

UNIVERSITY OF MAURITIUS
UoM Research Week 2017

Faculty of Engineering Research Day
Theme of Faculty: Sustainable and Innovative Technologies
Venue: LT2/G2, University of Mauritius

Tuesday 19 September 2017

TIME/VENUE	LT2	
09.00 - 09.10	Registration of Participants	
09.10 - 09.15	Welcome Address by Master of ceremony Mrs S Tribhon	
09.15 - 09.20	Address by Dean Associate Professor S Rosunee	
09.20 - 09.45	Keynote Address by Guest speaker Professor Wasim Saman <i>“The Role of Solar Thermal generation/storage in tomorrow’s energy mix”</i>	
09.45 - 10.00	TEA BREAK	
	LT2	G2
	<i>Session I</i> <i>Chair - Assoc Prof A. Kistamah</i>	<i>Session I</i> <i>Chair - Dr G. Somaroo</i>
10.00 - 10.15	Family Businesses Supporting Sustainability Initiatives: Case Study of Rivière des Anguilles S. Canakiah, S. Rosunee	Fouling and Scaling Mitigation in Desalination N. Dhunnoo and S. L. Summoogum Utchanah
10.15 - 10.30	Upcycling of Fishing Nets S.Canakiah, S. Rosunee	Kinetics of Biodiesel D. Bahadur and S. L. Summoogum Utchanah
10.30 - 10.45	Investigating the Prospect of Water Hyacinth Plant for Sustainable Product Design and Prototyping A. Vaidya Soocheta and J. Jadheea	A Study on the Potential Uses of Bottom and Fly Ash in Mauritius M. N. Emamdee and Sindra L. Summoogum-Utchanah

10.45 - 11.00	Processing and Transforming Kitchen Fibrous Wastes into Lifecycle Products S. Mootosamy and S. Rosunee	Kinetics of Organic matter removal in a full scale experimental constructed N. Nurmahomed and A. K. Ragen
11.00 - 11.15	Improving Sustainability and Adaptability of NHDC Houses T. Doondeea , R.Unmar	A comparative assessment of waste torrefaction and pyrolysis in Mauritius Y. P. Rago , D. Surroop and R. Mohee
11.15 - 11.30	Computer simulation of two-dimensional pore size distribution of 100% cotton plain woven fabrics J. Abel , R. Unmar and S. Rosunee	Assessing the potential of using HDPE as an aggregate in asphalt production I. Aubeeluck and G. Somaroo
11.30-11.45	Study of the geotechnical behaviour of tropical (residual and saprolitic) soil of Mauritius- On- going MPhil/ PhD R. Rughooputh , David Toll, Andre Chan Chin Yuk and Virendra Proag	Potential of soap making using Papain Enzyme P. S. Khedoo and G. Somaroo
11.45 - 12.00	Design considerations for the implementation of green roofs in Mauritius using in- situ measurements and numerical analysis R. Rughooputh , N. Boodia, M. Chooneea, M. Dauhoo, S. Facknath, M. Gooroochurn, A. Khoodaruth and H. Shamachurn	Process simulation and optimization of multiple effect evaporators in a cane industry in Mauritius T. N. Hoota and V. Dookhun
12.00 - 13.00	LUNCH	
	Session II Chair – Assoc Prof R. Ah King	Session II Chair – Assoc Prof S. Venkannah
13.00 - 13.15	Analysis and representation of Keystroke Dynamics features P. Baynath , S. Soyjaudah and M. Heenaye-Mamode Khan	An automatic fruit and vegetable peeler/cutter to promote healthy nutrition for the elderly T. S. M. Moutien , M. Gooroochurn
13.15 - 13.30	Design and Implementation of an autonomous solar powered wireless Monitoring system for live video broadcast. S. Caremben and A. P. Murdan	Design and Implementation of a Portable Power Unit with Solar Tracking Abilities N. Sowaruth , R. Ramful
13.30 - 13.45	Optimal location of DG units in unbalanced distribution systems P. Ramsami and Robert T. F. Ah King	Automated Outdoor Sweeping Machine D. Soopramanien , R. Ramful
13.45 - 14.00	Designing a secured fingerprint-based authentication for cloud computing M. Y. Khodabacchus , K. M. S Soyjaudah, G. Ramsawok	Determination of the U-value of local building fabric components: an important stepping stone towards achieving energy efficiency in our buildings C. Runnoo , M. Gooroochurn

14.00 - 14.15	Cryptanalysis using Metaheuristic Search Procedures S. Amic , K. M. S. Soyjaudah and G. Ramsawock	Mechanical characterization of <i>Pandanus utilis</i> fibre used to reinforce a polyester resin matrix for semi-structural applications. B. H. Rafidison , H. Ramasawmy, J. Chummun, F. B. V. Florens
14.15 - 14.30	TEA BREAK	
	Session III Chair – Dr (Miss) V. Bassoo	Session III Chair –Dr M. Gooroochurn
14.30 - 14.45	Optimisation of passive thermosiphon solar water heater for different regional climates in Mauritius A. Ramlall , M. Gooroochurn	Sustainable Energy Pole of Research Excellence (SEPRE) K. Elahee
14.45 - 15.00	Enhanced Error Control Coding Techniques for Digital Communication Systems Y. Beeharry , T. P. Fowdur and K. M. S. Soyjaudah	Sustainable Energy and Waste Engineering A. K. Ragen
15.00 - 15.15	Experimental evaluation of an evacuated tube solar-thermal collector model A. Soopee , A.A.H. Khoodaruth, V. Oree, and A. P. Murdan	Developing community-based projects via e-learning; and promoting the Ocean Economy, Science and Technology to improve the livelihoods of women in Mauritius and Rodrigues G. Somaroo , S. Rosunee, P. Jeetah, S. Ramsamy-Iranah, G. Bahadur, N. Nazurally
15.15 - 15.30	Investigation of Leakage and Energy Consumption in a Water Distribution System in the Laboratory L. Latchoomun , R. T. F. Ah King and K. Busawon	Simulations of air-water two-phase flow in an inclined pipe D. Juggurnath , M. Z. Dauhoo, M. K. Elahee, A. Khoodaruth, A. E. Osowade, O. T. Olakoyejo, S.O. Obayopo and A.O. Adelaja
15.30 - 15.45	Frequency and voltage control in power systems with integrated wind and solar energy sources. A. P. Murdan	Harnessing unsteady phase-change heat transfer during the condensation in high performance concentrated solar systems D. Juggurnath
15.45 - 16.00	An Adaptive Short-term Localised Weather Forecasting System for Mauritius T. P. Fowdur	

List of Posters

FACULTY OF ENGINEERING

Sn.	Title of Poster Presentation	Name(s) of Authors
1.	Investigation of the Mechanical Properties of Bamboo Exposed to Different Environmental Conditions	M. Gooriah and R. Ramful
2.	An Internet of Things based system for home automation using Web Services and Cloud Computing.	L. Gunness and A. P. Murdan
3.	A sustainable lightweight concrete paving block by partially replacement of the fine aggregate by glass and plastic wastes	A. Vaidya Soocheta and J. T. Blaise