



# PGIS News

Activities and Progress of the Postgraduate Institute of Science (PGIS),  
University of Peradeniya, Sri Lanka.

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# PGIS

*We are dedicated to provide, promote and develop higher education and research in Science.*





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# 1. International Conference on Mathematics and Mathematics Education (ICMME)

14th July 2023 - 15th July 2023

The international conference on Mathematics & Mathematics Education was initiated in 2019 with a suggestion made by Ministry of Education in enhancing the mathematical literacy in the country by providing a unique platform for the Mathematics Educators in the country, especially to expose the school teachers who teach mathematics to the diverse aspects of research in mathematics to make those as a tool to effectively provide knowledge to school children. The theme of the conference was set forth as Mathematics for a Better World considering the significance and impact of the subject.

With the aforementioned objectives in mind, in an unprecedented and grandeur nature, the first ICCME conference was organized in 2019 by the PGIS in collaboration with the Ministry of Education, Sri Lanka and the National Institute of Education, Sri Lanka. Based on the success, the organizing

committee decided to hold the conference as a biennial one. The second installment of the conference was held on 2021, once more in collaboration with the Ministry of Education. In addition to the Conference, this time around the organizing committee organized a series of workshops with the aim of providing hands-on experience to school teachers on various aspects of research in Mathematics Education and also how to use GeoGebra and Minitab softwares as interactive teaching aids. Based on the feedback received from the participants, the pre-conference workshops were a profound success.

ICCME 2023 also hosted panel discussions and interactive workshops, providing a forum for in-depth deliberation on specific topics of interest. Esteemed experts led these sessions, fostering an environment conducive to knowledge exchange and collaboration. Participants had the opportunity to engage actively, share experiences and gain practical insights into the best practices in teaching and learning, and research in Mathematics and Mathematics Education. Beyond the technical sessions, the conference offered ample networking opportunities. Participants could connect with peers, establish collaborations, and build lasting professional relationships. Since last year, several pre-Conference events were organized; (another) workshop on the use of GeoGebra and Minitab as teaching aids, three talks by distinguished local mathematicians on effective teaching of mathematics to school



# 1. International Conference on Mathematics and Mathematics Education (ICMME) Cont.

children, a series of workshops on preparing Abstracts, Extended Abstract, presentation slides, and also couple of awareness sessions for on the resource available at the Faculty of Science for the target audience.

The inauguration ceremony of ICCME 2023 was held on the 14th of July with the participation of

the Chief Guest, Prof. M.D.Lamawansa (Vice-Chancellor, University of Peradeniya), and the Guest of Honour, P.Somaraj, the 2nd Secretary to the Assistant High Commissioner of India to Sri Lanka. The keynote address was delivered via zoom by Prof. Asha Rao, the Associate Dean of Mathematical Sciences at the RMIT University on identifying a Criminal's Network of Trust using techniques of Graph theory. The two plenary addresses on the second day of the conference were delivered by Prof. Berinderjeet Kaur, Professor of Mathematics Education at the National Institute of Education (NIE), Nanyang Technological University (NTU) in Singapore and by Prof. Dinesh Ekanayake, Professor and Graduate Coordinator in the Department of Mathematics and Philosophy at Western Illinois University. The latter attended the event in-person and had stimulating discussions with the participants especially with the students motivating them to seek for higher education.



After a rigorous review process which involved an initial double-blind review that took place over several weeks resulted in choosing studies with the significant contributions selected to be presented at the conference. This rigorous review was done with the assistance of local and international subject experts. The technical sessions were held on the second day of the conference during which 58 research studies were be presented via Zoom. The participants had the unique opportunity to showcase their latest findings and engage in thought-provoking discussions. The conference featured parallel sessions that encompassed wide range of topics within Mathematics and Mathematics Education varying from fundamental theories to cutting-edge applications. Each research study will be published in the form of an Abstract in the Proceedings of the Conference whose a copy will be sent to the participants along with a Certificate of accomplishment.

The biennial conference and the pre-Conference workshops have come on in leaps and bounds since 2019 by contributing to enhance Mathematics literacy in the country. ICCME 2023 proved to be an intellectually stimulating event, showcasing the latest advancements and fostering collaborations within the fields of Mathematics and Mathematics Education, With its diverse range of workshops, discussions, and presentations, the conference succeeded in uniting researchers and professionals from around the world, leaving a lasting impact on the participants and paving the way to future collaborations.



## 2. Public Lecture on Himalayan Ultrahigh Pressure Rocks

25th July 2023



A public lecture organized by the Geological Society of Sri Lanka in collaboration with PGIS, University of Peradeniya, on the topic "Himalayan Ultrahigh-Pressure Rocks: Records of Deep Continental Subduction and Collision," took place on July 25, 2023, at the auditorium of the postgraduate institute of science (PGIS). Dr. Hafiz U. Rehman, an associate professor from the Graduate School of Science and Engineering at Kagoshima University, Japan, served as the speaker for the event. Approximately 50-60 undergraduate geology students and individuals with an interest in geology attended the lecture.





### 3. A Short Course on Bioinformatics

24th July 2023 – 15th October 2023



A virtual short course related to Bioinformatics: Introduction and Methods was jointly organized by the postgraduate institute of science (PGIS) and postgraduate institute of agriculture (PGIA) from the July 2023 to October, 2023. The themes covered in this program included course modules on the central dogma and biomolecules, basic statistics, biological databases, sequence alignments/ downstream sequence analysis, as well as basic computing and molecular visualization and analysis. Dr. Sachith Abeyesundara, Dr. Chandima Ariyaratne, Dr. Auchithya Dissanayaka, Associate prof. Collen Doherty, Dr. Vihara Kulamanthri, Dr. Dimanthi Jayatilake, Dr. Lochana C. Menikaarachchi, Prof. Chandrika Perera, Dr. Subhani Ranasinghe, Dr. Nipuni Sirimalwatta, Prof. T. Sivananthaweri, Dr. Hakim A. Usoof, Mr. Pramuka Weerasinghe, Dr. Anushka Wickramasuriya, Dr. Priyanga Wijesinghe, Prof. Deepthi Yakandawala were the resource persons of the event.





## 4. Project for implementation of Environmental Awareness Programmes among Local Schools through the Establishment of Green Youth Model in Dangolla, Kandy, Sri Lanka

05

15th August 2023 – 23rd August 2023

A Japanese delegation, led by Prof. Yoshiyuki Nagata from the University of the Sacred Heart in Tokyo, Japan, along with 15 other members including academic professionals and students from the same university and Keio University, visited Sri Lanka to implement and promote an environmentally friendly concept called the Green Growth Concept among school students in Sri Lanka. Students enrolled in primary and secondary level of education of model school, teachers of model school, villagers, undergraduate students of University of Peradeniya, and teachers are the targeted group of this programme. The programme was coordinated by Dr. W.D. Chandrasena and Mr. A.M.R.S. Bandara with administrative support from the PGIS, University of Peradeniya.



The Japan International Cooperation Agency (JICA) allocated funds to Sacred Heart in Tokyo, Japan, which was then channeled to the PGIS in Sri Lanka to propagate the aforementioned concept within the country. The team made regular visits to Sri Lanka, including a visit earlier this year from March 18th to 22nd, aiming to promote the same concept. During this period, two workshops were conducted at Wimalabuddhi School for students, while another two workshops took place at the PGIS for 10 selected school leaders and teachers. These workshops focused on fostering the green growth concept. Additionally, the team had the opportunity to meet with the Deputy Vice-Chancellor of the University of Peradeniya during their visit.



## 5. Chinese Programme

29th August 2023 - end of October 2023



Postgraduate Institute of Science (PGIS), University of Peradeniya keeping in line with its vision, entered into a Memorandum of Understanding with Tomorrow Technology Education Service Centre (TTESE), Room 1205, Floor 12, No. 3, Chongwenmenwai Street, Dongcheng District, Beijing, China for academic cooperation to promote teaching, learning and research for Chinese students. This is a revival of cooperation the two countries have been sustained and built up through silk route dating back to a few centuries ago. Selection of the PGIS by the TTESE, China for this academic endeavor is a true evidence of PGIS being accepted as an internationally renowned centre of excellence for Postgraduate Training, Innovative Research and Development in Sciences.

Under this agreement, the first batch of 27 Chinese students were admitted to follow the Masters programme in Science Education (SLQF 9) under the Board of Study in Science Education, taking into consideration the nature of the learner, the processes of learning and teaching and, the characteristics of the domain-Science, which stress the importance of orientation towards the future. Even though the PGIS has been hosting many foreign students from time to time for various academic and research programmes since its inception, this is the very first time it offered a full Masters degree programme to students offshore. Conducting lectures of the program began through online in early June 2023 and students visited Sri Lanka for their onsite activities from August 2023 till the end of October 2023, by which it completed the 1st semester academic activities of the program as well.



## 5. Chinese Programme Cont.

A formal welcoming ceremony hosted under the patronage of the Vice-Chancellor, University of Peradeniya was held on 29th August 2023, although there had been an opening ceremony held in May 2023 to mark the commencement of academic programme online. The Deputy Vice-Chancellor, Dean of the Faculty of Science, Director/PGIS, Chairperson/Board of Study in Science Education and the Programme Coordinator grace this occasion with the participation of 21 Chinese Students at the PGIS. Well qualified and highly competent academic staff members, especially in the field of science education were engaged in teaching of these students and the curriculum was enriched with hands on experience in teaching practice, classroom observation, IT related modules, scientific writing, research methodology etc, in addition to the other prescribed modules in the programme. TTESC has expressed its utmost satisfaction in the manner in which the program was conducted and based on their request arrangements are being made to enroll the next batch of students by the PGIS for the academic year 2024/2025 in January 2024.



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## 6. Introductory session on DAAD Development-Related Postgraduate Courses (EPOS) - 2023/2024

6th October 2023

The event 'Introductory session on DAAD Development-Related Postgraduate Courses (EPOS) - 2023/2024' was organized by the DAAD Sri Lanka in collaboration with the postgraduate institute of Agriculture (PGIA), University of Peradeniya was held on the 6th October, 2023 from 1.00 pm – 2.00 pm in the PGIS auditorium, University of Peradeniya.

With its development-oriented postgraduate study programmes, the DAAD (German Academic Exchange Service) promotes the training of specialists from development and newly industrialized countries. Foreign graduates from all disciplines with at least two years professional experience have the opportunity to apply.

The final year undergraduates, PGIA and PGIS students of the University participated in the event.





## 7. PGIS Pre-conference: Current trends in Photo – Electrochemical and Photovoltaic Materials, Devices, and Applications

09

6th October 2023



The first pre-conference workshop of the RESCON 2023 on 'Current trends in Photo – Electrochemical and Photovoltaic Materials, Devices, and Applications' was organized by the Department of Physics, University of Peradeniya on 6th October, 2023 from 9 am to 5 pm at the PGIS conference room. The session was done under three themes; the electrochemical solar cells, thin-film solar cells, and polymer electrolytes for energy applications. Emeritus Prof. Lakshman Dissanayake, Prof. Wijendra Bandara, Dr. Chathuranga Thotawattage, Prof. Nandu B. Chaure, Dr. Olajide Olusola, Dr. Bhuddhika Dassanayake, Prof. Bengel-Erik Meliander, Prof. Ingvar Albinsson and Dr. Maurizio Furlani participated as distinguished resource persons in the event. A panel discussion was also held at the end of the pre-conference.



## 8. PGIS Research Congress (PGIS RESCON)-2023

3rd November 2023 - 4th November 2023

The PGIS Research Congress (PGIS RESCON) is one of the key annual events, and the flagship international conference of the PGIS. The main aim of conducting this event is to promote and strengthen the research culture of the Postgraduate Institute of Science (PGIS), University of Peradeniya, and in turn contributing to the national development of the country. As a premier event in the academic calendar of scientists in the country, the PGIS RESCON provides an opportunity for researchers to disseminate their findings and update their knowledge on cutting-edge scientific research in both Sri Lanka and overseas. After nine successful events from 2014 to 2022, the tenth Research Congress 'RESCON - 2023' was successfully held on 3rd and 4th of November 2023. The congress was held as a physical event for all the local presenters where researchers of various disciplines got the opportunity to interact with scientists from around the country. Technical sessions for International presenters were conducted in a hybrid mode.

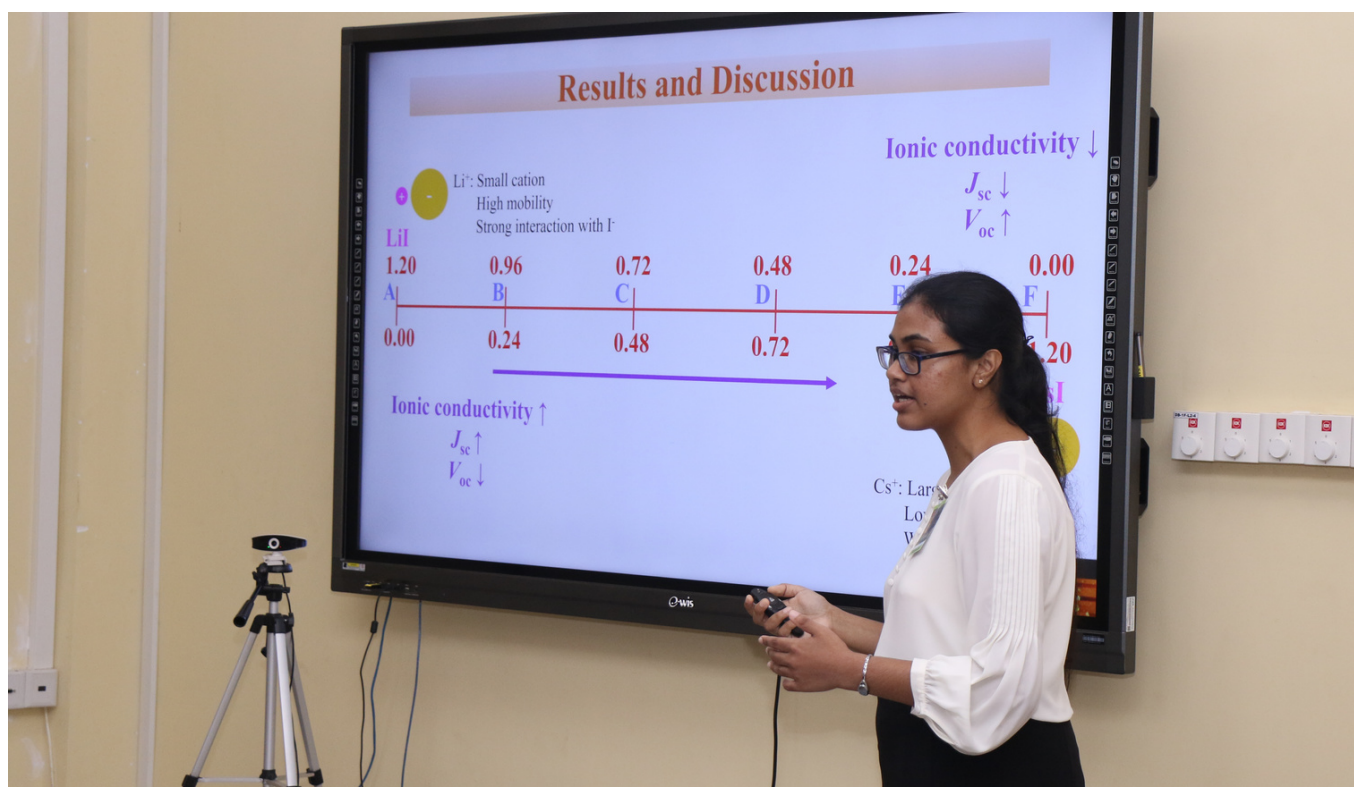


The event was ceremonially inaugurated by the Chief Guest, Prof. Ranjith Senaratne, the Chairman, National Science Foundation, Sri Lanka, on Friday 3rd November 2023 at the Postgraduate Institute of Science, Peradeniya. The Guest of Honor for the occasion was Prof. M.D. Lamawansa, the Vice-Chancellor, University of Peradeniya. Prof. Kosala Weerakoon from Faculty of Medicine and Allied Sciences, University of Rajarata delivered the keynote address titled “Harnessing Research for Community Well-being” at the inauguration. The inauguration ceremony was followed by a morning tea.



## 8. PGIS Research Congress (PGIS RESCON)-2023 Cont.

Technical Sessions of the PGIS Research Congress were held in two parallel sessions on the 3<sup>rd</sup> and three parallel sessions on the 4<sup>th</sup> of November 2023. RESCON 2023 received 206 abstracts, thus bringing together local and international researchers from almost all the state universities, non-state universities, research institutions, industries, and some foreign universities to share their ideas and new perspectives on a wide range of topics. 175 abstracts were published following a rigorous peer review process. There was a total of 27 technical sessions conducted over one and half days and each session were chaired by two senior academics. All the abstracts were orally presented under five broad themes: Earth and Environmental Science, Information & Communication Technology, Mathematics and Statistics, Life Sciences, Physical Sciences, and Science Education. The technical sessions of RESCON 2023 provided an excellent platform for postgraduate students and researchers from many disciplines to interact. In addition, a one-day preconference workshop on “Current Trends in Photo-Electrochemical and Photovoltaic Materials, Devices, and Applications with the active participation from both local and international researchers was conducted on the 6<sup>th</sup> of October 2023. Four foreign and three Sri Lankan resource persons, who were international experts in the field, conducted presentations and live demonstrations. The hybrid workshop was followed by a preconference dinner at the PGIS.



## 8. PGIS Research Congress (PGIS RESCON)- 2023 Cont.

This year's RESCON was fully funded by the PGIS, Peradeniya. Fellow academic staff members did the web design and graphics design without outsourcing. Professional video coverage and live-streaming were handled by the audio-visual team of Department of Physics with the help of other units at the university. RESCON 2023, for the first time, launched an event management App entirely created by undergraduate students of the Faculty of Science. Glimpse of RESCON 2023 inauguration and technical sessions were broadcasted on Siyatha TV as a news item on the 3rd and 4th of November. The conference was also featured in a special live segment at the SLBC Kandurata FM "Shilpabhimani" program a few days prior to the Conference. The dedication, support, and hard work of the organizing committee, backed by the Director of the PGIS, contributed immensely towards making PGIS RESCON 2023 another significant landmark in our collective pursuit of excellence.





## 9. RESCON 2023 - Plenary Speakers

3rd and 4th November 2023

At the recent RESCON 2023, held on November 3rd and 4th, four distinguished plenary speakers held the audience captive with their exceptional presentations, spanning a wide range of scientific and technological advancements.

Professor Danny O'Hare, a Professor in Biosensor Technology, delivered an engaging talk on "Minimally-invasive Biosensing: Advancements towards Point-of-Care Devices." Senior Professor Shironica Priyanthi Karunanayaka, specializing in Educational Technology, discussed "Open Science—Exploring the Next Frontier in Educational Practices." Professor Johannes Barth, a Professor in Applied and Environmental Technology, shared insights on "Rivers, Lakes, and Groundwater: Investigations Using Geochemical and Stable Isotope Tools" via a virtual platform. Dr. Chaminda



Ranasinghe, the Founder and CEO of IDEAHUB (PVT) LTD, presented a talk titled "What is ChatGPT Doing? The Future of Believable Stories for Humans." RESCON 2023 served as a platform for cutting-edge ideas and research, with these distinguished speakers making substantial contributions to the conference's success. The diverse array of topics underscored the interdisciplinary nature of contemporary research and its profound implications across various fields.



## 10. Pathogen Genomics – International Symposium 2023

27 th November 2023

The International Symposium on Pathogen Genomics, organized by the Board of Study in Biomedical Sciences at the Postgraduate Institute of Science (PGIS), University of Peradeniya, in collaboration with the International Relations Office (InRo), University of Peradeniya, was successfully held on November 29th, 2023, at the PGIS conference hall. Recognizing Pathogen Genomics as a relatively novel discipline for most of the participants, Dr. Priyanga Wijesinghe conducted a pre-symposium session on November 27th covering the basics of genomics to better equip the attendees to reap the maximum benefit from the event. The symposium was organized as a hybrid event, with over 50 participants joining both virtually and physically from all over the country. Participants from various disciplines, including molecular biology, microbiology, bioinformatics, epidemiology, biomedical sciences, and agriculture, participated in this event. The symposium commenced with a brief inaugural ceremony attended by Prof. H.M.T.G.A. Pitawala, Director of PGIS; Prof. Neil Alles, Director of InRO; Dr. Roshan Madalagama, Principal Scientist of Veterinary Research Institute of Sri Lanka; Dr. Priyanga Wijesinghe, Chairperson of the Board of Study in Biomedical Sciences; Dr. Piyumali Perera, Secretary of Board of Study in Biomedical Sciences, PGIS; and participants who joined virtually and physically.

The symposium featured three speeches from eminent researchers in the field, followed by an expert panel discussion. Dr. Roshan Madalagama from the Veterinary Research Institute elucidated the National Policy on Antimicrobial Resistance (AMR) and discussed the advantages and limitations of genomics within the country's current context. Dr. Ruklanthi de Alwis from Duke-NUS Medical School, Singapore focused on the Asia Pathogen Genomics Initiative (Asia PGI) and its implementation in resource-limited settings, particularly emphasizing disease surveillance. Dr. Lakmal Jayasinghe from Oxford Nanopore Technologies (ONT), joining from the UK, delved into the comprehensive capabilities of ONT as a tool for analyzing genetic material from any pathogen, by anyone, anywhere. Furthermore, all speakers highlighted job opportunities in related fields, targeting postgraduate students and early-career professionals.

The symposium culminated in a panel discussion involving experts such as Prof. Priyanka De Silva, Prof. Rasika Jinadasa, Dr. Lakmal Jayasinghe, and Prof. Veranja Liyanapathirana. This discussion addressed the remaining questions and the way forward in the field. Participants offered valuable feedback emphasizing the need for more practical aspects and increased interaction in future sessions. Extended workshops spanning 2–3 days were suggested to delve deeper into a wider array of topics. Attendees expressed their interest in various subfields of genomics, and the utilization of pathogen genomics in vaccine preparation and antimicrobial resistance mechanisms. Many found the session highly informative and expressed gratitude to the organizing committee, advocating for the continuation of similar symposia with hands-on experiences.



## 11. International Guest talks organized by Board of Study in Zoological Sciences

15th November 2023

The program took place at the conference hall of the Postgraduate Institute of Science, University of Peradeniya, on 15th November 2023, from 2:30 pm to 4:30 pm. It was specifically organized for students with an interest in zoology.



The two distinguished guest speakers for the day were Professor Michael A. Huffman from the Wildlife Research Center at Kyoto University, who delivered a talk titled "Pains and Gains of Long-Term Research: Some Lessons Learned Over 45 Years of Research in Asia and Africa" and Professor Hiroyuki Tanaka from the Center for Ecological Research at Kyoto University, who presented on "Phytogeography of Northern Pig-Tailed Macaques and Biogeographical Scenario of the Macao Nemestrina Group."



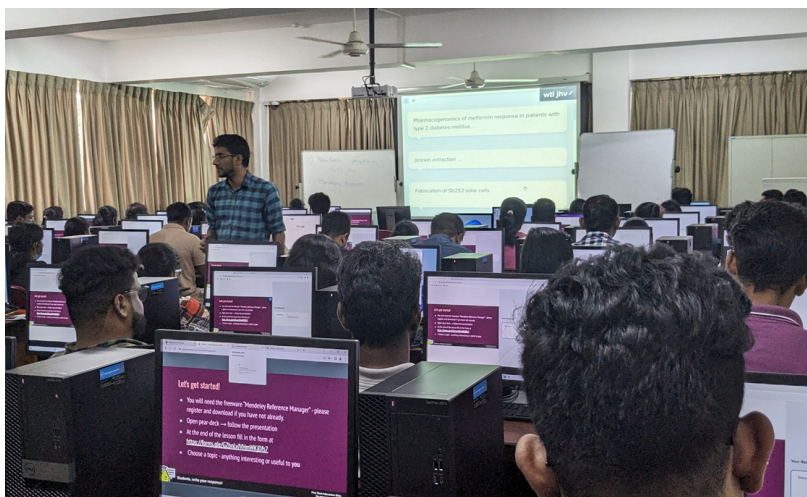
## 12. 26th Scientific Writing Workshop

2nd, 3rd, and 9th December 2023

The PGIS organizes periodic workshops focusing on scientific writing tailored for Masters, M.Phil., and Ph.D. students enrolled at the PGIS with the aim of enhancing their writing proficiency. Each workshop includes lectures and practical sessions to cover the main aspects in scientific writing. The workshop addresses topics such as Thesis Structure and Layout, Title and Abstract, Introduction, Bibliography, Computer-Aided Literature Survey, Experimental/Materials and Methods, Results, Discussion, Conclusions, and Ethics in Scientific Writing.

The 26th Scientific Writing workshop was primarily conducted targeting the Masters students who registered in 2022 in the Analytical Chemistry (ANC), Industrial Chemistry (INC), Nanosciences and Nanotechnology (CHN), GIS and Remote Sensing programmes. Additionally, Masters, M.Phil and Ph.D. students who registered in 2021 or earlier and were unable to participate in previous workshops were given the opportunity to join.

The event featured resource persons including Prof. C.V. Hettiarachchi, Prof. B.S.B.Karunaratne, Prof. T.M.W.J. Bandara, Prof. S.H.P.P. Karunaratne, Dr. Chaminda Wijesundara, Dr. R.J.K.U. Ranatunga, Dr. N.H. Koralegedara, Dr. J.A.T.C. Ariyasena, Dr. M. Marso, Dr. P.G. Mantilaka, Dr. M. Wijesinghe, Dr. P.L. Dharmapriya and Dr. H.T.K. Abeyesundara.





## 13. The 5th JICA CHAIR Program “Japan’s Modernization Studies”

11th December 2023

The 5th JICA session on "Sri-Lanka-Japan Relationship and The Making of Modern Japan," under the theme of “Japan’s Modernization Studies,” was hosted as a hybrid event at the PGIS on 11th December 2023, from 9:30 a.m. to 12:00 p.m. The program was organized by the Sri Lanka – Japan Study Centre, University of Peradeniya, in collaboration with the International Relations Office (InRO), University of Peradeniya, the Association of Sri Lanka Academics in Japan, and the Japan International Cooperation Agency.

Prof. Shinichi Kitaoka, the special advisor and former president of JICA, was the guest speaker for the event. Prof. Susiji Wickramasinghe and Dr. Samal Dharmaratne served as the moderator and the coordinator, respectively. Approximately 50 registered participants with an interest in the field physically attended the event at the PGIS.

The session provided valuable insights into the Sri-Lanka-Japan relationship and the historical development of modern Japan, attracting a diverse audience eager to engage in the discussion.



## 14. Ananda Coomaraswamy Memorial Oration 2023

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22nd August 2023



Ananda Coomaraswamy Memorial oration 2023 was successfully held on 22nd August, 2023 at the Conference Room, Postgraduate Institute of Science, University of Peradeniya.

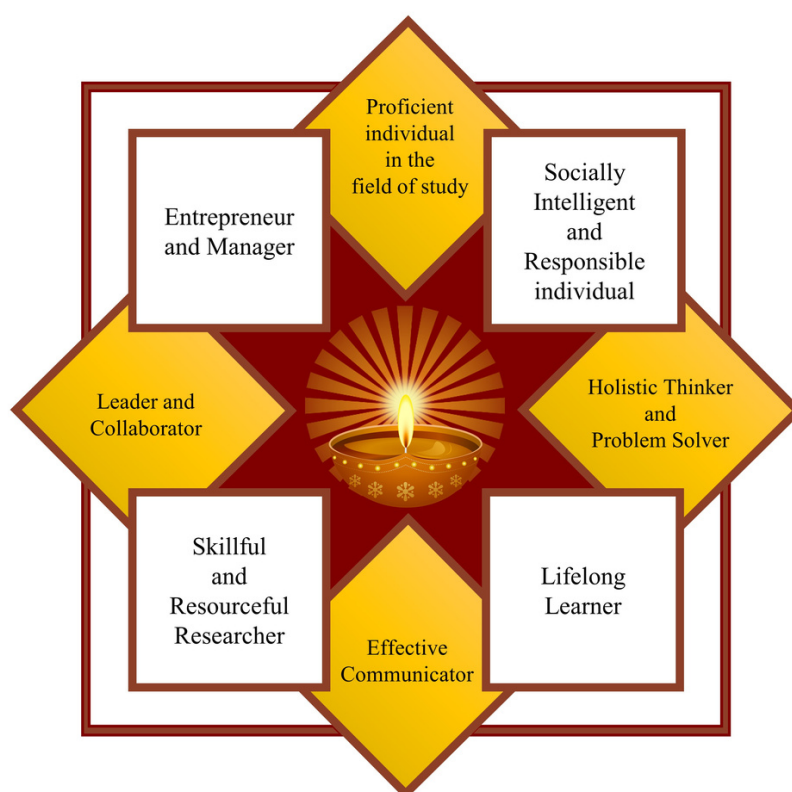
The Geological Society of Sri Lanka (GSSL) announced the recipient of the prestigious Ananda Coomaraswamy Medal for the year 2022 as Dr. Jagath Gunatilake, Department of Geology, University of Peradeniya, in recognition of his contributions to the advancement of the Engineering Geology and GIS knowledge of Sri Lanka. Dr. Gunatilake has received his B.Sc. special degree in Geology with a First Class Honors from the University of Peradeniya in 1988 and his M.Sc. in Engineering Geology and Applied Geophysics from Asian Institute of Technology AIT, Bangkok, Thailand in 1994. He received his Ph.D. in Geotechnical Engineering from Saga University, Japan in 2002.

GSSL congratulated his achievement!



## Design Competition for the PGIS Graduate Profile

The competition was initiated for members of the YRF to showcase their creativity and innovation in designing the PGIS graduate profile. Several imaginative designs were received, and after rigorous selection rounds, the design by Mr. Sadeep S. Gunathunga was chosen as the best for the PGIS graduate profile. The winner was presented with a prize voucher and a prestigious certificate in recognition of their achievement.



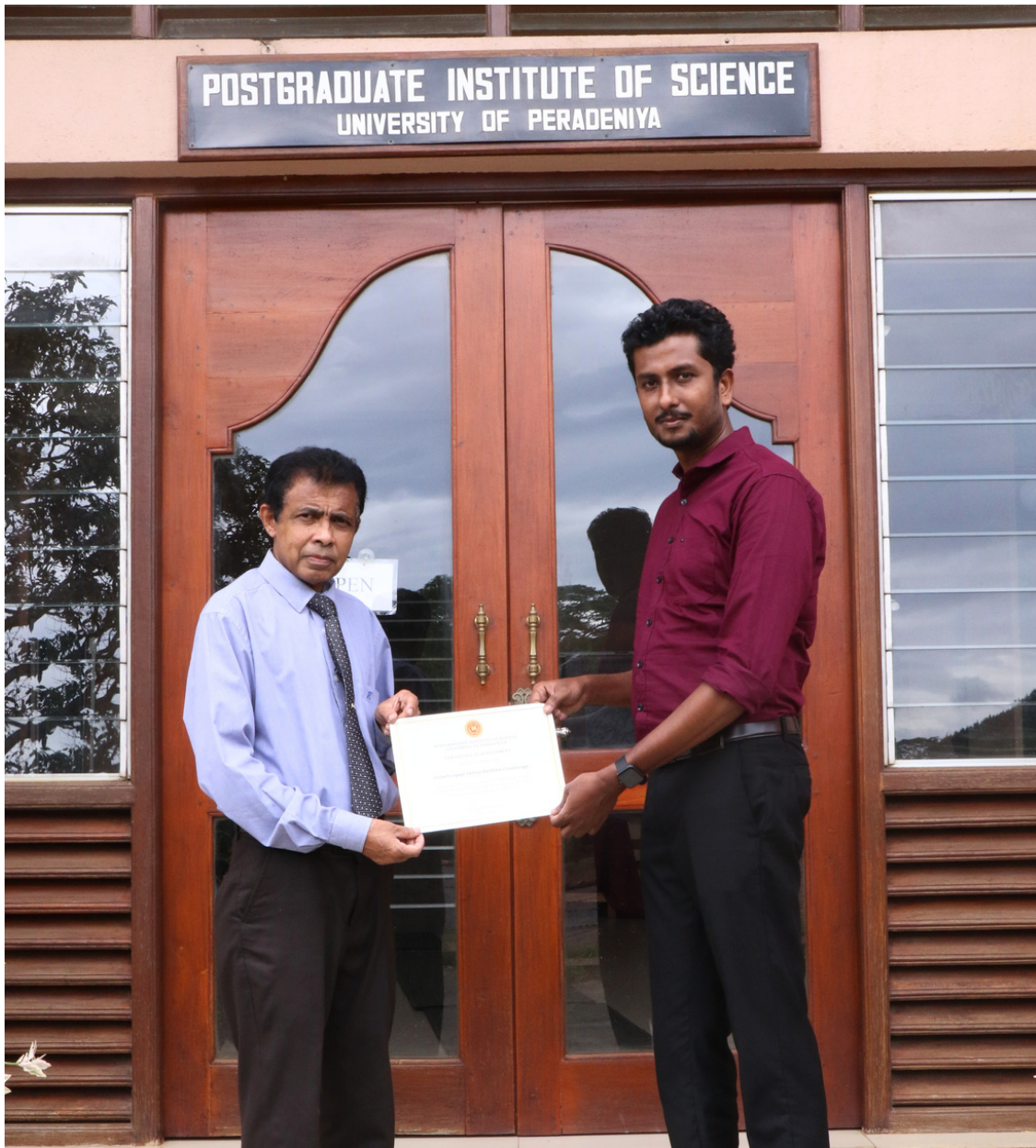
Postgraduate institute of science (PGIS) graduate is symbolized by the oil lamp and the qualities of a graduate through its radiant flame, illuminating knowledge, perseverance, and enlightenment in their journey of education.

- **Illumination:** Just like an oil lamp casts light in darkness, a graduate enlightens others with their acquired knowledge and expertise.
- **Rays:** The rays of an oil lamp represent the graduate's ability to shine and spread their knowledge and skills to others, through their work, communication, and leadership.
- **Endurance:** Similar to how an oil lamp burns steadily, a graduate demonstrates resilience, determination, and the ability to persevere through challenges.
- **Light:** The light of an oil lamp represent the graduate's impact on the world, through their contributions, innovations, and positive influence on others.
- **Guidance:** Just as an oil lamp provides guidance in the dark, a graduate serves as a beacon of inspiration, guiding and mentoring others in their pursuit of success.

## Design Competition for the PGIS Graduate Profile Cont.

The Yellow boxes represent the bright and positive attitude of the graduate, while the white boxes represent their ethical and moral values. Together, these features make the graduate a well-rounded and responsible professional, who contributes to society and makes a positive impact on the world.

Maroon color box around to represent the affiliation of the graduate with the mother university (University of Peradeniya), which is the institution that has recognized and supported the postgraduate institute where the graduate has completed their advanced studies. The use of maroon color signifies the strong connection and appreciation that the graduate has for the mother university, and acknowledges the pivotal role that the university has played in enabling their academic and professional growth.





## Register for Your Dream Postgraduate Course

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### Ph.D. | M.Phil. | Masters | Postgraduate Diploma

The PGIS offers postgraduate training in a wide range of disciplines in Science. The academic programmes of the PGIS are conducted through the following board of studies

- Biochemistry and Molecular Biology
- Biomedical Sciences
- Chemical Sciences
- Earth Sciences
- Environmental Science
- Mathematics
- Physics
- Plant Sciences
- Science Education
- Statistics & Computer Science
- Zoological Sciences

#### **M.phil. / Ph.D. RESEARCH DEGREE PROGRAMMES**

The PGIS offers postgraduate research programmes leading to the award of Degree of Master of Philosophy (M.Phil.) and Degree of Doctor of Philosophy (Ph.D.), which involve course work and research in selected areas of study. The medium of instruction shall be English. A candidate may normally register for an M.Phil./Ph.D. Degree programme in a chosen field of study with the approval of the relevant Board of Study.

# Courses offered by PGIS

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## M.Sc. DEGREE PROGRAMMES

At present the PGIS offers M.Sc. degree programmes in the following disciplines.

### **Biochemistry and Molecular Biology**

- Clinical Biochemistry
- Experimental Biotechnology
- Molecular Biology and Biotechnology

### **Chemical Sciences**

- Analytical Chemistry
- Industrial Chemistry
- Nanoscience and Nanotechnology

### **Earth Sciences**

- Disaster Management
- Engineering Geology and Hydrogeology
- Gemmology and Industrial Minerals
- GIS and Remote Sensing
- Water Resources Management

### **Environmental Science**

- Biodiversity Ecotourism and Environment Management
- Environmental Science

### **Mathematics**

- Industrial Mathematics

### **Physics**

- Medical Physics
- Physics of Materials

### **Plant Sciences**

- Biodiversity Conservation Management
- Medical Microbiology
- Pharmaceutical Botany
- Postharvest Technology of Fruits and Vegetables

### **Science Education**

- Science Education

### **Statistics and Computer Science**

- Applied Statistics
- Computer Science
- Data Science and Artificial Intelligence
- Information Technology (IT)

### **Zoological Sciences**

- Applied Epidemiology
- Fish and Wildlife Management



# Courses offered by PGIS

## POSTGRADUATE DIPLOMA

### Science Education

The programme will be of twelve month duration and, consists of coursework and an independent study on an area of student's interest in science education. Coursework will be conducted over a period of two semesters of 15 weeks (during weekends.) Continuous attendance is compulsory throughout the programme of study. The programme of study consists of six compulsory courses including teaching practice and an independent study and four optional courses. Satisfactory completion of a minimum of 24 credits including coursework, teaching practice, independent study with a GPA of not less than 2.75 is required to obtain the Postgraduate Diploma in Science Education.

### PGIS courses scheduled to commence in the year 2024

- Masters Degree in Analytical Chemistry
- Masters Degree in Nanoscience and Nanotechnology
- Masters Degree in Industrial Chemistry
- Masters Degree in Gemmology & Ind. Minerals
- Masters Degree in GIS and Remote Sensing
- Masters Degree in Science Education
- Postgraduate Diploma in Science Education







2023  
**PGIS NEWS**  
VOLUME 23 NO. 2

**Editorial Board**

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# THANK YOU !



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