

Technical Programme : Theme - Physical Sciences RESCON 2024

Friday, 1st November 2024

11:00 am - 1:10 pm	Session ID		Session Chairs		Location
	PS 1		Dr. Dimanthi R. Uduwela dimanthi.uduwela@sci.pdn.ac.lk		A3.1
			Prof. K.M.S. Wimalasiri swarnaw@agri.pdn.ac.lk		
	Time	Abstract ID	Title		Presenter
	11:00 - 11:15	41	ANTIBACTERIAL AND ANTIFUNGAL ACTIVITIES OF LOCALLY AVAILABLE FOUR DUCKWEED VARIETIES IN SRI LANKA		H.R.P. Prasadani
	11:15 - 11:30	145	COMPARISON OF BIOACTIVITY OF <i>Schumacheria castaneifolia</i> FROM DIFFERENT LOCATIONS		T.A. Dahanayaka
	11:30 - 11:45	267	LARVICIDAL ACTIVITIES OF <i>Capsicum frutescens</i> (KOCHCHI) VARIETIES AND COMBINED EFFECT WITH <i>Allium sativum</i> (GARLIC), AGAINST <i>Aedes</i> MOSQUITO LARVAE		H.P.T.C.Heiyanthuduwa
	11:45 - 12:00	287	PHOTOPROTECTIVE PROPERTIES OF SELECTED MEDICINAL PLANTS IN SRI LANKA ON THEIR PHENOLIC AND FLAVONOID CONTENTS		W.A.D.K.V. Wijesinghe
	12:00 - 12:15	195	EVALUATION OF CRITICAL FIBRE LENGTHS FOR SURFACE-TREATED PINEAPPLE LEAF FIBRES INCORPORATED NATURAL RUBBER COMPOSITES		L.H.H. Erangika
	12:15 - 12:30	204	ANTI-CORROSION PERFORMANCE OF ELECTROCHEMICALLY SYNTHESIZED POLYANILINE-GRAPHENE NANOCOMPOSITE		G.D.R. Lakhari
12:30 - 12:45	131	COMPARISON OF THE PHYTOCHEMICAL CONTENTS AND IN-VITRO ANTI-DIABETIC AND ANTI-OBESITY ACTIVITIES OF THE TWO VARIETIES OF <i>Piper nigrum</i> (BLACK PEPPER)		T.M.T.D. Thennakoon	
12:45 - 1.00	257	COMPARISON OF ANTI-DIABETIC, ANTI-OBESITY ACTIVITIES AND TOTAL ALKALOID CONTENT OF <i>Murraya koenigii</i> LEAVES FROM THREE CLIMATIC ZONES IN SRI LANKA		D.M.D.B. Dasanayake	
Panel Discussion					

11:00 am - 01:10 pm	Session ID		Session Chairs		Location
	PS 2		Prof. K Premaratne physprem@gmail.com		A3.2
			Dr. E.N. Jayaweera eranjij@sci.pdn.ac.lk		
	Time	Abstract ID	Title		Presenter
	11:00 - 11:15	70	IMPACT OF POST-ANNEALING TEMPERATURE ON SILVER BISMUTH SULFIDE QUANTUM DOT-SENSITIZED SOLAR CELLS FABRICATED BY SUCCESSIVE IONIC LAYER ADSORPTION AND REACTION METHOD		R.P.P.D Rajakaruna
	11:15 - 11:30	117	PARTICLE SIZE OF ALUMINIUM OXIDE NANO-FILLER ON THE PERFORMANCE OF DYE SENSITIZED SOLAR CELLS AND PROPERTIES OF GEL-POLYMER ELECTROLYTES		R.P. Chandrika
	11:30 - 11:45	144	FEASIBILITY OF COCONUT SHELL FLAKES DERIVED ACTIVATED CARBON ELECTRODES FOR SUPERCAPACITORS		R.R.M.M.N.B. Bambaradeniya
	11:45 - 12:00	185	CAPACITANCE IMPROVEMENT IN THE PRESENCE OF FRACTAL GRAPHENE: ACTIVATED CARBON COMPOSITE BY IMPROVING THE ELECTROLYTE WETTABILITY		Maithri Dissanayake
	12:00 - 12:15	220	THERMOELECTRIC PROPERTIES OF DODECYLBENZENE SULFONIC ACID SODIUM SALT (DBSA) DOPED POLYANILINE & REDUCED GRAPHENE OXIDE (RGO)-DBSA DOPED POLYANILINE COMPOSITES		W.G.T.L. Weerasinghe
	12:15 - 12:30	259	AN APROTIC ELECTROLYTE AND REDUCED GRAPHENE OXIDE ELECTRODES BASED SUPERCAPACITORS, PERFORMANCE DEPENDENCE ON CURRENT COLLECTORS		U. L. I. Udayantha
12:30 - 12:45	290	QUASI-SOLID-STATE SUPERCAPACITOR WITH COCONUT SHELL-DERIVED ACTIVATED CARBON ELECTRODES AND H3PO4/ POLYVINYL ALCOHOL GEL ELECTROLYTE		W.W.S.S.R. Fernando	
Panel Discussion					

LUNCH BREAK

2:00 pm - 4:00 pm	Session ID		Session Chairs		Location
	PS 3		Prof. Manawadevi. Y. U. Ganehenege myug@sci.pdn.ac.lk		A3.1
			Dr. Sampath B. Alahakoon sampath.alahakoon@sci.pdn.ac.lk		
	Time	Abstract ID	Title		Presenter
	2:00 - 2:15	232	INVESTIGATION OF CORROSION INHIBITION OF STAINLESS-STEEL GRADE 202 IN ACIDIC CHLORIDE MEDIUM BY CaO NANOPARTICLES		M.H.N. Revon
	2:15 - 2:30	233	EFFECTIVE CORROSION BARRIER OF CINNAMON LEAF OIL INCORPORATED POLYPYRROLE LAYERS FOR MILD STEEL		P.W.G.K. Palipana
	2:30 - 2:45	237	PREPARATION AND CHARACTERIZATION OF MICROBEADS FROM POST-CONSUMER POLY(ETHYLENE TEREPHTHALATE) BOTTLES		N.D.W.Y. Ananda
	2:45 - 3:00	238	POST-CONSUMER POLY(ETHYLENE TEREPHTHALATE) BASED MEMBRANES USING ELECTROSPINNING TECHNIQUE		I.U.S. Nikahetiya
	3:00 - 3:15	241	COMPARISON OF OIL ABSORPTION BY EXPANDED NEEDLE-TYPE AND PLATE-TYPE GRAPHITE FROM SRI LANKA		B.K.S.V. Rodrigo
3:15 - 3:30	215	INVESTIGATION OF THE PRESENCE OF HUMIC SUBSTANCES AND THEIR METAL BINDING ABILITY IN WATER		V.M.T.N. Vijesundara	
Panel Discussion					

2:00 pm - 4:00 pm	Session ID		Session Chairs		Location
	PS 4		Prof. B.S.B. Karunaratne bsbk@sci.pdn.ac.lk		A3.2
			Prof. P. Samarasekara pubudus@sci.pdn.ac.lk		
	Time	Abstract ID	Title		Presenter
	2:00 - 2:15	94	COMPARISON OF THE ELECTROCHEMICAL PERFORMANCE OF p-Cu ₂ O AND n-Cu ₂ O ANODE MATERIALS SYNTHESIZED BY ELECTRODEPOSITION TECHNIQUE FOR RECHARGEABLE LITHIUM-ION BATTERIES		W. T. R. S. Fernando
	2:15 - 2:30	101	TEMPERATURE PROFILE OF PULSATING STAR- CC ANDROMEDAE		K.M. Munasinghe
	2:30 - 2:45	126	MAGNETIC FIELD-INDUCED DEFORMATION OF CASTOR OIL-BASED FERROFLUIDS		R.M.R. Ratnayake
	2:45 - 3:00	244	A QUALITATIVE STUDY ON DETECTING INTERNAL CAVITIES OF TREE LOGS USING INFRARED THERMOGRAPHY		P.B.K.G.W. Baduge
	3:00 - 3:15	246	INVESTIGATION OF THE IMPACT OF CRYSTALLINITY AND SURFACE MORPHOLOGY ON THE MECHANICAL PROPERTIES OF ARTOCARPUS HETEROPHYLLUS LATEX AND POLY(ETHYLENE OXIDE) STRETCH FILMS		N. V. P. K. Gamage
3:15 - 3:30	248	CHARACTERIZATION OF rGO-INCORPORATED POLYVINYL ALCOHOL (PVA) AND POLYETHYLENE OXIDE (PEO) POLYMER COMPOSITES FOR PACKAGING APPLICATIONS		S.D.J. Gunasekara	
3:30 - 3:45	262	IMPACT OF PERFORATION ON SOUND ABSORPTION PROPERTIES OF CERAMIC MATERIALS		W.M.A.I. Weerakoon	
Panel Discussion					

Saturday, 2nd November 2024

am- 10:00 am	Session ID		Session Chairs		Location
	PS 5		Prof. Champika Hettiarachchi champikav@pdn.ac.lk		A3.1
			Dr. Kaushini Wickramasinghe kaushiniw@sci.pdn.ac.lk		
	Time	Abstract ID	Title		Presenter
8:45 - 9:00	5	INVESTIGATION OF FLUORIDE REMOVAL EFFICACY OF CARBON MATERIAL PREPARED BY ENVIRONMENTAL BENIGN CHEMICAL ACTIVATION METHOD		N.S. Athauda	
9:00 - 9:15	109	QUASI-SOLID STATE CADMIUM SULFIDE QUANTUM DOTS EMBEDDED PHOTOVOLTAIC CELLS WITH GEL ELECTROLYTE		M.S. Dassanayake	
9:15 - 9:30	137	FABRICATION OF WATER-REPELLENT TEXTILE THROUGH STEARIC ACID-MODIFIED MAGNESIUM HYDROXIDE DERIVED FROM NATURAL DOLOMITE		T.H. Weragoda	

8:45	9:30 - 9:45	155	DEVELOPMENT OF AN ELECTROCHEMICAL SENSOR WITH TITANIUM DIOXIDE INCORPORATED GRAPHENE QUANTUM DOTS TO DETECT PHENOXYACETIC ACID HERBICIDES	S.D. Rajapaksha
	9:45 - 10:00	202	ENHANCING DYE DEGRADATION WITH YAM PEEL-MEDIATED SILVER, ZINC OXIDE NANO PARTICLES AND THEIR COMPOSITE	V. Gamage
	Panel Discussion			

8:00 am - 10:00 am	Session ID		Session Chairs		Location
	PS 6		Prof. Ayanthie Navarathne ayanthin@sci.pdn.ac.lk		A3.2
			Dr. J. A. Thiloka C. Ariyasena jatca@sci.pdn.ac.lk		
	Time	Abstract ID	Title		Presenter
	8:00 - 8:15	75	BEYOND ULTRAVIOLET: OXYGEN-VACANT ZrO _{2-x} FOR VISIBLE-IR-LIGHT-DRIVEN WATER SPLITTING		D.C. Rajapakse
	8:15 - 8:30	81	COMPUTATIONAL STUDIES ON STABILITY OF EIGHT COORDINATED COMPLEXES FORMED BY Zr(IV) AND Hf(IV) WITH BIDENTATE LIGANDS		A.A.D.M. Adhikari
	8:30 - 8:45	217	DFT CALCULATIONS OF SECOND-ORDER NONLINEAR OPTICAL PROPERTIES OF DONOR-ACCEPTOR SUBSTITUTED NICKEL(II) SCHIFF BASE COMPLEXES		W.M. Safras
	8:45 - 9:00	226	SYNTHESIS OF POROUS GRAPHENE MATERIALS FOR SUPERCAPACITORS IN THE PRESENCE OF PHOSPHORUS-BASED ADDITIVES		D.A.S. Sharmila
	9:00 - 9:15	258	FABRICATION AND DEVELOPMENT OF A PAPER-BASED MICROFLUIDIC DEVICE FOR ELECTROCHEMICAL ANALYSIS OF COUNTERFEIT DRUG		D.M.L.R. Dissanayake
	9:15 - 9:30	284	FABRICATION AND OPTIMIZATION OF NANOPOROUS MEMBRANES FOR ZINC-BROMINE FLOW BATTERY		V.U.H. Serasinghe
9:30 - 9:45	295	α -TITANIUM PHOSPHATE DERIVED FROM ILMENITE BEACH SAND AS A NOVEL SENSING MATERIAL TO DETECT CHLORINE GAS AT ROOM TEMPERATURE		L.P.C. Ruwanthilaka	
Panel Discussion					

TEA BREAK

10:30 am - 12:30 pm	Session ID		Session Chairs		Location
	PS 7		Dr. W. S. Subhashini Gunathilake subhashinig@sci.pdn.ac.lk		A1.1
			Dr. J. M. Sumanthi Jayasinghe sumanthij@sci.pdn.ac.lk, Dr. Manjula Wijesinghe manjulaw@sci.pdn.ac.lk		
	Time	Abstract ID	Title		Presenter
	10:30 - 10:45	13	DETERMINATION OF ANTIOXIDANT ACTIVITY OF SRI LANKAN GREEN TEA BY THERMAL REGULATION		S.M.B.D. Sudusooriya
	10:45 - 11:00	22	PHENOLIC AND FLAVONOID CONTENTS AND FERRIC REDUCING ANTIOXIDANT POWER OF DIFFERENT SOLVENT EXTRACTS OF DEFATTED SEED KERNEL FROM Terminalia catappa L. FRUITS		H.F. Fahmidha
	11:00 - 11:15	45	ANTIOXIDANT POTENTIAL OF BARK COLUMN FRACTIONS OF Stereopermum suaveolens		N. Thanusika
	11:15 - 11:30	64	IN VITRO ANTIOXIDANT, CYTOTOXIC, PHYTOTOXIC AND α -AMYLASE INHIBITORY POTENTIAL OF FOUR SRI LANKAN MEDICINAL PLANTS		W.W.M.T.R. Wekadapola
	11:30 - 11:45	65	DETERMINATION OF ANTIOXIDANT AND ENZYME INHIBITORY ACTIVITIES OF Osbeckia octandra L., Cissus quadrangularis, AND Vitex negundo IN SRI LANKA		M.A.K.H. Mallawa Arachchi
	12:15 - 12:30	272	EXPLORING THE ANTIOXIDANT POTENTIALS AND PHYTOCHEMICALS OF THE EXTRACTS OF BABY COCONUT (KURUMBATTI) OF Cocos nucifera		R.R.S.W.H.S.M. Bandara
Panel Discussion					