

Vol. 1, No. 4 (Apr-June, 2011)

July 1, 2011

#### **Contents:**

- Convocation
- Publications
- Conferences
- Invited Talks
- Promotions
- PhDs Completed
- Activities @ JUIT
- Bits n Pieces
- Knowledge Bytes

# Convocation

JUIT hosted its 4th Convocation on 2<sup>nd</sup> May 2011. Many renowned guests graced the occasion and about 400 students participated in the event. The key dignitaries present in the function were Her Excellency Smt. Urmila Singh, The Governor, Himachal Pradesh; Prof. Prem Kumar Dhumal, The Chief Minister, Himachal Pradesh; Dr. Rajiv Bindal, The Health Minister, H.P., Shri Jaiprakash Gaur, The Founder Chancellor, JUIT; Shri Manoj Gaur, The Chancellor, JUIT and Dr. Yajulu Medury, COO, Jaypee Education System presided over the function. Prof. Ravi Prakash, The Vice Chancellor, JUIT, felicitated all the degree recipients. The chancellor's gold medal was awarded to Mr. Jayant Rajpurohit (ECE). The Convocation event was preceded by a cultural evening the previous night, when technocrats were kept spell bound by performance of the renowned singer Shaan and his team.

#### **Publications**

- Singh T.R., "Phylogenetic Networks: Concepts, Algorithms and Applications," Current Science, Vol. 100, 1570-71, 2011.
- Sandeep Vyas, Benu Manon, Tej Vir Singh, Pritam Dev Sharma, and Manu Sharma, "Potential O-acyl-substituted (-)-epicatechin gallate prodrugs as inhibitors of DMBA/TPA-induced squamous cell carcinoma of skin in Swiss Albino mice", Chemistry and Biodiversity, Vol 8, 599-613, 2011.
- Jitender Monga, Manu Sharma, Naveen Tailor and Narayan Ganesh, "Antimelanoma and radioprotective activity of alcoholic aqueous extract of different species of Ocimum in C57BL mice", Pharmaceutical Biology, Vol 49, 428–436 2011.
- Taru Prasad, Zain Taha, R.S. Chauhan and Hemant Sood, "Improvising procedures of micropropagation of Gerbera jamesonii for cost effectiveness and their commercial production", International Journal for Applied Engineering and Research, Vol 6, 1135-1140, 2011.
- A.K. Gupta and S.K. Jain (Subeditors), "Construction of Dams and Tunnels in Weak Rocks," Proc. Workshop 25-26 May 2011, JUIT, published by the Central Board of Irrigation and Power, New Delhi.
- Yashwant Singh, Dr. Manu Sood, Tarun Gupta and Atish Thakur,"Combining AOSD into MDA: A Perspective", International Journal of Computer Engineering and Computer Applications (IJCECA) Vol 5 (1), pp 38-46, March 2011, ISSN: 0974-4983.
- Shruti Jain, Sunil V. Bhooshan, Pradeep K. Naik, Mathematical modeling deciphering balance between cell survival and cell death using insulin, Network Biology, 1(1):46-58, 2011.(ISSN: 2220-8879).
- Shruti Jain, Pradeep K. Naik, Sunil V. Bhooshan, A Computational Model for cell survival/death using petrinets, International Journal of Applied Engineering Research, 6(5): 545-552, 2011 (ISSN: 0973-4562).

# **Editorial Board:**

- Tejinderbir Singh Lamba
- Chanderdeep Tandon
- Sunil Kumar Khah
- Subodh Kumar Jain
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- Shipra Sharma
- Amit Srivastava

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There were 11 Journal and 8 Conference Publications during the quarter.



5 Faculty members have been invited as a Resource Person at different places, both within and outside India.



- Vipin Balyan and Davinder S Saini, "Integrating new calls and performance improvement in OVSF based CDMA networks", International Journal of computers and communications, University Press, Vol. 5, No. 2, pp. 35-42, 2011. ISSN: 2074-1294.
- Viranjay M. Srivastava, K. S. Yadav, and G. Singh, "Analysis of Double Gate CMOS for DP4T RF Switch Design at 45-nm technology," Springer Journal of Computational Electronics, Vol. 10, No. 1-2, pp. 229-240, June 2011 (DOI: 10.1007/s10825-011-0359-6).
- Davinder S Saini, Reducing Wastage Capacity in OVSF Based CDMA Networks using Dynamic Rake Combiners, WSEAS Transactions on Communications, pp. 163-174, Issue 6, Volume 10, June 2011, ISSN: 1109-2742.

#### Conferences

- Taru Prasad, Zain Taha, R.S. Chauhan and Hemant Sood... "Improvising procedures of micropropagation of Gerbera jamesonii for cost effectiveness and their commercial production", National Conference on Converging Technologies beyond 2020, Kurukshetra University, April 6-7, 2011.
- S.K. Jain and Atul Nanda, "Finite Element Simulations of Self-boring Pressuremeter Tests in a Soft Marine Clay." Proc., 14th Asian Regional Conference, International Society of Soil Mechanics and Geotechnical Engineering, Hong Kong, May 23-27, 2011.
- Kapil Kumar, P. K. Gupta and Diwakar Upadhyay, "Change-Oriented Adaptive Software Engineering by Using Agile Methodology: CFDD", IEEE Xplore proceedings of International Conference on Network and Computer Science (ICNCS 2011), India, Apr-2011.
- Dr. Neelkanth presented a paper titled "Effect of Equivalent diameter of hard rolls on nip width in calendaring Machine at International Satellite Seminar on "Role of Mathematics in Science and Engineering" (ISSRMSE-11), May 13-14, 2011 organized by Graphic Era University, Dehradun.
- Bhasker Gupta and Davinder S. Saini, "BER Analysis of Space-Frequency Block Coded MIMO-OFDM Systems Using Different Equalizers in Quasi-Static Mobile Radio Channel" Proc. of International Conference on Communication Systems and Network Technologies (CSNT-11), pp. 520-524, 3-5 June 2011, SMVDU, Katra, India. DOI 10.1109/CSNT.2011.111.
- Vipin Balyan and Davinder S Saini, Flexible assignment of OVSF Codes for data calls in CDMA Wireless Networks, Proc. of International Conference on Communication Systems and Network Technologies (CSNT-11), pp. 5-9, 3-5 June 2011, SMVDU, Katra, India. DOI 10.1109/CSNT.2011.111, (Included in the IEEE Xplore).
- Viranjay M. Srivastava, K. S. Yadav, G. Singh, "Effect of Gate Finger on Double-gate MOSFET for RF Switch at 45-nm Technology," IEEE International Conference on Communication Systems and Network Technologies (CSNT-2011), June' 2 5, 2011, SMVDU, Jammu, India, pp. 464-468, (DOI: 10.1109/CSNT.2011.101).
- S.V.R.K .Rao and G.Singh, "An Algorithm for Channel Assignment in a Wireless Communication System", International Conference on Communication Systems and Network Technologies (CSNT-11), pp. 520-524, 3-5 June 2011, SMVDU, Katra, India. DOI 10.1109/CSNT.2011.111.

# **Invited Talks**

- Dr. Tiratha Raj Singh (BT & BI) was invited as a resource person in DBT sponsored National Training Course on Applications of Bioinformatics in Agriculture, organized by Bioinformatics Centre, Kerala Agricultural University (KAU), Thrissur, Kerala, May 3-7, 2011.
- Dr. A.K. Gupta (Civil) was invited as a resource person in National Workshop in Civil Engineering to deliver an expert lecture on Shear Strength of Geotechnical Materials at Himalayan Institute of Engineering and Technology, Kala Amb (H.P.) on 13<sup>th</sup> May 2011.
- Dr. Rajesh Goyal (Civil) was invited as a resource person in National Workshop in Civil Engineering to deliver an expert lecture on Elements of Structural Analysis at Himalayan Institute of Engineering and Technology, Kala Amb (H.P.) on 13<sup>th</sup> May 2011.
- Dr. Nitin Gupta (Maths) was invited as a resource person in the Science Camps under INSPIRE Internship programme funded by Department of Science and Technology (DST), Government of India, New Delhi, organized at Shoolini University during 29<sup>th</sup> June to 3<sup>rd</sup> July, 2011.
- Prof. Nirupama Prakash (HSS) was invited as a resource person at Padma Kanya College, Tribhuvan University, Kathmandu, Nepal to deliver an expert lecture on "Cross-cultural issues on Gender Studies", on June 27, 2011.

## **Promotions**

- Dr. Ashok K. Gupta (Civil) has been promoted to Professor.
- Dr. Sunil Kumar Khah (PHY) has been promoted to Professor.
- Dr. S.K. Jain (CE) has been promoted to Associate Professor.
- Dr. Rajesh Goyal (CE) has been promoted to Associate Professor.
- Dr. Nitin (CSE) has been promoted to Associate Professor.
- Dr. D.S. Saini (ECE) has been promoted to Associate Professor.
- Dr. Amit Srivastava (HSS) has been promoted to Assistant Professor.
- Dr. Vineet Sharma (PHY) has been promoted to Assistant Professor.

# PhDs Completed

- Mr. Amit Srivastava (HSS) completed his PhD on "Intra-Industry Trade of India with Special Reference to Few Selected Sectors" under the supervision of Dr. Y. Medury.
- Mr. Garlapati Vijay Kumar (BT & BI) has been awarded PhD degree in Microbial Biotechnology on "Modeling and optimization of lipase production, extraction and the application of immobilized lipase in ester synthesis", from IIT Kharagpur.

#### **Activities @ JUIT**

- The Department of Civil Engineering organized a highly successful workshop at JUIT in collaboration with the Central Board of Irrigation and Power and the International Society of Rock Mechanics during 25-26 May 2011. The workshop titled, "Construction of Dams and Tunnels in Weak Rocks," attracted over 100 participants from all over India and also from Bhutan. The workshop coordinators were Dr. A.K. Gupta and Dr. S.K. Jain.
- The Department of Civil Engineering organized a 1-day tour of 3<sup>rd</sup> year students for Jaypee Group's Cement plant at Arki, Solan, on 4th of April. The tour proved to be quite informative. The students were exposed not only to the cement manufacturing plant and processes but also to the associated difficulties and the achievement of constructing such an enormous structure at a remote and treacherous location. The event coordinator was Mr. Amit Goel.
- The summer school SSPDC-2011(Summer School on Parallel and Distributed Computing) was organized by CSE & IT department of JUIT, in collaboration with IUCEE during May 23-27, 2011. Prof. Yale Patt from University of Texas, USA, Prof. Sukumar Ghosh from University of Iowa, USA and Manish Gupta, Director of IBM Research India were the speakers in this workshop. Around 100 participants attended the workshop from various colleges and universities from around the country.
- CUDA lab has been established in Project Lab of CSE & IT department for high performance computer architecture and parallel programming. This has been done in collaboration with NVIDIA.
- UGC Centre for Women Studies has been established under the Department of Professional Development (now Humanities and Social Sciences). It was inaugurated by Dr. (Mrs.) H.K. Chauhan, Jt. Director, UGC, New Delhi in gracious presence of Dr. Y. Medury, COO, Jaypee Education System, on 21st May 2011.
- UGC Centre for Women studies, Department of Humanities and Social Sciences organized one day "Springboard Women Development Workshop" on 21<sup>st</sup> May, 2011. It is a series of four workshops and this was the first one. The workshop was conducted by Prof. Usha Pathania, Licensed Springboard Trainer.
- The Department of Physics has opened Materials Research Society of India Himachal Chapter (MRSI-HP) on 12<sup>th</sup> May 2011. Prof. Ravi Prakash, Vice Chancellor was elected as a President and Prof. P.B. Barman as General Secretary for the Chapter.
- The Department of Physics organized a five days IUCEE Workshop on Electronic and Opto-Electronic Materials from 30<sup>th</sup> May to 3<sup>rd</sup> June 2011. The Speaker for the Workshop was Prof. Guru Subramanyam, Department of Electrical and Computer Engineering, University of Dayton, USA.



During the quarter, 2 faculty members were promoted to Professor, 4 to Associate Professor and 2 were promoted to Assistant Professor.



Two PhDs have been completed during the quarter.





With more than 150,000 post offices, India has the largest postal network in the world. However, it is not unusual for a letter to take two weeks to travel just few kilometers.



"We owe a lot to the Indians, who taught us how to count, without which no worthwhile scientific discovery could have been made." — Albert Einstein

## Bits 'n' Pieces

- Prof. Harinder Singh (Maths) have been invited to be on the Editorial Board of "Research & Reviews: Journal of Statistics" published by Scientific Technical Medical (STM) Journals, Consortium eLearning Network Pvt. Ltd., A-105 IIIrd Floor, Sector-63, Noida 201 301 (U.P.), INDIA.
- Dr. Garlapati Vijay Kumar has been awarded "A4U Postdoctoral Fellowship" for conducting research on "Microbial electrolysis of cells" at Chemical engineering department, Universitat Autonoma de Barcelona (UAB), Barcelona, Spain.
- Dr. Kuldeep Singh joined IUPAC as an affiliate member for year 2011.
- The name of the "Department of Professional Development (PD)" has been changed to the "Department of Humanities and Social Sciences (HSS)".

# **Knowledge Bytes**

Here are the some interesting facts about India.

- The name 'India' is derived from the River Indus, the valleys around which were the home of the early settlers. The Aryan worshippers referred to the river Indus as the Sindhu. The Persian invaders converted it into Hindu. The name 'Hindustan' combines Sindhu and Hindu and thus refers to the land of the Hindus.
- Chess was invented in India.
- The game of Snakes & Ladders was created by the 13th century poet saint Gyandev. It was originally called 'Mokshapat'. The ladders in the game represented virtues and the snakes indicated vices. The game was played with cowrie shells and dices. In time, the game underwent several modifications, but its meaning remained the same, i.e. good deeds take people to heaven and evil to a cycle of re-births.
- The world's first university was established in Takshila in 700 BC. More than 10,500 students from all over the world studied more than 60 subjects. The University of Nalanda built in the 4th century was one of the greatest achievements of ancient India in the field of education.
- According to Indian Industrial Commission (1916-1918) Report "at a time when the west of Europe, the birthplace of the modern industrial system, was inhabited by uncivilised tribes, India was famous for the wealth of her rulers and for the high artistic skill of her craftsmen," and that "even at a much later period when traders from the West made their first appearance in India, the industrial development of this country was at any rate not inferior to that of the more advanced European nations".
- India had world's largest economy in the 1st to 11th century, with 32.9% share of world GDP in the 1st century and 28.9% in 1000 century. Now its share in World GDP is less than 2%.
- In 1700 when most of the India was ruled by Mughal Empire, it had 24.4% share of the world GDP, the largest at the time.
- Another estimate of India's pre-colonial economy puts the revenue of Akbar's Mughal Empire in 1600 at £17.5 million, in contrast to the entire treasury of Great Britain in 1800, which totaled at £16 million.
- The 'Place Value System' and the 'Decimal System' were developed in India in 100 B.C.
- Algebra, Trigonometry and Calculus also originated in India.Quadratic Equations were used by Sridharacharya in the 11th century. The largest numbers the Greeks and the Romans used were 106 whereas Hindus used numbers as big as 10\*53 (i.e. 10 to the power of 53) with specific names as early as 5000 B.C.during the Vedic period.Even today, the largest used number is Terra: 10\*12(10 to the power of 12).
- Bhaskaracharya rightly calculated the time taken by the earth to orbit the Sun hundreds of years before the astronomer Smart. According to his calculation, the time taken by the Earth to orbit the Sun was 365.258756484 days.
- The value of "pi" was first calculated by the Indian Mathematician Budhayana, and he explained the concept of what is known as the Pythagorean Theorem. He discovered this in the 6th century, long before the European mathematicians.
- Varanasi, also known as Benaras, was called "the Ancient City" when Lord Buddha visited it in 500 B.C., and is the oldest, continuously inhabited city in the world today.