ORGANIZING COMMITTEE

Chief Patron

- Prof. S.W.Akhtar, Hon'ble Chancellor, IU Lucknow Patrons
- Prof. Aqil Ahmad, VC(Acting), IU, Lucknow
- Prof. I.A.Khan, Registrar, IU, Lucknow
- Dr. S. N. Akhtar, DPR & Dean Engg., IU, Lucknow Co-Patrons
- Prof. S.A.Ahmad, Director HRDC, IU, Lucknow
- Prof. A.R.Khan, Dean Science, IU, Lucknow

Convener(s)

- Prof. S. Hasan Saeed, Deptt. of ECE, IU, Lucknow
- Dr. Monauwer Alam, Deptt. of EE, IU, Lucknow
- Dr. Seema Srivastava, Deptt. of Phy., IU, Lucknow Conference General Chair

• Prof. Syed Hasan Saeed, Deptt. of ECE, IU, Lucknow

- Conference Chair & Organizing Secretary
- Mr. Imran Ullah Khan, Deptt. of ECE, IU, Lucknow Technical Program Chair
- Dr. Shailendra Kumar, Deptt. of ECE, IU, Lucknow Technical Program Co-Chairs
- Prof. M.A.Mallick, Deptt. of EE, IU, Lucknow
- Dr. Asif Jamil Ansari, Deptt. of EE, IU, Lucknow
- Dr. Mohd. Faisal, Deptt. of CA, IU, Lucknow
- Dr.S.K.Nayak, Deptt. of CA, IU, Lucknow
- Mrs. Nupur Mittal, Deptt. of ECE, IU, Lucknow
- Mr. Piyush Charan, Deptt. of ECE, IU, Lucknow
- Mr. Zohaib H. Khan, Deptt. of ECE, IU, Lucknow
- Mr. Mohd. Amir Ansari, Deptt. of ECE, IU, Lucknow
- Mr. Mohd. Javed Khan, Deptt. of ECE, IU, Lucknow
- Dr. Ahmed Faiz Minai, Deptt. of EE, IU, Lucknow
- Dr. Mohd. Maroof Siddiqui, Deptt. of ECE, IU, Lucknow

ADVISORY COMMITTEE

- Prof. J. Ramkumar, IIT, Kanpur
- Prof. S.N.Singh, IIT, Kanpur
- Dr. Satish Kr. Singh, MNIT, Allahabad
- Prof. Dileep Kumar Sharma, GLA, Mathura
- Prof. Danila Parygin, Volgograd State Technical University, Russia.
- Dr. Ekram Khan, A.M.U., Aligarh
- Prof. V.S.Chandel, Deptt. of Physics, REC, A. Nagar

- Dr. Fakhrul Hazman Yusoff, Universiti Teknologi
 - Dr. Md. Faizan Farooqui, Deptt. of CA, IU, Lucknow
 - Dr. Aseem Chandel, REC, Mainpuri
 - Dr. Mohd. Rihan, A.M.U., Aligarh
 - Prof Prabhakar Tiwari, MMMUT, Gorakhpur
 - Dr.Mohd Mugeem, Deptt. of CA, IU, Lucknow
 - Dr. Sapuan Salit Universiti. Putra Malaysia
 - Dr. Zubair Khan Taibah University, Madina
 - Dr. Vinay Rishiwal, IIT, Kanpur
 - Prof. Yatindra Nath Singh, IIT, Kanpur
 - Dr. Jay Singh, GL Bajaj ITM Greater Noida
 - Prof. K.L. Yadav IIT Roorkee
 - Prof. R.K.Singh,BHU, Varanasi
 - Prof. M. A. Badar, Indiana State University, USA
 - Prof. Ahmad Harb, Jordan University, Jordan
 - Prof. Ashok Kumar, HBTI, Kanpur
 - Prof. Ameer Azam, ZHCET, AMU Aligarh
 - Prof. N. R. Kidwai, Dean (Engg.), JIT, Barabanki
 - Prof. Brajesh Varshney, Director, KIT, Kanpur

TECHNICAL PROGRAM COMMITTEE

- Prof. Abu Bakar Abdul Hamid, University Putra Malaysia, Malaysia
- Mr. Faizan Ullah Khan, IGCAR, Kalpakkam
- Prof. Usha Bajpai, Lucknow University
- Prof. T. Usmani, Deptt. of ECE, IU, Lucknow
- Prof. Suresh Bajpai, Lucknow University
- Dr. Harsh Vikram Singh, KNIT, Sultanpur
- Dr. Anurag K Srivastava, Washington State University, Pullman, Washington
- Prof. Elias Randjbaran Faculty of Engineering, University Putra Malaysia, Malaysia.
- Dr. M. Haris Siddiqui, IU, Lucknow
- Prof. P.K. Bharti, IU, Lucknow
- Ms. T.A.Chandel, IU, Lucknow
- Dr. Manoj Singh, University of Aveiro, Portugal
- Dr. Puneet Mishra, Lucknow University, Lucknow
- Dr. Abhishek Kumar Srivastava, HKUST, Hong Kong
- Dr. E. Altuntas, Gaziosmanpasa University, Tokat
- Dr. Shailendra Kumar, Republic of Korea
- Dr. Ganga Ram Mishra, ASET, Lucknow
- Dr. K.K.Singh, ASET, Lucknow
- Aarti Saxena, PSITCOE, Kanpur



IEEE International Conference

011

Computational and
Characterization Techniques in
Engineering & Sciences
(CCTES-18)
Date: September 14-15, 2018

Organized by

Departments of

Electronics & Communication Engineering,

Electrical Engineering & Physics

Integral University, Lucknow

TECHNICALLY CO-SPONSORED BY



(IEEE Conference #44023) http://cctes18.iul.ac.in/



INTEGRAL UNIVERSITY

Dasauli, Kursi Road Lucknow-226026 (U.P), India Website: www.iul.ac.in

ABOUT INTEGRAL UNIVERSITY

Integral University is a NAAC accredited state private university established in 2004 and approved by UGC under section 2(f) and 12(B) of UGC act 1956, MCI, PCI, BCI, INC, CoA, NCTE, UPSMF, IAP & DEB. Member of AIU. Courses Accredited by NBA. Recognized as a Scientific and Industrial Research Organization (SIRO) by the Department of Scientific and Industrial Research (DSIR), Ministry of Science & Technology. It has marvelous ambience and academically, lively and vibrant environment, highly conducive to higher and dedicated academic pursuits. It has lush green campus spread in 35 acres. The university is committed to generating, disseminating, and preserving knowledge. Our academic programs like engineering, medicine, science, arts, architecture and management equip students with the academic rigor and intellectual capacity to meet the corporate business challenges. University has its Medical, Integral Institute of Medical Sciences and Research with a 500 + bedded multispecialty hospital.

ABOUT LUCKNOW

Lucknow has been known as the city of Tehzeeb, Culture, Art, Literature and Cuisine. In past few decades, city is also being known as science and education hub. New architecture of Lucknow includes Ambedkar Park, Eco garden, Janeshwar Mishra Park, JPN International center, Newly established International Cricket stadium, Awadh Shilp Gram, Indira Gandhi Pratisthan, New building of High Court. Some of the major historical monuments of Lucknow include Bara Imambara, Residency, Chattar Manzil, Rumi Darwaza, Clock Tower, Moti Mahal, Hussainabad Imambara and many others. Lucknow is connected with major cities through flights, trains and buses.



PAPER SUBMISSION & SCOPE OF CONFERENCE

The aim of this Conference is to create an opportunity for participants to discuss the applications of Computational and Characterization Techniques in Engineering & Sciences. Original research contributions, technical papers and review papers on the following topics are invited for peer review and possible publications.

Articles should comprise of upto six (6) pages, and comply with the IEEE layout of the template provided. www.ieee.org/conferences events/conferences/publis hing/templates.html

CCTES2018 use Easychair Submission System for Submission and Review Process.

https://easychair.org/conferences/?conf=cctes18

MEDIA TYPE	ISBN
XPLORE COMPLIANT	978-1-5386-4254-2
DVD	978-1-5386-4252-8
PRINT	978-1-5386-4253-5

PAPER PUBLICATIONS

Accepted and Presented papers will be published in the proceedings and submitted to the IEEE Xplore Digital Library for possible publication. At least one author of each accepted paper is required to register and present their paper at the conference; otherwise paper will not be included in the proceedings. Best Paper Awards will be presented to high quality papers in each track.

CONFERENCE TRACKS

Track 1: Advanced Computing, Software Engineering & IOT

Track 2: Data Communication and Signal Processing

Track 3: Electronics and Communication

Track 4: Power Engineering, Digital Control System and Control System

Track 5: Renewable and Sustainable Energy

Track 6: Cybersecurity & IPR

Special Session

Track 7: Application of Power Electronics in Renewable Energy Systems

REGISTRATION DETAILS

Interested candidates should register either through online or offline mode. For online mode, registration

fee may be deposited through NEFT.

A/C Holder: IEEE Student Chapter IU Lucknow

Account No. 4786000100013095 **IFSC Code:** PUNB0478600

Punjab National Bank, IIT Dasauli, Lucknow

		Indian Authors	Foreign Authors
	Non-IEEE	6000	275 USD
Indian	Members	6500*	300USD*
Authors	IEEE Members	4500	225 USD
	TEEE Mellibers	5000*	250USD*
	Non-IEEE	4500	225 USD
Student	Members	5000*	250USD*
Authors	IEEE Members	3500	175 USD
	TEEL Members	4000*	200USD*
	Non-IEEE	9000	350 USD
Industry	Members	9500*	375USD*
delegates	IEEE Members	7000	300 USD
	TEEE Members	7500*	325USD*
Attending	Non-IEEE Members	1000	100 USD
Conference	IEEE Members	700	75 USD
	ot Registration / in Cash)	10% additionapplicable.	n charges are
Forly Dind De	oristrations Anon	ct 0E 2010	

Early Bird Registrations August 05, 2018
*Late Date of Registration August 25, 2018

Submission of Full Length Paper (EXTENDED & FINAL)	15-July-2018 (No Further Extension)
Paper Acceptance Notification (STARTS)	05-July-18
Last Date of Submission of Camera Ready Paper	30-July-18
Registration Deadline (EARLY BIRD)	05-August-18
Last Date of Registration	25-August-18

CONTACT DETAILS

Mr. Imran Ullah Khan

Mr. Md. Javed Khan +919918401217

\(\cdot +918127439699✓ iukhan@iul.ac.in

mjkhan@iul.ac.in

Conference Email: http://cctes18.iul.ac.in

			Plenary & Technical	Session-I	
	Venue		Central A	Auditorium	
			September 14, 2018 (Day-1)	
11:30	AM-12:15 PM		KEY-NOTE-1 (Dr. Ing	g Sian Lun Lau, Malaysia)	
12:	15 -01:00 PM	KI	EY-NOTE-2 (Dr. Khalid Khan, C	CEng. Lead Functional Architect,	UK)
01:	00 -01:30 PM		Address By H. I. Sidd	iqui, CEO, Typhoon HIL	
	Venue	Central Auditorium	IU Auditorium (HALL-1)	IU Auditorium (HALL-2)	Simulation Lab, Academic Block-II
		Advanced Computing, Software Engineering & IOT	Data Communication and Signal Processing	Electronics and Communication	SS Application of Power Electronics in Renewable Energy Systems
			01:30 -02:15 PM LUNCH	BREAK	
2:1	15-2:45 PM	Invited Talk-1	Invited Talk-2	Invited Talk-3	Invited Talk-4
	Paper IDs	CCTES-18	CCTES-18	CCTES-18	CCTES-18
-05::00 PM	Session Chair	Dr. Ing Sian Lun Lau, Malaysia	Dr. Dheerendra Pandey, BSBA University, Lucknow	Prof. Manish Gupta, COE, BBD University, Lucknow	DR. Farhad Ilahi Bakhsh, BGSB University Rajouri, J & K
02:45 -05::(Dr. K.K. Singh, Amity University, Lucknow	Dr. Alka BabaSaheb Bhimrao Ambedkar University, Lucknow	Mr. Asif Siddiqui, Manager, ISTRAC, ISRO, Govt. of India, Lucknow	Sachidananda Sahoo, ISTRAC, ISRO, Govt. of India, Lucknow
023	Rapporteur	Dr. Mohd. Haroon, Integral University, Lucknow	Dr. Shailendra Kumar, Integral University, Lucknow	Dr. Savita Maurya, Integral University, Lucknow	Dr. Mohammed Asim, Integral University, Lucknow
	Venue	IU Auditorium (HALL-3)	IU Auditorium (HALL-4)	Seminar Hall, Academic Block-II	
		Power Engineering, Digital Control System, Control System & Materials	Renewable and Sustainable Energy	Cybersecurity & IPR	
2:1	15-2:45 PM	Invited Talk-4	Invited Talk-5	Invited Talk-6	
M	Paper IDs	CCTES-18	CCTES-18	CCTES-18	
-05::00 PM	Session Chair	Prof. R. K. Srivastava, IIT, BHU, Varanasi	Er. V.B.Singh, Council member & Ex. Chairman Institute of	Sanjay Pal, Scientist 'G' & Director, DRDO, Govt. of India	
45 -05:		Shyam Krishna Pandey, Scientist in ISRO, Lucknow	Dr. D K Misra, ISTRAC, ISRO, Govt. of India, Lucknow	Dr. Deependra Pandey, Amity University, Lucknow	
02:45	Rapporteur	Dr. Asif Jamil Ansari, Integral University, Lucknow	Dr. Mirza Mohd. Shadab, Integral University, Lucknow	Dr. Mohd. Maroof Siddiqui, Integral University, Lucknow	

		Plenary & Te	chnical Session-II		
		September 1	15, 2018 (Day-2)		
	Venue	Central Auditorium	IU Auditorium (HALL-1)	IU Auditorium (HALL-2)	Simulation Lab, Academic Block-I
		Advanced Computing, Software Engineering & IOT	Data Communication and Signal Processing	Electronics and Communication	SS Application of Power Electronics in Renewable Energy Systems
09:15	- 09:45 AM	Invited Talk-7	Invited Talk-8	Invited Talk-9	Invited Talk-9
	Paper IDs	CCTES-18	CCTES-18	CCTES-18	CCTES-18
0 AM & 30 PM	Session Chair	Prof. Dilip Kumar Sharma, GLA, Mathura, Conver IEEE SIGHT, USA	Dr. Ram Chandra Singh Chauhan, IET, Lucknow	Dr. Harsh Vikram Singh, Electronics Eng. Dept., KNIT, Sultanpur	DR. Farhad Ilahi Bakhsh, BGSB University Rajouri, J & K
09:45 - 11:30 AM & 12:00 -01:30 PM	Session Co- Chair	Dr. Devesh Katiyar, Dr. Shakuntla Mishra Nation Reh. University, Lucknow	Dr. Puneet Mishra, Lucknow University, Lucknow	Dr. Arun Singh, Asso. Prof. REC Kannauj	Dr. Aslam Hussain, REC Ambedker Nagar
9:		Dr. Mohd. Shahid Siddiqui,	Dr. Shailendra Kumar, Integral	Dr. Savita Maurya, Integral	Dr. Mohammed Asim, Integral
•	Rapporteur	Integral University, Lucknow	University, Lucknow	University, Lucknow	University, Lucknow
		4 .	University, Lucknow	•	
		Integral University, Lucknow	University, Lucknow	•	University, Lucknow
	11:30 AM – 12:00	Integral University, Lucknow PM REFRESHMENT BREA	University, Lucknow K	01:30 -02:30 PM LUNCH Seminar Hall, Academic	University, Lucknow
1	11:30 AM – 12:00	Integral University, Lucknow PM REFRESHMENT BREAD IU Auditorium (HALL-3) Power Engineering, Digital Control System, Control	University, Lucknow K IU Auditorium (HALL-4) Renewable and Sustainable	01:30 -02:30 PM LUNCH Seminar Hall, Academic Block-II	University, Lucknow
09:15 A	11:30 AM – 12:00 Venue	Integral University, Lucknow PM REFRESHMENT BREAD IU Auditorium (HALL-3) Power Engineering, Digital Control System, Control System & Materials	University, Lucknow K IU Auditorium (HALL-4) Renewable and Sustainable Energy	01:30 -02:30 PM LUNCH Seminar Hall, Academic Block-II Cybersecurity & IPR	University, Lucknow
09:15 A	Venue M – 09:45 AM Paper IDs	Integral University, Lucknow PM REFRESHMENT BREAD IU Auditorium (HALL-3) Power Engineering, Digital Control System, Control System & Materials Invited Talk-10 CCTES-18	University, Lucknow K IU Auditorium (HALL-4) Renewable and Sustainable Energy Invited Talk-11	01:30 -02:30 PM LUNCH Seminar Hall, Academic Block-II Cybersecurity & IPR Invited Talk-12	University, Lucknow
09:15 A	Venue M – 09:45 AM Paper IDs	Integral University, Lucknow PM REFRESHMENT BREAD IU Auditorium (HALL-3) Power Engineering, Digital Control System, Control System & Materials Invited Talk-10 CCTES-18	University, Lucknow K IU Auditorium (HALL-4) Renewable and Sustainable Energy Invited Talk-11 CCTES-18 Prof. Usha Bajpai, Lucknow	01:30 -02:30 PM LUNCH Seminar Hall, Academic Block-II Cybersecurity & IPR Invited Talk-12 CCTES-18 Prof. K.S.Verma, Former Director KNIT Sultanpur & REC Ambbadkar Nagar	University, Lucknow
09:15 A	Venue M – 09:45 AM Paper IDs Session Chair Session Co- Chair	Integral University, Lucknow PM REFRESHMENT BREAD IU Auditorium (HALL-3) Power Engineering, Digital Control System, Control System & Materials Invited Talk-10 CCTES-18	University, Lucknow K IU Auditorium (HALL-4) Renewable and Sustainable Energy Invited Talk-11 CCTES-18 Prof. Usha Bajpai, Lucknow University, Lucknow Dr. Mahendra Agnihotri, Lucknow	O1:30 -02:30 PM LUNCH Seminar Hall, Academic Block-II Cybersecurity & IPR Invited Talk-12 CCTES-18 Prof. K.S.Verma, Former Director KNIT Sultanpur & REC Ambbadkar Nagar Prof. N.R.Kidwai, Dean JIT,	University, Lucknow

REPORT

IEEE International Conference

"Computational and Characterization Techniques in Engineering & Sciences"

CCTES-18

Organized on September 14-15, 2018 at Integral University, Lucknow

The latest iteration of the IEEE International Conference on COMPUTATIONAL AND CHARACTERISATION TECHNIQUES IN ENGINEERING & SCIENCES, (IEEE Conference Record number-44023) was organised by the department of Electronics and Communication, Physics and Electrical Engineering, on September 14th and 15th. The International conference was attended by eminent academicians, well versed faculty members, professionals, and students from various universities and representatives of government instituitions from all over the Indian subcontinent. The Conference was kick started into life by Prof. S.Hasan Saeed (Conference General Chair, Head Electronics Department), who addressed and welcomed the audience, wherein he briefed about the achievements of Integral University in the fields of research and technology. Further, Dr. Nadeem Akhtar(Dean, Engineering, Planning & Research) shared his views on how CCTES has been an important part of Integral University. Prof Aqil Ahmad (Vice-Chancellor), further added towards the influence of CCTES, and how it encourages the different flows of ideas. Our Honble' Chancellor Prof. S.W. Akhtar, described how Integral University has had been carrying out the legacy of hosting the

The Conference was then addressed by guest PROF. ING SIAN LUN LAU SIAN (Associate Dean, (Academics) Malaysia), and the GUEST OF HONOR, DR. KHALID KHAN, (CEng, Bombardier Transportation, Derby,UK.), who were extremely grateful to be a part of it, and then all gathered for the release of the CCTES 2018 SOUVENIR, and furthermore momentos were presented as a token of gratitude felt.

CCTES and its success.

Prof. Monauwer Alam (Convener, Head Electrical Department) shared the Vote of Thanks, and signaled the commencing of the conference.

The CCTES Conference was divided into 7 Major tracks, namely;

- •Advanced Computing, Software Engineering and IOT
- Data Communication and Signal Processing
- Electronics and Communication
- SS Application of Power Electronics in Renewable Energies
- Power Engineering, Digital Control System and Materials
- Renewable and Sustainable Energy
- Cybersecurity and IPR.

Various personnel and active research scholars, and authors from various parts of the city, and countries from all over presented their valuable work as an expedition towards the encouragement of attaining the knowledge of the emerging trends of electrical energy.

On 15th September, IEEE CCTES was kicked off with a keynote by Prof. Ekram Khan (AMU, Aligarh) describing the Advancements of Digital Signal Processing, alongwith the Scope of IOT in the field of Agriculture, Temperature Monitoring. Prof. Ekram Khan, further talked about the Image Processing Devices and the typical encoders used, however his sheer focus was on the emerging trends of the digital signal & image processing. Concluded his keynote, he asked a very subtle yet impactful question, quoted "Everybody has an smartphone today, but do you even know why do you have one?"

As the event proceeded, and things started to settle down, professionals and authors from all over the country had presented on topics that ranged from, Data Communications to Signal Processing, to Renewable Energy systems to Control Systems and IPRs. Every single paper presented here, had an edge over each other, as they all had described the emerging trends successfully, even explaining scenarios that have raised attention, as well as criticising the exisiting methods and how they can be evolved, furthermore detailed surveys had an expert side to itself, as they were rich in data that had already been analysed by the experts and were true to its form.

A Skype Presentation session was also held that focused on authors presenting the Recent Trends of either tracks, showcasing a few newer methods that improved application of subjects, and deep surfaced reviews.

Towards the conclusion of the event, a valedictory session was held that awarded momentos to the best papers from all the seven tracks of the conference.

Such an event has an impact on all inputs and a stride towards better outputs, progressing with the extreme sense of knowledge, and a fuel to advance with the trends around. It has been efficient to provide students to understand what is going on in the R&D departments of the world, as to why every simple thing in the universe has a strategy as well as complex structural planning at the very beginning. The conference came to a conclusion with the hope of bringing the best again next year, which would be emphasising on further trends and would be relatable to the past as well.













IEEE SIGHT

cal Interest Group on nanitarian Technology



IEEE INTERNATIONAL CONFERENCE

or

"Computational and Characterization Techniques in Engineering and Sciences"

CCTES-18

Certificate of Participation

This is to certify that Prof./Dr./Mr./Ms. Jahina Khatoon of

Physics, IU, Lucknow has participated in CCTES - 2018 organized by Departments of Electronics &

Communication Engineering, Electrical Engineering & Physics, Integral University, Lucknow, India on September

14-15, 2018.

Prof. S. H. Saeed (General Chair & Convener) I. U. Khan (Chair & Organizing Secretary) Dr. M. Alam (Convener) Dr. S. Srivastava
(Convener)