CONFERENCE ON HERPETOLOGICAL CONSERVATION AND BIOLOGY

Prof. Atula Senaratne (Vice-Chancellor, University of Peradeniya) lighting the traditional oil lamp during the inauguration of the Conference on Herpetological Conservation and Biology held at the PGIS from 28th to 29th November 2012. Prof. S H P P Karunarathne (Dean, Faculty of Science) and Mr. Kelum Manamendra-arachchi (Postgraduate Institute of Archaeology) are also in the picture.

SHORT COURSE ON RESEARCH DESIGN FOR FIELD BIOLOGISTS

Participants of the Short Course on Research Design for Field Biologists held at the PGIS from 29th June - 3rd July 2012. Resource Persons of the short course were Prof. Kathryn Sieving (2nd row: 5th from left) and Ms. Fangyuan Hua (1st row: 5th from left) from Department of Wildlife Ecology and Conservation, University of Florida, USA and Dr. Nilmini Jayasena (2nd row: 4th from left) from Department of Basic Veterinary Sciences, University of Peradeniya, who was also the coordinator of the short course.

INTERNATIONAL SYMPOSIUM ON WATER QUALITY AND HUMAN HEALTH

Prof. B S B Karunarathne (Director, PGIS) addressing the inaugural session of the symposium held from 22nd to 23rd March 2012. Seated (L to R): Dr. S K Yatigammana (Chairperson, Board of Study in Zoological Sciences and Symposium Coordinator), Prof. Tomonori Kawakami (Chairman, Department of Environmental Engineering, Toyama Prefectural University, Japan), Prof. S R Kodituwakku (Acting Dean, Faculty of Science) and Prof. H M D N Priyantha (Chairman, Board of Study in Environmental Science).

FACULTY DEVELOPMENT WORKSHOP FOR TEACHING STAFF OF DISASTER MANAGEMENT MSc PROGRAMME

Participants of the Faculty Development Workshop held at the Earl's Regency Hotel, Kandy from 22nd to 24th December 2012. Prof. B S B Karunarathne (Director, PGIS), Dr. Jagath Gunatilaka (Workshop Coordinator), and members of a delegation from Chiang Mai University, Thailand - Mr. N M S I Arambepola [Director, Asian Disaster Preparedness Centre (ADPC), Thailand], Mr. Sisira Kumara (ADPC), Miss Mutarika Prucksapong (ADPC) and Dr. Buddhi Weerasinghe (ADPC) are also in the picture.
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PGIS News

Editorial Board

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Dr. A A S Perera
Dr. N C Bandara (Editor)

Comments, suggestions and contributions to improve the quality of this newsletter are invited. For information and requests for copies of PGIS News please contact:

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E-mail: ncbandara@pgis.lk

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<th>Date(s)</th>
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<td>42nd Short Course on GIS and Applications</td>
<td>Dr. Jagath Gunatilake (Earth Sciences)</td>
<td>Jan. 16 - 21</td>
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<td>10th Advanced Short Course on GIS and Applications</td>
<td>Dr. Jagath Gunatilake (Earth Sciences)</td>
<td>Feb. 6 - 11</td>
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<td>Feb. 13 - 18</td>
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<td>Training Programme for Elephant Keepers in Pinnawala</td>
<td>Dr. Ashoka Dangolla (Zoological Sciences)</td>
<td>March 19 – April 20</td>
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<td>44th Short Course on GIS and Applications</td>
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<td>International Symposium on Water Quality and Human Health</td>
<td>Dr. S K Yatigammana (Environmental Science and Zoological Sciences)</td>
<td>March 22 - 23</td>
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<td>Postgraduate Certificate Course in Advanced Organic Chemistry</td>
<td>Prof. U L B Jayasinghe (Chemical Sciences)</td>
<td>March 24 – March 2013</td>
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<td>Dr. Jagath Gunatilake (Earth Sciences)</td>
<td>April 23 - 28</td>
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<td>11th Advanced Short Course on GIS and Applications</td>
<td>Dr. Jagath Gunatilake (Earth Sciences)</td>
<td>May 14 - 19</td>
<td>11</td>
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<tr>
<td>46th Short Course on GIS and Applications</td>
<td>Dr. Jagath Gunatilake (Earth Sciences)</td>
<td>May 28 - June 2</td>
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<tr>
<td>Workshop on Linear Accelerator for Medical Physicists and Medical Physics M.Sc. Students</td>
<td>Dr. V Sivakumar Mr. A D Kumar (Physics)</td>
<td>June 3</td>
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<tr>
<td>(Venue – National Cancer Hospital, Maharagama)</td>
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<tr>
<td>Short Course on Research Design for Field Biologists</td>
<td>Dr. N Jayasena (Zoological Sciences)</td>
<td>June 29 - July 3</td>
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<tr>
<td>Workshop on ‘How to write a research proposal for M.Phil./Ph.D. studies at PGIS’</td>
<td>Dr. Nanda Gunawardhana</td>
<td>July 17</td>
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<td>M.Sc. Programme (Date of Commencement)</td>
<td>Board of Study</td>
<td>Coordinator(s)</td>
<td>No. of Students</td>
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<td>---------------------------------------</td>
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</tr>
<tr>
<td><strong>Science Education</strong> (January 23)</td>
<td>Science Education</td>
<td>Dr. S Karunaratne (Science Education Unit, UPDN) &lt;br&gt; Dr. W A I P Karunaratne (Dept. of Zoology, UPDN) &lt;br&gt; Dr. C V Hettiarachchi (Dept. of Chemistry, UPDN) &lt;br&gt; Dr. D M Samarathunga (Department of Mathematics) &lt;br&gt; Dr. J P Liyanage (Dept. of Physics, UPDN)</td>
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<td><strong>Medical Physics</strong> (April 5)</td>
<td>Physics</td>
<td>Dr. V Sivakumar (Dept. of Physics, UPDN) &lt;br&gt; Mr. A Dilip Kumara (Cancer Unit, Teaching Hospital, Karapitiya)</td>
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**POSTGRADUATE DIPLOMA PROGRAMMES 2012/2013**

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<th>Diploma Programme</th>
<th>Board of Study</th>
<th>Coordinator(s)</th>
<th>No. of Students</th>
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<tr>
<td>Science Education (January 21)</td>
<td>Science Education</td>
<td>Prof. S Karunaratne (Science Education Unit, UPDN)</td>
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</table>

UPDN - University of Peradeniya

**Ph.D. and M.Phil. DEGREES AWARDED in 2012**

**Awardees**

**Titles of Theses**

**Ph.D. – Chemical Sciences**

1. L L W C Yalegama  
   Characterization and nutritional effect of cell wall polysaccharides from coconut kernel  
   (Supervisors: Prof. D N Karunaratne, Prof. R Sivakanesan and Dr. (Ms.) C Jayasekera)

**Ph.D. – Zoology**

1. E M L Ekanayake  
   Nesting behaviour, reproductive output, genetic structure and nest paternity of the green turtle nesting at Kosgoda rookery in Sri Lanka  
   (Supervisors: Dr. R S Rajakaruna, Dr. P Samaraweera and Prof. K B Ranawana)

**M.Phil. – Biochemistry & Molecular Biology**

1. N H N Priyanwada  
   Effect of inclusion of *Setaria italica* (L.) P. Beauv seeds in ruminant feed on the level of *cis-9,trans-11* isomer of conjugated linoleic acid content in goat milk  
   (Supervisors: Dr. W M A P Wanigasekara and Prof. H R W Dharmaratne)
**M.Phil. – Chemical Sciences**

1. **A M A Bandaranayake**
   Mechanistic investigation of interaction of chromium species and thermally-treated brick clay
   (Supervisor: Prof. Namal Priyantha)

2. **R M A U Rajapaksha**
   Natural dissolution mechanisms of serpentinite soils from Sri Lanka: leaching of chromium, nickel and manganese to the environment
   (Supervisors: Dr. M Vithanage, Prof. S V R Weerasooriya and Dr. W M A T Bandara)

3. **A R N M Abeyrathna**
   Synthesis of glycolipids for use as liquid crystals and surfactants
   (Supervisors: Prof. A D L C Perera and Prof. D N Karunaratne)

4. **A M D S Chandrathilaka**
   Equilibrium studies on toxic metal ion-mixed ligand systems under physiological conditions
   (Supervisor: Dr. C V Hettiarachchi)

5. **S G Anuradha**
   Development of dye-sensitized solar cells using Atomized Spray Pyrolysis technique
   (Supervisors: Prof. R M G Rajapakse, Prof. H M N Bandara and Dr. G R A Kumara)

6. **W W Kumbukgolla**
   Tea catechins: Antibacterial activity against methicillin-resistant *Staphylococcus aureus* (MRSA) and enhancement of sensitivity of MRSA to oxacillin
   (Supervisors: Prof. B M R Bandara, Prof. V Thevanesam and Prof. N S Kumar)

**M.Phil. – Mathematics**

1. **T D A Gomesz**
   A binary-integer programming method for optimal control of water distribution systems
   (Supervisor: Prof. W B Daundasekara)

**M.Phil. – Plant Sciences**

1. **P N Yapa**
   Impacts of soil biological and chemical properties on forest dieback at Horton Plains National Park, Sri Lanka: influence of arbuscular mycorrhizal fungi on the growth of *Syzygium rotundifolium* Arn.
   (Supervisors: Dr. H M S P Madawala and Dr. T C Bamunuarachchige)

**M.Phil. – Zoology**

1. **T C Weeraratne**
   Effective control of dengue fever vectors: *Aedes aegypti* and *Ae. albopictus* in Sri Lanka
   (Supervisor: Prof. S H P P Karunaratne)
42ND to 48TH SHORT COURSES ON GIS & APPLICATIONS

Participants of the 42nd Short Course (Jan. 16 - 21) during a technical session

Participants of the 43rd Short Course (Feb. 13 - 18)

Participants of the 45th Short Course (April 23 - 28) at a field class

Participants of the 48th Short Course (November 19 - 24) during a technical session

10TH to 13TH ADVANCED SHORT COURSES ON GIS AND APPLICATIONS

Participants of the 11th Short Course (May 14 - 19)

Participants of the 13th Short Course (December 10 - 15)
Left: Prof. Tomonori Kawakami (Chairman, Department of Environmental Engineering, Toyama Prefectural University, Japan) addressing the inaugural session of the symposium held from 22nd to 23rd March 2012. Seated (L. to R): Dr. S K Yatigammana (Chairperson, Board of Study in Zoological Sciences and Symposium Coordinator), Prof. B S B Karunaratne (Director, PGIS), Prof. S R Kodituwakku (Acting Dean, Faculty of Science) and Prof. H M D N Priyantha (Chairman, Board of Study in Environmental Science).

Right: Participants of the symposium

SHORT COURSE ON RESEARCH DESIGN FOR FIELD BIOLOGISTS

Left: Participants at a technical session of the Short Course on Research Design for Field Biologists held from 29th June to 3rd July 2012 at the PGIS. Right: Short course participants at a field session.

WORKSHOP ON “HOW TO WRITE A RESEARCH PROPOSAL FOR M.Phil./Ph.D. STUDIES AT PGIS”

SEMINAR ON “SCIENCE …….. IN THE REPAIR OF HUMAN TISSUE”

Participants at a technical session of the workshop held on July 17, 2012

Prof. Kunlee Oloyede (Queensland University of Technology, Australia) delivering his presentation on ‘Science, Technology, Engineering and Mathematics in the Repair of Human Tissue’.
Participants at technical sessions of the two workshops on ‘Curriculum revision of the M.Sc. programme in Disaster Management’, held on November 17 and November 18, respectively.

**CONFERENCE ON HERPETOLOGICAL CONSERVATION AND BIOLOGY**

Prof. B M R Bandara (Acting Director, PGIS) addressing the inaugural session of the conference held from 28th to 29th November 2012. Seated (L to R): Dr. Rupika Rajakaruna (Chairperson, Board of Study in Zoological Sciences and Conference Coordinator), Prof. Athula Senaratne (Vice-Chancellor, University of Peradeniya), Mr. Kelum Manamendra-arachchi (Research Associate, Postgraduate Institute of Archaeology), Prof. S H P P Karunaratne (Dean, Faculty of Science) and Dr. M Meegaskumbura (Conference Co-coordinator).

**FACULTY DEVELOPMENT WORKSHOP FOR TEACHING STAFF OF DISASTER MANAGEMENT MSc PROGRAMME**

Workshop participants attending a technical session at the Earl’s Regency Hotel, Kandy. Participants having a discussion at Gerandi Ella active landslide site, on their way to Nuwara Eliya field site.
### M.Sc. Degrees Awarded in 2012

#### Awardees

<table>
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<tr>
<th>M.Sc. – Analytical Chemistry</th>
<th>Titles of Project Reports</th>
</tr>
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<tr>
<td>1. R M D N Rathnayake</td>
<td>Solvent effect for extraction of Aflatoxin B1 from animal feed</td>
</tr>
<tr>
<td>3. B W M G C Bandara</td>
<td>Removal of cadmium by thermally and chemically modified peat</td>
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<table>
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<tr>
<th>M.Sc. – Applied Statistics</th>
<th>Titles of Project Reports</th>
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<tbody>
<tr>
<td>1. S R Gnanapragasam</td>
<td>Statistical modeling of topographic elevation using shuttle radar topographic mission digital elevation data</td>
</tr>
<tr>
<td>2. R M C K Siriwardhana</td>
<td>Modeling Sri Lanka monsoonal rainfalls with sunspot numbers using transfer function noise model</td>
</tr>
<tr>
<td>3. T D S N Jayasena</td>
<td>Analysis of paired incidence scores with clustering</td>
</tr>
<tr>
<td>4. M B M D S Gawarammana</td>
<td>Statistical analysis of factors influencing respiratory health of school children in Kandy</td>
</tr>
<tr>
<td>5. M Marystella</td>
<td>Epidemiological risk factors of chronic kidney disease of unknown origin in Sri Lanka: a case control study</td>
</tr>
<tr>
<td>6. A P K G S Samarasekara</td>
<td>Modelling spatiotemporal variables through data-driven approximated forms</td>
</tr>
<tr>
<td>7. P L N S Sumathipala</td>
<td>Joint distribution of the water levels of Kotte canal and Kelani river using copulas</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>M.Sc. – Biodiversity Ecotourism and Environment Management</th>
<th>Titles of Project Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. W A Dharmakeerthi</td>
<td>Mortality patterns in wild elephants in Sri Lanka</td>
</tr>
<tr>
<td>2. A M G G L K B Abeykoon</td>
<td>Conservation importance of semi-evergreen seasonal forests of Galamuduna area in the Knuckles region</td>
</tr>
<tr>
<td>3. W A W P Wijayalath</td>
<td>Population, environmental and climatic factors on dengue distribution in Colombo district</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>M.Sc. – Clinical Biochemistry</th>
<th>Titles of Project Reports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. V P Gunaratne</td>
<td>Histopathological effects of crude venom and purified phospholipase A&lt;sub&gt;2&lt;/sub&gt; from Russell’s Viper (<em>Daboia russelii russelii</em>) in mice</td>
</tr>
<tr>
<td>2. D B G M Ekanayake</td>
<td>Studies on clinically suspected dengue patients using RT-PCR and blood dengue parameters</td>
</tr>
<tr>
<td>3. D S Senavirathna</td>
<td>Establishing hematological reference ranges using a selected population of blood donors</td>
</tr>
<tr>
<td>4. S N N B W M K K Jayasundera</td>
<td>Prevalence of bacterial meningitis among children admitted to the Teaching Hospital, Kurunegala</td>
</tr>
</tbody>
</table>
5. W M A U B Bowatte  
Relation of maternal haemoglobin and serum protein concentrations to birth weight of newborn: a case study in Mannar district

6. D M S N B Dasanayake  
Clinical significance and diagnostic value of urinary protein analysis of chronic kidney disease patients by sodium dodecyl sulfate polyacrylamide gel electrophoresis

7. B D S Jayawardana  
Protease inhibitors in *Sesbania grandiflora* and *Terminalia catappa*

**M.Sc. – Computer Science**

1. V Surendranathan  
Development of a distributed collaborative student group project management system

2. J P R R S Jayaweera  
Subscriber management system for customizable customer relation management

3. M Intirapalah  
Development of a student information management system for schools

4. A P Hettiarachchi  
Content based image retrieval system by clustering

5. M A Lokuge  
Database administration via short message service

6. K W D M Chandrasiri  
Classification of brain computer interface data using formant analysis

7. N H Zainudeen  
Utilization of game theory in computer security as applied to intrusion detection systems

8. E R G V S Kulatunga  
3D Reconstruction tool for CT (or similar) scanned images

9. R R M P Ranaweera  
Source code generator to invoke Apache AXIS2 web services

10. R C Warusavithana  
A Supporting tool for teaching data structures and algorithms

11. P L N Perera  
Development of a secure e-voting system for election

12. B M N Bandara  
Evaluation of communication technologies for smart grid applications

13. E W M G W S G B Ekanayake  
Performance evaluation and comparison of Java RMI and RMI-IIOP

14. S Sivatuban  
Development of an online examination system

15. S A S S Subasinghe  
Platform migration project for Bio Foods (Pvt.) Ltd.

16. R M S U Gunathilake  
Implement a model to reserve mobile numbers in an efficient manner for a Telecom service provider

17. D P H R De Silva  
Offline Sinhala handwritten character recognition using matrix matching method

**M.Sc. – Disaster Management**

1. K P S A Amarkoon  
Socio-economic and cultural consequences of internal displacement

2. M P N Kumara  
Developing grass root level multi hazard contingency and disaster response plan for Biyagama area

3. H M A G B Thilakeratne  
Geochemical etiology of Chronic Kidney Disease unidentified (CKDu): a case study from Mahamailankulam, Vavuniya

4. Y B M Asmi  
Community perception of natural hazards and vulnerability: a case study from the south eastern coastal belt of Sri Lanka

**M.Sc. – Environmental Science**

1. A A I K Amarasinghe  
Evaluation of groundwater quality and soil pollution in urban solid waste dump site, Kegalle
**M.Sc. – Experimental Biotechnology**

1. J S Abeynayaka
   Serological detection of antibodies to human *Rickettsia* and *Toxoplasma gondii* in backyard poultry in Kanthale divisional secretariat

2. S A Wickramage
   Detection of Marek’s Disease virus in poultry using a Polymerase Chain Reaction based molecular diagnostic assay

3. K H P Manoshi
   Identification of the SSR marker RM261 for Brown Plant Hopper resistant gene *Bph12(t)* in *Oryza officinalis* line IR 54751-2-34-10-6-2 and its validations

**M.Sc. – GIS & RS**

1. S Yoharajan
   Prioritization of community development activities: GIS as a tool

**M.Sc. – Industrial Chemistry**

1. E A I N Egodawatta
   Application of hydrocyclone in industrial wastewater treatment

2. E D B P Wijayarathna
   Preparation of an adherent hydroxyapatite layer on stainless steel for orthopedic applications

3. B M S H Bandaranayake
   Controlling odour in tobacco processing

**M.Sc. – Industrial Mathematics**

1. S Suthan
   Application to optimization under uncertainty

2. R H M N Rajakaruna
   Comparison of minimum spanning tree algorithms for a telecommunication network

**M.Sc. – Nanoscience & Nanotechnology**

1. W M P M B Weerasekara
   Surface modification of iron oxide nanoparticles by casein

2. S B Y Abeywardana
   Modeling of arsenic adsorption on gibbsite nanoparticles

3. E A D M Athukorala
   Study of ionic conductivity of poly(ethylene oxide) [peo] based polymer electrolytes with fillers

4. M M C S K Ranasinghe
   Preparation and characterization of ferrite nanoparticles

5. S M M L Karunarathne
   Zinc oxide-based dye-sensitized solar cells

6. R Jayathissa
   Mixed cation effect in enhancing the efficiency of dye sensitized solar cells based on poly(methyl methacrylate) [PMMA] and nanoporous titanium dioxide (TiO₂)

**M.Sc. – Science Education**

1. R M C K Rajaguru
   Barriers of teachers in using student-centred approach to teach seventh grade science

2. J H R Samanthi
   Performance of G.C.E. (Advanced Level) Physical Science students on the concept of functions

3. R M A Pushpika
   Computer aided study package for effective teaching of the Unit 2 - Biodiversity in G.C.E. (Advanced Level) biology syllabus
4. J M B G D B Jayasinghe  Problems faced by students and teachers in learning and teaching agriculture in G.C.E. (Advanced Level) in Kandy and Nuwara Eliya districts in the Central Province

5. H K D L Dharmadasa  Effectiveness of 5E instructional method in teaching and learning agriculture and food technology, G.C.E. (Ordinary Level)

6. W C P Wanniarachchi  Teaching force, pressure, work and energy concepts for eighth graders using Problem-Based Learning (PBL) approach

**M.Sc. – Water Resource Management**

1. E L S Nilmini  Assessment of temporal variation of water quality in Boralessgamuwa lake

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**POSTGRADUATE DIPLOMAS AWARDED IN 2012**

**Analytical Chemistry**

1. W N De Alwis
2. J D Kotinkaduwa

**Applied Statistics**

1. G W Banda
2. V C T Gunaratna
3. M M Aboobucker
4. E D T Somarathne

**Clinical Biochemistry**

1. K N Amarasinghe

**Computer Science**

1. R Karunakaran
2. K D N Sanjeewa
3. M Ramaneetharan
4. W M S Ranasinghe

**Disaster Management**

1. R S W Abeywardena
2. A Athambawa
3. D R Gunarathe
4. A M J D K Mudalige
5. K G R V Pathirathna

**Engineering Geology and Hydrogeology**

1. E M K B Ekanayaka
2. I A V P Iddamalgoda

**Experimental Biotechnology**

1. A C Selvadurai

**GIS & RS**

1. K B Manathunga
2. M B B D Dampegama
3. C J Gamage

**Industrial Chemistry**

1. K A L Sandayani
2. C S Godagama
3. S Mohanaram
4. P R P S Nandika

**Industrial Mathematics**

1. T K Tennakoon

**Information Technology**

1. M F M Abdullah
2. J S R S Gunasekara
3. S M Haleem
4. A D K Rajapakse
5. M Z M Zaheer
6. C S Rankothge
7. M T M A Sajah
8. K V Siriwardena
9. S Umarasidevi
### PUBLIC LECTURES

<table>
<thead>
<tr>
<th>Title</th>
<th>Speaker and Affiliation</th>
<th>Date</th>
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<tr>
<td>'Epidemiology and Control of Mango Malformation Disease'</td>
<td>Dr. Stanley Freeman&lt;br&gt;Department of Plant Pathology and Weed Research&lt;br&gt;Agriculture Research Organization, The Volcani Center, Bet Dagan, ISRAEL</td>
<td>February 24</td>
</tr>
<tr>
<td>'Biological Control of Eucalyptus Gall Wasps'</td>
<td>Prof. Zvi Mendel&lt;br&gt;Department of Entomology&lt;br&gt;Agriculture Research Organization, The Volcani Center, Bet Dagan, ISRAEL</td>
<td>February 24</td>
</tr>
<tr>
<td>Science, Technology, Engineering and Mathematics in the Repair of Human Tissue</td>
<td>Prof. Kunlee Oloyede&lt;br&gt;School of Engineering Systems&lt;br&gt;Queensland University of Technology&lt;br&gt;Australia</td>
<td>July 17</td>
</tr>
<tr>
<td>'Quorum Sensing in Microbial Biofilms'</td>
<td>Dr. Nihal Bandara&lt;br&gt;Research Fellow, College of Pharmacy&lt;br&gt;University of Texas at Austin, Austin, Texas, U.S.A.</td>
<td>October 26</td>
</tr>
</tbody>
</table>
NSF RESEARCH AWARD 2011
The National Science Foundation (NSF) Research Award in Basic Sciences-2011
Awardees: Prof. H.M.D. Namal Priyantha and Prof. Ayanthi N. Navaratne for the project on ‘Investigation of environmental fate of some selected pesticides using electrochemical methods’.

NSF RESEARCH AWARD 2012
The National Science Foundation (NSF) Research Award in Basic Sciences-2012
Awardees: Prof. R M G Rajapakse, Prof. B S B Karunarathne, Prof. D T B Tennakoon, Prof. H M N Bandara and Prof. B M R Bandara for the project on ‘Clay-polymer Nanocomposites: Investigation of their electrical, mechanical, thermal and green-catalytic properties for industrial and technological applications’.

FORTHCOMING EVENTS IN 2013

• M.Sc. programmes to be commenced in March 2013: .......................... March 22
  M.Sc. in Analytical Chemistry
  M.Sc. in Applied Statistics
  M.Sc. in Clinical Biochemistry
  M.Sc. in Computer Science
  M.Sc. in Disaster Management*
  *Conducted jointly with the Faculty of Engineering, University of Peradeniya
  M.Sc. in Engineering Geology and Hydrogeology
  M.Sc. in Environmental Science
  M.Sc. in Experimental Biotechnology
  M.Sc. in GIS and Remote Sensing
  M.Sc. in Industrial Chemistry
  M.Sc. in Industrial Mathematics
  M.Sc. in Nanoscience and Nanotechnology

• Postgraduate Diploma programmes to be commenced in March 2013: .......................... March 22
  Postgraduate Diploma in IT
  Postgraduate Diploma in Science Education

• 51st Short Course on GIS & Applications .............................. April 1 - 6

• 2nd Short course on Data Analysis using R and R-Studio .............................. April 18 - 19

• Workshop on Geospatial Modeling for Disaster Management .............................. April 22 - 25

• 14th Advanced Short Course on GIS and Applications .............................. April 22 - 27

• Short Course on Disaster Management .............................. April 26 - 28

• Workshop on Forests for the Future: REDD and REDD+ .............................. May 3

• 15th Advanced Short Course on GIS and Applications .............................. May 13 - 18

• 52nd Short Course on GIS & Applications .............................. June 3 - 8

• 53rd Short Course on GIS & Applications .............................. June 17 - 22
The Postgraduate Institute of Science (PGIS) is a national institution attached to the University of Peradeniya, Sri Lanka. The PGIS offers postgraduate training in various specialities in science. The academic programmes of the PGIS are conducted through ten Boards of Study:

- Biochemistry and Mol. Biology
- Chemical Sciences
- Earth Sciences
- Environmental Science
- Mathematics
- Physics
- Plant Sciences
- Science Education
- Statistics and Computer Sc.
- Zoological Sciences

In addition to the M.Sc., M.Phil. and Ph.D. programmes the PGIS routinely conducts workshops, certificate courses, short term training programmes and offers consultancy services.

Academic staff members with postgraduate qualifications from some of the best universities in the world serve in the teaching staff of the PGIS. The excellent research facilities available at the Faculty of Science and other science - based Faculties of the University of Peradeniya and research institutions in the country are being used to provide research training to students. The Postgraduate Institute of Science (PGIS) and the Faculty of Science are internationally known for scientific research.

M.Sc. DEGREE PROGRAMMES

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

- Analytical Chemistry
- Applied Epidemiology
- Applied Statistics
- Biodiversity, Ecotourism & Environment Management
- Clinical Biochemistry
- Computer Science
- Disaster Management
- Environmental Science
- Experimental Biotechnology
- Gemmology & Industrial Minerals
- GIS & Remote Sensing
- Industrial Mathematics
- Industrial Chemistry
- Medical Microbiology
- Medical Physics
- Nanoscience & Nanotechnology
- Physics of Materials
- Plant Science
- Postharvest Tech. of Fruits and Vegetables
- Science Education
- Water Resources Management

The M.Sc. programmes consist of two semesters of course work and a research project of 3-6 months duration. Most M.Sc. programmes are conducted on Fridays and weekends. The minimum requirements for registration for an M.Sc. degree programme is a B.Sc. degree in the relevant discipline from a recognized university or any other equivalent qualification.

Interested applicants are requested to visit the PGIS website [http://www.pgis.lk](http://www.pgis.lk) for course contents and other details.

M.Phil./Ph.D. RESEARCH DEGREE PROGRAMMES

The PGIS offers postgraduate research degree programmes leading to the Degrees of Master of Philosophy (M.Phil.) and Doctor of Philosophy (Ph.D.). Candidates registered for these degrees are required to engage in a research project under the guidance of a supervisor. The minimum requirements for registration for an M.Phil. or Ph.D. degree is either an M.Sc. degree or a B.Sc. degree in the relevant area of study from a recognized university or any other equivalent qualification. Research programmes are available for M.Phil./Ph.D. candidates under different Boards of Study.

Occasional studentships are available for those who wish to follow courses and use other facilities over short periods without being registered for a postgraduate degree programme.

The PGIS welcomes applications from prospective students for M.Phil./Ph.D. (full-time or part-time) programmes. Please see the PGIS home page [http://www.pgis.lk](http://www.pgis.lk) for more details and application forms.

INQUIRIES

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