

Develop EDUCATION
through SKILL
Develop SKILL
through EDUCATION



Shobhit University

EDUCATION EMPOWERS

CICON-2016-17

17th February, 2017

6th International Conference on Emerging Trends in Science, Engineering, Technology and Management: Research and Development

Theme: Doubling Farmers' Income by 2022 - SMART Farming & SMART Village

Organized by
Shobhit University, Meerut & Shobhit University, Gangoh

Supported by



Ministry of Electronics and Information Technology
Government of India



In collaboration with

Ministry of Agriculture and Farmers Welfare, Government of India
Ministry of Rural Development & Panchayat Raj, Government of India
Ministry of Communications, Government of India
Indian Meteorological Department (IMD), Ministry of Earth Sciences,
Government of India
National Bank for Agriculture and Rural Development (NABARD), Mumbai
African – Asian Rural Development Organization (AARDO), New Delhi
Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut
ICAR - Indian Institute of Farming Systems Research, Meerut
International Crops Research Institute for the Semi-Arid Tropics
(ICRISAT), Hyderabad
M/s Indian Council of Food and Agriculture (ICFA), New Delhi
M/s Skymet Weather Services Pvt. Ltd., Noida, Uttar Pradesh
M/s SREI Insurance Broking Private Ltd, New Delhi
M/s CSC Forum, New Delhi
M/s Harvesting Inc., California, USA -94087 (www.harvesting.co)
M/s IIC Academy, IIC Technologies Ltd., Hyderabad, Telangana
M/s Level A Commodity Services Pvt. Ltd., Gurugram, Haryana

M/s Dharamvir Exports Pvt. Ltd, A-112, Defence Colony, New Delhi
M/s Vindhyaachal Agrofarm Pvt. Ltd, Salt lake City, Kolkata
M/s Magnetic Technologies LLC, Chennai (Hqrs- Dubai, UAE)
M/s Micro Insurance Academy, Okhla Phase-3, Delhi
M/s IFFCO Kisan Sanchar Limited, IFFCO HOUSE, Nehru Place, Delhi
M/s Ayurvet Limited, KM Trade Tower, Kaushambi, Ghaziabad, UP
Indian Society of Agribusiness Professionals (ISAP), New Delhi
Telecom Sector Skill Development Council, Ministry of Skill and
Entrepreneurship Development, Government of India
Electronic Skill Development Council, Ministry of Skill & Entrepreneurship
Development, Government of India
Agricultural Skill Development Council (ASDC), Ministry of Skill and
Entrepreneurship Development, Government of India
Infrastructure, Industry and Logistics Federation of India (ILFI), New Delhi
Centre of Pavement Excellence Asia and Pacific (CPEAP),
RMIT University, Melbourne, Australia
M/s GreenTV Ltd, Delhi
M/s Cultivu (www.cultivu.com), Israel

Shobhit University

NH-58, Modipuram, Meerut-250 110

Phone : +91-121-2575091/ 92; Fax : +91-121-2575724

E-mail : suconference@shobhituniversity.ac.in; Website : www.shobhituniversity.ac.in

BACKGROUND

Scientific innovations happening in electronics globally, promotes research and development in higher-end computing technology and which, in turn, facilitates advancements in Information Technology. Internet of Things (IoT) is promising to be the most influential technological revolution, and with the advent of World Wide Web (WWW), is expected to result in more than 100 billion uniquely identifiable objects, being connected to Internet by 2020. This is a Research and Development value chain.

Advances in Sensor and Computer Technology are revolutionizing the way remotely sensed data is collected, managed and analyzed. Extracting information from remotely sensed data turns out to be a major computational challenge. Social Media Networks are making and breaking the Governments and is the order of the day. Data Analytics and Modelling – the growing recognition of the potential values of all data – compels the developers to build in analytics from the start, making it an inherent aspect of Information Technology delivery. Data Security issues force “security architecture” in place. Open Data and Open Gov using open standards make the Governments transparent to the public. While many challenges remain, Cloud Computing is changing the face of enterprise computing. Computing is increasingly mobile. Digital Storage is where the most valuable assets of most business live. Providing access to assets and providing assets, through Internet, are crucial to business survival. Net neutrality issues are confronting the common public.

The emergence of Mobility, Social media, Big data and Cloud is creating enormous challenges for Information Technology to reliably deliver application to end-user. Wireless Power, Wireless Internet, and Near Field Communication (NFC) are the future and will make chargers and cords irrelevant. Reduced barriers to entry, new opportunities for exploiting information, and unprecedented speed to market are driving

AIM

Hon'ble Prime Minister Shri Narendra Modi ji's desire to double the income of farmers by the Year 2022, while addressing a farmers' rally in Bareilly (Uttar Pradesh), on February 28, 2016, has evoked interest among the Academicians, Researchers, and Stakeholders of Farming sector, however there have been discussions in various forums, viewing this goal as impossible and unrealistic. Through CICON-2016-17 Conference, the University desires to bring in all the stakeholders associated with research, education, development, training and extension of the Farming Sector to deliberate on as to how use Technologies, especially Digital Technologies, for creating additional economic impact in the Farming sector which will facilitate more income to the Farming Community. It will provide a forum to exchange and share their experiences, technological advances, research results in the field and discuss the practical challenges encountered and the solutions adopted.

College faculty and students are sometimes disconnected from the research needs of industries, especially industries in different countries or regions of the world. In order to be successful, students and professionals must not only know the basics of technology, but also about how to apply their knowledge to solve real problems.

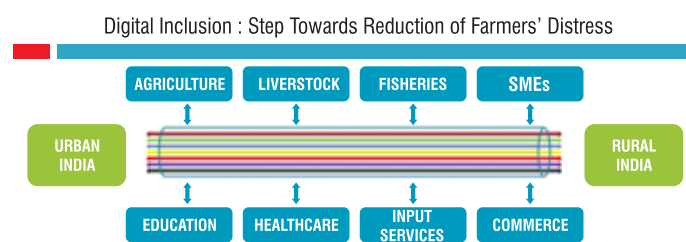
the digital industrial and revolution – “Entrepreneurial India” initiatives.

The Digital India Program 2014 of Narendra Modi Government aims at transforming India into “digitally empowered” society and “knowledge economy” and providing thrust to “Nine Pillars of Growth”, with the budget estimate of about Rs. 1,13,000 Crores, viz., Broadband Highways, Universal Access to Mobile Connectivity, Public Internet Access programme, e-Governance : Reforming Government through Technology, e-Kranti (empowerment) : Electronic Delivery of Services, Information for All, Electronic Manufacturing, Jobs in IT Sector, and Early Harvest programmes. The entrepreneurial India Programme is envisaged as a “Vehicle for Growth”.

India has about 4500 Engineering Colleges and about 18000 non-Engineering Colleges teaching various disciplines of Information and Communication Technologies (ICTs) – Computer Science, Computer Engineering, Computer Technology, Information Technology, Computer Application, Computer Management, Information Science and Management, Remote Sensing Technology, Spatial Informatics, Data Security etc., in the Graduate and Post-Graduate Courses.

Digital Industry Revolution requires human resources with ICT fundamentals with Geo-Informatics specialization. The gap in Human Resources development meeting the needs of Industry for their middle and higher levels categories is widening.

The All India Council for Technical Education (AICTE), Universities and the University Grants Commission (UGC) have not so far evolved any mechanism to tap the knowledge resources developed by the students or encouraged / facilitated such mechanism to promote so that an appropriate “Knowledge-Value-Chain” can be established for all-round development of the Society.



Rural Areas where more than 80 percent of the activities are related to agriculture sector.

There will be, therefore, focused discussions on the following “actionable points”:-

- Get new ideas for breakthrough technologies and innovation out in the open
- Encourage students to start thinking like an entrepreneur
- Make students aware about the industry relevant skills
- Sharing knowledge about current scenario of startup bubble in India
- Create the next generation of entrepreneurs.

The Conference envisages significant contributions from Students, Researchers, Faculties, Industries, Professionals, Governments and Institutions including NGOs to convert Academic institutions into “Innovative Ideas Powerhouse” and “achieving strategic and practical excellence.

TOPICS COVERED

Digital Technology <ul style="list-style-type: none"> ♦ Big Data Analytics and Cloud Computing ♦ Database Technology ♦ Mobile Computing ♦ Geospatial Technology ♦ Internet & Cyber Security ♦ Web Technology ♦ IOTs, WOTs & IOE ♦ Open Data & Open Gov ♦ e-learning & e-Portals ♦ Bio-Technology and Bio-Informatics ♦ Standards ♦ e-Governance 	Digital Farming <ul style="list-style-type: none"> ♦ SMART Climate Resilient Farming ♦ SMART Village ♦ Digital Agricultural Resources Information System (AgRIS) ♦ Digital Micro-level Planning & Schemes Implementation ♦ Digital Marketing and e-Entrepreneurship ♦ Digital Trade and Commerce ♦ Digital Warehousing, Logistics, Pledging, Clearing and Settlement ♦ Digital Marketing Information System - Prices Discovery and Realisation 	<ul style="list-style-type: none"> ♦ Digital Extension ♦ Digital Risk Management ♦ Digital Precision Farming ♦ Digital Farm Health Management ♦ Digital Integrated Nutrient Management ♦ Digital Fisheries Management ♦ Digital Dairy Management ♦ Digital Irrigation & Water Management ♦ Digital Agricultural Statistical System ♦ Digital Supply & Value Chain Analytics ♦ Digital Livestock Management 	<ul style="list-style-type: none"> ♦ e-Governance in Farming Sector ♦ Digital micro-financial inclusion and micro-Insurance Inclusion ♦ Informatics & e-Governance Research and Education ♦ Digital Forecasted Weather Information and Agromet Advisories ♦ Digital Agribusiness Management ♦ Digital Land & Water Management ♦ Digital Credit & Cooperation Network ♦ Digital Network for Farmers (DNF)
--	---	---	--

TENTATIVE PROGRAMME SCHEDULE

08.00 – 09.00 Hrs 09.00 – 10.00 Hrs 10.00 – 11.30 Hrs	Registration Plenary Session Technical Session-I Technical Session - II	15.30 - 17.00 Hrs 17.15 – 18.30 Hrs 18.30 – 1845 Hrs	Technical Session – V Technical Session - VI Valedictory Session High Tea / Coffee Conference Closes
11.30 – 11.45 Hrs 11.30 – 13.00 Hrs 13.00 – 14.00 Hrs 14.00 – 15.30 Hrs	Tea / Coffee Break Inaugural Session Lunch Break Technical Session – III Technical Session – IV	Poster Presentation (Students Entrepreneurship Projects Excellence Award) 10.00 – 11.45 Hrs 13.00 – 14.00 Hrs 14.00 – 16.45 Hrs.	Poster Session – I Lunch Break Poster Session – I

ABOUT THE UNIVERSITY

The journey to empower the nation through education, particularly rural India, has its origins from a remote village Gangoh followed by another village Dulhera in North India. It was in the year 1989, under the aegis of NICE Society, envisioned by Babu Vijendra Kumar Ji, an eminent agriculturist and social worker who had a dream to turn intellect into empowerment particularly for the downtrodden that the idea took shape. In the next few years his dream was nurtured by a team of eminent professionals, technocrats, educationists and social workers.

The University offers a wide range of programmes in Computer Engineering and IT, Electronics Engineering, Biotechnology, Biomedical Engineering, Bio-Informatics, and Agri-Informatics, Law, Library Science, Education etc. The University is complemented by a highly distinguished and eminent faculty and strong research facilities at its smart campus. Shobhit University offers graduate, postgraduate and professional programmes to the student community adopting best national and international practices.

Shobhit University retains its coveted position in the list of country's most emerging universities and ranked among top 50 universities by various survey agencies. Shobhit University, Meerut has been ranked amongst the best Universities in the Country and bagged twenty position in the multi-disciplinary Universities that include State, Central, Private and

Deemed Universities in North Zone. University of Delhi, Jawaharlal Nehru University (JNU) and Banaras Hindu University are at number one, two and three positions respectively. SU has a strong record of collaborative research with number of projects involving many reputed laboratories of national and international importance which enriches the university to bring laurels. The University campus is cosmopolitan having a diverse pool of students from all parts of the subcontinents and other countries.

Microsoft Innovation Center (MIC) at Shobhit University is Microsoft's only tie-up in the Northern region. The MIC operates as an innovation hub providing incubation and expert hands-on support on Microsoft technology innovation, research, and software solutions, aiming to create a pool of student technology experts in the state.

Shobhit University is a NAAC Accredited Research-intensive University that shares the values of high-quality teaching within an environment of internationally competitive research. The University is ISO 9001:2008 Certified and has received "Best Institution for Promoting Industry-Academia Interface Award 2016" (bestowed by ASSOCHAM), "An Emerging Leader in Higher Education" (CAREERS360 Magazine, March 2016), "National Education Excellence Award 2015" (bestowed by Federation of Industry, Trade and Service -FITS).

ABOUT THE FACULTY

Faculty of Computer Science and Information Technology was established with a view to meet the demands of technically qualified personnel for research & development, academia, regulatory affairs and administration in the field of electronics and communication engineering, computer engineering and information technology. The major objective of the faculty is to train the budding professionals in basic and applied aspects of electronics, communication, software development process, system programming and state of the art IT technologies and research. The Faculty has strong commitment by forming partnership with industries and other institutions of repute. The Faculty has well-furnished classrooms, well equipped laboratories and Wi-Fi network.

The Faculty has B.Tech. programmes in Electronics & Communication Engineering, Computer Engineering and Information Technology. Postgraduate programmes: M.Tech. in Computer Engineering, Communication Engineering, VLSI, Biotechnology, Biomedical Engineering, Bio-Informatics, Agriculture Informatics are offered. A number of Research Scholars are doing their Ph.D. in different Research and Industry oriented areas.

PATRONS

Dr. Shobhit Kumar, Hon'ble Chairman, Shobhit University
Kunwar Shekhar Vijendra, Hon'ble Chancellor, Shobhit University

CHAIRPERSON

Prof. D.V. Rai, Vice Chancellor, Shobhit University

CO-CHAIRPERSON

Prof. M. Moni, Professor Emeritus, Shobhit University & Former DG, NIC

TECHNICAL ADVISORY COMMITTEE

Prof. R. P. Agarwal, Shobhit University
Prof. A. K. Sharma, Dean, BSAITM, Faridabad
Prof. Ashok De, Director, NIT, Patna
Prof. Manoj Mishra, IIT, Roorkee
Prof. H.K.Mishra, IRMA, Anand
Shri Rajiv Aggarwal, CEO, CSC Forum

CONVENER

Prof. Jayanand, Associate Professor & Registrar, Shobhit University, Meerut

ORGANIZING SECRETARY

Dr. Mamta, Associate Professor, Shobhit University, Meerut

ORGANIZING JOINT SECRETARY

Ms. Jyoti Sharma, Assistant Professor, Shobhit University, Meerut

TECHNICAL ADVISORY COMMITTEE

Dr. Yogesh Awasthi, Associate Professor, Shobhit University, Meerut
Dr. Niraj Singhal, Associate Professor, Shobhit University, Meerut

FINANCE CHAIR

Mr. Deepak Goyal, Finance Officer, Shobhit University, Meerut
Ms. Shikha Choudhary, Asst. Professor, Shobhit University, Meerut

GENERAL CHAIR

Dr. Mahipal Singh, Dean, Shobhit University, Gangoh
Dr. R.G. Singhal, Associate Professor, Shobhit University, Meerut
Dr. Jyoti Sharma, Associate Professor, Shobhit University, Meerut
Dr. Vipin Tyagi, Associate Professor, Shobhit University, Meerut
Dr. M.D. Joshi, Associate Professor, Shobhit University, Meerut
Dr. Saubarh Sharma, Associate Professor, Shobhit University, Gangoh
Dr. Manoj Ghosh, Associate Professor, Shobhit University, Gangoh

Mr. Vijay Maheshwari, Associate Professor, Shobhit University, Meerut
Mr. Mridul Vaish, Assistant Professor, Shobhit University, Meerut
Mr. Varun Bansal, Assistant Professor, Shobhit University, Gangoh
Mr. Rajesh Pandey, Assistant Professor, Shobhit University, Meerut
Ms. Tripti Pandey, Assistant Professor, Shobhit University, Meerut
Dr. Sonali Gangwar, Assistant Professor, Shobhit University, Gangoh

REGISTRATION DETAILS

Delegates Rs. 2000/-

Students Rs. 1000/-

Late & Spot Registration Rs. 2500/-

Note: IEEE/CSI/ICEIT/ISTE members will be given 20% discount in registration fee.

DD should be drawn in favor of "Shobhit University" payable at Meerut.

IMPORTANT DATES

Submission of Full Paper : January 25th, 2017

Selection Intimation : February 5th, 2017

Last date for Registration : February 10th, 2017

Conference Date : February 17th, 2017

SPONSORSHIP

Sponsorship from Government, Industry, Public Sectors Undertaking, NGOs, NRIs, Industry and Management Associations etc., are welcome.

Bank Details:

Account No. - 2159009300001989

IFSC Code No. - PUNB0215900

Beneficiary Name - Shobhit University

Bank - Punjab National Bank, Sports Complex, Mohkampur Delhi Road, Meerut 250002

International SWIFT Code - PUNBINBBMSC

SUBMISSION OF FULL PAPER

After selection intimation, one copy of full paper in accordance with IEEE guidelines may please be sent by post and a soft copy through email at suconference@shobhituniversity.ac.in on or before 10th February, 2016.

PUBLICATION

Selected papers will be published in the "International Journal of Contemporary Research in Engineering and Technology" ISSN: 2250-0510 published by Shobhit University Meerut, provided at least one author of the paper registers.