School of Science & Technology Newsletter

Issue One / June 2014

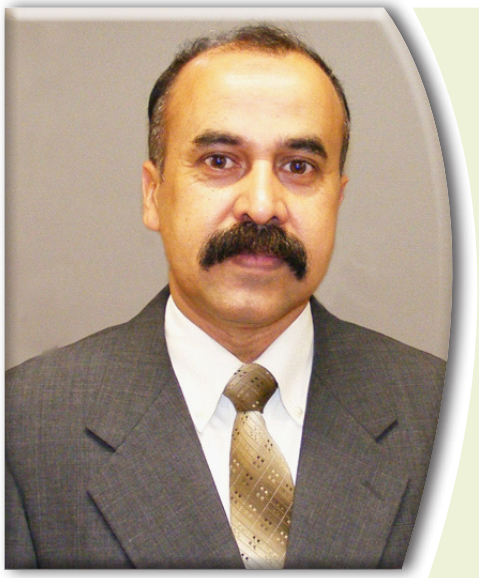


inside

Deans Message 2
New Staff Introduction 2
Department Events 5
Publications 15
Upcoming Events.....16

The University of Fiji

MESSAGE FROM THE DEAN



Professor ABM Shawkat Ali

Welcome to our first issue of School of Science and Technology (SoST) Newsletter. By visiting our newsletter, you are walking through our "Digital SoST" – and I'm glad you've joined us. Everyone involved within the school is united by a common desire to make our world a better place.

As of this year onwards, we have planned to summarize our achievements in this letter on a half yearly basis. Regardless of how you got access to a copy of our newsletter, be rest assured that our SoST has something to offer you. If you are a prospective student or researchers, consider joining an exceptional community of innovative academic leaders then our school is the right place for you.

NEW STAFF INTRODUCTION

PROFESSOR SHAWKAT ALI

Professor in CS/IT

Professor ABM Shawkat Ali joined CS/IT department as a Professor in January 2014. Before joining us, Professor Ali was working as a Senior Lecturer in Computer Science at the Central Queensland University. He has received his PhD in Information Technology from Clayton School of Information Technology, Monash University in 2005. His research interests include Computational Intelligence, Data Mining, Smart Grid, Cloud Computing and Biomedical Engineering.

Furthermore, Professor Ali has published more than 115 research papers in international journals and conferences, most of them are IEEE/ELSEVIER journals/conferences, such as:

- **IEEE Transactions on Intelligent Transportation Systems**
- **WSEAS Transactions on Information Science and Applications**
- **Journal of Medical Systems, Springer, Renewable Energy, ELSEVIER**

He has also published several book chapters and four books. In addition to publications, Professor Ali has chaired many conferences including DMAI, NSS, ICDKE and ISDA and has been a program committee member for about 50 international conferences such as IEEE TrustCom, IEEE ICCIT, IEEE/ACIS, IEEE ICARCV and IEEE AINA.

Currently Professor Ali is editor-in-chief for International Journal of Emerging Technologies in Sciences and Engineering (IJETSE), Canada. He is also an IEEE Senior Member. Professor Ali has received the following awards:

- **Post Graduation Publication Award, Monash University, 2004**
- **Excellence in Supervision Award, CQ University, 2007**
- **Top 10 Course Designers, CQ University, 2010**

Dr. Vishwa Nath Maurya is presently working as Associate Professor & Head of Department of Mathematics, School of Science & Technology at the University of Fiji. Prior to joining the University of Fiji, he has served as founding Director, Principal, Dean/Professor & Head at several leading Universities and Management and Engineering Institutions in India approved by national regulatory/statutory bodies- AICTE/UGC, Govt. of India, New Delhi and affiliated to U.P. Technical University, Lucknow and Rajasthan Technical University, Kota. Since 2004, he served in cadre of Professor/Head/Dean/Director at Singhania University, Rajasthan; Haryana College of Technology & Management; MITS Deemed University, Sikar (Rajasthan); United College of Engineering & Research, Allahabad; Institute of Engineering & Technology, Sitapur; Vision Institute of Technology, Aligarh; Shekhawati Engineering College,Rajasthan, and Sanghavi College of Engineering (University of Pune), Maharashtra. He is recipient of selected Professor from various premier technical institutions of India. Prof. V.N. Maurya is an Indian academician and leading expert in Applied Mathematics & Operations Research including Probability Theory and Statistics.

Prof. Maurya supervised as Head Examiner for Central Evaluation in G.B. Technical University, Lucknow (formerly UPTU) during 2005-06 and Chhatrapati Shahu Ji Maharaj University (formerly Kanpur University); State Universities of Govt. of U.P., for four terms during 2000-04. He earned his M.Sc.



Associate Professor

Mathematics

Dr. Vishwa Nath Maurya

and Ph.D. Degree in Mathematics & Statistics with specialization in Operations Research in First Division from Dr. Ram Manohar Lohia Avadh University, Faizabad; (State University established by Govt. of UP, India) in the year 1996 and 2000 respectively and thereafter he accomplished another 2 years Master's Management Degree-MBA with specialization in Computer Science in First Division (B+ Grade) from Newport University, California, USA in 2003. His Ph.D. Thesis entitled "A Study of Use of Stochastic Processes in Some Queueing Models" was supervised by Prof. (Dr.) S.N. Singh, PhD. (BHU), Professor & Head, Department of Mathematics & Statistics, Dr. RML Avadh University who has formerly served as Reader/Associate Professor at Department of Mathematics, Banaras Hindu University (BHU) Varanasi, India. He has always been a meritorious scholar in his student career. In the last 19 years of his academic career, Prof. Maurya has published over 90 scientific and academic research papers including his Doctor of Philosophy (PhD) and Doctor of Science (D.Sc.) Thesis in leading Indian and Foreign International Journals and authored 5 textbooks in his field of specialization which are published in Scholars Press Publishing Co., Germany, Lambert Academic Publishing, Germany and Scientific Research Publishing, USA, based on over 23 published research papers in international and foreign journals, his postdoctoral D.Sc. Thesis from the University of Fiji has been published in the form of book entitled "Performance Analysis and Inference of Mixed Poisson Queueing Models" with ISBN 978-3-639-70092-3 in the field of Reliability Engineering, Operations Research and Advanced Computing in Scholar's Press Publishing Co., Saarbrucken, Germany in 2013. Most of his published research papers in India, USA, UK, Germany, Nigeria, Algeria, Georgia and Austria are recognized as landmark contributions and these papers are indexed in leading databases of Indian Science Abstract, IEEE Xplore, British Library Direct and Statistical Theory and Method Abstracts-Zentralblatt, Google Scholar, Pak Directory of Open Access Journal (PDOAJ), Pakistan etc. An approved Supervisor from UGC recognized Indian and foreign Universities for Master's (M.Sc./M.Tech./M. Phil.) and Doctoral (PhD) research degree programs, and guided several Master's and PhD Research Scholars. Currently, Prof. Maurya has supervised as Principal Investigator and Co-Investigator of 2 research projects titled "Performance analysis and forecasting of Fiji Sugar Corporation, Lautoka using simulation and optimization techniques for cost reduction" and "Integrating solar photovoltaic power in the National Grid- A study about the possibility in context of Fiji" funded by Fiji Higher Education

Commission (FHEC), Govt. of Fiji Islands. Apart from teaching and academic administration, Prof. Maurya has worldwide recognition in research and innovations. He has been an active member of organizing committee of several International Conferences organized by the Institute of Researchers, Engineers and Doctors (IRED), USA and the World Academy of Science, Engineering and Technology (WASET), Italy held in Bangalore (India); London (UK); Osaka (Japan); Antalya, USA; Vienna (Austria); Dubai (UAE); Koula Lumpur (Malaysia) and other countries. On the basis of significant research work carried out by him, he has been selected in Asia's who is who in Men & Women achievement, New Delhi, January 2014, (Vol. III, Revised Edition) and also selected and worked for Editor-in-Chief, Honorary Advisory Editor, Lead/Chief Guest Editor and Reviewer of over 70 leading International Journals published from India, USA, UK, Italy, Germany, Hong Kong, Algeria, Nigeria, Georgia, Austria, Australia, New Zealand & other countries. Also on role of Fellow/Senior/Life Member of various National & International bodies. He has served as Editor-in-Chief of American Journal of Modeling and Optimization, Science and Education Publishing, USA and Editor of Open Journal of Optimization, Scientific Publishing, USA during 2012-13. Since last three years Prof. Maurya is on role of Editor-in-Chief of Journal of Mathematical Sciences and Applications, USA; American Journal of Computing Research Repository, USA; Applied Mathematics and Physics, USA; Statistics, Optimization and Information Computing, Hong Kong; National Research Journal of Pure & Applied Mathematics and its Applications, and National Research Journal of Information Technology & Information Science, New Delhi (India); IEC University Journal of Engineering, Management and Sciences, HP (India). Apart from this, he is also on active role of Fellow/Senior/Life Member of various reputed National and International professional bodies of India and abroad including Operations Research Society of India, Kolkata; Indian Society for Technical Education, New Delhi; Indian Association for Productivity, Quality & Reliability, Kolkata; Indian Society for Congress Association, Kolkata; International Indian Statistical Association, Kolkata; All India Management Association, New Delhi; Rajasthan Ganita Parishad, Ajmer and International Association of Computer Science & Information Technology, Singapore and many more.

Ms Sherlin Reddy : Tutor in CS/IT



Ms Sherlin Reddy Kumar from Vuda Point Lautoka joined UniFiji in January this year as a Tutor with the department of CS/IT. She obtained her Bachelor of Information Technology degree form UniFiji in 2012.

Prior to joining the UniFiji family, Ms Reddy had worked as an IT Tutor in a Computer Institute in Lautoka City for 6 months.

WORLD WATER DAY CELEBRATION : Water & Engery.

EVENTS ORGANISED BY THE DEPARTMENT OF SCIENCE

Water & Energy - 2014 International World Water Day was celebrated on Friday 21st March at UniFiji. 2014 is also dedicated as the International Year of Small Island Developing States which gives it more importance to this event.

This even was organized by Center for Climate Change Energy Environment and Sustainable Development [CCCEESD], with support of the Department of Science.

The two hour event had significant guests in attendance;

- Vice Chancellor , Prof. Richard Coll
- IWRM Project Manager, Mr. Vinesh Kumar
- The SSO Fiji Met, Mr. Ravin Prasad
- Actg Dean SOST, Prof. Shawkat Ali

Keynote speakers highlighted the importance of water and water resources with Water and Energy.

Energy generation and transmission especially for hydroelectric, nuclear, and thermal energy sources requires utilization of water resources.

Also discussed was the water-energy nexus, particularly addressing inequities, especially for those impoverished rural areas and people who survive without access to safe drinking water, adequate sanitation, sufficient food and energy services.

Particular attention was paid in identifying best practices that can make a water and energy-efficient 'Green Industry' a reality.

The celebration had some notable events such as Impromptu for students, Poster competition and Photo contest and audience quiz.

A vast number of schools participated in poster competition, bringing life to the days theme with its relevance and colour.

10 secondary schools participated in the Impromptu competition, giving a very lively and participative atmosphere to the celebration. Judges assessed the students performance and creativeness and declared winners on a set of criteria relevant to the theme. The winners were given prizes and all participants were given certificates.

Winners for the Competitions

Impromptu Competition

1st - Xavier College
(Nikhat N. Khan)

2nd - Kamil Muslim College
(Amirah Ali)

3rd - Tilak High School
(Zurena J. Kumar)

Poster Contest

1st - Sabeto College
(Sahil A. Kumar)

2nd - Kamil Muslim College
(Roneez I. and Shiveneel S.)

3rd - Natabua High School
(Anjani Nishika)

Photo Contest

1st - DAV College, Ba
(Shamal Prasad et al)

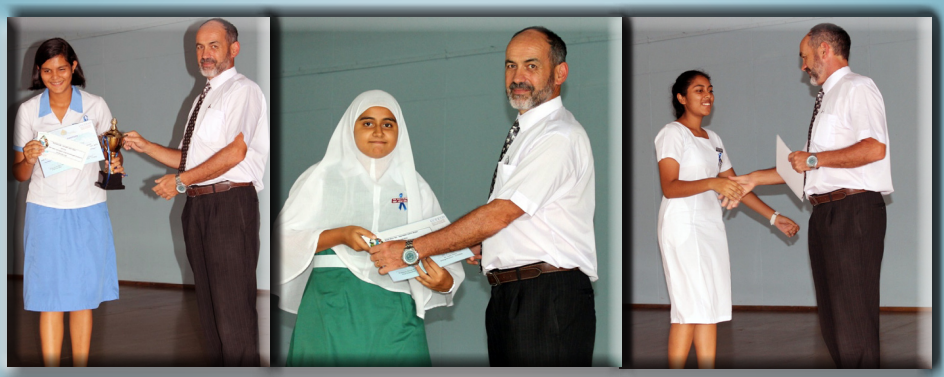
2nd - Ltk Andhra Sangam College
(Rachna Kumar)

Some Glimpses of the World Water Day Celebration





Function Venue, Lecture Hall (B200) full with enthusiastic UniFiji and various secondary school students and guests.



Vice Chancellor, Professor Richard Coll awarding Prizes for Impromptu to: (left-right) Nikhat N. Khan of Xavier College: Amirah Ali of Kamil Muslim College and Zurena J. Kumar of Tilak High School.



Judges In Action: Dr. Priit, Dr. Ghani, Ms. Dhrishna and Ms. Andreen



Professor Shawkat Ali (with Ms Geetika waiting on) awards Poster Contest Prizes to: (left-right) Roneez of Kamil Muslim College and Anjani Nishika of Natabua High School.



Impromptu Speakers: (left-right); Avneel Chand *of Nadi SSKM College, Assistant Lecturer Ramendra adjusts microphone for speaker from Natabua College, Filimaina Wati of Maharishi Sanatan College.*

International Day of Forests



Celebrate our Forests, Restore, Improve, Sustain and Enhance

International Day of Forests,officially proclaimed to be held on the 21st March annually from 2013 onwards, serves to raise awareness and importance of all types of trees and forests.

In collaboration with Department of Forestry, The Science Department of the University of Fiji celebrated International Day of Forests in Western Division by planting mangroves at Natabua Seaside,Lautoka with the theme, "Celebrate our Forests, Restore, Improve, Sustain and Enhance".

Mangrove forests are among the most important wet land communities in tropical areas and largely occupy coastal areas with saline or brackish water. They are extremely important breeding grounds for shrimp, crab and fish. Despite great economic value and their utility for protecting coastal areas, storms and tsunamis, mangroves have been severely degraded by over collecting of wood for fuel, construction poles and timber throughout the region. Over 35% of the worlds mangrove ecosystems have been destroyed, and more are being destroyed every year.

65 students enrolled in the science program at UniFiji, together with two academic staff, Ms Roselyn and Mr. Sanjay participated in this event which took place between 3:15 pm to 4:30 pm.

The Unifiji group was joined by four staff members from Fisheries and Forestry Western Division. An approximate number of 800 seedlings was planted.

Message: Forests and trees outside forests sustain life through the provision of food, shelter, clean air, water and employment." Help us sustain forest, plant a tree today, plant our future".



Students enrolled in Department of Science courses hard at work planting mangrove trees at Natabua Seaside, Lautoka.

Spain Visits for Project Renewable Energy in the Pacific (EPIC)

The University of Fiji in collaboration with University of Alicante, Spain, University of Papua New Guinea, PNG and European Commission (EC) undertook the Project ***RENEWABLE ENERGY IN THE PACIFIC: DEVELOPING SKILLS AND CAPACITY (EPIC).***

The objectives of the project:

- establish the Centre of Renewable Energy (CORE)
- develop Masters in Renewable Energy Management (REM)



April 2014 Spain Visit to EPIC seminar by Dr. Priit, Dr. Ghani, Ramendra and Roselyn.

The project duration is of 3 years and has a total budget of 469403.92 Euros, of which 398993.33 Euros is sponsored by European Commission (EC).

Starting of in October 2013, EPIVs Kick Off meeting at University of Alicante, Spain was made by Dr Syed Ghani and Mr. Ramendra Prasad in November 2013.

The following activities has to be carried out within project at the given time frame:

- Analytical assessment of the current situation & its overall Report - Nov 2013 to Feb 2014
- Study visit/knowledge transfer for course lectures and development of course materials.
- A total of Eight (08) course text books has to be developed - April 2014 to June 2014
- To organize a regional conference hosted by University of Fiji.



CCCEESD and Department of Science meeting held on 25th March 2014 at 9.30 am in room B 219 with the participants from University of Ryukus, Okinawa, Japan

Meeting Proceedings

Welcoming of the guests

The Guest from the University of Ryukus, Okinawa, Japan:

- Prof. Yoshinobu KAWAMITSU
- Prof. Masami UENO,
- Dr. Eizo TAIRA (Assistant Professor)
- Mr. Shunichiro KAWASAKI (Graduate Student)

On arrival at around 9.25am, were welcomed and escorted to the conference room where the meeting was called to order by Mrs. Priyatma Singh and commenced by Prof. Shawkat Ali after an official welcome.

Presentation By Dr. Syed Ghani, who first gave the guest an overview of the University, highlighting its structure, campuses, various schools and the number of students, moving on to the Department of Science, its Staff, their designation and subject area.

Presentation by Professors from University of Ryukus was on the use of bagass charcoal in the distillation process to help Marshall Islands obtain fresh water, followed by discussions on it and other topics:

- use of Bagaass in the carbonization process in order to generate burnable gases as a source of energy.
- presentation on the use of oil from Jatropha Tree seeds from Africa to produce biodiesel and its discussion.
- the use of mangroves as a source of biomass especially the Avicennia marina and Rhizopora stylosa spp which have the highest photosynthetic rates were discussed.
- Professor Ueno suggested that mangrove planting can be very successful in Fiji looking at the favourable weather conditions.

Discussion on the Exchange Program/Master Program Application outcomes:

- University of Ryukus is very much receptive to the idea of having a student exchange program between University of Fiji and University of Ryukus.
- training of two staff from Science Department on the Applications of Biomass energy at University of Ryukus would be required to enquire further with JICA.
- A new Masters/PHD program has been developed by University of Ryukus and the professor also suggested that international applicants can apply for it as well.



Professor Shawkat Ali with academic staff members of Science Department & guests from University of Ryukus, Okinawa, Japan.

International EARTH Day

Clean Up Campaign initiative was taken by the UniFiji Science Department in collaboration with Centre for Climate Change, Energy, Environment and Sustainable Development (CC-CEESD) to mark the International Earth Day on 22nd of April. The Clean-up campaign was also supported by the Earth Day Network and our initiative was mentioned on their website:

- http://www.earthday.org/greencities/events/#oceania
- http://www.earthday.org/blog/2014/04/22/its-earth-day

The aim of this Clean-up campaign was to create awareness on the importance of cleaner and greener environment by reducing pollution and increasing longevity of our natural resources.

Students and staff of UniFiji gathered at the University Hall Foyer, where hand gloves and garbage bags were distributed. The participants were then divided into smaller groups and led to various areas of the university campus by the science department staff with the mission to make UniFiji more beautiful. Special thanks was given to the Dean for SOST, Professor Shawkat Ali, for participating and setting an example for others to follow.

The Clean-up was a success. Future events as such need to be organized to create awareness amongst our students in keeping our environment pollution free and taking responsibility in making a difference in our society.



Prof Shawkat Ali in discussion with Science Dept. Academics Ms. Priyatama & Mr. Sanjay.



Ms. Geetika leading her students along with the campaign.



Students putting in their best effort to beautify UniFiji Saweni Campus even more and enjoying the along the way.



Fitting the Pieces Together WorkShop

The Climate Change: Fitting the Pieces Together Workshop was held at the University of Fiji on May 17th, 2014 at its Saweni campus in Lautoka, Fiji.

The workshop was hosted and organized jointly by the University of Fiji and Project Survival Pacific. The participants in this workshop included teachers, students and representatives from NGO's.

The objective of the workshop was to introduce youth, students and teachers to climate change science, its impacts and the role of young people in climate actions and sustainable development.

The world café method was used to draw out an action plan of activities that could be used by youths in the western division to facilitate their participation in climate change and sustainable development opportunities.

Areas explored included policy and youth ambassador training, Small Island developing states (SIDS), community outreach and engagement and youth training needs. Recommendations drawn out from the discussions are listed as follows:

- University of Fiji and Project Survival Pacific to look into further collaborative ways to action some of the discussed ideas.
- Project Survival Pacific and the University of Fiji to craft training modules based on the needs identified by the participants
- Need for more presence of NGO's in the western division to better facilitate the needs of the youths here and to ensure that their ideas reach relevant government ministries, UN agencies, youth-led organizations and non-government organization networks



Prof. Narendra Reddy, Prof. Shawkat Ali, all faculty of science department and participants at Fitting The Pieces Together Workshop

Participation in Workshop/seminar/Symposium by CCCEESD & Science Department staff

Dr. Syed Ghani & Ms Roselyn Naidu participated in a seminar on 'BIOGAS' in Lautoka organized by Sugar Research Institute of Fiji (SRFI) on 13th Feb. 2014.







Ms Dhrishna Charan attended the Climate Public Expenditure and Institutional Review (CPEIR) workshop in Suva from 24 – 25 February 2014.



Dr. Priit Kilgas presented on The effects of climate change on birds at the Climate change seminar, on 17th May 2014 at The University of Fiji, Saweni.

Dr. Syed Ghani participated in validation Workshop in Nadi on Pacific Centre for Renewable Energy and Energy Efficiency (PCREE) organized by SPC from 12-13 March 2014.

Ms Roselyn Naidu attended the Renewable Energy Readiness Assessment Workshop in Suva organized by Department of Energy on 13th March 2014.

UniFiji 2014 Graduation

The University of Fiji, 2014 graduation which took place on Saweni campus Lautoka on 11th of April in the presence of Chancellor, His Excellency, Ratu Epeli Nailatikau, saw 250 students graduating from various programmes.

Outstanding student awards were given to students holding the highest GDP for each school. The Vice Chancellor Award (VCA) is given to the student who is best overall had has the highest GDP in the graduating lot.

This year's VCA medal went to Muni Prashneel Goundar, who also won the outstanding students award graduation with a Bachelor of Information Technology Degree (BIT) degree from the Department of Computer Science and Information Technology.

Message from the Alumni (Muni Prashneel Gounder)

My Hobbies are travelling, socialising making new friends, surfing the Internet to get new insights into IT Field. My fascination with the use of computers in everyday life has led to my interest in this field. Along with this, computers play a pivotal part in this technological era that makes an Information Technology Professional's Job really demanding. I joined the University of Fiji in the year 2010 and completed a three year Bachelor of Information Technology program from the School of Science and Technology.

Unifiji has opened the door, a pathway to quality, affordable, futuristic flexible and innovative tertiary education right at my doorstep. Throughout my stay at the University of Fiji I have attained lots of knowledge and insights in the field of Information Technology under the guidance of my mentors (Lecturers). The lecturers at University are very approachable and always avail themselves for one on one discussion and queries in regards to lectures. I have undergone various training that has led to my professional development.

For instance, presentation in various courses has boosted my level of confidence and has inspired me further research rather than being confined to the lecture notes. My greatest accomplishment is being one of the outstanding students of my batch that has made me more marketable. The biggest challenge that any IT Professional would face in his/her career would be keeping in par with the rest of world in terms of information technology as new innovative ideas, technology and methods are introduced and incorporated on a daily basis.

However, my experience at Unifiji has helped me to overcome this obstacle whereby competition and motivation from fellow students has inspired me to keep striving. Besides, even after graduation I constantly keep in contact with my friends and share new ideas and knowledge as knowledge always broadens as a result of sharing.

Apart from providing tertiary education, Unifiji gives an opportunity to get involved in extracurricular activities. For example, the thrills and spills of Unifiji soccer league provided me, a means to refresh my mind. Other activities are available for students to take advantage of such as inter-tertiary games, creative circle group, Unifiji Social Nite to explore and showcase their talents.

Finally, with the newly introduced structure for Information technology discipline available at the University of Fiji providing two major mainstreams (Software Engineering and Multimedia and Games respectively), is one of the biggest contributing factor for selecting Unifiji for tertiary education. My advice to younger alumni or students who aspire to follow a similar career path is to prioritise education whilst at university that would enable them to secure highly paid jobs after graduation



Double Medal Holder Prashneel Gounder takes a snap with Vice Chancellor Prof. Richard Coll.

Center for Smart Technologies (CST)

Center for Smart Technologies (CST), a center of excellence in modern Information and Communication Technology (ICT) proposed by The Department of Computer Science and Information Technology will open its doors to start services from Semestr 2, 2014.

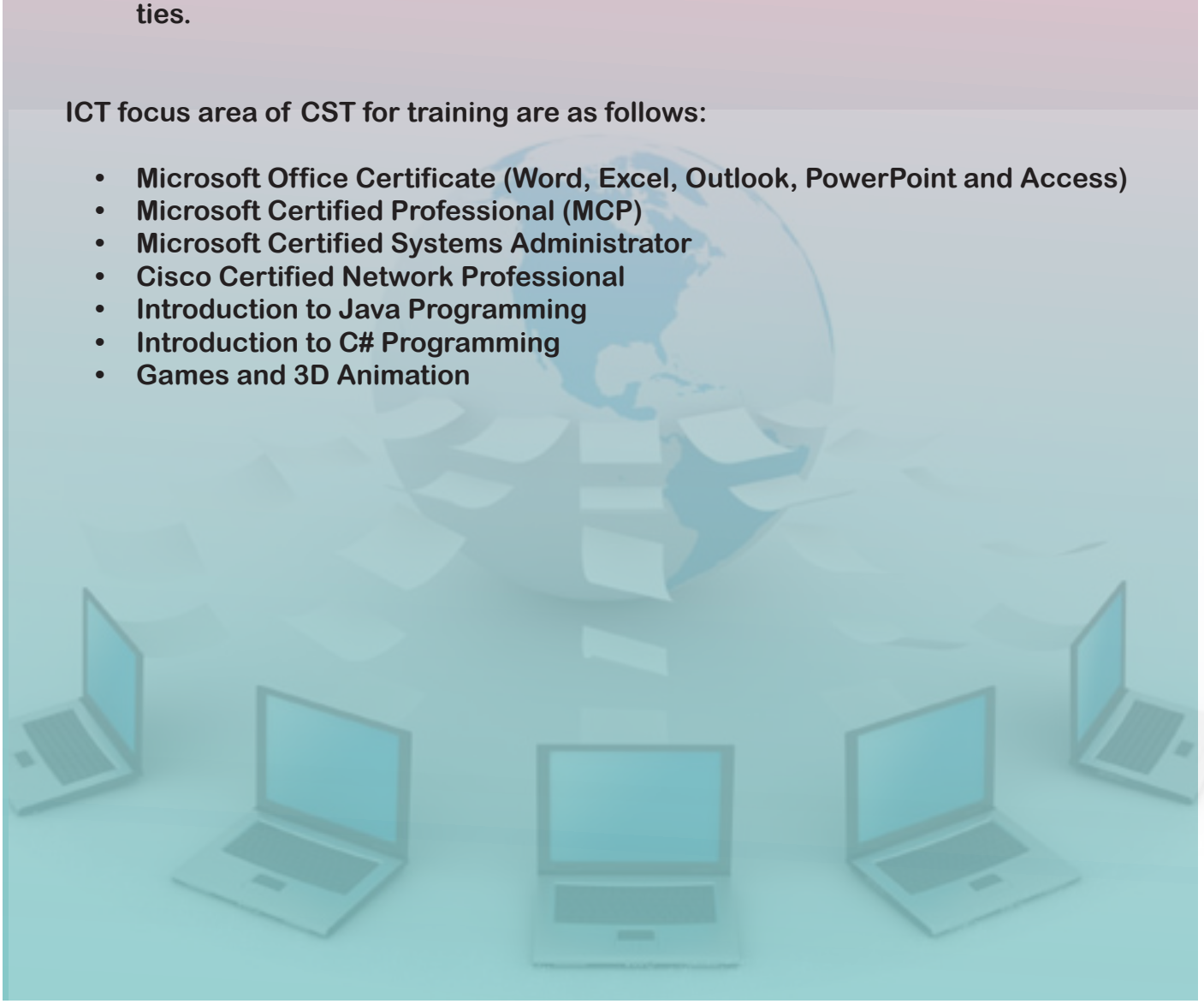
A major emphasis that will be placed by CST will be on using the considerable strength in basic ICT research at CST to develop a research culture at The University of Fiji and will be officially established next semester.

The goals of this center are:

- To develop a nationally and internationally recognized center of excellence in ICT;
- To provide an environment for the development and retention of productive faculty;
- To facilitate the training of students, graduate students, postdoctoral fellows, and community members; and
- To encourage the development of translational and applied research with funding from local industries, federal agencies and international communities.

ICT focus area of CST for training are as follows:

- Microsoft Office Certificate (Word, Excel, Outlook, PowerPoint and Access)
- Microsoft Certified Professional (MCP)
- Microsoft Certified Systems Administrator
- Cisco Certified Network Professional
- Introduction to Java Programming
- Introduction to C# Programming
- Games and 3D Animation



Presentations & Publications

Publications by: Dr. Vishwa Nath Maurya

Published/Accepted Research Papers in Internatinal Level.

1. **Maurya V.N.**, Mathematical modeling for performance analysis and inference of k-out of-n repairable system integrating human error and system failure constraints, ***American Journal of Modeling and Optimization*, *Science & Education Publishing*, *USA*,** Vol. 2, No. 1, pp. 16-24, 2014, ISSN (Print) 2333-1143, ISSN (Online) 2333-1267

2. Maurya V.N., Mathematical modeling and performance analysis of single server two-state batch arrivals and batch service Markovian queue with multiple vacations, American Journal of Modeling and Optimization, Science & Education Publishing, USA, Vol. 2 (2), 2014, pp. 39-46, ISSN (Print) 2333-1143, ISSN (Online) 2333-1267

3. Maurya V.N. and Maurya A.K., Application of Haar wavelets and method of moments for computing performance characteristics in electromagnetic materials, American Journal of Applied Mathematical and Statistics, Science & Education Publishing, USA, Vol. 2(3), 2014, pp.96-105, ISSN (Print) 2333-8784, ISSN (Online) 2333-8792

4. Maurya V.N., Mathematical modeling for performance analysis and inference of k-out of-n repairable system integrating human error and system failure constraints, American Journal of Modeling and Optimization, Science & Education Publishing, USA, Vol. 2(1), 2014, pp.16-24, 2014, ISSN (Print) 2333-1143, ISSN (Online) 2333-1267

5. Maurya V.N., Reddy Narendra, Maurya Avadhesh Kumar, Datt Nikleshwar, Progressive review and analytical approach for optimal solution of stochastic transportation problems (STP) involving multi choice cost, American Journal of Modeling and Optimization, Science & Education Publishing, USA, Vol. 2 (3), , 2014, ISSN (Print) 2333-1143, ISSN (Online) 2333-1267

6. Maurya A.K., Singh R.K., Maurya V.N. and Misra R.B., Analysis and simulation of harmonics current in power electronics equipment generated by nonlinear loads: hysteresis current control approach, American Journal of Engineering Technology, Academic and Scientific Publishing, USA, Vol. 2(5), 2014

7. Maurya V.N., Reddy Narendra, Maurya Avadhesh Kumar, Datt Nikleshwar, Optimization perspectives and effectiveness of gender in organizational leadership: Scenario of employees satisfaction and organizational goals, IEC University Journal of Engineering, Management and Sciences, India, Vol. 1 (1), 2014

8. Maurya V.N., Performance analysis of MX/(G1,G2)/1 queueing model with second phase optional service and Bernoulli vacation schedule, American Journal of Modeling and Optimization, Science and Education Publishing, New York, USA, Vol. 2 (1), 2014, pp. 01-07, ISSN (Print) 2333-1143, ISSN (Online) 2333-1267

9. Arneja C.S., Maurya V.N. & Kaur Gaganpreet, Entrepreneurship development of Punjab farmers based on statistical survey, Journal of Engineering and Technology Research, Scientia Research Library, Georgia, Vol. 2(1), 2014, pp. 1-9, ISSN: 2348-0424, USA CODEN JETRB4

10. Maurya V.N., Bathla Rajender Kumar, Maurya Avadhesh Kumar & Arora Diwinder Kaur, New fuzzy logic model for effort estimation in software module development, Journal of Engineering and Technology Research, Scientia Research Library, Georgia, Vol. 2(1), 2014, pp. 10-16, ISSN: 2348-0424, USA CODEN JETRB4

11. Maurya Avadhesh Kumar, Maurya Vishwa Nath, Singh R.K., A novel method for analysis of synchronization of GPS and geosynchronous satellite signals using solar braking and intrinsic velocity rectification, Journal of Engineering and Technology Research, Scientia Research Library, Georgia, Vol. 2(1), 2014, pp. 17-24, ISSN: 2348-0424, USA CODEN JETRB4

12. Maurya V.N., Maurya A.K., Arora D.K., Singh Dibyanshu, Priyadarshi Anurag, Anand Gaurav, and Ateeq Nida, Product quality improvement and project assessment using test maturity model integrated (TMMi), Time Journal of Engineering and Physical Sciences, Vol. 2(5), 2014, ISSN 2360-7335

13. Maurya V.N. & Maurya A.K., Polynomial simulation and refutation of complex formulas of resolution over linear equations in propositional proof system, American Journal of Modeling and Optimization, Science & Education Publishing, USA, Vol. 2(2), 2014, pp. 34-38, ISSN (Print) 2333-1143, ISSN (Online) 2333-1267

14. Maurya V.N., Maurya A.K., Singh Dibyanshu, Priyadarshi Anurag, Anand Gaurav, and Ateeq Nida, A short note on test maturity model integrated technique in project assessment, National Research Journal of Information Technology & Information Science, National Press Associates, New Delhi, India, Vol. 1(1), 2014.

15. Maurya V.N., Singh Bijay, Reddy N., Singh V.V., Maurya A.K., Arora D.K., Cost-effective perspective and scenario development on economic optimization for multiple-use dry-season water resource management, American Open Journal of Agricultural Research, Academic & Scientific Publishing, New York, USA, Vol. 2(5), 2014, ISSN (Online) 2333-2131

16. Maurya V.N., Reddy Narendra, Maurya Avadhesh Kumar, Arora D.K., Datt Nikleshwar, Empirical analysis of work life balance policies and its impact on employee's job satisfaction and performance: Descriptive statistical approach, American Journal of Theoretical and Applied Statistics, USA, 2014, (Accepted/In-press)

17. Maurya V.N., Estimation of the optimal parameters of adaptive control chart model for monitoring the mean of a process using Markov chains technique, American Journal of Theoretical and Applied Statistics, USA, 2014, (Accepted/In-press)

18. Maurya V.N., Misra R.B., and Maurya A.K., Differential equations technique for mathematical modeling and analytical study of memorization process, World Academy of Science, Engineering & Technology (WASET), Italy (Accepted)

Published/Accepted Books in International Publications

1. Maurya V.N., Performance Analysis and Inference of Mixed Poisson Queuing Models, Scholar's Press Publishing Co., Saarbrucken, Germany, ISBN 978-3-639-70092-3

2. Maurya V.N., Arora D.K. and Maurya A.K., Elements of Advanced Probability Theory and Statistical Techniques, Scholar's Press Publishing Co., Saarbrucken, Germany, ISBN 978-3-639-51849-8

3. Maurya V.N., Maurya A.K. and Arora D.K., Elements of Operations Research and Decision Theory, Scientific Publishing Co., California, USA

4. Maurya V.N. and Maurya A.K., Discrete Mathematical Structures and Graph Theory with Applications, Scientific Publishing Co., California, USA

5. Maurya V.N. and Maurya A.K., Elements of Stochastic Processes and Queuing Theory, Lambert Academic Publishing, Saarbrucken, Germany

Seminar/ Conference Presentations :

1. **Kilgas, P.**, ***The effects of climate change on birds***, Climate change seminar, on 17th May 2014 at The University of Fiji, Saweni.

2. **Naidu R.,** Pohler S., Erez J & Combes H.J ***Impact of Ocean Acidification on larger benthic foraminifer Marginopora vertebralis in coastal waters of Fiji***. Conference presentation ,Concepcion,Chile.

Upcoming Events

- **UniFiji Open Day 2014, Saweni Campus (Lautoka) from 1st to 3rd July.**
- **Official establishment of Center for Smart Technologies for Department of CS and IT.**
- **Change over in School of Science & Technology name with the possible introduction of Engineering courses in the Department of CS and IT.**
- **Presentations of by Masters and PG students of their work at various schools.**
- **The three departments under the SoST banner will make visits to some Schools.**
- **Eco Contest supported and sponsored by Mc Donalds, Fiji - July 25th 2014.**
- **Western Secondary Schools Quiz Competition - July to September, 2014.**

Newsletter Edited & Designed by: Ms. Shireen Nisha (AL, Dept. CS and IT)
Assisted by: Mrs. Madhu Prasad (AA, SOST)

© School of Science & Technology, The University of Fiji, 2014