

ORAL PRESENTATIONS

27th September 2024

BASIC AND APPLIED SCIENCES

Technical Session I

Venue: LL3, 4th Floor, Faculty of Medicine

Chairperson

Prof. W. Rohini M. de Silva

Professor and Head of Department, Department of Chemistry
Faculty of Science, University of Colombo, Sri Lanka

0830 – 0835 Hrs

Introduction of the Chair

0835 – 0840 Hrs

Preliminary Remarks by the Chair

0840 – 0855 Hrs

Comparative Investigation of Antioxidant Activity of Pectin and Gelatine based Food Packaging Films incorporated with Green Tea and TiO₂

DNA Arachchi, RM de Silva, and KMN de Silva

0855 – 0910 Hrs

Bio-congruent Synthesis and Characterization of Silver Nanoparticles using Aqueous Extracts of Justicia Genus Leaves: Investigation of Cytotoxicity, Antioxidant Capabilities, Antimicrobial Efficacy, Para-nitrophenol Reduction, and Photocatalytic Properties

A Premkumar, M Kandiah, and O Perera

0910 – 0925 Hrs

Advanced Formulations of Chitosan/Polyethylene Oxide/Ethyl Cellulose incorporated Desferrioxamine: A Comparison of Cell Permeability, Loading Efficiency and pH-dependant Release Properties

AKDVK Wimalasiri, JC Godevithana, K Siriwardana, M Mohotti, TA Pereira, BP Espósito, and P Kalansuriya

0825 – 0940 Hrs

Fitting Column Study Data of Commercial Activated Charcoal for Cu (II) Adsorption in Different Kinetic Models

RMHY Rajapaksha, TMM Marso, NP Liyanage, NPW Rathuwadu, and SB Alahakoon

0940 – 0955 Hrs	Development of a Low-cost Paper-based Electroanalytical Device for the Detection of Caffeine RAGM Roshael and MN Kaumal
0955 – 1010 Hrs	Evaluating Influence of Solvents in Graphene Synthesis <i>via</i> Electrochemical Exfoliation: Optimal and Suboptimal Performers ON Malawalaarachchi and NPW Rathuwadu
1010 – 1015 Hrs	Summing up by the Session Chair
1015 – 1030 Hrs	Refreshments

BASIC AND APPLIED SCIENCES

Technical Session II

Venue: LL3, 4th Floor, Faculty of Medicine

Chairperson	Emeritus Prof. A M Abeysekera Emeritus Professor, Department of Chemistry, Faculty of Applied Sciences, University of Sri Jayewardenepura, Sri Lanka
1030 – 1035 Hrs	Introduction of the Chair
1035 – 1040 Hrs	Preliminary Remarks by the Chair
1040 – 1055 Hrs	Optimizing Bioactive Properties of <i>Garcinia queasita</i> and <i>Moringa oleifera</i> Combinations: Phytochemical, Antioxidant, and Anti-inflammatory Insights DM Silva, SB Alahakoon, and AI Kuruppu
1055 – 1110 Hrs	Identification of Chemical Constituents in “Wathupalu” (<i>Mikania cordata</i>) Plant Extracts in Wound Healing using Scratch Assay PGKA Bandara, CD Wijayarathna, CL Goonasekara, and AI Kuruppu
1110 – 1125 Hrs	<i>In vitro</i> Antioxidant, Anti-inflammatory and Antacid Activities of the Crude Extract of the Marine Algae <i>Codium</i> sp. HMRP Premadasa, RDP Isurika, PGNH Dharmasiri, YT Senaweera, BLC Samanmali, and KW Samarakoon
1125 – 1140 Hrs	Total Phenolic Content, Total Flavonoid Content and Antioxidant Activity in Whole Fruits of Ceylon Gooseberry (<i>Dovyalis hebecarpa</i>) at Different Maturity Stages ST Warusavithana, AI Kuruppu, JAS Chathurika, RGPT Jayasooriya, and NPW Rathuwadu

1140 – 1155 Hrs	Formulation of an Antioxidant Nutraceutical through the Optimization of Mixing Ratio of Antioxidant-Rich Underutilized Fruits Based on Experimental Mixture Design LA Wickramaarachchi, AI Kuruppu, P Ranasinghe, HMT Herath and KW Samarakoon
1155 – 1210 Hrs	In vitro Bioactivity of <i>Curcuma longa</i> JK Handagala, N Kumarasinghe, CL Goonasekara, and AI Kuruppu
1210 – 1215 Hrs	Summing up by the Session Chair
1215-1315 Hrs	Lunch

BASIC AND APPLIED SCIENCES

Technical Sessions III

Venue: LL3, 4th Floor, Faculty of Medicine

Chairpersons

Prof. Chandrika Nanayakkara

Professor, Department of Plant Sciences, Faculty of Science,
University of Colombo, Sri Lanka

1330 – 1335 Hrs

Introduction of the Chair

1335 – 1340 Hrs

Preliminary Remarks by the Chair

1340 – 1355 Hrs

Bio-surfactant Production from Waste Coconut Oil by Marine Isolate of *Rhodococcus* sp. RH-01

A Kulakalaharan and HS Jayasinghearachchi

1355 – 1410 Hrs

The Field Evaluation of the Efficacy of Bio-herbicide Formulations and Recommending the Effective Dosage for Rice

BN Hendeniya, PAM Krishanthi, PPDC Perera, HMS Herath, and SADP Senadheera

1410 – 1425 Hrs

Biofortification of Iron in Hydroponically Grown *Ipomoea aquatica*, *Lactuca sativa*, and *Alternanthera sessilis* as a Solution to Alleviate Iron Deficiency in Sri Lanka

JK Hewawithana, HU Abhayarathne, GLL Gunarathne, GAG Nadeera, and GSG Liyanage

1425 – 1440 Hrs

Potential of African Butter (*Pentadesma butyracea*) Fruit Pulp in Selected Food Product Development

RMAR Rathnayaka, NY Jayanath, GD Liyanaarachchi and S Kathirgamanathar

1440 – 1455 Hrs

Bio-surfactant-mediated Surface Conditioning Enhances the Microbial Colonization on Polyethylene Terephthalate (PET) Surface: Implication for the Development of Microbial Enhanced Biodegradation of PET

A Kulakalaharan and HS Jayasinghearachchi

1455 – 1510 Hrs	In-silico Structure based Identification of Potential Human Gamma Secretase Inhibitor Ligands MRM Faries, K Senathilake, S Samarakoon, and MFM Mishal
1510 – 1515 Hrs	Summing up by the Session Chair
1515 – 1530 Hrs	Refreshments

BASIC AND APPLIED SCIENCES

Technical Sessions IV

Venue: LL3, 4th Floor, Faculty of Medicine

Chairpersons

Prof. Savithri Wasundara Wimalasekera

Professor, Department of Physiology, Faculty of Medical Sciences,
University of Sri Jayewardenepura, Sri Lanka

1530 – 1535 Hrs

Introduction of the Chair

1535 – 1540 Hrs

Preliminary Remarks by the Chair

1540 – 1555 Hrs

Kinematic Analysis of the Release Phases in Male Javelin Throwers in Sri Lanka's National Athletic Pool

TSW De Silva, WKDSA Wickramarachchi, and AWS Chandana

1555 – 1610 Hrs

The Respiratory Muscle Strength and Pulmonary Functions in Sabaragamuwa University Athletes: Differences by BMI Classification

DMR Dhanapala and WKDSA Wickramarachchi

1610 – 1625 Hrs

Estimation of Pre-practice Hydration Status of National Athletes in Sri Lanka

NDJMS Uluwita and WKDSA Wickramarachchi

1625 – 1640 Hrs

The Relationship between Breathing Pattern and Shooting Performance of Elite School-Level Air Pistol Shooters in Sri Lanka

WAP Kaveesha, WKDSA Wickramarachchi, HWUS Jayasinghe, and MAS Udayanga

1640 – 1645 Hrs

Summing up by the Session Chair

1645 -1700 Hrs

Refreshments

POSTER PRESENTATIONS

27th September 2024

BASIC AND APPLIED SCIENCES

Association between the Sleep Quality and Physical Fitness of undergraduates of the University of Colombo, Sri Lanka

JSU Thathsarani and GU Jayaweera

Investigation of Antioxidant Activity of Selected Sri Lankan Marine Algal Extracts

WP Attanagoda and DC Aluthge

A study of the Influence of Geographical Location on Usually Pathogenic Targeted Bacteria in the Gut of *Nemipterus virgatus* (Golden Threadfin Bream) in Different Marine Locations in the Western Province of Sri Lanka

RAF Nafla, AIA Imthikab, and GDN George

The Evaluation of In-vitro Anti-inflammatory Effect of a given Methanolic Extract of *A. flavus* MM1

N Premkumar and DH Warawitage

Addressing Glamour Attached to Violent Behaviour among Youth in a Sri Lankan Technical College through a Health Promotion Intervention

N Rathnayake, K Abhayasinghe, J De Silva, and GND Guruge

Identification and Quantification of the Biodegradation Potential of Polycyclic Aromatic Hydrocarbon-Degrading Soil Bacteria from Fuel Stations: Implications for Effective Bioremediation

JMUD Jayasundara, R Fernando, P Mayoora, R Chandrasekaran, F Shahindha, SF Sabra, JV Arulnesan, HOTO Perera, and RBN Dharmasiri

Non-invasive Thermal Sensor Using Zero Heat Flux Method

MGSJB Meddegoda, WLPK Wijesinghe, WSP Fernando, and MKAJ Maldeniya

Maximizing Organic Waste Management through Vermicomposting: A Comparative Study of Red Wigglers and Black Soldier Fly Larvae

IASR Ileperuma, EA Kariyawasam, JMS Jayalath, and PN Dayawansa

Comparative Analysis of *Annona muricata* and *Annona reticulata* Crude Seed Extracts: Phytochemical Analysis, Antioxidant Activity and Fatty Acid Composition

YT Senaweera, MN Molagoda, P Ranasighe, PT Jayasooriya and KW Samarakoon

Electrochemical Synthesis of Polyaniline-Graphene Nanocomposite for Advanced Supercapacitor Application

GDR Lakhari, KR Koswattage, and NPW Rathuwadu

Phytochemical Screening, Antioxidant and Antidiabetic Activities of Different Solvent Extracts of *Elaeocarpus serratus* (Veralu) and *Elaeocarpus angustifolius* (Nilveralu) Grown in Sri Lanka

PGNH Dharmasiri, P Ranasinghe, PT Jayasooriya, and KW Samarakoon

Comparison of N-based and P-based Additives in the Synthesis of Porous Graphene Material for Supercapacitors

DAS Sharmila and NPW Rathuwadu

Comparative Analysis of Sri Lankan Cricketers' Performances in the Lanka Premier League and International T20 Matches

MG Saranga, WPTM Pathirana, PDSS Pitiyage, KH Wickramathunga, and PR Withanage

Bridging Digital Divide by Boosting IT Skills for Soragune Village Sri Lanka for Socio-Economic Growth

KH Wickramathunga, PR Withanage, PDSS Pitiyage, WPTM Pathirana and MG Saranga

Detection of Fake News Using Machine Learning and Natural Language Processing: Addressing the Modern Information Crisis

WPTM Pathirana, MG Saranga, PR Withange, PDSS Pitiyage and KH Wickramathunga

Identifying Trends in Blockbuster Films Using K-Means Clustering

PDSS Pitiyage, MG Saranga, PR Withange, WPTM Pathirana and KH Wickramathunga

Evaluation of Climate-Related Difficulties and Development of Resilience in Soragune Village, Sri Lanka

SAR Maleesha, MBF Amna, PDSS Pitiyage and P Laksia

Evaluation of Phytochemicals, *In-vitro* Antioxidant, and Anti-inflammatory Properties of an Arishta Formula under Three Aging Conditions

AGN Nirmali, N Kumarasinghe, KW Gunawardana, N Salim and AI Kuruppu

Cytotoxic Effects of Green Jackfruit (*Artocarpus heterophyllus*) and Ceylon Olives (*Elaeocarpus serratus*) Fruit Extracts on Cancer Cells

MPT Virajini, MD Bandara, P Jayasooriya, KW Samarakoon and AI Kuruppu

In-vitro Anti-Cancer Activity of *Cinnamomum verum* Barks and Leaves

AS Ameer, CU Widanapathirana, SH Tennakoon, and AI Kruppu

In vitro Screening of Antioxidant, Anti-inflammatory, and Cytotoxic Activities of Medicinal Herbal Extracts

MR Jayasinghe, N Jayasundara, KW Samarakoon, and AI Kuruppu

Evaluating Selected Pharmacognostic Properties and Bioactivities of *Careya arborea*

S Kugaseelan, KW Samarakoon, and AI Kuruppu

Simultaneous Detection of Bovine and Porcine DNA in Gelatine-based Products Using Species-Specific Duplex PCR

WTGSL Withana, YM Bandara, H Murali, and AMMH Athapaththu

Development of a Pressure Sensor Matrix Insole utilizing Velostat for Gait Analysis

WKMND Bandara, KG Samarawickrama, and UMRMU Kumari

Comparison between Two Sampling Methods of Airborne Microplastic Particles

RLK Saumya, MP Deeyamulla, DSM De Silva, A Athukorala, and GR Diwyanjalee