

CONTENTS

Description of Content	Page
Keynote speech Novel Organic Materials for Photovoltaic Devices <i>Rajendra (Raj) Rathore, Department of Chemistry, Marquette University, Milwaukee, Wisconsin, USA</i>	1
Abstracts of oral presentations: Session A	
Assessment of Egg Parasitoids in paddy and vegetable Farming Systems in Puliyankulama and Mahailuppalama Area, Anuradhapura District of Sri Lanka <i>Samarakoon S. A. M. C., Priyadarshani T.D.C., Hemachandra K.S. and Sirisena U.G.A.I.</i>	4
Sensitive indicators of <i>R. mucronata</i> Lam. to abiotic stress conditions; early-detection of stressors in mangrove restoration fields <i>Kodikara K.A.S., Madarasinghe S.K., Prasangika K.D. and Jayatissa L.P.</i>	5
Hydraulic architecture and hydraulic conductivity of <i>Rhizophora mucronata</i> Lam. in response to water stress <i>Dissanayake N.P., Premachandra G.S.D., Kodikara K.A.S. and Jayatissa L.P.</i>	6
Effect of locus of the crisis on purchase intention of the crisis brand: Sri Lankan young consumers' view <i>Samaraweera, G.C.</i>	7
Taxonomic implications from leaf stomatal anatomy of <i>Calotropis Gigantea</i> R. Br. (Apocynaceae) found in Matara, Sri Lanka <i>Pushpa Abeysinghe, Tanya Scharaschkin, Rachel Hancock and Sanjleena Singh</i>	8
Screening of <i>Trichoderma</i> isolates as bicontrol agents against banana wilt pathogen and evaluating organic biomass wastes for mass production of conidia. <i>Chathuranga T. S., Masakorala K. and Abeysinghe S.</i>	9
Performance evaluation of a maize growth simulation model <i>Rajawatta K.M.W, Dongjian He, Piyaratne M.K.D.K. and Haidong Lu</i>	10

Effects of used lubricant oil contaminated soil on soil microbial activity and population size <i>W.G.S. Sriyanthi, K.Masakoral</i>	11
Micro propagation of Jujube (<i>Ziziphus jujuba</i> Mill.) through shoot tip and nodal segment culture <i>Hansika K.P., Perera R.N.I., Ranawake A.L. and Senanayake S.G.J.N.</i>	12
Spatio-temporal changes in mangrove cover of three lagoons in Southern Sri Lanka during the last two decades: A field validated GIS study <i>Madarasinghe SK, Yapa KKAS, Kodikara K.A.S., Satyanarayana B., Udayakantha PMP, Jayatissa LP</i>	13

Abstracts of oral presentations: Session B	Page
---	-------------

Investigation of extraction conditions to obtain marigold extracts rich in lutein and antioxidants <i>M. D. N. N. Jayarathne and B. G. K. Perera</i>	14
Syntheses of $[\text{Re}(\text{CO})_3(\text{NN})\text{Cl}]$ complexes of bulky N,N-donor ligands <i>Sarath D. Perera</i>	15
Microencapsulation of clove oil to improve its usability as a pesticide <i>N.D. Gajasinghe, B. G. K. Perera and R.D. Wijesekera</i>	16
Analysis of nutrient compositions in commercially available selected, processed dry food products and instant dry food mixtures <i>Vajira P. Bulugahapitiya and L.A. S. Priyangika</i>	17
Preparation of cinnamon oil microcapsules to be used as a digestive supplement for humans <i>J. P. S. Rasanganie and B. G. K. Perera</i>	18
Development of a smart textile with medicinal properties using lime oil microcapsules <i>P.B. Wijesirigunawardana and B.G.K Perera</i>	19

Visual Detection of Fluoride ions by a Simple Chromogen, Bromothymol Blue Diacetate <i>A. S. Dissanayake and W. N. R. Fernando</i>	20
Synthesis and Characterization of Cationic Tri-Oxygen coordinated Ru Complexes <i>Kalutharage N. K. and Yi C. S.</i>	21
Impact of different cooking methods on the Antioxidant content of selected underutilized tubers in Sri Lanka <i>H. M. A. J. Herath, H. D. J. E. Wijerathna and A Chandrasekara</i>	22
Adsorption of Ni ²⁺ and Pb ²⁺ by Curry leaves <i>W.M. Wijetunga and R.H.W. Gunasekera</i>	23
Coir Pith Lignin Isolation and Spectroscopic Structure Elucidation <i>L.A. Panamgama and J.W.W.C. Jayalath</i>	24
An evaluation on suitability of fish waste to produce fish oil <i>S. P. B. Sajeewani and Hema M.K.K. Pathirana</i>	25
Treatment of highly acidic wastewater from a food processing industry <i>Hettiarachchi. L. I. and Wanniarachchi. S</i>	26
Removal of Reactive Black 5 Using Activated Carbon Produced From Sawdust and Rice Husks - An Effective Way of Effluent Treatment <i>Bandara T.P.D.S., Wadumethrige S.H. and Wanniarachchi S.</i>	27

Abstracts of oral presentations: Session C	Page
---	-------------

A preliminary study on the evaluation of hypocholesterolemic activity of some <i>Phyllanthus</i> species <i>P. G. M. Kalpani, S. R. Weerakoon, S. Somaratne, N. Nilakarawasam and C. Ranasinghe</i>	28
Identification of gill trematode, <i>Centrocestus</i> sp. infect on ornamental fish species in Sri Lanka using morphological characteristics <i>Sumuduni B.G.D., Munasinghe D.H.N. and Arulkanthan A.</i>	29

Post-hatch ontogenetic changes and their functional significance in guppy fries (<i>Poecilia reticulata</i>) revealed by histology and osteology <i>K.I.G. Hewavitharana, S.H.N.P. Gunawickrama and K.B.S. Gunawickrama</i>	30
Effect of different diets on growth and colour enhancement of red blonde variety of guppy (<i>Poecilia reticulata</i>) <i>Dharmasiri, T.S.K. and De Silva, M.P.K.S.K.</i>	31
Evaluation of total phenolic content, total flavonoid content, <i>in vitro</i> antioxidant activity and <i>in vitro</i> antidermatophytic activity of <i>Rhinacanthus nasutus</i> (Aniththa) grown in Sri Lanka. <i>Hettihewa S.K, De Silva M.N.M and Wijayarathne W.M.D.G.B</i>	32
Micro-climatic gradients across an isolated rainforest remnant bordered by different landuse types in the Knuckles range, Sri Lanka <i>Sripal D.D.N., Gunatilleke I.A.U.N., Gunaratne A.M.T.A. and Madawala H.M.S.P.</i>	33
Abstracts of oral presentations: Session D	
Co-Relational Analysis of Webometric Measurements in Sri Lankan University Library Websites <i>Ramanayaka, KH, Xianqiao Chen and Bing Shi</i>	34
Improving the accuracy of k-means algorithm using genetic algorithm <i>Fernando W. T. R., Wijeweera K. R. and Dasanayaka D. M. N. K.</i>	35
Geometric Brownian Motion Based Hybrid Approach for the Analysis High volatile Financial Time Series <i>Kapila Tharanga Rathnayaka R.M., Seneviratna D.M.K.N and Jianguo W.</i>	36
Modeling seasonal Leptospirosis cases in Western province of Sri Lanka <i>Gnanapragasam S.R.</i>	37
A Mobile-based Application for Making Timely Decisions using Participatory Sensing: A Case Study from Sri Lankan Agriculture <i>R.S.I. Wilson and A.I. Walisadeera</i>	38

A method for measuring students' power skills automatically <i>JRKC Jayakody</i>	39
Low cost, highly efficient TiO ₂ based Electrochromic device for architectural application <i>H.N.M.Sarangika, G.K.R. Senadeera, M.A.K.L.Dissanayake³ and W.G.M.D.Karunaratna</i>	40
Poly (vinylidene fluoride-hexafluoropropylne) and fumed silica based nano-composite electrolyte for efficient dye sensitized solar cells <i>Weerasinghe A.M.J.S., Dissanayake M.A.K.L., Senadeera G.K.R., Thotawatthage C.A. and Kumari J.M.K.W</i>	41
Augmented reality for teaching Object Oriented Programming Concepts <i>Surendra R.M.D.B.</i>	42
Influence of cation concentration in the electrolyte on photovoltaic performance of dye sensitized solar cells <i>J.M.K.W. Kumari, M.A.K.L. Dissanayake, G.K.R. Senadeera, C.A. Thotawatthage and A.M.J.S. Weerasinghe</i>	43
Analysis of the Seasonal Influenza Model in Actuarial Point of View <i>Perera S.S.N.</i>	44
An investigation on classical and quantum information entropies and diversity measures <i>N Yapage</i>	45
Design and implementation of an altazimuth mount drive for a Newtonian telescope coupled to a DSLR camera <i>Amaradasa H.D.S., Abeywickrama S.S., Ranatunga E.M., Mahanama G.D.K., Baduge S., Priyankara J.G.V. and Gunawardhana S.D.</i>	46
Study on noise exposure of train passengers in Sri Lanka <i>S.M.N. Sethunga, J.A.P. Bodhika and W.G.D. Dharmaratne</i>	47
A preliminary study on behavioral effects of laboratory rats (Albino Wistar) after the sub-chronic noise stress <i>J.R.I.A. Jayakody and J.A.P. Bodhika</i>	48
Quality of service factor categorization for restful web services <i>Sewwandi M.A.N.D. and Ilayperuma T.S.</i>	49

Towards a framework for evaluating AOSE methodologies from agent and generic software engineering perspectives
Hewage U.H.W.A. and Ilayperuma T. S. 50

Noise pollution in Matara city
S.M.N. Sethunga, N.H.R Tharuka, J.A.P. Bodhika, W.G.D. Dharmaratna 51

Abstracts of poster presentations: Session A Page

A study about agro forestry practices in wet zonal home gardens
Akuressa Divisional Secretariat in Sri Lanka
W.M. Gangani Chandralatha 52

Fatty acid composition of seed oils extracted from six underutilized fruits grown in Sri Lanka
Wedamulla, N, Priyadarshana, Y.A. And Madhujith, T 53

Labour use pattern and cost of production in Soybean cultivation in Anuradhapura District/ Sri Lanka
A.V. Dhanapalaand and T.Kirupananthan 54

Abstracts of poster presentations: Session B Page

A preliminary survey of odonates at selected sites in “Kerala Kele” sanctuary, Matara, Sri Lanka
Kalpani, P.G.M., Dharmasiri, T.S.K., Amarasinghe, N.J.de S. and Chandana, E.P.S 55

Flora and Fauna diversity in selected Seagrass beds in the Southern Sri Lanka.
P .R. S. A. Abeyrathna, P. B.T. P. Kumara, R. D. A. Gunasekara and T. G. Dayananda 56

Comparison of mosquito repellent activity of citric acid treated and untreated samples of the oil of *Eucalyptus citriodora*
M.C.N.M. Marasinghe, B.G.K. Pereraand D.T.U. Abeytungu 57

Ecology and the Level of Habitat Degradation of Upparu Mangrove Forest, Kinniya, Sri Lanka.
P.A.K.N.Dissanayake, D.G.T.C.Balawardhana, P.B.T.P.Kumara and E.P.D.N.Thilakarathna 58

Heavy metal contamination in the vicinity of a landfill site at Weligama, Sri Lanka <i>M.G.T.T. Marasinghe, S.R.Amarasinghe, S.D.Wanniarachchi and K.R. Fernando</i>	59
---	----

Abstracts of poster presentations: Session C	Page
---	-------------

Socio-economic Aspects of Fishing Communities: A Case Study in Victoria Reservoir, Sri Lanka <i>Wickremasinghe E.S., Dematawewa C.M.B. and Edirisinghe E.M.L.B.</i>	60
Suitability of medicinal plants, <i>Sesbania grandiflora</i> , <i>Aegle marmelos</i> and <i>Allium sativum</i> as feed additives on growth performance of red tilapia <i>Nishshanka K.M., Amarasinghe N.J.De.S. and Guruge W.A.H.P.</i>	61
An aqueous pod extract of <i>Capsicum frutescens</i> – as a potential botanical for controlling <i>Aphis craccivora</i> <i>W.A.K. Thakshila, W.T.S. Dammini Premachandra and M.G.V. Wickramasinghe</i>	62

Abstracts of poster presentations: Session D	Page
---	-------------

An efficient line clipping algorithm against a convex polygon <i>Wijeweera K. R., Kodituwakku S. R. and Chamikara M. A. P.</i>	63
Preparation and characterization of ZnO-Chitosan nanocomposite and evaluation of its antifungal activity against pathogenic <i>Candida albicans</i> <i>Dananjaya S.H.S, Udayantha H.M.V, R.M.C. Udayangani, Beom S.S, Jehee L. and De Zoysa M.</i>	64
Parametric forms for Pythagorean Triples and Congruent numbers <i>Padmaprabha H.G.N.L. and Shanthidevi K.C.N.</i>	65
Ranking Environmental Problems In Sri Lanka Using Crowd sourcing and Natural Language Processing <i>Lakshika M.V.P.T. and Senanayake S.H.D</i>	66
An automated device to measure a fixed volume of a liquid <i>Maduranga U.G.D., Abeywicrama S.S, Dharmarathna W.G.D. and Ranatunga E.M</i>	67

A Low Cost Transportation Plan to a Garment Factory <i>Dunuwila N.D.K.K. and Samarathunga D.M.</i>	68
Analysis of the physico-chemical quality of some consumer preferred plain set yoghurts sold in Matara municipal area of Sri Lanka: A case study. <i>Wedage L.T., Amarathunga S.M., Hemamali K.K.G.U. and Jayasekara L.A.L.W.</i>	69
A Preliminary Model of Predictive Text for Sinhala using N-gram Statistics <i>Chanaka K.M.R., Lorensuhewa S.A.S. and Kalyani M.A.L.</i>	70
A novel device for bending PVC pipes for plumbing purposes <i>N.A.A.K.Sanjaya, W.G.D. Dharmaratna, S.S. Abeywickrama and E. M. Ranatunga</i>	71
Low-cost impedance spectroscopic system for investigation of solar cell characteristics <i>Ajward A.M. and Gunawardhana I.D.C.B.K.</i>	72
List of reviewers - RISTCON 2017	73
Sponsors of RISTCON 2017	82

Details of the Sessions

Session A: Agriculture, Botany, Molecular Biology & Biotechnology

Session B: Biochemistry & Biophysics, Chemistry, Ecology, Environmental Science, Oceanography

Session C: Fisheries & Aquaculture, Medical & Health Sciences, Veterinary Science, Zoology

Session D: Computer Science & ICT, Engineering, Mathematics & Statistics, Nano Technology, Physics & Geophysical Science