# RESNOVAE

Issue - 7

January - April, 2017

http://www.chitkara.edu.in/rese-novae-newsletter/

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### **Editorial Team:**

- Dr. Sachin Ahuja
- Mr. Ravi Gupta
- Ms. Neha Tuli

### **CYBER THREAT INTELLIGENCE**

**Ms. Ekta Gandotra** Chitkara University, Punjab

A recent ransomware (WannaCry) attack reported on May 12, 2017 has been a worldwide dilemma. It had the potential to impact about 45,000 computers in 99 countries within few hours of the attack. India is the top 3rd country affected by Wannacry. In 2011, another cyber-attack had led Indira Gandhi International Airport shut down and it took around 12 hours of security experts to restore the systems back. Another such attack was launched using a worm (Stuxnet) in the year 2010 that targeted Iran's nuclear program. Such type of cyber-attacks are becoming common these days and intend to emerge cyber warfare among different countries on various levels. These attacks have the potential to crash security & economy of a nation along with the critical information infrastructure on which it relies. The evolution of new techniques like IoT, cloud computing, social networking and proliferation of mobile devices have given opportunities to attackers for finding and exploiting existing vulnerabilities for creating sophisticated attacks. Moreover, with the increase in readily available and sophisticated tools, the new generation cyber threats/attacks are becoming more targeted, persistent and unknown. Most of the attacks are detected when the damage has already been done and it gets too late for security experts to protect their systems.

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Due to this changing threat landscape, it has become imperative to shift from the reactive approach to proactive approach i.e. from traditional cyber security to Cyber Threat Intelligence (CTI). According to Gartner "Threat intelligence is evidencebased knowledge, including context, mechanisms, indicators, implications and actionable advice about an existing or emerging threats to assets that can be used to take decisions." It answers the questions such as (i) What methods are being used by attackers? (ii) What is their motive? (iii) What platform they are targeting at? and many more such queries. Cyber Threat Intelligence adds a value to the threat information by detecting, analyzing and defending against cyber threats which reduces uncertainty for the consumer, while aiding in identification of threats. Generating threat intelligence is not feasible without employment of big data and machine learning techniques. For instance, after collecting a significant amount of data from diverse security monitoring solutions, it is necessary to use big data technology and machine learning techniques to mine and interpret the insights to perceive, reason, learn and act against cyber adversary tactics, techniques and procedures. Thus, Cyber Threat Intelligence is among one of the fastest growing interdisciplinary fields of research which brings together researchers from digital forensics, cyber security, criminology, big data analytics and machine learning etc. to detect, contain and mitigate advanced persistent threats.

The Cyber Threat Intelligence can be shared with security experts, Computer Emergency Response Teams, security agencies like National Technical Research Organization, Research & Analysis Wing, Intelligence Bureau and other stakeholders. They in turn can issue preventive measures and advisories which can help the public and private organizations to deal with future threats and to minimize the risks posed by them.

Though Cyber Threat Intelligence is becoming more ubiquitous, popular and useful, there are number of challenges that must be

overcome to realize its true value. Some of these are:

- Security sensors and systems must share threat intelligence near real time to match attack speeds.
- Standard formats need to be developed and adopted for sharing Cyber Threat Intelligence. The major challenges in sharing the information include its volume, validation and quality of the information generated.
- A huge amount of network data is streaming continuously and dynamically in cyber infrastructure which challenges machine learning modeling and requires new principles, methodologies and algorithms for transforming raw data into the useful information. Moreover, the techniques for big data analytics and automation need improvement.
- The area of integration of Cyber Threat Intelligence into other tools & technologies is still immature and needs the skilled and trained professionals.
- All the information obtained from Cyber Threat Intelligence is considered to be at high priority. Methods need to be developed to identify the threats which should be given topmost priority.
- The failure to identify relevant patterns in threat data makes it impossible to turn data into intelligence and thus require collecting and correlating data from diverse sources.

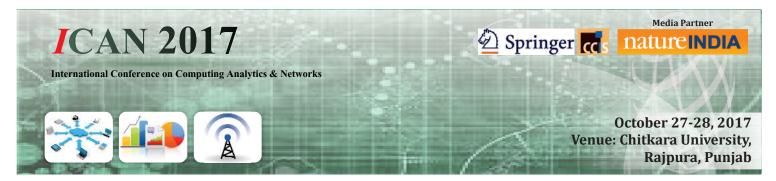
Ms. Ekta Gandotra has completed her Ph.D. in Computer Science & Engineering from PEC University of Technology, Chandigarh. She is currently working as Assistant Professor (Research) in CURIN. Her research interests include network and cyber security, cyber threat intelligence, machine learning and big data analytics.



### **UPCOMING EVENTS**

Create experience that leave you in awe, for these will be the highlights of your life.

Ryan Blair





### PROVISIONAL PATENTS FILED

Ideas have a short shelf life; you must act on them before expiration date.

John C. Maxwell

 Advanced Autonomous Wall Painting Machine for High Rise Buildings

Dt. 31/01/2017 No. 201711003597

Inventors: Dr. Ramkumar Ketti Ramachandran, Dr. Amandeep Sing Oberoi, Dr. Harsh Sohal,

Dr. Sachin Ahuja

 Novel Dehydrated Fat Free Marinade for Meats and Veg and Method Thereof

Dt. 28/02/2017 No. 201711007084

Inventors: Dr. Mansi chitkara, Ms. Rajnit Kohli, Dr Inderjeet Singh Sandhu, Mr. Didar Singh, Dr. Rakesh Kumar Sindhu, Mr. Rohit Agnish Compact Nutrition and Energy Bar and Method Thereof Dt. 28/02/2017 No. 201711007090 Inventors: Dr. Mansi Chitkara, Ms. Rajnit Kohli,

Dr. Inderjeet Singh Sandhu, Mr. Didar Singh, Dr. Rakesh Kumar Sindhu, Mr. Rohit Agnish

Personal Safety Device

Dt. 02/03/2017 No. 201711007428

Inventors: Mr. Prateek Srivastava, Ms. Prema Mehtani,

Dr. Nitin Saluja
Mirror Frame

Dt. 10/03/2017 No. 291669

Inventors: Ms. Kashish Matheraja, Mr. Harvinder Singh,

Dr. Sachin Ahuja

### **CONSULTANCY PROJECTS**

 Prototyping of Mechanical Parts as per Sample Given Organisation: Excellion Pvt. Ltd.

Dt. 12-01-2017 to 12-02-2017 Investigator: Dr. Rupesh Gupta

Chitkara School of Mechanical Engineering

 2-dimensional CAD Drawings of Bone Plate Organisation: Ms. Kompal Bansal, Patent Attorney,

Corporate IP Consultants (CIPC) Dt. 16-02-2017 to 23-02-2017

**Investigator:** Dr. Amandeep Singh Oberoi Chitkara School of Mechanical Engineering

 Pharmacological Investigation of Curculigo Orchioides for Attenuation of Diabetes and Diabetic Complications in Laboratory Animals"

**Organisation:** Mr.Krishan Singla Dt. 01-04-2017 to 31-01-2018

Investigator: Dr. Thakur Gurjeet Singh

Chitkara College of Pharmacy

### **BOOK CHAPTER PUBLISHED**

Dr. Sachin Ahuja contributed chapter entitled "*Using the Flipped Classroom to Improve Knowledge Creation of Master's-Level Students in Engineering*" in Handbook of Research on Instructional Systems and Educational Technology, pp. 326-339, published by IGI Global, 2017.

### CONFERENCES/WORKSHOPS/SEMINARS/EXTENSION LECTURE

A leader is one who knows the way, goes the way, and shows the way.

John C. Maxwell

Workshop on

### **IUCEE - IIECP Precertification Workshop**

8 -10th March, 2017

Dr. Archana Mantri conducted 3 day IUCEE - IIECP precertification workshop for 35 engineering educators at a private university in Rajkot, Gujarat. The three day workshop covered range of topics from Learning Styles, Teaching Philosophy statement, Collaborate learning, Layout of an effective lecture, Classroom management techniques and assessment technologies. The pre-certification workshop is





designed to let the participants glance through to the fully blown six months duration certification program by IUCEE. Dr Mantri teaches the modules on "Elements of Course Design' and Collaborative Learning' in the certification program. This workshop was the fifth in the series. Earlier she has conducted similar ones at Hyderabad, Chandigarh, Patiala and Bangalore.

### Expert Session on

### Possible Roles in Drug Discovery

23rd March, 2017

Dr. Kamal Dullat, Alberta Pharmacist Asso and Dr. G Chaddha, Prof, Univ of New England conducts expert session on possible roles in Drug Discovery, Development, Quality Analytics, Technology, Industrial Processes, Scale up, Regulatory Documentation, Distribution, Logistics, Good Practices, Clinical Research and Community Pharmacy in Canada and USA. Students of B Pharm, M Pharm and Pharm D planning for oversees career got to know the process of professional recruitment.

### 5th Annual International Conference on

# **Bioinformatics and Proteomics Driven Biomarker Discovery-BPDBD-2017**

7-8 April, 2017

Chitkara College of Pharmacy, Chitkara University, Punjab conducted Indian Council of Medical Research (ICMR) and Department of Science and Technology (DST) Sponsored International Conference "Bioinformatics and Proteomics Driven Biomarker Discovery-BPDBD-2017" with the theme focusing on techniques of Bioinformatics and Proteomics for



discovering new clinical biomarkers for various diseases which may be useful for Drug molecule Discovery, targeted therapy, pharmacotherapeutic treatment, disease progress and prognosis monitoring. About 200 delegates from various regions across India took part in deliberations and sessions by international experts like Dr Richie Soong, Professor and Scientist, National University of Singapore, Dr Mausami

Bhardwaj, Sr Scientist, CSIR (Cancer Institute), New Delhi, Dr S Chinnababu, Surgeon (Oncology) and Director, Clinsync, Hyderabad, Sh S.V.K. Prasad, Exec Director, CITO Healthcare, Hyderabad, Dr Oliver Grundman, Prof University of Floida (joining by Webinar), Dr R.K. Goel, Prof, Punjabi Univ, Patiala, Dr Samrat, Sr Scientist, IISER, Mohali and Dr. Alka Sehgal, Sr Gynecology Surgeon, GMCH Chandigarh, Dr Arnab Pal, Asso Prof, PGIMER, Chandigarh. The sessions brought out various discussions on analytical techniques for biomarker discovery, proteomic profiling, bioinformatics etc for biomarker discovery. Initiated by Dr Sandeep Arora, Convener BPDBD, presided by Dr. Madhu Chtikara, Hon'ble Vice Chancellor, Chitkara University, Punjab, the conference winded with Poster and oral sessions and valedictory thanks by Dr Gurjeet Thakur, Secretary BPDBD.

### Annual Innovation Challenge

### NOVATE-2017

14th April, 2017

NOVATE is the annual innovation challenge of Chitkara University. Each year we bring problems, which affect our lives and of those around us. We call upon thinkers, innovators, makers and implementers to find innovative solutions to the problems, so that we can



make a small difference to somebody near us. This year we have identified the problems, which affect day-to-day environment of our University. We require students, staff and faculty of Chitkara University (Himachal Pradesh), Chitkara University (Punjab) and Chitkara International School (Chandigarh) to team up to find never before, efficient, implementable and scalable solutions to these problems. 52 Teams participated in the event and build solutions for the given problems. The challenge was judged by jury of international repute. The winning teams were awarded with prize money and all the proposed solutions are being actually implemented at the university.



### Workshop on

### "Pharmapreneur" on Recent Drug Approval Trends, Pharma Technology and Analytical Developments, IPR and Brand Positioning

21 April, 2017

Chitkara College of Pharmacy winded up the session with applied workshops and brainstorming on recent Drug approval trends, Pharma Technology and Analytical Developments, IPR, product management and Brand positioning. Students of B Pharm, Pharm D and M Pharm showcased case studies in the above areas followed with discussions. A workshop on IPR was also conducted with ideas invited on synthetic/semisynthetic drug discovery/derivatisation,



herbal, novel and non conventional dosage form development from undergraduate and postgraduate courses for possible patent and IPR generation as apart of IPR activity for Nodal IPR Centre for PSCST. The activities winded up with cultural presentations by students from different courses.

### Chitkara University Doctoral Consortium

### **CUDC-2017**

13 May, 2017

The rationale of CUDC-2017 was to provide a platform for Research Scholars in Management, Engineering, Pharmaceutical Sciences, Health Sciences and Applied Sciences to showcase their unique research ideas, real



research problems and stimulate discussions on various emerging issues. Taking in to consideration the UGC guidelines, CUDC 2017 provided an opportunity for the PhD scholars to present/publish their research work. CUDC-2017 also brought together the researchers interested in the investigation of real world challenges. The consortium provided PhD students with an opportunity to present their work to a group of mentors and peers from a diverse set of academic and industrial institutions, to receive feedback on their doctoral research plan and progress.

### WORKSHOPS/CONFERENCE/SEMINARS ATTENDED

### Management is about arranging and telling. Leadership is about nurturing and enhancing.

Tom Peters

### Workshop on

Innovative Research in pedagogy for Mini\_MOOCs blended with instruction strategies to enhance quality of Higher Education

3-4 March, 2017

Chitkara University is the proud consortium member of the Royal Academy of Engineering, UK funding, where Future



Learn, UK is also a partner. Dr. Archana Mantri and Ms. Shivani Sharma attended a two day workshop at Thapar University, Patiala. The title of the workshop was "Innovative Research in pedagogy for Mini\_MOOCs blended with instruction strategies to enhance quality of Higher Education".

### Workshop on

### **Case Writing**

17-19 March, 2017

Mr. Pawan Kumar Chand attended 03 days "Case Writing workshop: Development of Cases in Business Management Education" on case study from 17 mar 2017 to 19 mar 2017 organized by Department of Management & Humanities, National Institute of Technology, Hamirpur (H.P).



### LEADERSHIP EXCELLENCE AWARDS, CHITKARA UNIVERSITY

Chitkara University announced its first edition of Leadership Excellence Awards. These awards were based on perception survey and the objective was to acknowledge and appreciate those members of Chitkara Leadership team who are perceived to be excellent by their peer group members. The Leadership Excellence awards were presented by Hon'ble Chancellor, Dr Ashok K Chitkara and Hon'ble Vice Chancellor Dr. Madhu Chitkara on April 29th coinciding with "A Day with the Chancellor".



























### RESEARCH PROPOSALS SUBMITTED/SHORTLISTED/GRANTED/APPROVED

Changes call for innovation, and innovation leads to progress.

Li Keqiang

**1. Title of the Project:** Study on dye doped blue phase liquid crystal for display application

Submitted to: SYST-DST

Project Investigators: Dr. Pankaj Kumar, Ms. Chinky Jaggi

2. **Title of the Project**: Farmer Interactive Remotely Controlled Rice Crop Disease Detection System

Submitted to: Millenium Alliance

Project Investigators: Dr. Sheifali Gupta, Dr. Rupesh

Gupta, Mr. Satpal Singh, Ms. Gurleen Kaur

# MEETINGS UNDER SHARE (Showcase Harp Appreciate Research Exchange)

Don't wait for extraordinary opportunities. Seize common occasions and make them great.

Orison Swett Marden

### Expert Talk on

# Pedagogical Innovations in Engineering Education: Issues and Challenges in Deployment

11-12th January, 2017

Dr. Archana Mantri was invited to deliver an invited talk on "Pedagogical Innovations in Engineering Education: Issues and Challenges in deployment" at 4th International Conference on Transformation in Engineering Education (ICITEE-2017)



organized by IUCEE. The conference was organised at three different locations from Jan 5th to Jan 12th - at Hyderabad, Rajkot and at Jaipur. Several international experts and flew in from USA, Russia, Australia, Porto Rico and other countries. In all the three locations about 5000 delegates participated. Dr Mantri is IUCEE Expert advisory group members and delivers a module on collaborative learning in the international certification program for Engineering educators by IUCEE.

## Invited talk by

Mr. Abhay Vakil

15 February, 2017

Actor Mr. Abhay Vakil visited Chitkara University, Rajpura to Motivate & Inspire Students from Fine Arts & Mass Media. Mr. Abhay said "Patience, Perseverance, Performance - always remember these 3P's of success



while chasing your dreams. Don't let the roadblocks stop you & when you finally get your shot, give 100% of yourself and PERFORM," who travelled all the way from tinsel town for a Talk Show at Chitkara University earlier this morning. It was an awe-inspiring session where Mr Vakil shared with our students - his journey into Bollywood, the challenges he faced, his biggest achievements, the lessons he learnt and to top it all, his fitness secrets. Students gave a stupendous welcome to





Abhay by performing Bhangra upon his entrance, and Abhay also stepped in to match the beats of the students, which made the environment full of vigour & celebrations. Special guests at the talk show were: Dr. Madhu Chitkara, Hon'ble Vice Chancellor, Dr. Archana Mantri, Pro Vice Chancellor and Dr. Ashutosh Mishra, Mr. Chetan Sood, Mr. Sumeer Walia, Chitkara University, Punjab.

### Invited Talk by

### Dr. Pankaj Kumar

20-21st February, 2017

Dr. Pankaj Kumar delivered an invited lecture (IL) on "Application of nanoparticles for alignment control to augmented performance of liquid crystal displays" at National Symposium on Materials for Advanced Technologies, DIT University, Dehradun, Uttarakhand (India), Feb 20-21, 2017.

#### Session Chair

### Dr. Sheifali Gupta

1-3rd March, 2017

Dr. Sheifali Gupta, Invited as a Session Chair in IEEE conference INDIACom – 2017; International Conference on



Computing for Sustainable Global to be held during 01st – 03rd March, 2017.

### Visit of

### Mr. Richard Bank, Production Head, FutureLearn

3rd March, 2017

Mr. Richard Bank Head future learn visited Chitkara University Punjab on 3rd March, 2017.

Richard is Award-winning Digital Producer, Product/Project Manager and team leader with 13 years experience in digital media.

Currently working for FutureLearn, an innovative tech startup offering online courses with top ranking UK and international universities. Previously worked for Oxfam GB, a leading international NGO, and the BBC, the world's best known public service broadcaster.

Richard has an Extensive experience in the design and

production of digital media, especially e-learning, radio, music and live events. Richard was enlighten to meet the



students at Chitkara University and discussed about the future scope of the e-learning during a live interview at Radio Chitkara 107.8

### \* Expert Lecture on

Wide Area Surveillance for Automatic Situational Awareness and Security Automation by Advanced Image Analysis

3rd March, 2017

Expert Lecture on "Wide Area Surveillance for Automatic Situational Awareness and Security Automation by Advanced Image Analysis" by Dr. Vijayan K. Asari, Professor



in Electrical and Computer Engineering, Director, University of Dayton Vision Lab, University of Dayton, Dayton, USA, organized by Dr. Sheifali Gupta, Chitkara University Research and Innovation Network (CURIN).

### \* Expert Lecture on

### Internet of Things and Cloud Computing

15th March, 2017

Dr. S.N. Panda delivered expert lecture on "Internet of Things and Cloud Computing" in a workshop "Short Term Course on Cloud Computing and Internet of Things" organised by



### University Institute of Engineering and Technology,



Kurukshetra University, Kurukshetra on 15th March, 2017, which is sponsored by TEQIP II and World Bank.

### Invited Lecture on Innovative Language Training Practices: Integrating Culture and Technology

22-27 March, 2017

Prof. Sovia R.J. Singh, Dean Chitkara School of Languages was invited as a Plenary Speaker at the 22nd International Conference of Nepal English Language Teachers Association, NELTA, organized from 24th to 27th March 2017 in Kathmandu. The conference, which witnessed participation of more than 1500 researchers from 20 countries, was a discourse around the



larger theme 'Language, Culture and Technology: Exploring Novelty in ELT.' Prof. Sovia delivered a plenary on the "Innovative Language Training Practices: Integrating Culture and Technology". She reached out immensely well to the galaxy of intellectuals present there as she shared with them the novel methods of language skill development embraced at Chitkara University Punjab and Himachal Pradesh, annually for more than ten thousand students, who enrich their academic portfolio. She further highlighted that such innovative practices are not limited to The School of Languages at Chitkara but are extensively practiced in all the programmes offered here at various levels from Diploma, Under & Post-Graduate and Doctoral courses. Such is the ethos of academic delivery to achieve the aim of outcome based learning in order to produce not mere degree holders but talented professionals as global citizens for workplace readiness. She further explained that on completion of basic language courses, the learning curve of learners are challenged to embrace deep learning for which they are exposed to High Order Spoken Discourse and Critical Thinking by making them participate in various public speaking activities such as Open House Discussions, Talk Shows, Flip Debates, Model United Nations, Toastmasters International Communication Meetings etc. which are a mandate.

### Expert Lecture on Network at a Glance

25th March, 2017

Dr. S. N. Panda delivered an expert lecture on "Network at a Glance" at S.A. Jain PG College, Ambala City on 25th March 2017. Dr. Panda focused on Internet of Things,



Cloud Computing, and the working of Internet Protocol. Students from M.Sc (Computer Sc.), B.Sc (Computer Sc.), B.Com Computer Applications attended the lecture.

### ❖ Expert Talk on

Dimensions and levels of learning for assessing-with emphasis on Bloom's Taxonomy, Merging Blue print and Rubrics in Teaching

30th March, 2017

Dr. Archana Mantri was invited to deliver an Expert talk on "Dimensions and levels of learning for assessing-with emphasis on Bloom's Taxonomy, Merging Blue print and



Rubrics in Teaching" to Alpha Teacher, B.Ed. Students at Chitkara University, Punjab organized by College of Education for Women.



### Visit of

### Mr. Chandra Shekhar, COO, ACM India

1st April, 2017

ACM Student Chapter (Department of Computer Science and Engineering) has invited Mr. Chandra Shekhar, COO, ACM India, for a visit to Chitkara University Punjab on 1st April, 2017. During his visit, Mr. Shekhar alongwith Dr. Archana Mantri, Pro Vice Chancellor, Dr. Rajnish Sharma, Dean-Research, and Ms. Meenu Khurana discussed various ACM India events and also suggested few of them to be conducted by Chitkara University. CS-Pathshala, Summer School Workshop, ACM-W and ESP are the event that will be hosted by Chitkara University.



### **ACHIEVEMENTS**

### Creating is just connecting things.

Steve Jobs

- Dr Pankaj Kumar was awarded with Research Excellence Award for the years of 2015 and 2016 on "Faculty's Day with the Chancellor," Chitkara University, Punjab (India), April 29, 2017.
- Dr. Amandeep S. Oberoi was awarded with Research Excellence Award for the years of 2015 and 2016 on "Faculty's Day with the Chancellor," Chitkara University, Punjab (India), April 29, 2017.
- Dr. S.N.Panda received Appreciation Certificate from Dr. D.S. Chauhan, President, Association of Indian Universities in National Student's Research Convention at Annamalai University for his meritorious service and valuable contribution as Coordinator of North Zone AIU Student's Research
- Convention "Anveshan" jointly organised by AIU and Chitkara University, Punjab.
- Chitkara University won 1st position in Engineering Sector and 2nd Position in Basic Science Sector in National Student's Research Convention "ANVESHAN" at Annamalai University, Chidambaram, Tamil Nadu, 27-29 March, 2017 hold by the Association of Indian Universities, N.Delhi. All winners from North, South, West, East and Central AIU Zonal Student's Research Convention were participated in National Convention in five sectors Agriculture, Basic Science, Engineering, Health Science and Social Science.

### **PUBLICATIONS**

### Research is creating new knowledge.

Neil Armstrong

- Jhamb D., Mittal A., 'Exploring Materialism and Hedonism in Indian Women' presented in '7th IIMA Conference on Marketing in Emerging Economies. January 11-13, 2017.
- Rijal R., Jhamb D., 'The Power of Science and Management An Organizational Approach' presented in ICSSR sponsored National Seminar on "Global Issues in Management", Panjab University, Chandigarh, 28th March, 2017.
- Garg A., Jhamb D., 'An Exploratory study on CSR Best Practices followed by Multi-National Companies in India' presented in ICSSR sponsored National Seminar on "Global Issues in Management", Panjab University, Chandigarh, 28th March, 2017.
- D. Mitra, S. Mittal, A. Chand, P. K (2017) Determinants of Offshore Outsourcing Locations – A Comparison on Voice Based Jobs in India and Philippines, Journal of Technology Management for Growing Economies Vol. 8, No. 1 April 2017 pp. 41-65.

- Gupta S., Kumar R., "Factor confirmation and multi-criteria assessment method (AHP) of Reactions towards online advertisement of millennials in India" presented at 2017 Annual Conference of Emerging Markets Conference Board, IIM Lucknow, January 5-7, 2017.
- Gupta S., Kumar R., "Factor confirmation and multi-criteria assessment method (AHP) of Reactions towards online advertisement of millennials in India" presented at 12th SIMSR Global Marketing Conference at K.J Somaiya Institute of Management Studies and Research, Mumbai, 9th-10th Feb. 2017.
- Mitra, S., Mittal, A., Chand, P. K (2017), "Determinants of Offshore Outsourcing Locations – A Comparison on Voice Based Jobs in India and Philippines, Journal of Technology Management for Growing Economies Vol. 8, No. 1 April 2017 pp. 41-65.
- Vandna Sharma, Pankaj Kumar, Amit Sharma, Chinky and





- K. K. Raina, "Droplet configuration control with orange azo dichroic dye in polymer dispersed liquid crystal for advanced electro-optic characteristics" Journal of Molecular Liquids, 233, (2017), 122-130. (Impact Factor 2.74)
- Vandna Sharma, Chinky, Amit Sharma, K. K. Raina and Pankaj Kumar, "Measurement of anchoring energy and electro optic properties of liquid crystals doped with inorganic nanoparticles" National Symposium on Materials for Advanced Technologies, DIT University, Dehradun, Uttarakhand (India), Feb 20-21, 2017, PP-10.
- Sheifali Gupta, Prabhpreet Walia, Chaitanya Singla, Shivani Dhankar, Tanvi Mishra, Ayush Khandelwal and Mohit Bhardwaj, "Segmentation, Feature Extraction and Classification of Astrocytoma in MR Images", International Conference on Recent trends in Computer Science and Electronics, Malaysia, January 2017.
- Shiveta Bhat, Amanpreet Kaur, Sheifali Gupta, "Frequency Scaling Based Power Efficient Kannada Unicode Reader Design on 40nm and 28nm FPGA" 11th INDIACom and 4th IEEE conference - 2017.
- Satpal Singh, Sheifali Gupta, Deepika Koundal "Vehicular Adhoc Network Protocols and Future Applications" 11th

- INDIACom and 4th IEEE conference 2017.
- Preeti Sharma, Amanpreet Kaur, Sheifali Gupta, "Energy Efficient Meetei Mayek Unicode Reader Design" 11th INDIACom and 4th IEEE conference - 2017.
- Angra, S., Ahuja, S. (2017). Implementation of Data Mining Algorithms on Student's Data using Rapid Miner. In Big Data Analytics and Computational Intelligence(ICBDACI), International Conference on (pp. 167-170). IEEE
- Angra, S., Ahuja, S. (2017). Machine learning and its Applications: A Review. In Big Data Analytics and Computational Intelligence(ICBDACI), International Conference on (pp. 167-170). IEEE
- Marwaha, A., Ahuja, S. (2017). A review on identifying influencing factors and data mining techniques best suited for analyzing students' performance. In Big Data Analytics and Computational Intelligence(ICBDACI), International Conference on (pp. 288-293). IEEE
- Kaur, H., Ahuja, S. (2017). Time Series Analysis and Prediction of Electricity Consumption of Health Care Institution Using ARIMA Model. In Proceedings of Sixth International Conference on Soft Computing for Problem Solving (pp. 347-358). Springer, Singapore.



