

Programme



Promoting Innovation through Research

**14th Academic Sessions and
13th Vice Chancellor's Awards Ceremony**

1st March 2017

**Organized by
Faculty of Engineering
University of Ruhuna
Hapugala, Galle**

14th Academic Sessions and 13th Vice Chancellor's Awards Ceremony

1st March 2017, Faculty of Engineering, University of Ruhuna

Agenda

7.30 – 8.30	Registration (Venue: Auditorium, Faculty of Engineering, University of Ruhuna)
8.30 – 8.40	Ceremonial Procession
8.40 – 8.45	Welcome Dance
8.45 – 8.50	Lighting of Traditional Oil Lamp
8.50 – 8.55	University Anthem
8.55 – 9.05	Welcome Address Dr. T.N. Wickramaarachchi Chairperson of the 14 th Academic Sessions University of Ruhuna
9.05 – 9.15	Address by Dr. A.M.N. Alagiyawanna Deputy Vice Chancellor, University of Ruhuna
9.15 – 9.30	Address by the Chief Guest Snr. Prof. Gamini Senanayake Vice Chancellor, University of Ruhuna
9.30 – 10.00	Keynote Speech “Innovations & Sustainable Developments in Ancient Sri Lanka” Professor Munidasa P. Ranaweera Emeritus Professor of Civil Engineering Department of Civil Engineering Faculty of Engineering, University of Peradeniya
10.00 – 10.05	Cultural Item
10.05 – 10.35	Oration “Medicinal Plants in Sri Lanka: Ethnobotanical, Phytochemical and Pharmacological Investigations” Dr. Mayuri Tharanga Napagoda Department of Biochemistry Faculty of Medicine, University of Ruhuna
10.35 – 10.45	Best Presenter Awards, 13 th Academic Sessions
10.45 – 11.05	13 th Vice Chancellor's Awards
11.05 – 11.15	Award of Professor Emeritus
11.15 – 11.20	Vote of Thanks Dr. J.M.R.S. Appuhamy Secretary of the 14 th Academic Sessions University of Ruhuna
11.20 – 11.25	National Anthem
11.25 – 11.45	Refreshments
11.45 – 12.30	Technical Sessions (Poster Presentations)
12.30 – 13.30	Lunch
13.30 – 15.45	Technical Sessions (Oral Presentations)
15.45 – 16.00	Refreshments

Technical Session 1 - Medicine and Allied Health Sciences (Oral)

Venue – Lecture Room 1 (LR1)

Time	Abstract ID	Title and Author/s
13.30 - 13.45	ALS - 04	Exposure to Patient Related Violence Against Nursing Officers in Different Units, in Teaching Hospital Karapitiya <i>SMRG Godawita, NHDP Fonseka and GD PUNCHIHEWA</i>
13.45 - 14.00	ALS - 07	Formulation of Polyherbal Handwash with Potential Antibacterial Activity <i>S K HETTIHEWA, WMDGB WIJAYARATNE and KRS NEELANAYANI</i>
14.00 - 14.15	MED - 01	Synthesis of Silver Nanoparticles using Extracts of <i>Plectranthus zeylanicus</i> for Antimicrobial Applications <i>WSG De Soysa, MT Napagoda, WMDGB Wijayarathne and S Witharana</i>
14.15 - 14.30	MED - 03	Assessment of Bancroftian Filariasis Transmission by an IgG4 Enzyme-Linked Immunosorbent Assay with Urine Samples of Primary School Children in Jaffna and Trincomalee Districts of Sri Lanka <i>MA RAHUMAN, TC YAHATHUGODA, P Premaratne, J Ruban, S Kamathasan, A Murugananthan, S Senanayake, H Takagi, M Itoh and MV Weerasooriya</i>
14.30 - 14.45	MED - 05	Linguistic Validation of Sinhala Version of 12 item General Health Questionnaire (GHQ12) and Measurement of Psychological Distress of People with Chronic Lymphatic Filariasis (LF) in Southern Sri Lanka <i>Janaka Ruben, TC Yahathugoda, Chandani Senadhera, Bilesha Perera and KG Somasiri</i>
14.45 - 15.00	MED - 06	Effects of Six Months, High-Dose Parenteral Vitamin D Therapy on Cardiovascular Risk Scores and Lipid Profile in Patients with Diabetic Nephropathy; A Randomized Double-Blind Placebo Controlled Clinical Trial <i>PLGC Liyanage, S Lekamwasam, TP Weeraratna and C Liyanage</i>
15.00 - 15.15	MED - 09	Evaluation of Photoprotective Potential in Sri Lankan Medicinal Plants for the Development of Herbal Sunscreens <i>MT Napagoda, HKUP Samaranyake, MM Qader and L Jayasinghe</i>
15.15 - 15.30	MED - 10	Food Restrictions and Choices in Childhood: Are Tradition and Culture More Influential than Health Education? <i>CJ Wijesinghe, ILAN Darshana and ND Liyanaarchchi</i>
15.30 - 15.45	MED - 12	Knowledge and Practices Towards an Endemic Disease with Serious Complications, among Adults in Sri Lanka <i>NP Weerasinghe, A Nagahawatte, WMDGB Wijerathne, RS Amarasuriya, U Kulasinghe, SS Wickramasinghe and HT Thabrew</i>

Technical Session 2 - Literature, Languages and Social Sciences (Oral)

Venue – New Lecture Hall 1 (NLH 1)

Time	Abstract ID	Title and Author/s
13.30 - 13.45	HSS - 01	Human Security Challenges in Contemporary Sri Lankan Society: Study based on Newspapers <i>Gayathri Wijesundara, MTK Premarathna and CPM Gunawardane</i>
13.45 - 14.00	HSS - 02	The Impact of Error Analysis on Second Language Pedagogy <i>W Wijesinghe</i>
14.00 - 14.15	HSS - 03	පෙළඹවූ බහිෂා සම්බන්ධයෙන් ශ්‍රී ලංකාවේ පවතින රාජ්‍ය ප්‍රතිපත්තිය කාර්තවින් වෙත ඇති කරන බලපෑම පිළිබඳ අධ්‍යයනයක්: මාතර ප්‍රාදේශීය ලේකම් කොට්ඨාශය ඇසුරින් එස්. චන්ද්‍රසේන සහ ඩී. එල්. ඩී. එස්. කරුණානායක
14.15 - 14.30	HSS - 04	1978 ආණ්ඩුක්‍රම ව්‍යවස්ථාවේ 19 වන ව්‍යවස්ථා සංශෝධනය මගින් ස්ථාපිත කළ ස්වාධීන කොමිෂන් සභා පිළිබඳ විශ්ලේෂණාත්මක අධ්‍යයනයක් <i>ටී. ජී. චන්ද්‍රසේන</i>
14.30 - 14.45	HSS - 05	ශ්‍රී ලංකාවේ අපනයන සැකසුම් කලාප තුළ ස්ත්‍රී ශ්‍රමිකයින්ගේ වෘත්තීය ගැටළු (කොස්ගල වෙළඳ කලාපය ඇසුරින්) <i>එස්. ජයරත්න, චන්ද්‍රසේන, සු. ඩී. ආර්. එස්. කුමාරි සහ ඒ. ආර්. දුලනාචනි</i>
14.45 - 15.00	HSS - 06	Political Party Identifications and Attitudes Towards Foreign Policy of Sri Lanka <i>Nisanka Sanjeevani Ariyaratne</i>
15.00 - 15.15	HSS - 07	Pearls in Historical Context: An Alternative Perspective on External Trade and Connectivity of Sri Lanka <i>Wijerathne Bohingamuwa</i>
15.15 - 15.30	MGT - 02	Determinants of Lower Level Adoption of Sri Lanka Public Sector Accounting Standards (SLPSAS) in Sri Lanka (with Special Reference to the Divisional Secretariats in Galle District) <i>AG Deepal</i>

Technical Session 3 - Agriculture and Environmental Sciences (Oral)

Venue - Lecture Theatre 1 (LT 1)

Time	Abstract ID	Title and Author/s
13.30 - 13.45	AG - 03	Effect of Corporate Social Responsibility (CSR) Strategies on Young Consumers' Purchase Behaviour after a Product Harm Crisis: A Case in Sri Lanka <i>Ganganeer Chandima Samaraweera</i>
13.45 - 14.00	AG - 04	Effects of Organic Amendments and Subsequent Potential Water Repellent Conditions on Major Nutrient Dynamics in Soil <i>TDP Liyanage and DAL Leelamanie</i>
14.00 - 14.15	AG - 05	Surface Water Entry and Water Retention of Soil in Relation to Water Repellency in Ohiya Eucalyptus Forest <i>HIGS Piyarawan and DAL Leelamanie</i>
14.15 - 14.30	AG - 08	Tomato Seed Germination Index for Determining Phytotoxicity in Municipal Solid Waste Compost in Sri Lanka: Effects of pH and EC <i>ISU Rupasinghe and DAL Leelamanie</i>
14.30 - 14.45	AG - 13	Colours of Artificial Light: Effect on Behaviour of Broilers in Tropical Environment <i>D Senaratna, T S Samarakone and WWDA Gunawardena</i>
14.45 - 15.00	FMST - 01	Impacts of Calcium on Brittlewort (<i>Nitella pseudoflabellata</i>) Exposed to Cesium <i>Keerthi Sri Senarathna Atapaththu, Md Harun Rashid, Y Kaneko and Takashi Asaeda</i>
15.00 - 15.15	FMST - 02	Impacts of Bats on Speleothems Formation in Wavulpane Cave <i>WMYR Bandaranayake, PN Ranasinghe and HB Asanthi</i>
15.15 - 15.30	SCI - 03	Effect of Initial Inoculum Densities of <i>Meloidogyne incognita</i> on Growth Performance and Root Infestation of Tomato <i>WTS Dammini Premachandra and HP Weeraratne</i>
15.30 - 15.45	SCI - 07	Petiolar Anatomy as a Diagnostic Character for Taxonomic Identification of <i>Cinnamomum</i> Species found in Sri Lanka <i>Pushpa Damayanthi Abeysinghe and Tanya Scharaschkin</i>

Technical Session 4 - Science and Mathematics (Oral)

Venue - New Lecture Hall 2 (NLH 2)

Time	Abstract ID	Title and Author/s
13.30 - 13.45	AG - 14	Robust Method for Adding Samba Users as a Batch with Individual User Names and Passwords <i>KKLB Adikaram, ACP Priyankara, MKDK Piyaratne, DT Andrahannadi and UI Samarawickrama</i>
13.45 - 14.00	ENG - 02	A Neuroplasticity Approach in Artificial Neural Networks <i>Mihirini Wagarachchi and Asoka Karunananda</i>
14.00 - 14.15	ENG - 05	Optoelectronics Effects of Gold Nanoparticles in the Active Layer of Polymer Photovoltaic Devices <i>Aruna Wanninayake and Nidal Abu Zahra</i>
14.15 - 14.30	FMST - 03	Retrieval of Land and Water Surface Temperature using ASTER Data in Lake Magadi Area, Kenya <i>Gayantha RL Kodikara</i>
14.30 - 14.45	SCI - 01	The Existence of an Integral Solution of a Delayed Model of Age Structured Proliferating Cell Population with Inherited Cycle Length <i>KCN Shanthidevi and HGN Lasitha Padmaprabha</i>
14.45 - 15.00	SCI - 06	A Comparison of Some Statistical and Geometrical Properties of Power-law Distribution and a Particular Form of Exponential Distribution <i>N Yapa</i>
15.00 - 15.15	SCI - 09	Qualitative Properties and Hopf bifurcation Analysis of a Delayed SEIR Model with Logistic Growth and Relapse Effect <i>B G Sampath Aruna Pradeep and MK Abeyratne</i>

Technical Session 5 - Civil and Manufacturing Engineering (Oral)

Venue - Lecture Room 2 (LR2)

Time	Abstract ID	Title and Author/s
13.30 - 13.45	ENG - 01	Investigation of Site Management Practices in Sri Lankan Construction Industry <i>SN Malkanthi, MTC Premathilaka and TWCS Thalangama</i>
13.45 - 14.00	ENG - 06	Analysis of Composition and Properties of Liquid and Gaseous Hydrocarbon Fuel Derived from Waste Plastics <i>EP Rohan, NK Hettiarachchi and B Sumith</i>
14.00 - 14.15	ENG - 12	Evaluation and Assessment of Most Suitable Low Cost and Environment Less Effective Landfill Pollution Control Systems for Dry Zone <i>WAP Fernando, NH Priyankara, Y Inoue, AMN Alagiyawanna, K Kawamoto and KCN Dayanthi</i>
14.15 - 14.30	ENG - 15	Landfill-Leachate Treatment in Up and Down Flow Anaerobic Filters with Combined Packing Media of Locally Available and Low-Cost Materials <i>BSR Nanayakkara and WKCND Dayanthi</i>
14.30 - 14.45	ENG - 16	Development of an Efficient Method of Predicting Remaining Strength Capacities of Corroded Reinforced Concrete Structures <i>HVAN Sanjeeva, RMMC Rathnayake, MRM Ifham, MZS Ahamed and JMRS Appuhamy</i>
14.45 - 15.00	ENG - 21	Field-Scale Permeable Reactive Barrier (PRB) System with Low-Cost Reactive Materials to Treat Ground Water Contaminated by Landfill-Leachate <i>DM Kankanige, AM Disanayake, IU Nagasinghe, WKCND Dayanthi and WAP Asela</i>
15.00 - 15.15	ENG - 23	Comparison of Lubricating Properties of Palm Oil and Palm Kernel Oil with Commercial Engine Oils <i>TKKS Pathmasiri, SPND Karunaratna, GIP Perera and R Gallage</i>

Technical Session 6 - Electrical, Mechanical and Information Engineering (Oral)

Venue - Lecture Theatre 2 (LT 2)

Time	Abstract ID	Title and Author/s
13.30 - 13.45	ENG - 07	Simulation Study of an Electronic Load Controller with a Novel Phase Balancing Configuration to Enhance the Efficacy of the Micro-Hydro Generator <i>RPS Chandrasena and HWHL Walpita</i>
13.45 - 14.00	ENG - 08	A Multi-Sensor Plantar Pressure Profiler <i>AS Mudalige, KGRL De Silva, MPP Mithila, ND Jayasundere and TP Weeranthna</i>
14.00 - 14.15	ENG - 09	Application of the Cell-Linked List Algorithm to Reduce Computational Time of Meshfree Based Plant Tissue Models <i>KGP Hansani, Sumith Baduge and HCP Karunasena</i>
14.15 - 14.30	ENG - 19	Integration of PEM Fuel Cell Stack with a Micro Grid in Non-Dispatchable Mode of Operation <i>KMSY Konara</i>
14.30 - 14.45	ENG - 20	Power Dispatching Controller Modelling for an Energy Storage with High SOC in a Micro Grid <i>KMSY Konara</i>
14.45 - 15.00	ENG - 22	Dynamic Modelling and Stability Analysis of a DC-DC Converter Connected with an Energy Storage <i>KMSY Konara</i>
15.00 - 15.15	ENG - 24	Applicability of 3D Imaging for Plant Irrigation Management <i>Anura P Rathnayake, Carloz Zuniga, Lav R Khot, Pete Jacoby and Sindhuja Sankaran</i>
15.15 - 15.30	ENG - 27	Use of Passive Cooling for Improved Energy Efficiency of Small Scale Conventional Air Conditioners <i>MT Palliyaguru, WMPL Rathnayake, MIM Aseem, MT Ranjan and HCP Karunasena</i>
15.30 - 15.45	MGT - 01	Hybrid Intrusion Detection Approach with Improved Accuracy <i>Samitha S Somathilaka, JADC Jayakody and DMKD Dissanayake</i>

Technical Session 7 - Medical, Social and Environmental Sciences
(Poster)

Venue - Drawing Office 1 A (DO 1A)

Time	Abstract ID	Title and Author/s
11.45 - 12.30	AG - 01	Assessment of Food Waste Generated in Student Canteen in Faculty of Agriculture, University of Ruhuna <i>MGG Awanthi, CP Rupasinghe and RHK Rathnappriya</i>
	ALS - 05	Knowledge, Attitudes and Practices Regarding Inhaler Usage among Mothers of Paediatric Asthma Patients in Teaching Hospital Karapitiya <i>EAW Sewewandi, PN Kariyawasam and SP Hewawasam</i>
	ENG - 11	Effect of Grade 5 Scholarship Exam and/or G.C.E. (O/L) Exam for State University Entrance in Sri Lanka <i>WMKRTW Bandara, BMLA Basnayake, WATM Jayarathna, HMLP Senevirathna, TB Edirisooriya, RAKL Rajapaksha, AMV Gunarathna, MMCM Mawela and WADT Ariyaratna</i>
	LIB - 02	Usability Approach for Library Websites Evaluation: A Case Study in Library, University of Ruhuna <i>KH Ramanayaka, Xianqiao Chen, Bing Shi, UA Lal and GAJ Hemmali</i>
	MED - 02	Usage of Medicinal Plants as Anti-inflammatory Therapeutics among the Inhabitants of Polonnaruwa District- Sri Lanka: An Ethnobotanical Study <i>MT Napagoda, SMTD Sundarapperuma, NHDP Fonseka, AMSS Amarasiri and KAPD Gunaratna</i>
	MED - 11	A Study on Serum Creatinine Measurement and eGFR Reporting Practices in Sri Lankan State Sector Hospital Laboratories <i>ID Siriwardhana, EH Silva and BKTP Dayanath</i>
	SCI - 08	Abundance of Fishes among Different Mangrove Densities <i>KJMUP Jayathilaka, MP Kumara, LP Jayatissa, US Amarasinghe and Mark Huxham</i>

Technical Session 8 - Science and Technology (Poster)

Venue - Drawing Office 1 B (DO 1B)

Time	Abstract ID	Title and Author/s
11.45 - 12.30	AG - 11	Study the Morphological Variations between Polyploids and Diploids of <i>Raphanussativus</i> L. (Radish) Var. Beeralu <i>IP Manawadu, PCD Perera and Dahanayake Nilanthi</i>
	ENG - 03	Smart Monitoring and Distribution of Power in Distribution Grid <i>DS De Silva, MA Mufthi, R Kiruthiga and MRM Zainul Haq</i>
	ENG - 04	Comparison of Phosphorus Removal Efficiency of Selected Aquatic Macrophytes in Mixed Culture <i>H Kodithuwakku and KC Ellawala</i>
	ENG - 13	Spatial Variation of Ground Water Quality in Southern Province, Sri Lanka <i>GG Tushara Chaminda, BMJK Balasooriya, Champika Ellawala and Tomonori Kawakami</i>
	ENG - 25	Investigation of a Solar Loop Heat Pipe Water Heating System <i>Sumith Baduge and MT Tennis Ranjan</i>
	ENG - 26	A Non-Electric Regenerative Braking System for Passenger Buses <i>RMSP Karunaratne, M Aravithan, PWGSD Pussewaththa and HCP Karunasena</i>
	FMST - 04	Softening and Defluoridation of Domestic Drinking Water Using Seeds Extracts of <i>Moringa Oleifera</i> and <i>Strychnos potatorum</i> <i>MN Saranathilake and RA Maithreepala</i>