



COLLEGE OF ENGINEERING, SCIENCE & TECHNOLOGY NEWS LETTER



Mr Alipate Kau from School of mechanical engineering has been working on a project to develop a process for liquefaction of Bio-gas using commercially available compressors. Mr Kau is a lecturer with the department of air-conditioning and refrigeration and has special research interests in developing new products in his field.

CONFERENCES

ARTICLE 1



Dr Rajeev Lal's paper "Using cosmogenic Be-10 to estimate soil production rates and soil residence time in northern territory" has been selected for presentation at the

14th International Conference on Accelerator Mass Spectrometry being held at University of Ottawa, Canada. Dr Rajeev Lal is a PhD from University of Sydney and is presently a lecturer with the department of physics. His research interests are : Environmental radioactivity, Geochronology and radiation detection and measurements.

ARTICLE 2



Mr Shiu Kumar's paper "An improved discriminative filter bank selection approach for motor imagery EE-6 signal classification using mutual information" has been selected for presentation at the 16th inter-

national Conference on Bioinformatics" scheduled to be held in September at Tsinghua university, China. Mr Shiu Kumar is a lecturer with the school of electrical and electronics engineering. He is currently pursuing his PhD from USP. His research interests are : Signal processing - wireless sensor networking related to BCI (Brain computer interface)

ARTICLE 3



Mr Ravikant's paper on "Effect of saturation on strength behaviour of soapstone" has been selected for presentation at the International Conference on Science Engineering and Environment,

scheduled to be held in USQ, Australia in Nov 2017. Mr Ravikant is a lecturer in the School of Building and Civil Engineering and his research interests are both, geotechnical and highway engineering.

Soapstone samples used by Mr Ravikant for his research work



ARTICLE 4



Mr Sandeep Amit Kumar's paper "A lagrangian UAV swarm formation suitable for monitoring exclusive economic zone and for search and rescue" was selected for presentation at the IEEE Conference on control technology

and applications (CCTA) held in Hawaii, USA in Aug 17. Mr Sandeep is a lecturer with School of Mathematics and Computing Sciences (SMCS). His research interests include stability of non-linear systems, planning algorithms and swarm intelligence.

PAPERS

ARTICLE 5



Dr Ramesh Subramani, published a paper titled "Plant-Derived Antimicrobials to Fight against Multi-Drug Resistant Pathogens" along with his co-authors "Feussner, K-D and Narayanasamy, M" in 3 BioTech journal published

by Springer publications doi:10.1007/s13205-017-0848-9. Dr Ramesh Subramani is presently the head of the department for Biology. His research interests include: Microbial Diversity and Biotechnology, Marine Microbial Bio-prospecting, Microbial Secondary Metabolites and Drug Discovery, Actinobacteria Diversity and Metabolism.

ARTICLE 6



Ms Ravita Prasad published a paper titled 'A review of Fiji's energy situation: Challenges and strategies as a small island developing state', published in the "Renewable and Sustainable Energy Reviews" journal Vol. 75, 2017, pp. 278-292 .

Ms Ravita Prasad is a lecturer in the department of physics and presently pursuing her PhD from USP. Her research interests include Renewable Energy (Biomass, Wind, Solar) and Energy Planning.

CONSULTANCIES

ARTICLE 7



"Professional Vehicle Inspection Course" for one week duration was conducted by the staff of the erstwhile School of Automotive Engineering. The course has the approval of LTA (Land transport authority) and will be held regularly in accordance with the schedule decided by LTA . Approval to conduct the said course is in recognition of the expertise held by the school in this area, besides it also generates revenue for the college.

ARTICLE 8



Mr Cyril Rachman from School of Building and Civil Engineering, along with his students carried out a flooding assessment project at the Nadawa flooding area. The report on the project was later submitted to the Nasinu town council. Mr Cyril Rachman is senior lecturer in

the school of building and civil engineering and his research interests include : coastal engineering, engineering hydrology and sediment transport.

COMPETITION

ARTICLE 9



Students from School of Mathematics and Computing Sciences (SMCS) participated in the “ANZ – Innovative Challenges” competition held in Suva. The team stood second against a tough competition from 6 teams from USP and 2 from University of Fiji. The solitary team from FNU developed an “App” (application) for e-ticketing which, besides helping in ticketing can track the location of buses through GPS and also provide delay notifications. The app is being proposed to be transferred to “Fleet” commercially.

ARTICLE 10



Dr Rajeev Bhat is an Associate Professor with the School of Applied Sciences. He is an accomplished researcher with a citation score of over four thousand on Google scholar. He has around 4 books, 25 book chapters around 150

research publications under his belt. A prolific writer, he writes articles in Fiji Times regularly. Given below is an image of his recently launched book on “Sustainability Challenges in Agrofood Sector”



ARTICLE 11



Professor Anad Tyagi, Professor Rajendra Prasad and Professor Rana participated in a Biological weapon convention workshop held both at national and regional level in Nadi in July 2017. Presentations made by FNU and subsequent participation in designing a national framework for mitigating biological threats were well appreciated by one and all.

ARTICLE 12

College Research Committee : CRC meeting was held on 31 July 2017. The meeting approved 3 new project proposals details of which, are listed below. In addition progress report for the past CRC projects were also presented. Researchers for all past projects were requested to submit their progress reports to AD(R) office in a timely fashion so that necessary steps required for their support and assistance can be planned accordingly.

NO	TITLE	PRINCIPAL INVESTIGATOR	ESTIMATED COST
(a)	Investigation of road crash data (project was approved with minor conditions)	Mr Maika PV Tuicakau	\$8000
(b)	Development of re-engineered rice harvester into multi-purpose light transport farm operations vehicle	Dr Raul B Alamban	\$8000
(c)	Effect of Nausori airport sewerage treatment plant on water quality of lower Rewa river	Ms Litiana Saraqia	\$7500



A team led by Mr Isireli Veitokiyaki and staff members from SEEE and SBCE namely, MR Sitiveni Daukamakama, Mr Saimoni Sovalawa, Mr Epi Wesesle, Mrs Vane Seruvakula and Mrs Sulueti Tuivonovono along with the students have been working on rebuilding houses and lives post TC Winston. The project started by the team has seen ten houses being rebuilt in Koro island till now. The project is still going strong despite being faced with gruelling challenges of shortages of funds, building materials, transport, time and labour. We appreciate this industrious team who are working tirelessly by sacrificing their personal lives to bring smile and assurance on the faces of cyclone affected people of Fiji. A big Vinaka Vakalevu to the team.

TITBITS

