



Second International Conference on  
**Frontiers in Chemical Technology**

# PROGRAMME

20 - 22 June, 2024 | Colombo, Sri Lanka



## Pre-conference Workshop (19.06.2024)

12.00 pm - 12.50 pm	Lunch and Conference Pre-registration
12.50 pm - 1.00 pm	Welcome Address <b>Prof. Namal Priyantha</b> <i>President, Institute of Chemistry Ceylon &amp; Conference Chair, FCT-2</i>
1.00 pm - 5.00 pm	Pre-conference Workshop Resource persons: <b>Prof. Supawan Tantayanon</b> <i>Professor of Chemistry, Faculty of Science, Chulalongkorn University, Thailand</i> <b>Prof. Supakorn Boonyuen</b> <i>Associate Professor, Faculty of Science and Technology, Thammasat University, Thailand</i> <b>Dr. M Kandiah</b> <i>Dean, School of Science, Business Management School, Colombo 06, Sri Lanka</i>
5.00 pm - 5.10 pm	Vote of thanks <b>Prof. Priyani A Paranagama</b> <i>Treasurer, Institute of Chemistry Ceylon &amp; Treasurer, FCT-2</i>
5.10 pm	Tea



## Day 1 (20.06.2024)

8.00 am - 8.30 am	Arrival of Guests, Registration & Morning Refreshments
8.30 am - 8.45 am	Ceremonial Procession of Council Members and Past Presidents
8.45 am - 8.55 am	Introductory Trailer
8.55 am - 9.00 am	Lighting of the Oil Lamp & National Anthem
9.00 am - 9.05 am	Citation of the President Prof. Janitha Liyanage
9.05 am - 9.35 am	Welcome Speech and Presidential Address <b>Prof. Namal Priyantha</b> <i>President, Institute of Chemistry Ceylon &amp; Conference Chair, FCT-2</i>
9.35 am - 9.40 am	Citation of the Chief Guest Prof. Priyani Paranagama
9.40 am - 9.55 am	Address by the Chief Guest <b>Dr. Ale Palermo</b> <i>Head of Global Inclusion at the Royal Society of Chemistry</i>
9.55 am - 10.00 am	Citation of the Guest of Honour Prof. Namal Priyantha
10.00 am - 10.10 am	Address by the Guest of Honour <b>Prof. Sabu Thomas</b> <i>Chairman, Trivandrum Engineering Science &amp; Technology Research Park, Mahatma Gandhi University, India</i>
10.10 am - 10.15 am	Citation of the Distinguished Service Awardee Prof. Ramanee Wijesekera
10.15 am - 10.20 am	Presentation of the Distinguished Service Award <b>Prof. Srianthie A Deraniyagala</b>
10.20 am - 10.25 am	Citation of the Yeoman Service Awardee Prof. Chayanika Padumadasa
10.25 am - 10.30 am	Presentation of the Yeoman Service Award <b>Prof. Sudantha Liyanage</b>
10.30 am - 10.35 am	Citation of Prof. Nolene Byrne, Plenary Speaker Dr. Medha Gunaratne
10.35 am - 11.05 am	Plenary Lecture <b>Prof. Nolene Byrne</b> <i>Associate Professor, Institute for Frontier Materials, Deakin University, Australia</i>
11.05 am - 11.10 am	Citation of Prof. Dinesh Mohan, Plenary Speaker Dr. Sameera R. Gunatilake
11.10 am - 11.40 am	Plenary Lecture <b>Prof. Dinesh Mohan</b> <i>Professor, School of Environmental Sciences, Jawaharlal Nehru University, India</i>
11.40 am - 11.45 am	Vote of Thanks <b>Prof. Janitha Liyanage</b> <i>President-elect, Institute of Chemistry Ceylon</i>
11.45 am - 1.00 pm	AGM
11.45 am - 2.15 pm	Poster Presentations
12.15 pm - 2.15 pm	Lunch

11.45 am - 2.15 pm

Poster Presentations

EN_016	Electrochemical Studies of Mahanimbine Isolated from <i>Murraya koenigii</i>	M.G.S.A.M.E.W.D.D.K. Egodawele, R.M.G. Rajapakse, J.M.S. Jayasinghe, V.N. Seneviratne, H.M.N.P. Gunarathne, A.U. Malikaramage, V.M.Y.S.U. Bandara and H.M.T.J. Senarathna
EV_032	Antioxidant and Photocatalytic Activities, and Cytotoxicity of Biosynthesized Silver Nanoparticles using Plant Leaf Extracts of <i>Camellia sinensis</i> Varieties	F.R. Masoon, M. Kandiah and O. Perera
EV_033	Biosorption of Lead (II) from Aqueous Solution by Banana Peel: Optimization and Adsorption Isotherm Study	S.M. Keerthisinghe, T.P. Gamagedara and N. Priyantha
EV_034	Biodegradation of Polycyclic Aromatic Hydrocarbons (Pahs) in Soil Samples from Urbanized Coastal Areas, Gardens, and Roadsides: a Green Approach for Bioremediation with Soil Bacteria	R.B.N. Dharmasiri, S.F. Sabra, P. Mayooraan, R. Fernando, J.V. Arulnesan, R. Chandrasekaran, F. Shahindha and J.M.U.D. Jayasundara
EV_035	Curcumin Incorporated Natural Rubber Latex	A.N.K. De Silva, T.M.S.U. Gunathilake and T.K. Mudiyansele
EV_036	Natural Rubber Latex Mixed with Jackfruit Latex as a Bio-Based Heat Curing Adhesive	M.S.R. Fernando and D.T.D. Weerathunga
EV_037	Photocatalytic and Antibacterial Activities of CuO Nanoparticles Synthesized Using Seed Extract of <i>Persea americana</i>	A.A.S.K. Abeyasinghe and R.M.A.S. Rathnayake
EV_038	Development of Reduced Graphene Oxide/Chitosan Composite Material for Water Purification Applications	M.M.I.P. Fernando and S. Jayawardena
FD_046	Formulating Herbal Tea Blends from <i>Rhizophora mucronata</i> Hypocotyl, <i>Sonneratia saseolaris</i> Fruit, and <i>Tragia plukenetii</i> Leaves	M.W.D.D. Piyara, S. Jayakody, R.G.S. Wijesekara, D.C. Abeyasinghe, M.M. Nipunika, A.C. Liyanage, I. R. Palangasinghe, S. Manuelpillai and H.N.T.M. Kumarasiri
FD_047	Development of Fish-Based Ready-To-Use Therapeutic Food to Prevent Malnutrition among Sri Lankan Young Population	R.D.A. Malsha, J.M.J.K. Jayasinghe, Y. N. Amaratunga and A.B.G. Silva
FD_048	Effect of Natural Antioxidants Extracted from <i>Emblia officinalis</i> Seed on the Sensory Properties of Mayonnaise	A.A.K. Lanakanayake, K.G.L.R. Jayathunge, P.C. Bandara, D.C. Manathunga, S.M. Rajapaksha and C.M. Senanayake
FD_049	Formulation and Development of <i>Centella asiatica</i> and Aloe Vera Incorporated Ice Cream	E.M.L.N. Lakshini and M. Senevirathne
FD_050	Development of Antimicrobial Agents Intercalated Layered Double Hydroxides Incorporated Nanofiber Based Active Packaging Material	I.P. Madhushika, P.N. Yapa, I. Munaweera and C. Sandaruwan
MD_080	Method Development and Validation of Vitamin C and Losartan Potassium Pharmaceutical Tablets Using Zero Dimension (0-D) UV-Visible Spectrophotometry	D.S.P.C.N De Silva, P.C.M. Nonis and U.K. Jayasundara
MD_081	Comparative Study of Anti-Microbial and Antioxidant Properties of <i>Psidium guajava</i> L. (Guava) and <i>Annona muricata</i> L. (Soursop) Leaves	H.I. Fernando, A.N. Navaratne, J.M.S. Jayasinghe and B.S. Nanayakkara



MD_082	Green Synthesis and Characterization of Nano-Hydroxyapatite via Wet Chemical Method using <i>Centella asiatica</i> Extract for Biomedical Applications	A.A.J. Jayamini and T.P. Gamagedara
MD_083	Phytochemical Analysis of Leaf Extracts from Five Selected Citrus Plant Species in the North Central Province of Sri Lanka	S.S.S.T. Fernando, R.G.P.T. Jayasooriya, K.W. Samarakoon, N.D.A.D. Wijegunawardana and S.B. Alahakoon
MD_084	Phytochemical Profiling and Biochemical Activities of Endemic Medicinal Plants <i>Diplodiscus verrucosus</i> and <i>Dimorphocalyx glabellus</i>	E.M.S.L. Ekanayaka, E.M.R.K.B. Edirisinghe, D.K. Hettiarachchi and W.M.G.A.S.T.B. Wijetunga
MD_085	Development of a Larvicidal Agent Against <i>Aedes</i> Spp. Mosquito Larvae by Encapsulating Mixed Crude Extract of <i>Capsicum frutescens</i> (Kochchi) and <i>Allium sativum</i> (Garlic) into Chitosan Nanoparticles	H.P.T.C. Heiyanthuduwa, J.M.S. Jayasinghe and W.A.P. De Silva
MD_086	Enhancing Oral Ulcer Treatment Efficacy in the Dental Drug Industry Through Electrospun Fiber Mats	M.H.M.A.K. Bandara, U. Karunarathne, A.U. Malikaramage, K.W.D. Deepthika, D.A.K.L. Perera, K.N.T.P. Jayasuriya, P.B. Ratnayaka, D.M.K.G.A.H.B. Dissanayake, R.M.G. Rajapakse and R.D. Jayasinghe
MD_087	Analysis of Different Cinnamon Varieties Present in Local Ayurvedic Medicinal Product Dhathryarishtam	A.M.S.S. Amarapathi, N.M. Liyanawahunge, G.V.C.P. Lakshman, N.D.A. Wageesha and A.A.P. Keerthi
MD_088	Investigation of Effects on Liver Enzymes by Selected Potential Factors Causing Chronic Kidney Disease of Unknown Etiology in Sri Lanka	D.J.B. Arachchi and T.P. Gamagedara
WA_098	<i>Centella asiatica</i> Extract-derived Co <sub>3</sub> O <sub>4</sub> Nanoparticles on Photocatalytic Degradation of Textile Dyes and Antibacterial Activities	M.D.H. Perera and R.M.A.S. Rathnayake
WA_099	Determination of Quality of Municipal Solid Waste-based Compost as a Fertilizer Source	A.H. Premaratne and A.N. Navaratne
WA_100	Batch Studies for Removal of Cations from A Mixture Using Coconut Shell Charcoal, Rice Husk and Burnt Brick Clay Particles	H.A.S. De Silva, M.D.N. Dinusha, U.P.D. Uduwala, R.M.H. Rathnayaka, B.D.P. Dharaka and N. Priyantha
WA_101	Utilization of Waste Engine Oil to Improve the Properties of Activated Carbon Derived from Textile Dyeing Sludge	W.I.N. Wickramathunga and W.D.C. Udayanga
WA_102	Green Synthesized NiO Nanoparticles on Methylene Blue Dye Degradation and Antimicrobial Activities	T.M. Weragalage and R.M.A.S. Rathnayake
WA_103	Modeling an Amorphous Biochar Structure using Molecular Dynamics Simulation	S.A. Yakandawala, S.R. Gunatilake, M.B. Nardelli and L.S.I. Liyanage

Venue		Conference Room A	Conference Room B	Conference Room C
Session No		Technical Session 1	Technical Session 2	Technical Session 3
Sub Theme		<b>Energy:</b> Chemistry, Technology and Engineering	<b>Environment:</b> Climate change, pollution and Green Chemistry	<b>Medicine:</b> Chemistry, Pharmaceutical and Herbal Technology
Chair		Prof. K. M. Nalin de Silva	Prof. Supawan Tantayanon	Prof. N. A. K. P. J. Seneviratne
Co-chair		Prof. W. Rohini M. de Silva	Prof. Ayanthie N. Navaratne	Dr. Thelma Abeysinghe
2.15 pm	2.45 pm	<b>Keynote 1</b> Prof. K. M. Nalin de Silva	<b>Keynote 2</b> Dr. Jeyanny Vijayanathan	<b>Keynote 3</b> Prof. Channa De Silva
2.45 pm	3.00 pm	EN_001  Physicochemical and Antioxidant Properties of Chitosan/Pectin Blended Bio Nanocomposite Films with Green Tea Extract and TiO <sub>2</sub>  D.N.A. Arachchi, R.M. De Silva and K.M.N. De Silva	EV_017  Utilization of Parthenium hysterophorus Weed for Eco-Friendly Bioplastic Films Incorporated with Green-Synthesised ZnO Nanoparticles: Enhancing UV Shielding Properties  S. Thuvaraga and R. Srikanan	MD_051  Investigation of Antibacterial Potential of Sequential Extracts of <i>Senna alata</i> and <i>Datura metel</i> for Selected Pathogens  C.M. Hettiarachchi and D.V.S.M. Waidyatillake
3.00 pm	3.15 pm	EN_002  Atomistic Simulation Study of Na <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> : Defects, Diffusion, and Dopants  A.J. Irraniou, P. Iyngaran, P. Abiman and N. Kuganathan	EV_018  Toxicity Assessment of a Sunscreen Cream on Common Guppy, <i>Poecilia reticulata</i>  D.M.S.D. Dissanayaka, W.A.Y.P. Weerasinghe, R. Shiron, D.D.S. Dissanayaka, R.U. Munaweera, J. Sindhujan, K.M.A. Dissanayaka and H.B. Asanthi	MD_052  Variation of phytochemicals and antioxidant capacities across different parts of plants; <i>Annona muricata</i> , <i>Phyllanthus emblica</i> , and <i>Morus alba</i>  H. Niroshika, H. Weerakoon, R.G.P.T. Jayasooriya, I.M.N. Molagoda, K.W. Samarakoon and K. Weerakoon
3.15 pm	3.30 pm	EN_003  Analysis of Demagnetization Energy in Ferromagnetic Thin Films Using the Fourth Order Perturbed Heisenberg Hamiltonian with all Seven Magnetic Energy Parameters  M.S.M. Farhan and P. Samarasekara	EV_019  Triphenylamine-Substituted Iron Porphyrin as Catalysts for CO <sub>2</sub> Reduction  A.A.A. De Silva and C.Y. Yeh	MD_053  Assessment of <i>in vitro</i> Antioxidant Activity of Curcumin Released from Curcumin-Loaded Electrospun Polycaprolactone Fibers  S.P.P.M. Perera, R.M. De Silva and K.M.N. De Silva



3.30 pm	3.45 pm	EN_005 Electrochemical Synthesis of Porous Polyaniline for High-Performance Supercapacitor Application G. D. R. Lakhari, N. P. W. Rathuwadu and K. R. Kowattage	EV_020 A Comprehensive Study on Novel Eco-Friendly Natural Rubber - Cinnamon Oil Peroxide Vulcanize System H.N.A.B. Abeygunawardana and D.T. Kuruwita-Mudiyansele	MD_054 Enhancing the Bioactivity of Green Tea ( <i>Camellia sinensis</i> ) using Kothala Hibutu ( <i>Salacia reticulata</i> ) J.M.D.S. Jayawardena, T.C. Jayaruk and M. Jayanetti
3.45 pm	4.00 pm	EN_006 Synthesis & Characterization of <i>N, N', N''</i> -Donor Sulfonamide Ligands Terminated with Quinoline Rings and their Platinum Complexes S.A.R. Abhisheka, K. Myntana, W.I.U. De Silva, S.A.S.T. Senanayake, K.S.D. Perera and P.V.H.K. Ranasinghe	EV_021 Proximate Composition of Two Brown Marine Algal Species from the Northern Coast of Sri Lanka: A Comparative Analysis N. Ramaraj, G. Thiripuranathar, S. Ekanayake, K. Attanayake and R.A.U.J. Marapana	MD_055 Nano silver-incorporated Carboxymethyl Cellulose – Polyethylene Glycol – Chitosan Hydrogels as Super Absorbent Antibacterial Wound Dressings D.L.I. Yasara, V.U. Godakanda, K.M.N. De Silva and W.R.M. De Silva
4.00 pm	4.15 pm	EN_007 Corrosion Inhibition Effects of Phosphate Species on Grade 202 Stainless Steel in the Presence of Other Chemical Constituents M.H.N. Revon, H.B.M.W.Y.T.K. Mahagedara and N. Priyantha	EV_022 Magnesium Oxide Nanoparticles Impregnated Pyrolyzed Coconut Coir as an Antifungal Agent E.M.I.J.S.B. Ekanayake, R.G.S.C. Rajapakse, A.C.A. Jayasundera and A.D.L.C. Perera	MD_056 Comparison of <i>in vitro</i> Antioxidant and Anti-Inflammatory Activities of Yellow Color and Pink Color Flowers of <i>Mirabilis jalapa</i> Linn S.M.N. Chathuranga and C.S.K. Rajapakse
4.15 pm	4.30 pm	EN_008 Cinnamon Leaf Oil Embedded Polyaniline Films for Corrosion Inhibition of Grade 202 Stainless Steel H.B.M.W.Y.T.K. Mahagedara, M.H.N. Revon and N. Priyantha	EV_023 Adsorption of Nickel in Aqueous Solution by Using <i>Strychnos Potatorum</i> Seed-Derived Biocharcoal V.N. Seneviratne and W.A.D.S. Wijekoon	MD_057 Determination of antibacterial activity in stress induced <i>Ophiorrhiza pumila</i> plant W.S. Malalasekera, S.D.N.K. Bathige, D. Pathiraja and C.M. Hettiarachchi
4.30 pm	4.45 pm	EN_009 Exploring the Electronic/Semiconductor Properties of Co, Ni, Mg, Zn-MOF-74 Upon Encapsulation of Aniline and Aniline Derivative Encapsulation P.D.T.S.N. Jayasundara, C.V. Hettiarachchi and H.A.I.R. Perera	EV_024 Ecologically Relevant Concentrations of Arsenic-Induced Toxicities in Zebrafish ( <i>Danio rerio</i> ) Embryos I. B. K. Thomas, D. T. Abeysinghe, R. Senthilnithy, C. D. Jayasinghe	MD_058 Phytochemical screening and antioxidant activity of ethanol extracts of seed, pulp and peel of <i>Dialium ovoideum</i> Thwaites D.A.U. Chathurangani, D.N. Udukala and M.J. Gunaratna

4.45 pm

Tea



## Day 2 (21.06.2024)

8.00 am - 8.30 am	Arrival of Guests & Morning Refreshments
8.30 am - 10.30 am	Presentation of Awards, Prizes and Certificates
10.30 am - 10.35 am	Citation of the CCS Researcher of the Year Dr. Dinusha Udukala
10.35 am - 11.05 am	CCS Researcher of the Year Lecture <b>Prof. T Gobika</b> <i>Professor in Inorganic Chemistry, College of Chemical Sciences, Institute of Chemistry Ceylon</i>
11.05 am - 11.10 am	Citation of the Ramakrishna Memorial Awardee, 2024 Dr. Sameera R Gunatilake
11.00 am - 11.40 am	Ramakrishna Memorial Award Lecture, 2024 <b>Prof. Thambiliyagodage Charitha Jayaruk</b> <i>Department of Applied Sciences, Faculty of Humanities &amp; Sciences, Sri Lanka Institute of Information Technology, Malabe</i>
11.40 am - 11.45 am	Citation of Prof. Terrence Madhujith, Plenary Speaker Prof. Namal Priyantha
11.45 am - 12.15 pm	Plenary Lecture <b>Prof. Terrence Madhujith</b> <i>Chair Professor, Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya</i>
12.15 pm - 1.00 pm	Lunch





Venue		Conference Room A	Conference Room B	Conference Room C
Session No		Technical Session 4	Technical Session 5	Technical Session 6
Sub Theme		<b>Environment:</b> Climate change, pollution and Green Chemistry	<b>Medicine:</b> Chemistry, Pharmaceutical and Herbal Technology	<b>Professor M U S Sultanbawa Award for Research in Chemistry</b>
Chair		Prof. Dinesh Mohan	Prof. Janitha A Liyanage	Prof. Dhammike P. Dissanayake
Co-chair		Prof. Jeewantha Premaratne	Prof. Channa De Silva	Prof. Suranga Wickramarachchi
12.45 pm	1.00 pm			SB_104 Suppression of Waterborne Pathogens in Effluents Using Agro-waste Derived Functionalized Cellulose Nanocrystals A.M.S. Aththanayake, G. Thiripuranathar and S. Ekanayake
1.00 pm	1.15 pm	<b>Keynote 4</b> Prof. Sakunthala Yatigammana Ekanayake	<b>Keynote 5</b> Prof. Sameera R Samarakoon	SB_105 Green Synthesis of Zinc Oxide Nanoparticles using <i>Mangifera Indica</i> Seed Kernel Extract and their Photocatalytic Activity D.H.A.G.K. Perera, G. Thiripuranathar and R.M.A.S. Rathnayake
1.00 pm	1.30 pm			SB_106 Incorporation of Natural Inexpensive Filler-Cnc, into Polycarbonate Matrix as a Green Technology Approach L. Weerasinghe, J.E.A.R.S. Jayasinghe and R. De Silva
1.30 pm	1.45 pm	EV_026 Applications of Different Microorganisms to Improve the Solubility of Eppawala Rock Phosphate W.M.R.W. Weerakoon, L.D.B. Suriyagoda, R.G.S.C. Rajapakse and H.M.T.G.A. Pitawala	MD_059 Shrimp Shell Chitosan-nHA Scaffolds: A Promising Approach for Bone Fracture Healing N.B.N. Nuwarapaksha, D.L.L. Perera and S.U. Adikary	SB_107 Assessment of the Viability of <i>Tithonia diversifolia</i> Seed Oil as a Biodiesel Feedstock via Transesterification P.A.W. Keshiya and M.Y.U. Ganahenege

1.45 pm	2.00 pm	<p>EV_027</p> <p>Individual and Interactive Toxicity of Chitosan Mediated Silver Nanoparticles and Cadmium on <i>Allium cepa</i></p> <p>G.S.T. Silva, G.T.P.S. Gulawitage, I. Nawarathna, M. Gregory, C. Hemachandra, H.M.T.R. Samarakoon, C.R. De Silva and S.R. Wickramarachchi</p>	<p>MD_060</p> <p>Exploring the Pharmacological Efficacy of Herbal Under-Eye Cream Formulated with <i>varnya gana dravya</i> from <i>Charaka samhita</i> Through Analytical Techniques</p> <p>W.M.L. Madhushan, W.A.B. Kavindi, Y.A.U.D. Karunaratne and S.K.M.K. Herapathdeniya</p>	<p>SB_108</p> <p><i>In silico</i> Investigation on Designing New Synthetic Linamarin Analogs as an Anticancer Drug</p> <p>A.H.M.S. Dilmini and C.N. Ratnaweera</p>
2.00 pm	2.15 pm	<p>EV_028</p> <p>Simultaneous and Sequential Synthesis of Rice Husk Biochar – Nano Zero Valent Iron Composites: Material Characterization and Remediation of Nitroaromatics</p> <p>Y.A. Alahakoon, M. Wijerathne, S.S. Perera, C. Peiris, T.E. Mlsna, and S.R. Gunatilake</p>	<p>MD_061</p> <p>Investigating Possible Antipyretic Mechanism of Paspanguwa Herbal Formula <i>in silico</i></p> <p>R.P.D.P. Ranasinghe and R.J.K.U. Ranatunga</p>	<p>SB_109</p> <p>Bioremediation of Chromium by Heavy-Metal Resistant Bacteria from Tannery Effluent</p> <p>M.I.R. Ahamad, V.N. Seneviratne and R.G.S.C. Rajapakse</p>
2.15 pm	2.30 pm	<p>EV_029</p> <p>Remediation of Aqueous Lead using Phosphate Incorporated and Nano Zero-Valent Iron Decorated Biochar Hybrids</p> <p>P.R. Nanayakkara, Y.A. Alahakoon and S.R. Gunatilake</p>	<p>MD_062</p> <p><i>In vitro</i> Study of Anti-Inflammatory and Antioxidant Activities of Endophytic Fungi Isolated from <i>Dialium ovoideum</i> Thwaites Leaves</p> <p>U.N.LaksaraniandH.I.C.DeSilva</p>	<p>SB_110</p> <p>Developing a Natural Food Preservative from Cinnamon oil (<i>Cinnamomum zeylanicum</i>) Nanoemulsion</p> <p>N.B. Warapitiya*, T.C. Jayaruk and M. Jayanetti</p>
2.30 pm	2.45 pm	<p>EV_030</p> <p>Biochar Surface Functionality as Affected by Acid Modifications: FTIR-based Principal Component Analysis</p> <p>Y.M. Senadheera, R. Silva, Y.A. Alahakoon, P. Walpita and S.R. Gunatilake</p>	<p>MD_063</p> <p>Study of Antioxidant Properties in a Combination of Turmeric (<i>Curcuma longa</i> L.) and Nutmeg (<i>Myristica fragrans</i> Houtt.)</p> <p>V.N. Seneviratne and R.J.S. Wickramanayake</p>	<p>SB_111</p> <p>Modification of Surface Hydrophobicity of Paper <i>via</i> Gamma Radiation Induced Graft Copolymerization</p> <p>C.D.R. Pathirana, K.R.C. De Silva, W.P.A.K.W. Kumari, S.D.M. Chinthaka and M. Katugampola</p>
2.45 pm	3.00 pm	<p>EV_031</p> <p>Water Defluoridation Using Magnetite-impregnated Coconut Coir-based Activated Carbon</p> <p>S. De Silva, S. Jayasinghe, I. Munaweera, N.S. Kottegoda and A.D.L.C. Perera</p>	<p>MD_064</p> <p>Evaluation of Physicochemical Properties and Microbiological Quality of Ashōkarōhinī Chūrna, A Polyherbal Ayurveda Pediatric Preparation</p> <p>W.A.R.P. Weerasingha, I.A.M. Leena, R.K. Jayaratne and T.K. Nawarathna</p>	<p>SB_112</p> <p>Multimetallic Silica Nanohybrids Incorporated Nanofiber Membrane for Potential Synergistic Antibacterial Applications</p> <p>P.N. Yapa, I. Munaweera, L. Weerasinghe, C. Sandaruwan and M.M. Weerasekera</p>

3.00 pm - 3.30 pm **Tea**



Venue		Conference Room B	Conference Room C	Conference Room D
Session No		Technical Session 7	Technical Session 8	Technical Session 9
Sub Theme		<b>Medicine:</b> Chemistry, Pharmaceutical and Herbal Technology	<b>Waste:</b> Management, Value Addition and Circular Economy	<b>Food:</b> Security, Safety and Quality
Chair		Prof. Chamari M. Hettiarachchi	Prof. Hema Pathirana	Mr. N M S Hettigedara
Co-chair		Dr. A A P Keerthi	Dr. Dinusha N. Udukala	Prof. Preetam Sarkar
3.30 pm	3.45 pm	MD_065 Evaluation of Urease Inhibitory Activity of Peel, Fruit Pulp and Leaf Extracts of <i>Citrus crenatifolia</i>  K.P. Madawala and D.N. Udukala	WA_089 Comparison of Methylene Blue and Rhodamine B Adsorption Efficiencies of Acid Modified Banana Pseudo Stem Biomass (BPSB)  U.K. Jayasundara and C.V.J. Mendis	
3.45 pm	4.00 pm	MD_066 Antioxidant, Anti-Diabetic and Anti-Obesity Properties of Latex of <i>Garcinia quaesita</i>  V.M.M.K. Jagoda, T.M.T.D. Thennakoon and J.M.S. Jayasinghe	WA_090 Value Addition to Waste Nylon Fishing Nets by Making Short-Fibers and Incorporating Those in Natural Rubber Vulcanizates  K.N.D. Thilakarathne, J.K. Premachandra and T.K. Mudiyansele	
4.00 pm	4.15 pm	MD_068 Evaluation of Anti-Inflammatory and Antimicrobial Activity of <i>Solanum nigrum</i> Plant Extract  S.H. Ahamed, M.S.A.A. Azdi and M.M.K. Peiris	WA_091 Optimization of Rice Husk-Derived Activated Carbon for Efficient Methylene Blue Adsorption: Kinetic and Equilibrium Studies  K.A.D.D. Sakunthala, P.L.R.A. Perera, W.P.R.T. Perera, J.A. Liyanage and W.A.P.J. Premaratne	FD_039 Development of a Screening Method to Detect Melamine Adulteration in Animal Vitamin Mixture using FTIR Spectroscopy  N.U. Uhanowita, B.A.T. Amalka, K.M. Binduhewa, S.M.N.K. Thilakarathne, W.M.I. Dissanayaka, C.K. Dissanayaka and J.M.J.K. Jayasinghe
4.15 pm	4.30 pm	MD_069 Evaluation of Anti-Urease Activity in the Root Extract of <i>Piper longum</i> and the Leaf Extract of <i>Cyperus rotundus</i>  W.P.N.A. Kumari and D.N. Udukala	WA_092 Purification of Crude Glycerol from Biodiesel Production & Development of a Cost-Effective Carwash  P.M.S. Hansika, P.I. Ellawala, A.M.P.S. Chathuranga and T.D.C.M.K. Wijesiriwardena	FD_040 Effect of cumin ( <i>Cuminum cyminum</i> ) Powder and Citric acid Incorporation on Acrylamide Mitigation and Antioxidant Properties in Dhal Vade  B.K.H.H. Batuwita, J.M.J.K. Jayasinghe, R.A.U.J. Marapana and C.V. L. Jayasinghe

4.30 pm	4.45 pm	<p>MD_070</p> <p>Anti-Diabetic and Anti-Obesity Activities Comparison of Common Different Curry Leaves Varieties in Sri Lanka</p> <p>B.A.S.U. Wanigasekara, D.M.D.B. Dasanayake, J.M.S.J. Jayasinghe and N.L.V.V. Karunaratne</p>	<p>WA_093</p> <p>Biogenic ZnO Nanoparticles Synthesized from Purple Yam Peel as a Potential Photocatalysts for the Degradation of Pigment Dye</p> <p>V. Gamage, G. Thiripuranathar, U. Nishshanka, N. Priyantha, M.D. Goonatilleke, B.S. Guiton, S. Gunewardene and S. Jayanetti</p>	<p>FD_041</p> <p>Effect of KMnO<sub>4</sub> -impregnated Activated Carbon Sachets on Extending Storage Life of Tomatoes (<i>Solanum lycopersicum</i>): A Comparative Study Across Different Maturity Stages</p> <p>B.V.A.M. Ranasinghe, W.M.S.S.K. Weerasinghe and M. Senevirathne</p>
4.45 pm	5.00 pm	<p>MD_071</p> <p>Synthesis and Characterization of Visible Light Active Fe Doped ZnO Nanohybrids for Self Sterilizing Applications</p> <p>K. Ranathunga, P.N. Yapa, I. Munaweera and C. Sandaruwan</p>	<p>WA_094</p> <p>Comparative Analysis of Various Photocatalyst and Effect of Different Parameters on Photocatalytic Degradation to Remove Brilliant Blue Dye Efficiently</p> <p>D.Y.N. Perera, S.S.A. Fernando, G.W.C.S. Perera and U.S.K. Weliwegamage</p>	<p>FD_042</p> <p>Physicochemical and Nutritional Characterization of Nutrient Rich Snack Bar Formulated with <i>Cucurbita moschata</i> and Local Ingredients for School Children.</p> <p>A.W.P.N. Kumari, G.S.A. Senanayake, Y.N. Amarathunga and A.B.G. Silva</p>
5.00 pm	5.15 pm	<p>MD_072</p> <p>Synthesis and Evaluation of <i>in vitro</i> and <i>in silico</i> Anti-Inflammatory Activities of 4-(N-Substituted Benzylidene)-2-Phenyloxazol-5(4H)-One Derivatives</p> <p>V.C. Lorensu Hewage and M.J. Gunaratna</p>	<p>WA_095</p> <p>Mechanical and Thermal Characterization of <i>Corypha umbraculifera</i> Petiole Fibers for Potential Use as a Textile Fiber</p> <p>B.G.N.P. Jayasooriya and S.A.S.C. Samarasinghe</p>	<p>FD_043</p> <p>Comparative Analysis of Physicochemical, Nutritional and Functional Properties of Rice Bran Oils from White and Brown Rice Bran in Sri Lanka: A Study of Bg 300 and At 362”</p> <p>H.M. Jans, P.A.B.N. Perumpuli and A.P.H.I. Abeyesuriya</p>
5.15 pm	5.30 pm	<p>MD_073</p> <p>Evaluation of Phytochemical and Antimicrobial Properties of <i>Cyperus iria</i></p> <p>S.L.A. Lakshika, K.H. Maleesha, T.K. Nawarathna and M.M.K. Peiris</p>	<p>WA_096</p> <p>Novel Biochar Production from Insoluble Dairy Waste</p> <p>H.R.J. Fernando, Y.A. Alahakoon, C. Peiris, T.E. Mlsna, J.J. Wewelwela and S.R. Gunatilake</p>	<p>FD_044</p> <p>Developing Water-Soluble Curcumin-Loaded Carrageenan Nanoparticles for Integration into Functional Food</p> <p>W.A.D.K.V. Wijesinghe, M.H.M.A.K. Bandara, A.D.L.C. Perera and J.M.S. Jayasinghe</p>



### Day 3 (22.06.2024)

8.00 am - 8.30 am	Arrival of Guests & Morning Refreshments
8.30 am - 8.35 am	Citation of Prof. Nimal Punyasiri, Plenary Speaker Prof. Chamari Hettiarachchi
8.35 am - 9.05 am	Plenary Lecture <b>Prof. Nimal Punyasiri</b> <i>Professor of Biochemistry at Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo, Sri Lanka</i>
9.05 am - 9.10 am	Citation of Prof. Sabu Thomas, Plenary Speaker Dr. Medha Gunaratna
9.10 am - 9.40 am	Plenary Lecture <b>Prof. Sabu Thomas</b> <i>Chairman, Trivandrum Engineering Science &amp; Technology Research Park, Mahatma Gandhi University, India</i>

Venue		Conference Room A	Conference Room B	Conference Room C
Session No		Technical Session 10	Technical Session 11	Technical Session 12
Sub Theme		<b>Medicine:</b> Chemistry, Pharmaceutical and Herbal Technology	<b>Energy:</b> Chemistry, Technology and Engineering	<b>MIX</b>
Chair		Prof. Chayanika Padumadasa	Prof. Priyani A. Paranagama	Prof. Zuriati Zakaria
Co-chair		Dr. K C Weerasiri	Dr. Asanka Rathnayake	Prof. Gobika Thiripuranathar
10.00 am	10.30 am	<b>Keynote 6</b> Prof. Preetam Sarkar	<b>Keynote 7</b> Prof. Anoma Chandrasekara	
10.30 am	10.45 am	MD_074 Exploring The Bioactivity and Chemical Profiling of Some Marine Sponges of Sri Lanka  M.F. Mazra and E.M.R.K.B. Edirisinghe	EN_010 Electrochemical Performance of CuO Anode Material Synthesized by Chemical Precipitation Technique at Different Temperatures, for Rechargeable Lithium-Ion Batteries  W.T.R.S. Fernando, T.H.N.G. Amaraweera, R.P. Wijesundera and H.W.M.A.C. Wijayasinghe	WA_097 Plasma functionalized coconut-coir biochar for Cd(II) and Pb(II) removal from aqueous solution  I. Rathnayake, B. De Alwis, H. Dissanayake, I. Munaweera, N.S. Kottegoda, A.D.L.C. Perera and S. Jayasinghe
10.45 am	11.00 am	MD_075 An Evaluation of the Anti-Inflammatory Activity of Underutilized Fruit and Leaf Extracts  M.P.T. Virajini, M.D. Bandara, P. Jayasooriya, K.W. Samarakon and A.I. Kuruppu	EN_011 Synthesis of Reduced Graphene Oxide/CaWO <sub>4</sub> Composite Photoanode for Enhanced Activity Towards Photoelectrochemical Water Splitting  E.G.O.D. Egodawaththa, H.N.M. Sarangika, C. Bhattacharya, S. Ghosh, H.M.B.I. Gunathilaka, G.M.L.P. Aponsu and H.Y.R. Atapattu	FD_045 Isolation of Ninhydrin Positive Steroidal Saponins in Palmyrah Products  M.P.R. Perera, A.A.H. Himanshika and A.A.P. Keerthi
11.00 pm	11.15 pm	MD_076 Study of Synergistic Antioxidant Activity of Leaves <i>Mikania cordata</i> (Burm.f.) With Copper Oxide Nanoparticles  H.T. Welikala and K.C. Weerasiri	EN_012 Development of an Inexpensive Battery-Operated Potentiostat for Microfluidic Studies  T.M. Dinamithra, I.M.G.J. Eranga and M.B. Wijesinghe	EV_025 Cellulose Fibres Modified with Natural Anti-Bacterial Agents for Single-Use Medical Application  T.W.M.I.I. Dissanayake and S.A.S.C. Samarasinghe



11.15 am	11.30 am	<p>MD_077</p> <p>Analysis of Phytochemicals and 5-Lipoxygenase Inhibition Properties of Essential Oil Extracted from <i>Acronychia pedunculata</i> (L.) Miq. (Ankenda) Leaves</p> <p>R.P.D.M. Rajapaksha, G.D. Liyanaarachchi, J.K.R.R. Samarasekara, H.D. Weerathunge, W. Divisekara, P.D. Perera and K.M. Mewan</p>	<p>EN_014</p> <p>Optimization of Gel Polymer Electrolytes for Zinc/Bromine Gel Batteries</p> <p>J.W.L.N. Prasadi, D.A.S.S. Gunasena, H.M.N. Bandara and R.M.G. Rajapakse</p>	<p>EN_004</p> <p>Tailoring Crystalline Morphology in Poly(Ethylene Oxide)-Poly(Ethylene Glycol) Blends for Enhanced Performance in Quasi-Solid Dye-Sensitized Solar Cells</p> <p>R.D.M.A.C.B. Rajakarunaratne, S.C. Dissanayake, I.D. Maithripala and T.M.W.J. Bandara</p>
11.30 pm	11.45 pm	<p>MD_078</p> <p>Total Phenolic Content and Anti-Oxidant Activity of <i>Tabernaemontana dichotama</i></p> <p>R.M. Weerathunga, D.A.U. Chathurangani and D.N. Udukala</p>	<p>EN_015</p> <p>Development of Polymer Gel for Zinc/Bromine Gel Battery</p> <p>V.M.Y.S.U. Bandara, D.A.S.S. Gunasena, H.M.N. Bandara and R.M.G. Rajapakse</p>	<p>MD_067</p> <p>Synthesis of Etherified Derivatives of Garcinol as <math>\alpha</math>-Amylase and <math>\alpha</math>-Glucosidase Inhibitors</p> <p>T.M.T.D. Thennakoon, J.M.S. Jayasinghe and N.L.V.V. Karunaratne</p>
11.45 pm	12.00 pm	<p>MD_079</p> <p>Computational Study of Flabelliferin-II and Its Impact on <math>\text{Na}^+/\text{K}^+</math>ATPase Function</p> <p>N.K.T. Manchanayake, A.M. Jaufer and A.A.P. Keerthi</p>		

12.00 pm - 1.00 pm	<b>Lunch</b>
1.00 pm - 2.30 pm	<b>Panel Discussion on Fostering Equality and Excellence: A Panel Discussion on Women Empowerment in Chemistry</b>  <i>Panelists:</i> Dr. Supawan Tantayanon, <i>Professor of Chemistry, Faculty of Science, Chulalongkorn University, Thailand</i> Prof. Zuriati Zakaria, <i>Malaysian Institute of Chemistry</i> Dr. Ale Palermo, <i>Head of Global Inclusion at the Royal Society of Chemistry</i> Dr. Thelma Abeyesinghe, <i>Senior Lecturer, Department of Chemistry, The Open University of Sri Lanka</i>  <i>Moderator:</i> Prof. Priyani A Paranagama, <i>Treasurer, Institute of Chemistry Ceylon &amp; Treasurer, FCT-2</i>
2.45 pm - 4.15 pm	<b>Panel Discussion on Chemistry at the Crossroads: Bridging Academia and Industry - A Panel Discussion with Visionary Industrialists</b>  <i>Panelists:</i> Prof Ajith de Alwis, <i>Chief Innovation Officer, National Innovation Agency</i> Mr. Ashoka Siriwardene, <i>Group Chairman, Wardena Venture Holdings</i> Ms. Udesha Bopitiya, <i>Director Technical, LANMIC group of companies (pvt) Ltd.</i> Mr. Warnajith Chandrarathne, <i>Head of Research &amp; Development, Nature's Beauty Creation Ltd.</i>  <i>Moderator:</i> Dr. Piyal Ariyananda, <i>Head - Global Innovations, Stretchline Holdings Ltd.</i>
<b>Valedictory Ceremony</b>	
4.30 pm - 4.35 pm	Prof. Namal Priyantha <i>President, Institute of Chemistry Ceylon &amp; Conference Chair, FCT-2</i>
4.35 pm - 4.50 pm	Conference Recap
4.50 pm - 5.10 pm	Best Presenter Awards
5.10 pm - 5.15 pm	Vote of Thanks  <b>Dr. Sameera R Gunatilake</b> <i>Conference Secretary, FCT-2</i>
5.15 pm	Tea