



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

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Postgraduate Diploma Awards Ceremony



The Vice-Chancellor, Deputy Vice-Chancellor, Directors of Postgraduate Institutes, Deans of Faculties and Registrar of the University of Peradeniya, Chairpersons of Boards of Study and academic/non-academic staff of the PGIS were present at the Postgraduate Diploma Awards Ceremony held on 12th June 2015 at the PGIS auditorium. Postgraduate Diplomas were awarded to 435 students who had successfully completed the necessary requirements during the last five years, in the disciplines of Biochemistry and Molecular Biology, Chemical Sciences, Earth Sciences, Environmental Science, Mathematics, Physics, Plant Sciences, Science Education, and Statistics and Computer Science. At this ceremony, 161 students received their Diplomas in person. The others (274) were conferred the Diploma *in absentia*.

Opening of the PGIS Instrumentation Laboratory



The instrumentation laboratory of the PGIS was opened on 2nd January 2015, and the Vice-Chancellor, University of Peradeniya, former/present Directors of the PGIS and Dean, Faculty of Science graced the occasion. Gas Chromatograph, Polarising Microscope, PCR Machine, Electrochemical Analyzer, UV/Visible Spectrophotometers, Centrifuge and Rotary Evaporator are some of the instruments available in the Laboratory for postgraduate studies.

PGIS Celebrating the New Year ...

Prof. Atula Senaratne (Vice-Chancellor, University of Peradeniya), members of the Board of Management, academic and non-academic staff, and students of the PGIS were present at the new year tea party organized by the PGIS on 2nd January 2015.



Short Course on 'Graphite Products and Graphene'



The short course on 'Graphite products and graphene' was conducted at the PGIS on 22nd January 2015. The aims of the short course were,

- to enlighten the participants on cutting edge research
- to educate them on value addition to industrial products
- to promote industry-academia interactions and
- to establish research links with the Toyota Technological Institute (TTI), Japan.

There were 29 participants including university academics, research students and personnel from industry. The short course was coordinated by Prof. R M G Rajapakse.

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PGIS News

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Inauguration of five M.Sc. Programmes in Earth Sciences



Five M.Sc. programmes (listed below) of the Board of Study in Earth Sciences were inaugurated with the participation of 150 students on January 24, 2015. Prof. Namal Priyantha (Director, PGIS), Prof. Anura Wickramasinghe (Dean, Faculty of Science) and Dr. Jagath Gunatilaka (Chairman, Board of Study in Earth Sciences) addressed the inaugural ceremony.

M.Sc. Programme	Coordinator(s)
Disaster Management	Prof. B S B Karunaratne
Eng Geology & Hydrogeology	Dr. Jagath Gunatilaka Dr. H A Dharmagunawardhane
Gemmology and Industrial Minerals	Dr. S Malaviarachchi
GIS and Remote Sensing	Dr. Jagath Gunatilaka
Water Resources Management	Dr. H A Dharmagunawardhane

Inauguration of M.Sc. and PG Diploma Programmes in Science Education



M.Sc. and Postgraduate Diploma programmes in Science Education were inaugurated on February 28, 2015 with the participation of 29 and 36 students, respectively. Prof. Namal Priyantha (Director, PGIS), Prof. Chandani Perera (Chairperson, Board of Study in Science Education) and the Coordinators of the M.Sc. programme (Dr. W D Chandrasena, Dr. H M S P Madawala, Dr. C V Hettiarachchi, Dr. D M Samarathunga and Dr. J P Liyanage) and PG Diploma programme (Dr. A R G A M Abeykoon Manike) were present at the inaugural ceremony.

Inauguration of Twelve M.Sc. Programmes



Over 300 registrants were present at the inauguration ceremony of the below-listed twelve M.Sc. programmes held on April 24, 2015.

M.Sc. Programme	Board of Study (Chairperson)	Coordinator(s)
Biodiversity, Ecotourism and Environment Management	Environmental Science (Prof. Namal Priyantha)	Dr. S K Yatigammana Mr. C S Wijesundara
Environmental Science		Dr. G W A R Fernando
Experimental Biotechnology	Biochemistry and Molecular Biology (Prof. J G S Ranasinghe)	Prof. J G S Ranasinghe Dr. P Samaraweera
Analytical Chemistry	Chemical Sciences (Prof. B M R Bandara)	Prof. M M A N Navaratne Dr. K Jayasundara
Industrial Chemistry		Dr. C S Kalpage Dr. S Jayasinghe
Nanoscience & Nanotechnology		Prof. R M G Rajapakse Dr. R G S C Rajapakse Dr. A C A Jayasundera
Industrial Mathematics	Mathematics (Dr. A A S Perera)	Dr. M I M Ishak
Medical Physics	Physics (Dr. L R A K Bandara)	Dr. C P Jayalath Mr. A Dilip Kumara
Physics of Materials		Dr. L R A K Bandara
Computer Science	Statistics and Computer Science (Prof. S R Kodituwakku)	Prof. A A I Perera
Applied Statistics		Dr. P M S A Ruwan
Applied Epidemiology	Zoological Sciences (Prof. R Rajakaruna)	Dr. S K Yatigammana

60th, 61st and 62nd Short Courses on 'GIS and Applications'



Three short courses (60th to 62nd) in the series on GIS and Applications were organized and conducted by the Board of Study in Earth Sciences at the PGIS from February to June 2015 and were coordinated by Dr. Jagath Gunatilake. The objective

of the short courses was to expose officers from state and private sector organizations to Geographical Information Systems (GIS) and Global Positioning Systems (GPS) for efficient management and planning, and to provide basic theoretical and comprehensive hands-on training in the use of GIS for a variety of applications.



The 60th Short Course on 'GIS and Applications' was held from 16th to 21st February. The 29 participants represented the Ministry of Health, Ministry of Agriculture - Southern Province, Southern Provincial Irrigation Department, Atomic Energy Authority and University of Ruhuna. The 61st Short Course on 'GIS and Applications' was conducted from 11th to 16th May 2015 for 24 officers of the Land Use Policy Planning Department (LUPPD). Sixty-two officials representing World Vision Lanka and Ministry of Health participated in the 62nd Short Course on 'GIS and Applications' held from 29th June to 4th July 2015.

Further Activities of the Board of Study in Earth Sciences

- The 3rd Capacity Development Seminar for National Building Research Organization, District Secretariats, Road Development Authority (RDA) and other stake holders on 'Slope Stability Analysis and Counter Measure Plan' was organized and conducted jointly by PGIS, RDA and Japan International Cooperation Agency (JICA) on 19th March 2015 for 50 participants.
- The 7th Short Course on 'Human Resources Management' was conducted at the Department of Geology from 9th to 10th May 2015 for 80 undergraduate students of University of Peradeniya.



- The 6th Short Course on 'ISO 14001' was organized jointly by the PGIS and the Centre for Environmental Studies, University of Peradeniya

and conducted at the Department of Geology from 23rd to 24th May for 80 participants selected from among undergraduates of the University of Peradeniya.

- Visiting Lecturer, Eng. Bala Balasubramaniam from TTI Consulting Engineers, Australia, conducted lectures for the students of the two M.Sc. programmes; M.Sc. in Engineering Geology and Hydrogeology, and M.Sc. in GIS and Remote Sensing, in May 2015 at the PGIS.

The above activities were coordinated by Dr. Jagath Gunatilake, Chairperson of the Board of Study in Earth Sciences.

4th Workshop on 'Thin Film Solar Cells and their Science and Technology'



As the fourth step in an ongoing series of workshops, the Sivananthan Laboratories Inc., USA, in collaboration with the Department of Physics, University of Peradeniya and Board of Study in Physics, PGIS with the sponsorship of the UGC, HETC, InRC - University of Peradeniya, NSF and Metrohm,

successfully conducted a 2-day workshop on 'Thin Film Solar Cells and their Science and Technology' from 27th to 28th February 2015. There were 120 participants: professors, lecturers, engineers and M.Phil./Ph.D.

research students from universities, research institutes and private sector agencies. The resource persons were from the Sivananthan Laboratories Inc., University of Illinois at Chicago (UIC) and National Renewable Energy Laboratory, CO, USA. Two programmes aiming at raising awareness among high school students included: an island-wide essay competition; a hands-on laboratory session for 30 GCE (A/L) students in the Kandy area on solar and renewable energy devices. Dr. B S Dassanayake and Dr. C P Jayalath coordinated the workshop activities.



Certificate Course on 'Teaching Methodologies in Science Education for Science Teachers in Grade 6 - 11 in the Central Province'

This course was organized and conducted by the Science Education Alumni Association (SEAA), PGIS in collaboration with the Board of Study in Science Education, PGIS and Education Department, Central Province for 48 secondary



level science teachers, from 17th April to 29th May 2015 at the PGIS. The objective of this course was to enhance the knowledge, skills and attitudes of teachers in teaching methodologies with special focus on teaching of science. The course was coordinated by Dr. Sakunthala Yatigammana (University of Peradeniya) and Ms. D M M P Dissanayake (Provincial Department of Education, Kandy).

Workshop on Scientific Writing

PGIS plans to conduct a series of workshops on 'Scientific Writing', free of charge, for Ph.D., M.Phil. and M.Sc. students registered at the PGIS, in order to improve their writing skills. The first of the series was held from 29th to 30th April 2015 at the PGIS auditorium with the participation of 68 PGIS students. The objective of the workshop was to help students produce a quality Project Report/Thesis and publications, which is an integral part of postgraduate training.



The workshop consisted of lectures/discussion sessions on different aspects of postgraduate thesis/project report writing. The topics covered at the workshop were: Structure and layout of a thesis/project report; Ethics in Scientific Writing; Title and Abstract; Computer-Aided Literature Survey; Introduction and Bibliography; Experimental/Materials and Methods; Results, Discussion and Conclusions. The Group Discussion Sessions on 'Title and Abstract' and 'Results, Discussion and Conclusions' provided the students with hands-on experience. Dr. N C Bandara coordinated the workshop.

Computer-aided Educational Tour on IT for Naval Officers



PGIS organized a Computer-aided Educational Tour on IT for 18 Navy Officers of the Naval and Maritime Academy, Trincomalee on 25th May 2015, at the PGIS computer laboratory.



2nd National Workshop on Data Handling, Analysis and Interpretation



The 2nd National Workshop on Data Management, Analysis and Interpretation organized by the PGIS was held on 27th June 2015. University students, academics and researchers from disciplines of Allied Health Sciences, Engineering, Medicine, Science and Veterinary Science were among the 80 participants. The workshop was coordinated by Dr. N C Bandara and Mr. Anushka Liyandeniya.

PGIS - Young Researchers' Forum (PGIS-YRF)

Sciscitator - Annual Magazine of YRF

Second volume of the annual magazine of the YRF "Sciscitator" was launched on 2nd April 2015 at the PGIS followed by the "YRF Night"



Night" which is an annual gathering



of PGIS research students and staff. The magazine contained articles from multidisciplinary areas; chemical, geological, computer, plant, environmental, biochemical and mathematical sciences, authored by members of the YRF.

YRF Cricket Fiesta 2015

The annual cricket match of YRF was held on 6th June 2015 at the University grounds. The objective of organizing this event was to strengthen the interactions among research students of the PGIS. The YRF of University of Peradeniya was happy to entertain the invited teams from the Institute of Fundamental Studies, Hantana and from the Young Researchers' Forum of Kotalawala Defense Academy, at the YRF Cricket Fiesta 2015.



YRF Annual Trip 2015

YRF members participated in a one-day trip to Trincomalee, on 19th June 2015, which included a boat ride to Pigeon Islands, snorkeling to observe corals, and a visit to the Naval museum in Trincomalee.



YRF Colloquium Series

Dr. Thusitha Rupasinghe, Senior Research Scientist at University of Melbourne, Australia gave a talk on 'Applications of mass spectroscopy in metabolomics and lipidomics' on 5th January 2015.

President/YRF - Mr. Sarath Kumara;

Secretary/YRF - Ms. Shalini Rajakaruna

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Merit Scholarship Awardees of M.Sc. Programmes



Seventeen M.Sc. students with high GPA were awarded certificates of merit at a ceremony held on 24th January 2015.

M.Sc. in GIS and RS - 2011/12:

Ms. M G N R Karunasena; Mr. M S P M Siriwardena; Mr. H G B Amarasekera

M.Sc. in Disaster Management - 2013/14:

Ms. M G H U Gunarathna; Mr. J M M C K Jayasundara; Ms. H A S Jisantha; Ms. M A K Kumari; Ms. K D G Pathirathna; Ms. W G W Wanasinghe; Mr. M Sutharsanan; Mr. M M G N H Wijerathna; Mr. K L A S Wijesinghe; Ms. W M D K Jayawardana; Mr. K Sivendram; Mr. A M Neranjan; Mr. P Ragavan; Mr. W M S M B Samarakoon

Postgraduate Degrees and Diplomas awarded (January – June 2015)

M.Sc. Degrees and Awardees

Analytical Chemistry	8	Environmental Science	6
Applied Statistics	8	Experimental Biotechnology	3
Biodiversity, Ecotourism & Environment Management	2	GIS & Remote Sensing	10
Clinical Biochemistry	1	Industrial Chemistry	2
Computer Science	14	Industrial Mathematics	1
Disaster Management	1	Medical Microbiology	10
Engineering Geology & Hydrogeology	4	Nanoscience & Nanotechnology	7
		Science Education	10



Postgraduate Diplomas and Awardees

Analytical Chemistry	1	Clinical Biochemistry	1
Applied Statistics	1	Disaster Management	2
Biodiversity, Ecotourism & Environment Management	1	Industrial Chemistry	1
		Science Education	29

Ph.D. Degrees and Awardees

Chemical Sciences

R M C J Bandara
M M M G P G Mantilaka

Physics

N P Liyanawaduge

Earth Sciences

P Jayasingha
J K Rajapaksha

Plant Sciences

H M D K Kanatiwela
M M S N Premetilake
A P Henagamage

Statistics and Computer Science

Barathy Mayurathan



M.Phil. Degrees and Awardees

Biochemistry and Mol. Biology

K A A S Kumara

Chemical Sciences

M A S K Menikarachchi
H M S K H Bandara
H A P P B Jayathilake
G C Pathiraja
D S Jayaweera

Earth Sciences

H M D V Herath
T B Nimalsiri
S M P G S Kumara
E M T K Senevirathna

Mathematics

W N P Rodrigo
W A Gunarathna
Paramacutty Paramadevan
T P J Navinthan

Statistics and Computer Science

M Chandrabose

Zoological Sciences

N I Suwandharathne
S Ariyaratna