXAMINATION EXPENSES	3,944,088	
80908	HOLIDAY WARRENT & SEASON TICKETS	30,750	
80812	LEAGAL & DOCUMENTATION CHARGES	177,665	
84210	NON- OTHER ALLOWANCE	101,400	
80911	AWARDS & INDEMNITIES	1,500,000	
80915	OTHER - NEWSPAPER MAGAZINES ECT	1,091,246	
80926	PGIS INSURENCE SCHEME	132,000	
80935	PGIS RESEARCH CONGRESS	987,956	
80810	PRINTING ADVERTISING ECT	543,688	
80903	SPECIAL SERVICES - PROFESSIONAL & OTHER FEES	77,525	
80902	SPECIAL SERVICES COUNCIL & COMMITIES	1,602,646	
80930	STAFF WELFARE	319,217	
80920	FIELD VISIT EXPENSES	631,092	
80906	STAFF DEVELOPMENT	65,625	
80904	WORKSHOP & SEMINAS	680,636	
80941	RESEARCH GRANT EXPENDITURE	8,357,040	
70072	ADMINISTRATION CHARGES		758,435
70073	CERTIFICATE FEE		193,870
70077	XRD ANALYSIS INCOME		1,021,750
70075	APPLICATION PROCESSING FEE		1,256,000
70078	XRF ANALYSIS INCOME		345,000
70070	MISCELLANEOUS INCOME		4,278,144
70071	PRINTING INCOME		72,673
75000	INTEREST FROM SAVING A/C		282,898
75010	INTEREST INCOME FROM LOANS & ADVANCES		169,155
75060	INTEREST INCOME ON FD		73,632,525
75005	INTEREST ON RFC		523,691
75102	AMORTIZED INCOME		9,246,373
75100	BENCH FEE		1,215,000
70010	EXAMINATION FEES		2,397,800
70061	EXCHANGE GAIN /LOSS		175,660,337
60000	GOVERNMENT GRANT FOR RECCURANT		25,998,000
70250	LIBRARY TICKET		646,500
70025	M.PHIL & PH.D TUTION FEE		1,375,700
70090	MEDICAL FEE		66,000
70030	REGISTRATION FEE		3,904,000
70076	RESCON INCOME		238,459
70190	SERVICES & FACILITIES FEE		60,000
75064	SUPERVISION FEE		1,101,000
70020	TUTION FEES		72,238,356
70200	VEHICAL HIRING CHARGES		217,475
75103	REASEARCH GRANTS INCOME		8,357,040
	TOTAL	1,503,635,390	1,503,635,390

14 REPORT OF THE AUDITOR GENERAL



ජාතික විගණන කාර්යාලය

தேசிய கணக்காய்வு அலுவலகம்

NATIONAL AUDIT OFFICE



මගේ අංකය
எனது இல.
My No.

සිපිසීපී/කේඩී/ඩී/පීපීඅයිඑස්/2023/07
உமது இல.
Your No.

දිනය
திகதி
Date

2023 මැයි 19 දින



අධ්‍යක්ෂ

විද්‍යා පශ්චාත් උපාධි ආයතනය

විද්‍යා පශ්චාත් උපාධි ආයතනයේ 2022 දෙසැම්බර් 31 දිනෙන් අවසන් වර්ෂය සඳහා වූ මූල්‍ය ප්‍රකාශන සහ වෙනත් නෛතික හා නියාමන අවශ්‍යතා පිළිබඳව 2018 අංක 19 දරන ජාතික විගණන පනතේ 12 වන වගන්තිය ප්‍රකාරව විගණකාධිපති වාර්තාව

1. මූල්‍ය ප්‍රකාශන

1.1 මතය

විද්‍යා පශ්චාත් උපාධි ආයතනයේ 2022 දෙසැම්බර් 31 දිනට මූල්‍ය තත්ත්ව ප්‍රකාශනය සහ එදිනෙන් අවසන් වර්ෂය සඳහා වූ මූල්‍ය කාර්යසාධන ප්‍රකාශනය, ගිවිසම් වෙනස්වීම් ප්‍රකාශනය සහ එදිනෙන් අවසන් වර්ෂය සඳහා මුදල් ප්‍රවාහ ප්‍රකාශනය සහ මූල්‍ය ප්‍රකාශනවලට අදාළ සටහන්, සාරාංශගත වැදගත් ගිණුම්කරණ ප්‍රතිපත්තිවලින් සමන්විත 2022 දෙසැම්බර් 31 දිනෙන් අවසන් වර්ෂය සඳහා වූ මූල්‍ය ප්‍රකාශන ශ්‍රී ලංකා ප්‍රජාතාන්ත්‍රික සමාජවාදී ජනරජයේ ආණ්ඩුක්‍රම ව්‍යවස්ථාවේ 154(1) ව්‍යවස්ථාව සමඟ සංයෝජිතව කියවිය යුතු 2018 අංක 19 දරන ජාතික විගණන පනතේ සහ 1971 අංක 38 දරන මුදල් පනතේ විධිවිධාන ප්‍රකාර මාගේ විධානය යටතේ විගණනය කරන ලදී. ආණ්ඩුක්‍රම ව්‍යවස්ථාවේ 154(6) ව්‍යවස්ථාව ප්‍රකාරව මාගේ වාර්තාව යථා කාලයේදී පාර්ලිමේන්තුවේ සභාගත කරනු ලැබේ.

විද්‍යා පශ්චාත් උපාධි ආයතනයේ මූල්‍ය ප්‍රකාශන තුළින් 2022 දෙසැම්බර් 31 දිනට මූල්‍ය තත්ත්වය සහ එදිනෙන් අවසන් වර්ෂය සඳහා එහි මූල්‍ය ක්‍රියාකාරීත්වය හා මුදල් ප්‍රවාහ ශ්‍රී ලංකා රාජ්‍ය අංශයේ ගිණුම්කරණ ප්‍රමිතීන්ට අනුකූලව සත්‍ය හා සාධාරණ තත්ත්වයක් පිළිබිඹු කරන බව මා දරන්නා වූ මතය වේ.

1.2 මතය සඳහා පදනම

ශ්‍රී ලංකා විගණන ප්‍රමිතීන්ට (ශ්‍රී.ලං.වි.ප්‍ර) අනුකූලව මා විගණනය සිදු කරන ලදී. මෙම විගණන ප්‍රමිතීන් යටතේ වූ මාගේ වගකීම, මෙම වාර්තාවේ මූල්‍ය ප්‍රකාශන විගණනය සම්බන්ධයෙන් විගණකගේ වගකීම යන කොටසේ තවදුරටත් විස්තර කර ඇත. මාගේ මතය සඳහා පදනමක් සැපයීම උදෙසා මා විසින් ලබාගෙන ඇති විගණන සාක්ෂි ප්‍රමාණවත් සහ උචිත බව මාගේ විශ්වාසයයි.

1.3 ආයතනයේ 2022 වාර්ෂික වාර්තාවේ ඇතුළත් අනෙකුත් තොරතුරු

මෙම විගණන වාර්තාවේ දිනට පසුව මට ලබාදීමට බලාපොරොත්තු වන විද්‍යා පශ්චාත් උපාධි ආයතනයේ 2022 වාර්ෂික වාර්තාවේ ඇතුළත් කර ඇති නමුත් මූල්‍ය ප්‍රකාශන සහ ඒ පිළිබඳව වූ මාගේ විගණන වාර්තාවේ ඇතුළත් නොවන තොරතුරු, අනෙකුත් තොරතුරු යන්නෙන් අදහස් වේ. මෙම අනෙකුත් තොරතුරු සඳහා කළමනාකරණය වගකිව යුතුය.

මූල්‍ය ප්‍රකාශන සම්බන්ධයෙන් වූ මාගේ මතයෙන් අනෙකුත් තොරතුරු ආවරණය නොකරන අතර මම ඒ පිළිබඳ කිසිදු ආකාරයක සහතිකවීමක් හෝ මතයක් ප්‍රකාශ නොකරමි.

මූල්‍ය ප්‍රකාශන පිළිබඳ මාගේ විගණනයට අදාළව, මාගේ වගකීම වන්නේ ඉහත හඳුනාගත් අනෙකුත් තොරතුරු ලබාගත හැකි වූ විට කියවීම සහ එසේ කිරීමේදී අනෙකුත් තොරතුරු මූල්‍ය ප්‍රකාශන සමඟ හෝ විගණනයේදී හෝ වෙනත් ආකාරයකින් ලබාගත් මාගේ දැනුම අනුව ප්‍රමාණාත්මක වශයෙන් නොගැලපෙනවාද යන්න සලකා බැලීමයි.

විද්‍යා පශ්චාත් උපාධි ආයතනයේ 2022 වාර්ෂික වාර්තාව කියවන විට, එහි ප්‍රමාණාත්මක වරදවා දැක්වීම් ඇති බව මම නිගමනය කළහොත්, නිවැරදි කිරීම සඳහා පාලනය කරන පාර්ශවයන් වෙත එම කරුණු සන්නිවේදනය කළ යුතුය. තව දුරටත් නිවැරදි නොකළ වරදවා දැක්වීම් තිබේ නම්, ඒවා ආණ්ඩුක්‍රම ව්‍යවස්ථාවේ 154(6) ව්‍යවස්ථාව ප්‍රකාරව මා විසින් යථා කාලයේදී පාර්ලිමේන්තුවේ සභාගත කරනු ලබන වාර්තාවට ඇතුළත් කරනු ඇත.

1.4 මූල්‍ය ප්‍රකාශන පිළිබඳ කළමනාකරණයේ සහ පාලනය කරන පාර්ශවයන්ගේ වගකීම්

මෙම මූල්‍ය ප්‍රකාශන ශ්‍රී ලංකා රාජ්‍ය අංශයේ ගිණුම්කරණ ප්‍රමිතීන්ට අනුකූලව පිළියෙල කිරීම හා සාධාරණ ලෙස ඉදිරිපත් කිරීම සහ වංචා හෝ වැරදි හේතුවෙන් ඇති විය හැකි ප්‍රමාණාත්මක සාවද්‍ය ප්‍රකාශයන්ගෙන් තොරව මූල්‍ය ප්‍රකාශන පිළියෙල කිරීමට හැකිවනු පිණිස අවශ්‍ය වන අභ්‍යන්තර පාලනයන් තීරණය කිරීම කළමනාකරණයේ වගකීම වේ.

මූල්‍ය ප්‍රකාශන පිළියෙල කිරීමේදී, ආයතනය අඛණ්ඩව පවත්වාගෙන යාමේ හැකියාව තීරණය කිරීම කළමනාකරණයේ වගකීමක් වන අතර, කළමනාකාරිත්වය ආයතනය ඇවර කිරීමට අදහස් කරන්නේ නම් හෝ වෙනත් විකල්පයක් නොමැති විටදී මෙහෙයුම් නැවැත්වීමට කටයුතු කරන්නේ නම් හැර අඛණ්ඩ පැවැත්මේ පදනම මත ගිණුම් තැබීම හා ආයතනයේ අඛණ්ඩ පැවැත්මට අදාළ කරුණු අනාවරණය කිරීමද කළමනාකරණයේ වගකීමකි.

ආයතනයේ මූල්‍ය වාර්තාකරණ ක්‍රියාවලිය සම්බන්ධව පරීක්ෂා කිරීමේ වගකීම, පාලනය කරන පාර්ශවයන් විසින් දරනු ලබයි.

2018 අංක 19 දරන ජාතික විගණන පනතේ 16 (1) උප වගන්තිය ප්‍රකාරව, ආයතනයේ වාර්ෂික සහ කාලීන මූල්‍ය ප්‍රකාශන පිළියෙල කිරීමට හැකිවන පරිදි ස්වකීය ආදායම්, වියදම්, වත්කම් හා බැරකම් පිළිබඳ නිසි පරිදි පොත්පත් හා වාර්තා පවත්වාගෙන යා යුතුය.

1.5 මූල්‍ය ප්‍රකාශන විගණනය සම්බන්ධයෙන් විගණකගේ වගකීම

සමස්තයක් ලෙස මූල්‍ය ප්‍රකාශන, වංචා සහ වැරදි නිසා ඇතිවන ප්‍රමාණාත්මක සාවද්‍ය ප්‍රකාශනයන්ගෙන් තොර බවට සාධාරණ තහවුරුවක් ලබාදීම සහ මාගේ මතය ඇතුළත් විගණන වාර්තාව නිකුත් කිරීම මාගේ අරමුණ වේ. සාධාරණ සහතිකවීම උසස් මට්ටමේ සහතිකවීමක් වන නමුත්, ශ්‍රී ලංකා විගණන ප්‍රමිති ප්‍රකාරව විගණනය සිදු කිරීමේදී එය සෑම

විටම ජරමාණාත්මක සාවද්‍ය ප්‍රකාශනයන් අනාවරණය කරගන්නා බවට වන තහවුරු කිරීමක් නොවනු ඇත. වංචා සහ වැරදි තනි හෝ සාමූහික ලෙස බලපෑම නිසා ප්‍රමාණාත්මක සාවද්‍ය ප්‍රකාශනයන් ඇතිවිය හැකි අතර, එහි ප්‍රමාණාත්මකභාවය මෙම මූල්‍ය ප්‍රකාශන පදනම් කරගනිමින් පරිශීලකයන් විසින් ගනු ලබන ආර්ථික තීරණ කෙරෙහි වන බලපෑම මත රඳා පවතී.

ශ්‍රී ලංකා විගණන ප්‍රමිති ප්‍රකාරව විගණනයේ කොටසක් ලෙස මා විසින් විගණනයේදී වෘත්තීය විනිශ්චය සහ වෘත්තීය සැකමුසුබවින් යුතුව ක්‍රියා කරන ලදී. මා විසින් තවදුරටත්,

- ප්‍රකාශ කරන ලද විගණන මතයට පදනමක් සපයා ගැනීමේදී වංචා හෝ වැරදි හේතුවෙන් මූල්‍ය ප්‍රකාශනවල ඇති විය හැකි ප්‍රමාණාත්මක සාවද්‍ය ප්‍රකාශනයන් ඇතිවීමේ අවදානම් හඳුනාගැනීම හා තක්සේරු කිරීම සඳහා අවස්ථාවෝචිතව උචිත විගණන පරිපාටි සැලැසුම් කර ක්‍රියාත්මක කරන ලදී. වරදවා දැක්වීම් හේතුවෙන් සිදුවන ප්‍රමාණාත්මක සාවද්‍ය ප්‍රකාශනයන්ගෙන් සිදුවන බලපෑමට වඩා වංචාවකින් සිදුවන්නා වූ බලපෑම ප්‍රබල වන්නේ ඒවා දුස්සන්ධානයෙන්, ව්‍යාජ ලේඛන සැකසීමෙන්, චේතනාන්විත මඟහැරීමෙන්, වරදවා දැක්වීමෙන් හෝ අභ්‍යන්තර පාලනයන් මඟ හැරීමෙන් වැනි හේතු නිසා වන බැවිනි.
- අභ්‍යන්තර පාලනයේ සඵලදායීත්වය පිළිබඳව මතයක් ප්‍රකාශ කිරීමේ අදහසින් නොවුවද, අවස්ථාවෝචිතව උචිත විගණන පරිපාටි සැලැසුම් කිරීම පිණිස අභ්‍යන්තර පාලනය පිළිබඳව අවබෝධයක් ලබාගන්නා ලදී.
- භාවිතා කරන ලද ගිණුම්කරණ ප්‍රතිපත්තිවල උචිතභාවය, ගිණුම්කරණ ඇස්තමේන්තුවල සාධාරණත්වය සහ කළමනාකරණය විසින් කරන ලද සම්බන්ධිත හෙළිදරව් කිරීම් අගයන ලදී.
- සිද්ධීන් හෝ තත්ත්වයන් හේතුවෙන් ආයතනයේ අඛණ්ඩ පැවැත්ම පිළිබඳ ප්‍රමාණාත්මක අවිනිශ්චිතතාවයක් තිබේද යන්න සම්බන්ධයෙන් ලබාගත් විගණන සාක්ෂි මත පදනම්ව ගිණුම්කරණය සඳහා ආයතනයේ අඛණ්ඩ පැවැත්ම පිළිබඳ පදනම යොදා ගැනීමේ අදාළත්වය තීරණය කරන ලදී. ප්‍රමාණවත් අවිනිශ්චිතතාවයක් ඇති බවට මා නිගමනය කරන්නේ නම් මූල්‍ය ප්‍රකාශනවල ඒ සම්බන්ධයෙන් වූ හෙළිදරව්කිරීම්වලට මාගේ විගණන වාර්තාවේ අවධානය යොමු කළ යුතු අතර, එම හෙළිදරව්කිරීම් ප්‍රමාණවත් නොවන්නේ නම් මාගේ මතය විකරණය කළ යුතුය. කෙසේ වුවද, අනාගත සිද්ධීන් හෝ තත්ත්වයන් මත අඛණ්ඩ පැවැත්ම අවසන් වීමට හැකිය.
- මූල්‍ය ප්‍රකාශනවල ව්‍යුහය හා අන්තර්ගතය සඳහා පාදක වූ ගනුදෙනු හා සිද්ධීන් උචිත හා සාධාරණව ඇතුළත්වී ඇති බව සහ හෙළිදරව්කිරීම් ඇතුළත් මූල්‍ය ප්‍රකාශනවල සමස්ත ඉදිරිපත් කිරීම අගයන ලදී.

මාගේ විගණනය තුළදී හඳුනාගත් වැදගත් විගණන සොයාගැනීම්, ප්‍රධාන අභ්‍යන්තර පාලන දුර්වලතා හා අනෙකුත් කරුණු පිළිබඳව පාලනය කරනු ලබන පාර්ශවයන් දැනුවත් කරමි.

2. වෙනත් තෛතික හා නියාමන අවශ්‍යතා පිළිබඳ වාර්තාව

2.1 2018 අංක 19 දරන ජාතික විගණන පනතේ පහත සඳහන් අවශ්‍යතාවයන් සම්බන්ධයෙන් විශේෂ ප්‍රතිපාදන ඇතුළත් වේ .

- 2.1.1 2018 අංක 19 දරන ජාතික විගණන පනතේ 12(අ) වගන්තියේ සඳහන් අවශ්‍යතාවන් අනුව, විගණනය සඳහා අවශ්‍ය සියලු තොරතුරු සහ පැහැදිලි කිරීම් මා විසින් ලබාගන්නා ලද අතර, මාගේ පරීක්ෂණයෙන් පෙනී යන ආකාරයට නිසි මූල්‍ය වාර්තා ආයතනය පවත්වාගෙන ගොස් තිබුණි.
- 2.1.2 2018 අංක 19 දරන ජාතික විගණන පනතේ 6(1)(ඇ)(iii) වගන්තියේ සඳහන් අවශ්‍යතාවය අනුව ආයතනයේ මූල්‍ය ප්‍රකාශන ඉකුත් වර්ෂය සමඟ අනුරූප වේ.
- 2.1.3 2018 අංක 19 දරන ජාතික විගණන පනතේ 6(1)(ඇ)(iv) වගන්තියේ සඳහන් අවශ්‍යතාවය අනුව ඉකුත් වර්ෂයේදී මා විසින් සිදුකරන ලද නිර්දේශයන් ඉදිරිපත් කරන ලද මූල්‍ය ප්‍රකාශනවල ඇතුළත්ව ඇත.
- 2.2 අනුගමනය කරන ලද ක්‍රියාමාර්ග සහ ලබා ගන්නා ලද සාක්ෂි මත හා ප්‍රමාණාත්මක කරුණුවලට සීමා කිරීම තුළ, පහත සඳහන් ප්‍රකාශ කිරීමට තරම් කිසිවක් මාගේ අවධානයට ලක් නොවීය.
 - 2.2.1 2018 අංක 19 දරන ජාතික විගණන පනතේ 12 (ඇ) වගන්තියේ සඳහන් අවශ්‍යතාවය අනුව ආයතනයේ පාලක මණ්ඩලයේ යම් සාමාජිකයෙකුට ආයතනය සම්බන්ධවී යම් ගිවිසුමක් සම්බන්ධයෙන් සෘජුව හෝ අන්‍යාකාරයකින් සාමාන්‍ය ව්‍යාපාරික තත්ත්වයෙන් බැහැරව සම්බන්ධයක් ඇති බව.
 - 2.2.2 2018 අංක 19 දරන ජාතික විගණන පනතේ 12(ඊ) වගන්තියේ සඳහන් අවශ්‍යතාවය අනුව පහත සඳහන් නිරීක්ෂණයන් හැර යම් අදාළ ලිඛිත නීතියකට හෝ ආයතනයේ පාලක මණ්ඩලය විසින් නිකුත් කරන ලද වෙනත් පොදු හෝ විශේෂ විධානවලට අනුකූල නොවන ලෙස ක්‍රියා කර ඇති බව.

නීතිරීති/ විධානයට යොමුව

නිරීක්ෂණ

(අ) 2021 නොවැම්බර් 16 දිනැති අංක PE/01/2021 දරන රාජ්‍ය ව්‍යාපාර වකුලේඛයේ 6.6. ඡේදය

මුදල් වර්ෂය අවසන්වී මාස 05 ක් ඇතුළත ආයතනයේ විගණිත වාර්තාව සමඟ පසුගිය වර්ෂයේ කාර්යසාධනය ඇතුළත් වාර්ෂික වාර්තාව භාෂා ත්‍රිත්වයෙන් පාර්ලිමේන්තුවේ සභාගත කළයුතු වුවත්, ආයතනය විසින් 2020 හා 2021 වර්ෂවලට අදාළ වාර්ෂික වාර්තා මේ දක්වාම පාර්ලිමේන්තුවේ සභාගත කර නොතිබුණි.

2.2.3 2018 අංක 19 දරන ජාතික විගණන පනතේ 12 (උ) වගන්තියේ සඳහන් අවශ්‍යතාවය අනුව ආයතනයේ බලතල, කර්තව්‍ය සහ කාර්යයන්ට අනුකූල නොවන ලෙස කටයුතු කර ඇති බව.

බලතල, කර්තව්‍ය සහ කාර්යයන්

නිරීක්ෂණ

(අ) 2016 මාර්තු 01 දිනැති අංක 04/2016 දරන විශ්වවිද්‍යාල ප්‍රතිපාදන කොමිෂන් සභා වකුලේඛය
i. 02 හා 4.5 ඡේද

සියලු ස්වයං මූල්‍ය උත්පාදන ක්‍රියාකාරකම් ලාභ නොලබන පදනමින් හා පිරිවැය ආවරණය වන පදනමින් පවත්වාගෙන යා යුතු බවට දක්වා

ඇතත්, 2018 ජනවාරි 01 දින සිට 2022 ජූලි 31 දින දක්වා ක්‍රියාත්මක කර තිබුණු පාඨමාලා 12කට අදාළව අයවැයගත ආදායම රු.29,245,000 ක් සම්බන්ධයෙන් එම නියමයන්ට පරිබාහිරව අයවැය ලේඛන පිළියෙල කර තිබුණි.

ii. 4.5 ඡේදය

2018 ජනවාරි 01 දින සිට සමාලෝචිත වර්ෂය අවසාන දින දක්වා කාල පරාසය තුළ අවසන් කරන ලද අයවැයගත ආදායම රු.209,370,600 ක් වූ ස්වයං මූල්‍ය උත්පාදන ක්‍රියාකාරකම් 55 කට අදාළව මූල්‍ය ප්‍රකාශන පිළියෙල කර නොතිබුණි.

iii. 5.2.1 ඡේදය

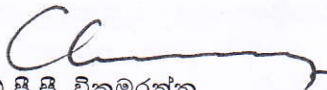
මුළු වකු පිරිවැයෙන් සියයට 15 සිට සියයට 30 දක්වා ප්‍රමාණයක් ආයතනයේ පොදු කාර්යය පිරිවැය සඳහා වෙන් කළ යුතු වුවත්, 2018 ජනවාරි 01 දින සිට 2022 ජූලි 31 දින දක්වා කාලය තුළ ක්‍රියාත්මක කරන ලද ස්වයං මූල්‍ය උත්පාදන ක්‍රියාකාරකම් 21 කට අදාළව අයවැයගත ආදායම රු.58,840,600 කින් ආයතනයේ පොදු කාර්යය පිරිවැය සඳහා වෙන් කිරීම් සිදු කර නොතිබුණි.

2.2.4 2018 අංක 19 දරන ජාතික විගණන පනතේ 12(ඌ) වගන්තියේ සඳහන් අවශ්‍යතාවය අනුව ආයතනයේ සම්පත් සකසුරුවම් ලෙස, කාර්යක්ෂම ලෙස සහ ඵලදායී ලෙස කාල සීමාවන් තුළ අදාළ නීතිරීති වලට අනුකූලව ප්‍රසම්පාදනය කර භාවිතා කර නොමැති බව.

2.3 වෙනත් කරුණු

- (අ) 2017 වර්ෂයේ සිට 2021 වර්ෂය දක්වා කාලයට අදාළව සිසුන් 1891 දෙනෙකුගෙන් අයවිය යුතුව තිබුණු රු.30,259,400 ක හිඟ පාඨමාලා ගාස්තු සමාලෝචිත වර්ෂය අවසන් වන විටත් අය කර ගැනීමට අපොහොසත් වී තිබුණි.
- (ආ) පර්යේෂණ කාල සීමාව අවසන් වූ රු. 12,580,485 ක පර්යේෂණ ප්‍රදාන 06 කට අදාළව පර්යේෂණ අවසන් කිරීමට හෝ එහි කාලය දීර්ඝ කිරීමට සමාලෝචිත වර්ෂය අවසාන දින වන විටත් කටයුතු කර නොතිබීම හේතුවෙන් අදාළ පර්යේෂණ අතර මහ නවතා දමා තිබුණි.
- (ඇ) වැඩ අවසන් කරන ලද පර්යේෂණ ප්‍රදාන 06 ට අදාළව මිල දී ගෙන තිබුණු රු.2,087,783 ක ස්ථාවර වත්කම් සමාලෝචිත වර්ෂයේ අවසානය දක්වාම ආයතනයට පවරා ගැනීමට හෝ අදාළ ව්‍යාපෘති වෙත බාරදීමට හෝ කටයුතු කර නොතිබුණි.
- (ඈ) 2013 වර්ෂයේ සිට සමාලෝචිත වර්ෂය දක්වා කාලය තුළ ක්‍රියාත්මක කර තිබුණු රු.75,457,930 ක පර්යේෂණ ප්‍රදාන 19 ට අදාළව පර්යේෂණ පත්‍රිකා සමාලෝචිත වර්ෂයේ දෙසැම්බර් 31 දින දක්වාම පළ කිරීමට කටයුතු කර නොතිබුණි.

- (ඉ) පර්යේෂණ ප්‍රදානයන් 06 ක් වෙනුවෙන් ලැබී තිබුණු රු.1,430,243 ක් ක්‍රියාත්මක නොකිරීම හේතුවෙන් හා පර්යේෂණ ප්‍රදාන 04ක් වෙනුවෙන් ලැබී තිබුණු රු.2,038,815 ක් අදාළ ආයතන සමඟ ගිවිසුම්වලට එලඹීමට කටයුතුකර නොතිබීම හේතුවෙන් සමාලෝචිත වර්ෂය තුළදී උගත උපයෝජිතව පැවතුණි.
- (ඊ) වැඩිමුළු හා කෙටිකාලීන පාඨමාලා වෙනුවෙන් ගෙවිය යුතු රු.971,812 ක් සමාලෝචිත වර්ෂය අවසන් දින වන විට වසර 02 සිට වසර 04 දක්වා කාලයක් ගතවී ඇතත්, නිරවුල් කිරීමට කටයුතු කර නොතිබුණි.


ඩබ්ලිව්.පී.සී. වික්‍රමරත්න

විගණකාධිපති

The Director
Postgraduate Institute of Science

Report of the Auditor General on the Financial Statements and Other Legal and Regulatory Requirements of the Postgraduate Institute of Science for the year ended 31 December 2022 in terms of Section 12 of the National Audit Act, No. 19 of 2018.

1. Financial Statements

1.1 Opinion

The audit of the financial statements of the Postgraduate Institute of Science for the year ended 31 December 2022 comprising the statement of financial position as at 31 December 2022 and the statement of financial performance, statement of changes in equity and cash flow statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, was carried out under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with provisions of the National Audit No. 19 of 2018 and Finance Act No. 38 of 1971. My report to Parliament in pursuance of provisions in Article 154 (6) of the Constitution will be tabled in due course.

In my opinion, the financial statements give a true and fair view of the financial position of the Institute as at 31 December 2022, and of its financial performance and cash flows for the year then ended in accordance with Sri Lanka Public Sector Accounting Standards.

1.2 Basis for Opinion

I conducted my audit in accordance with Sri Lanka Auditing Standards (SLAuSs). My responsibilities, under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my unqualified opinion.

1.3 Other Information Included in the Annual Report 2021 of the Institute

The other information means the information included in the 2021 Annual Report of the Institute, which is expected to be submitted to me after the date of this report, but

not contained in the Financial Statements and my audit report thereon. Management is responsible for this other information.

My opinion on financial statements does not cover the other information and I do not express any assurance or opinion thereon.

My responsibility in connection with my audit of financial statements is to study the above identified other information and evaluate whether the other information is substantially mismatched with the financial statements or my knowledge gained in auditing or another manner.

In the study of Annual Report of the Postgraduate Institute of Science for the year 2021, if I conclude that there are substantial misstatements, I should communicate that matters to the governing body for correction. If there are misstatements further to be corrected, those will be included in the report which I table in parliament in accordance with Article 154 (6) of the Constitution in due course.

1.4 Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with Sri Lanka Public Sector Accounting Standards, and for such internal control as management determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Institute's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intend to liquidate the Institute or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Institute's financial reporting process.

As per sub- section 16(1) of the National Audit Act No. 19 of 2018. The Institute is required to maintain proper books and records of all its income, expenditure, assets and liabilities, to enable annual and periodic financial statements to be prepared of the Institute.

1.5 Auditor's Responsibilities for the Audit of the Financial Statements

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high

level of assurance, but is not a guarantee that an audit conducted in accordance with Sri Lanka Auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Sri Lanka Auditing Standards, I exercise professional judgement and maintain professional scepticism throughout the audit. I also,

- Identify and assess the risk of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Institution's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the management.
- Conclude on the appropriateness of the management's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Institute's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the institute to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

2. Report on Other Legal and Regulatory Requirements

2.1 National Audit Act, No. 19 of 2018 includes specific provisions for following requirements.

2.1.1. I have obtained all the information and explanation that required for the audit and as far as appears from my examination, proper accounting records have been kept by the Institute as per the requirement of Section 12 (a) of the National Audit Act, No. 19 of 2018.

2.1.2 The financial statements presented by the Institute are consistent with the preceding year as per the requirement of section 6 (1) (d) (iii) of the National Audit Act, No. 19 of 2018.

2.1.3 The financial statements presented includes all the recommendations made by me in the previous year as per the requirement of section 6 (1) (d) (iv) of the National Audit Act, No. 19 of 2018.

2.2 Based on the procedures performed and evidence obtained were limited to matters that are material, nothing has come to my attention;

2.2.1 to state that any member of the governing body has any direct or indirect interest in any contract entered into by the Institute which are out of the normal cause of business as per the requirement of section 12 (d) of the National Audit Act, No. 19 of 2018.

2.2.2 except for the following observations, that it has not acted in accordance with any relevant written law or other general or special directives issued by the governing body of the institute as per the requirement of Section 12 (f) of the National Audit Act, No. 19 of 2018, except for the following observations.

Reference to Laws, Rules/Directives	Observation
-----	-----
(a) Paragraph 6.6 of Public Enterprises Circular No. PED/012021 dated 16 November 2021	Although the annual report including the last year's performance along with the audited report of the institution should be tabled in the parliament in three languages within 05 months after the end of the financial year, the institution has not tabled the annual reports related to the years 2020 and 2021 in the parliament till now.

2.2.3 to state that the Institute has not performed according to its powers, functions and duties as per the requirement of section 12 (g) of the National Audit Act, No. 19 of 2018.

Powers, Duties and Functions

Non- compliance

(a) Circular No. 04/2016 of the University Grants Commission dated 01 March 2016

(i) Paragraph 2 and 4.5

Although being informed that the self-financing activities should be maintain under non-profit basis and cost- covering basis, budgeted income of Rs.29,245,000 related to 12 self-financing courses which had been implemented from 1 January 2018 to 31 July 2022, budget documents had been prepared despite the circular provisions.

(ii) Paragraph 4.5

Annual financial statements had not been prepared for 55 self- financing activities with a budgeted value of Rs.209,370,600 which had been completed during the time period of 01 January 2018 to the end of year under review.

(iii) Paragraph 5.2.1

Although 15 to 30 per cent of the total indirect costs should be allocated for the development vote of the institute, Budgeted income of Rs.58,840,600 in related to 21 self-financing activities implemented between 01 January 2018 to 31 July 2022, had not been allocated for the Institution's development vote as per circular instruction.

2.2.4 to state that the resources of the Institute had not been procured and utilized economically, efficiently and effectively within the time frames and in compliance with the applicable laws as per the requirement of section 12 (h) of the National Audit Act, No. 19 of 2018.

2.3 Other Matters

- (a) Institute had been failed to recover the due course fee of Rs.30,259,400 from the 1891 students for the period from 2017 to 2021, at the end of the year under review.
- (b) 06 research grant projects value of Rs.12,580,485 which research period has been expired, action have not been taken to complete or extend by the end of the year under review.
- (c) Action had not been taken to take over or hand over fixed assets value of Rs.2,087,783 which had been purchased related to 06 completed research grant by the end of the year under review.
- (d) In relation to the 19 research grants amounting of Rs.75,457,930 implemented between the year 2013 and the year under review, the research papers had not been published until the end of the year under review.
- (e) Due to the non- implementation value of Rs. 1,430,243 received for 6 research grants and inability to reach the agreements with Institutions value of Rs.2,038,815 received for 04 research grants, remained underutilized during the year under review.
- (f) Rs.971,812 payable for workshops and short-term courses had not been settled even though a period of 02 to 04 years had passed by the last date of the year under review.

Sgnd by :
W.P.C. Wickramaratne
Auditor General

THE ORIGINAL DOCUMENT HAS BEEN SIGNED

15 REPLIES TO AUDIT REPORT

Management's explanation of the reasons regarding the Auditor General's report regarding the financial statements and other legal and regulatory requirements of the Postgraduate Institute of Science for the year ending 31 December 2022 in terms of Section 12 of the National Audit Act No. 19 of 2018.

2.2.2	That the Institute has not complied with any applicable written law, general and special directions issued by the governing body of the Institute as per the requirement of section 12 (f) of the National Audit Act, No. 19 of 2018.			
(a)	<p>Paragraph 6.6 of the Public Enterprises Circular No.PE/01/2021 dated 16 November 2021.</p> <p>As informed by the letter dated 23.05.2022 of the Ministry of Higher Education, the Post Graduate Institute of Science has sent the Google Link of the 2021 Annual Report to the Ministry of Higher Education on. 23.05.2022. Thereafter, as informed by the Ministry of Higher Education on 15.09.2022, the Post Graduate Institute of Science has sent 06 copies of the Annual Report and 02 CDs with PDF copies to the Ministry of Higher Education on 22.11.2022.</p> <p>In order to present to Parliament, 12 printed copies and 2 CD/DVDs have been handed over to Parliament as per the Letter dated 14.03.2023 of the Ministry of Higher Education.</p>			
2.2.3	That the Institute has not performed according to its powers, functions and duties as per the requirement of section 12 (g) of the National Audit Act,			
(a)	<p>University Grants Commission Circular No. 04/2016 dated 01 March 2016.</p> <table border="1"> <tr> <td>i. Paragraphs 02 and 4.5</td> <td>From among the courses that had been stated as being the courses with their budgeted expenditure exceeding the budgeted income in the Audit Report, more than 20 per cent of the prescribed minimum contribution to be obtained for the development Objects have been recovered from 05 courses. Similarly, taking into account the contribution made to the national economy, 03 courses for which an adequate number of students had not been registered to obtain a minimum contribution of 20 per cent as per the circular, have been implemented on the approval of the Finance Committee and the Board</td> </tr> </table>		i. Paragraphs 02 and 4.5	From among the courses that had been stated as being the courses with their budgeted expenditure exceeding the budgeted income in the Audit Report, more than 20 per cent of the prescribed minimum contribution to be obtained for the development Objects have been recovered from 05 courses. Similarly, taking into account the contribution made to the national economy, 03 courses for which an adequate number of students had not been registered to obtain a minimum contribution of 20 per cent as per the circular, have been implemented on the approval of the Finance Committee and the Board
i. Paragraphs 02 and 4.5	From among the courses that had been stated as being the courses with their budgeted expenditure exceeding the budgeted income in the Audit Report, more than 20 per cent of the prescribed minimum contribution to be obtained for the development Objects have been recovered from 05 courses. Similarly, taking into account the contribution made to the national economy, 03 courses for which an adequate number of students had not been registered to obtain a minimum contribution of 20 per cent as per the circular, have been implemented on the approval of the Finance Committee and the Board			

	<p>of Management.</p> <p>Furthermore, in the preparation of financial statements in relation to the activities that had been stated as being the activities with their budget income exceeding the budgeted expenditure, action will be taken to submit the final financial statements including this surplus in the development Objects.</p>
ii. Paragraph 4.5	<p>From among the self-financing activities pointed out by the Audit Report, the financial statements for the already completed activities are being prepared at present and action will be taken to submit them for the approval in the future.</p>
iii Paragraph 5.2.1	<p>As Treasury provisions are not made for other recurrent expenditure of the Postgraduate Institute of Science, all the overhead costs of the Institute have to be covered by the budgets prepared for the Science Postgraduate courses. Therefore, action has been taken to recover 5 per cent contribution of the total income for the overhead cost, but not from the total indirect cost.</p> <p>Similarly, the total expenditure of the Postgraduate Institute of Science should be covered by the from the income earned, and as such, a specific percentage is not allocated for an Object of the Director as per Paragraph 5.2.2 of the circular. For the activities meant for the promotion of reputation and the unity of the Institute, required expenditure has to be incurred from the General Fund of the Postgraduate Institute of Science under the formal approval.</p>
2.2.4	<p>The procurement plan of the Institute related to the year 2022 has been prepared in keeping with the requirements and financial capacity of the Institute and the approval of the Board of Management has been obtained therefor. Similarly, action has been taken to carry out all procurements in accordance with the guidelines approved by the government and to use them.</p>

	<p>Due to not providing the Treasury provisions allocated to the Postgraduate Institute of Science owing the financial crisis in the country in the year 2022, and due to the directives issued by the Public Enterprises Circulars Nos. 04/2022 and 07/2022 dated 27.04.2022 and 08.08.2022 to suspend new constructions/procurements, the constructions indicated in the procurement plan were not carried out. Action will be taken to carry out new constructions and resume procurement activities once the financial provisions are received and above circular provisions are amended.</p>
<p>2.3</p>	<p>Other Matters</p>
<p>(a)</p>	<p>The course fees that further remain receivable from the students, whose period of study of the relevant degree courses has not been completed, from among the students registered for pursuing various degree courses of the Postgraduate Institute of Science have been recovered. As it was not possible to continue the academic activities as expected due to the closure of the country on several occasions in the face of Covid epidemic that prevailed in the country in 2020 and 2021, and as a result of impact on the academic activities owing to the unfavourable economic position and the fuel crisis in the country in 2022, the academic activities could not be maintained as expected and therefore, an issue regarding the recovery of course fees had arisen.</p> <p>However, with the commencement of all the courses through the online education system, students resumed their studies and accordingly, action will be taken to recover these outstanding course fees. Similarly, actions have already been taken to send reminders to all the students to settle the outstanding course fees without delay.</p>
<p>(b)</p>	<p>The clarification of reasons related to 06 research grants for which it is stated that action had not been taken to complete or extend the period of the research activities mentioned in the draft audit report are given below.</p> <p><u>6225 - Collaborative Research Activities</u></p> <p>The clarification of reasons related to 06 research grants for which it is stated that action had not been taken to complete or extend the period of the research activities</p>

mentioned in the draft audit report.

6225 - Collaborative Research Activities

The research activities related to this research grant have been completed and the final report has also been presented by now. Plans have been drawn to purchase research equipment by Rs. 645,815.33 existed in this research grant account, of which a sum of Rs. 430,059.65 has already been utilized. Although quotations were called and orders were placed to purchase equipment from the balance available in the account, the relevant suppliers had refused the supply of equipment. Therefore, arrangements are being made to recall for quotations. Since the expected research activities of the research grants have been completed at present, no time extension has been done.

6279 - Study on floristic Diversity of Ambokka Mountain Range

The balance in the relevant research grant account at the end of the reviewed year has already been utilized for the relevant research activities and there is no balance in the relevant research grant account at present.

6291 - Proposed Project on Synthesis of Value Added Product From Sri Lanka Zircon Sand

The relevant research recipient has already been notified to complete the research activities related to this research grant or to take steps to extend the time by the relevant research grant institution.

6305 - Comparative Analysis of soil carbon sequestration capacity of Different Mangrove and Associated Plant Communities in the Manduganga RAMZAR site and madampa Vila sanctuary

The balance existed in this account at the end of the reviewed year has already been transferred to the general research fund of the institution on the recommendation of the finance committee and the approval of the management board, based on the agreement of the relevant research grant institution.

6282 - Research grant on safe use of Chrysotile Asbestos in Sri Lanka

Taking into account the prevailed Covid epidemic situation and the leaving of the research assistant who served in the research, a request has already been forwarded to the relevant research funder to extend the research period and further action will be

	<p>taken based on the response of the relevant research grant institution.</p> <p><u>6286 - Conserving Kurunegala Lake for Sustainable Water Supply</u></p> <p>The period related to this research has been extended to 31.12.2022 and after completing the relevant research work, the final report has also been forwarded to the relevant funding agency. Further, it is also informed that there is no balance in this research grant account as at 31.12.2022.</p>
(c)	<p>These fixed assets purchased by research grants have already been entered in the inventory books maintained by the Postgraduate Institute of Science in respect of fixed assets purchased through research grants. However, the relevant recipients of the research grants have already been informed to seek the approval of the relevant research funding agencies for the permanent transfer of the fixed assets purchased from these research grants to the Postgraduate Institute of Science. A copy of the relevant letter has been referred herewith for audit.</p>
(d)	<p>From among the 23 research grants implemented by the Postgraduate Institute of Science stated in the audit report, the relevant research recipients have published research papers in relation to 12 research grants in local and foreign journals. Similarly, the submission of research papers by other research grantees is already going on and apart from the submission of research papers, the awarding of PhD and MPhil degrees and a number of other objectives have been accomplished through these research grants.</p>
(e)	<p>The clarification of reasons for the 6 research grants mentioned in the audit report as not being implemented are indicated below.</p> <p><u>6225 - Collaborative Research Activities</u></p> <p>On completion of the research activities, the final report has also been submitted and the remaining balance in the research grant account is expected to be used for the purchase of research equipment. Although quotations were called for the purchase of research equipment with this remaining funds and placed orders for the goods, due to the fact that the suppliers did not offer to supply the goods at those prices, arrangements are being made to recall for quotations. Accordingly, these funds are expected to be effectively used in the future.</p>

	<p><u>6290 - Sea Turtle Egg Sales and Consumptive use in Sri Lanka</u></p> <p>Action has been taken to extend the period related to this research grant up to 31.12.2023 on the agreement of the relevant research grant institution. Accordingly, arrangements are being made to utilize the relevant funds effectively for this research work.</p> <p><u>6279 - Study on floristic Diversity of Ambokka Mountain Range</u></p> <p>The balance in the relevant research grant account at the end of the reviewed year has already been utilized for the relevant research activities and there is no balance in the relevant research grant account at present.</p> <p><u>6287 - Diversity of Freshwater Snails in the Central Province of Sri Lanka and their DNA Barcoding and Molecular Phylogenetic Analysis</u></p> <p>The balance existed in this account at the end of the reviewed year has already been transferred to the general research fund of the institution on the recommendation of the finance committee and the approval of the management board, based on the agreement of the relevant research grant institution.</p> <p><u>6242-Value Addition to Sri Lanka Laterites</u></p> <p><u>6291 - Proposed Project on Synthesis of value added products from Sri Lanka Zircon Sand</u></p> <p>The relevant recipients of these research grants have already been notified to get the necessary approval to use the balance of these research fund accounts for the relevant research activities or to return it to the relevant funding agency.</p>
	<p>The explanations of the reasons related to the 4 main research grants mentioned in the audit report as not being adhered to the agreements are indicated below.</p> <p><u>6225 - Collaborative Research Activities</u></p> <p>This research grant is a collaborative research work funded and implemented by Postgraduate Institute of Science and Post Graduate Institute of Agricultural Science. The relevant research work has been completed and the final report has been submitted. The current balance of this research grant account is Rs. 215,755.35 which is expected to be used for the purchase of research equipment. As this has been implemented as a collaborative research, separate agreement has not been entered into.</p>

	<p><u>6242 - Value Addition to Sri Lanka Laterites</u></p> <p>The research works related to this research have been completed and the final report has already been submitted. The balance further remaining in this research grant account is an approved amount to be used for further research related to this research and no separate agreement has been entered into relating to this matter.</p> <p><u>6291 - Proposed Project on Synthesis of Value Added Products from Sri Lanka Zircon sand</u></p> <p>A separate agreement has not been entered into regarding this research grant and the related research activities will be implemented based on the agreement given by the funder in relation to the submitted research proposal.</p> <p><u>6289 - Technology Grants Covid Cell 2020</u></p> <p>A research agreement has not been entered into in relation to this research grant and the research activities are proceeded with according to the provisions included in the research grant letter.</p>
(f)	<p>The matters regarding the values related to the 02 short-term courses stated as expenses payable under the workshops and short-term courses in the financial statements will be reported to the finance committee and the audit committee and its recommendations will be forwarded to the Board of Management, and appropriate measures will be taken in accordance thwrewith.</p>

Prof. H M T G A Pitawala
 Director
 Postgraduate Institute of Science

**16 REPORT OF THE AUDIT &
MANAGEMENT COMMITTEE
PGIS - 2022**

REPORT OF THE AUDIT & MANAGEMENT COMMITTEE, POSTGRADUATE INSTITUTE OF SCIENCE - 2022

Introduction

The Audit and Management Committee was appointed by the Postgraduate Institute of Science Board of Management at its 141st Meeting held on 09.05.2018. The Committee comprises of two Non-Executive Governing Council Members of the University and a member representing the General Treasury under the provisions made on paragraph 7.4.1 of the Public Enterprises Guideline for Good Governance.

In the year 2022, four (04) Audit & Management Committee meetings were held with the participation of the Director, Deputy Registrar, Senior Assistant Bursar, Assistant Registrar, and the Superintendent of Audit of the National Audit Office who is the representative of the Auditor General of Sri Lanka. The Audit & Management Committee performs its duties according to the scope specified in the Public Enterprises Guidelines for Good Governance, University Grants Commission Circulars, and Ministry of Higher Education Circulars and makes recommendations to strengthen the Internal Control Systems on the operations of Finance, Academic, Non-Academic, activities and improve the Administrative Procedures of the Postgraduate Institute of Science, University of Peradeniya.

Progress

During the year under review, the Audit and Management Committee has made several recommendations, directions and proposals which have paved the way toward the improvement of internal controls and auditing. The Postgraduate Institute of Science, University of Peradeniya was also able to obtain an Unqualified Audit Opinion (Clear Opinion) from the Auditor General on the Financial Statements for the financial year ended 31st December 2021.

Internal Audit Division

Important matters and work done by the Internal Audit Division under the guidance of the Audit & Management Committee can be summarized as follows.

- The Internal Audit Division has made 31 recommendations by issuing 03 Internal Audit Reports by upgrading the internal control systems of the University even under a roster basis of the staff attendance in compliance with the government instructions to address the fuel shortage and economic crisis.
- Liaised with the External Auditor and directed the officers employed by the Postgraduate Institute of Science, University of Peradeniya to take follow-up actions on highlighted flaws and lapses on audit queries and reports of the Auditor General.

- In addition, the Internal Audit Division has almost covered its Annual Internal Audit Plan by using Sample Audit techniques, Tests of controls, Substantive analytical procedures and detailed substantive procedures.

Accordingly, the important matters were discussed in the meetings of the Audit & Management Committee and the recommendations of the Committee can be summarized as follows.

- Reviewed, evaluated and made recommendations to develop the policy on revenue recognition of the Postgraduate Institute of Science.
- To prepare a comprehensive report on the outstanding the student course fee to the Institute and to analyze the dropout student of the institute.
- To follow the rules and regulations regarding contract administration, recruitment of the academic staff, documentation of the personal file and releasing the retirement benefits of the employees reported through the management letters placed before the Audit and Management Committee.
- To revalue the assets that are shown at zero value in the financial statement
- To follow the SOPs and guidelines for Consulting Services provided by the PGIS.
- Reviewed, evaluated and made recommendations on internal controls on the procurement process for purchasing equipment of the PGIS
- Reviewed, evaluated and made recommendations on the Internal Control Procedures regarding the motor vehicles of Postgraduate Institute of Science, UoP
- To submit a detailed report on all Research Grants to the Audit and Management Committee.
- Reviewed the financial fraud that occurred at the PGIS and made recommendations to be kept as a regular agenda item of the Board of Management and recommended to table the progress of the matter at the Audit and Management Committee.
- To take corrective action as per the directives of the COPE
- To implement the security deposit as per FR 880 to the officers who are handling the transactions of cash and cash equivalent
- To expedite the process of verification of the assets and stores and to submit the reports to the auditors on time.

The following are the comments made by the Chairman of the Audit and Management Committee.

- The present top management has taken positive steps to implement the recommendations of the Audit & Management Committee and Internal Audit Division.
- The necessary steps are being taken to rectify the weaknesses in the Internal Control Systems in the Institute and the accounting and internal control systems have to be further reviewed, upgraded and enforced.
- The Institute has to be reorganized to identify weaknesses in the staff, design and conduct training programs to improve the performance of staff in each category. The staff of the Administration/ Finance Divisions have to be fully aware of the rules and regulatory framework of the Institute. The staff awareness programs need to be improved E.g. an awareness program on the vehicle management.

- The cooperation of staff is required for the implementation of internal controls recommended by Internal Audit Division, Audit & Management Committee and Auditor General's Department.

Failures and Justifications

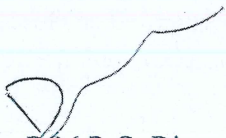
The Internal Audit Division has made their Internal Audit Activities on the approved Internal Audit Plan under insufficient human resource allocation. Presently, Internal Audit Division has expanded its duties of internal audit not only to the University of Peradeniya but also to the Postgraduate Institute of Agriculture, Postgraduate Institute of Science, Postgraduate Institute of Humanities & Social Sciences, and Postgraduate Institute of Medical Sciences since 2019.

These Institutes function as separate entities funded by National Budget without allocating any staff for Internal Auditing. The internal Audit Division of the University should carry out more than 20 Audit & Management Committee meetings annually. Out of which, a minimum of 04 meetings for University and 04 meetings for each Postgraduate institute should be held. As the Internal Auditor has to participate in so many meetings and take up minutes of said meetings and more time and staff have to be allocated for pre-audit activities.

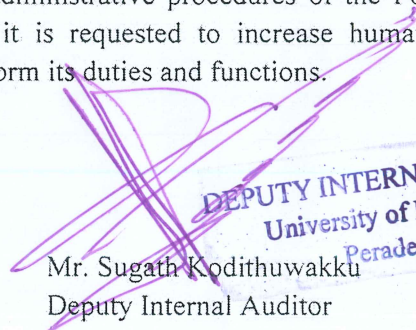
When considering the above huge volume of activities of the University of Peradeniya and its Postgraduate Institutes, it is justifiable to provide additional cadres to fully implement the Annual Audit Plan of the University. Also, separate cadres are required to be allocated for each Postgraduate Institute to function their audit activities smoothly.

Future Plans

The Audit & Management Committee of the Postgraduate Institute of Science is planning to further extend its objectives to review the systems and controls and make its recommendations to strengthen the internal control systems for upgrading the financial and administrative procedures of the Postgraduate Institute of Science, University of Peradeniya. Further, it is requested to increase human resource allocation for the Internal Audit Division to effectively perform its duties and functions.



Mr. D.M.B.G. Diyagama
Chairman, Audit & Management Committee
Postgraduate Institute of Sciences



DEPUTY INTERNAL AUDITOR
University of Peradeniya
Peradeniya

Mr. Sugath Kodithuwakku
Deputy Internal Auditor