



**Sant Longowal Institute of Engineering and Technology**  
**Longowal-148106, Sangrur (Pb.) India**  
 (Deemed to be University, CFTI under MHRD, Govt. of India)

# SLIETCON-2019

(www.slietcon.org)

**A Multi-Track National Conference**  
 (March 1 - 2, 2019)

**Under TEQIP - III (Twinning Program)**

- **Track I: National conference on “New Horizons in Food Processing Technology and Nutrition” (NHFPTN-2019)**
- **Track II: National conference on “Research and Innovation in Chemical Engineering and Technology” (RICET-2019)**
- **Track III: National conference on “Recent Advances in Computing and Information Technology” (RACIT-2019)**
- **Track IV: National conference on “Computational Techniques in Renewable Energy Systems” (CTRES-2019)**
- **Track V: National conference on “Electronics, Communication and Networking Technologies” (ECNT-2019)**



**Venue**

**National Institute of Technical Teachers Training and Research (NITTTR)**  
 Sector 26, Chandigarh - 160019 India

## Venue

The Venue of the conference is National Institute of Technical Teachers Training and Research (NITTTR) Chandigarh, which is about 150 km from Sant Longowal Institute of Engineering and Technology, Longowal by road. Chandigarh “The City Beautiful” is well-linked to New Delhi and other major cities by road and rail. The National Highway 1 connects Chandigarh with Delhi. The Chandigarh railway station and airport are almost 6 km and 12 km, respectively from the NITTTR Chandigarh. Chandigarh was planned by the famous French architect Le Corbusier and picturesquely located at the foothills of Shivaliks. Chandigarh features beautiful lakes, well-maintained gardens and dense greenery. Some of the city’s main tourist attractions include Rock Garden, Sukhna Lake, Rose Garden, Garden of Fragrance, Butterfly Park and International Dolls Museum. Though the weather in Chandigarh normally remains pleasant in the month of March but warm clothes may be required.

## Registration and Full Length Paper Submission

Authors are invited to submit extended abstract (within 2 pages) and full length paper through EasyChair Conference Management System (<https://easychair.org/conferences/?conf=slietcon2019>). It is mandatory for one of the authors to register and present the paper for inclusion in the conference proceedings. The paper template for extended abstract and full length papers (within 6-8 pages) may be downloaded from SLIETCON website.

## Important Dates for Authors

**Last date for extended abstract submission** : December 31, 2018  
**Intimation of acceptance of extended abstract** : January 20, 2019  
**Last date for submission of full paper** : February 05, 2019  
**Registration** : February 05-20, 2019

## Accommodation

Limited accommodation is available at the venue. Accommodations will be made available in the nearby vicinity on payment basis. The details are available at conference website.

## REGISTRATION FEE

Category	Early bird by Feb. 20	After Feb. 20, 2019
Faculty Members / Scientists	Rs. 2000/-	Rs. 2500/-
Research Scholars / Students	Rs. 1000/-	Rs. 1500/-
Delegates from Industry	Rs. 2500/-	Rs. 3000/-

## Mode of Payment

Registration fee along with registration form is to be sent in the form of DD drawn in favour of ‘SLIETCON-2019’ payable at Longowal. The participants can also deposit registration fee by bank transfer and send the online transaction details to the organizers. The bank transfer details are as under:

Account Name : SLIETCON-2019  
 Account No. : 3716400347  
 Bank Name & Branch : Central Bank of India, SLIET, Longowal  
 IFSC Code : CBIN0283105

## FOR ANY QUERY, PLEASE CONTACT

Track	Contact Person	Email	Contact No.
NHFPTN-2019	Dr. Vikas Nanda	nhfptn@sliet.ac.in	+91 9815980054, 1672253254 (O)
RICET-2019	Mr. Gulshan Kumar Jawa	ricet@sliet.ac.in	+91 9463167202, 1672253322 (O)
RACIT-2019	Dr. Manoj Sachan	racit@sliet.ac.in	+91 7986446628, 1672253254 (O)
CTRES-2019	Dr. Manpreet Kaur	ctres@sliet.ac.in	+91 9463863036, 1672253342 (O)
ECNT-2019	Dr. Ajaypal Singh	ecnt@sliet.ac.in	+91 9417106644, 1672253329 (O)

## SPONSORSHIP AND EXHIBITION

Exhibition	Sponsorship
SLIETCON-2019 invites start-ups, industries and researchers to sponsor the event and showcase their latest industrial products in the relevant areas during the conference.	Platinum : Rs. 1,00,000 Gold : Rs. 50,000 Silver : Rs. 25,000



## SLIETCON-2019

SLIETCON-2019, A Multi-Track National Conference of Sant Longowal Institute of Engineering and Technology (SLIET), Longowal will be held during March 1-2, 2019 at National Institute of Technical Teachers Training and Research, Chandigarh. The technical extravaganza SLIET continues to encourage academic activities to help students as well as teachers to continuously develop their skills to meet the demands of the present society. SLIETCON-2019 brings together the Engineers, Technologists, Delegates from Industry, Researchers, Students and Scientists to discuss current trends and future developments in the field of Electronics and Communication Engineering, Food Engineering and Technology, Chemical Engineering, Computer Science and Engineering, and Electrical and Instrumentation Engineering.

### About SLIET

Sant Longowal Institute of Engineering and Technology (SLIET) is an autonomous body (Deemed-to-be- University) which has been set up by MHRD, Government of India, with an aim to achieve technological excellence through innovation. It caters to the technical manpower requirements at various levels by adopting a new concept of modular system in imparting technical education with emphasis on practical training in industry. It offers the Integrated Certificate Diploma (ICD), B.E., M.Tech., M.Sc., MBA and Ph.D. in various disciplines of Science, Management, Engineering and Technology. SLIET shall strive to act as an international podium for the development and transfer of technical competence in academics through formal and non formal education, entrepreneurship and research to meet the changing needs of society. The institute has a sprawling area of 447 acres of land. The campus of the institute extends a beautiful and well developed lush green area with many topographically featured picturesque landscapes, numerous buildings of various nature and stature and metal road network. The campus presents a spectacle of harmony and natural ecosystem. The institute is situated at the outskirts of Longowal and is around 8 km from Sangrur-Barnala Highway. The Institute is connected by road with Sangrur (18 km), Barnala (25 km), Patiala (75 km), Ludhiana (100 km), Chandigarh (150 km) and Delhi (360 km). The nearest railway stations are Sangrur (18 km), Sunam (16 km) and Dhuri (32 km) and the nearest airport is Chandigarh (130 km).

### About Departments

**FET:** The Department of Food Engineering and Technology offers Integrated Certificate, Diploma (ICD), B.E., M.Tech. and Ph.D. courses. Besides teaching, faculty members are involved in active research work and are being handling various projects funded by different agencies (DST, DBT, AICTE, ICAR, CSIR, MHRD, MoFPI) in their respective fields of interests.

**CHE:** The Department of Chemical Engineering was established in the year 1991 and is offering Integrated Certificate Diploma course (ICD) and Degree (B.E.) course, M.Tech., and Ph.D. programs. The department is equipped with state of art infrastructure, including modern classrooms, seminar halls and well-established laboratories equipped with modernized facilities, and equipments. The faculty is actively engaged in research and development in their respective fields of interests.

**CSE:** The Department of Computer Science and Engineering was established in the year 1991 and has been successfully imparting quality education to Masters, Bachelors and Integrated Certificate-Diploma (ICD) courses in Computer Science & Engineering. The department is also admitting the candidates for full time and part time Ph.D. programmes. The department has the state of the art facilities for R&D activities. The faculty of the department is actively engaged in development and research in the areas of machine learning, image processing, information security, meta-heuristics, cloud computing, natural language processing, computer networks and big data etc.

**EIE:** The Department of Electrical and Instrumentation Engineering offers Integrated Certificate - Diploma course (ICD) and Degree (B.E.) course in disciplines of Electrical Engineering and Instrumentation Engineering. It also offers postgraduate course (M.Tech.) in Instrumentation and Control Engineering and Ph.D. programme. The Department has highly qualified and experienced faculty. The faculty members are actively involved in research work in the field of biomedical signal processing, image processing, power system, power electronics, power quality, design of electromagnetic devices, reliability engineering and optimization of load dispatch problems.

**ECE:** The Department of Electronics and Communication has acquired a new and significant place in this region towards its endeavours to equip the students with skills and knowledge desirable in the industry and in their changing environments. The department offers the Integrated Certificate Diploma (ICD), B.E., M.Tech. and Ph.D. programmes. The well equipped lab, undoubtedly the best in the region and the experienced faculty with the encouraging hands groom the graduates in practical as well as theory. The vast resources of this portal and the integrated study give them an unimpeachable edge over students from other colleges.

### Technical Sessions

Technical sessions will focus on the theme of the five National Conferences under the umbrella of SLIETCON-2019 and the following broad themes will be covered with interaction through plenary sessions, invited lectures, paper presentations and poster sessions. There will be three best paper awards each in oral and poster presentations in each session. The following topics, but not limited to are to be covered:

#### Track I : National conference on “New Horizons in Food Processing Technology and Nutrition” (NHFPTN-2019)

- Emerging food processing techniques
- Emerging techniques for food safety and quality.
- Innovations in food process engineering
- Innovative food product development
- New perspectives in food biotechnology and fermentation
- Novel insights in composition of foods
- Value addition of food industry by products

#### Track II: National conference on “Research and Innovation in Chemical Engineering and Technology” (RICET-2019)

- Biomass conversion
- Chemical engineering computations and optimization
- Chemical process instrumentation and control
- Chemical process modeling and simulation
- Energy and environment
- Engineering materials for chemical processes
- Innovations in unit operations and processes
- Polymer processing and technology
- Process synthesis, design and development
- Separation technologies
- Sustainable and clean process technology
- Transport phenomena

#### Track III: National conference on “Recent Advances in Computing and Information Technology” (RACIT-2019)

- Artificial intelligence
- Biomedical and biometric image analysis
- Computer vision and computer networking
- Distributed computing, cloud computing and big data
- E-business, e-governance and e-healthcare
- Genetic algorithms and optimization techniques
- Image processing
- Internet of things
- Machine learning
- Meta-heuristics
- Mobile computing
- Motion detection
- Natural language processing
- Pattern recognition
- Signal processing
- Software engineering

#### Track IV: National conference on “Computational Techniques in Renewable Energy Systems” (CTRES-2019)

- Applications of renewable energy systems
- Artificial intelligence and machine learning applications for renewable energy systems
- Biomass, bio fuel and fuel cells
- Data mining and analysis techniques for renewable energy systems
- Decision support system for renewable energy system
- Future challenges for renewable energy systems
- Hybrid energy system
- Power quality improvement
- Renewable energy systems such as wave energy, tidal energy, wind energy, solar energy, geothermal energy and hydropower
- Safety and security for renewable energy system
- Smart grids
- Sustainable energy and green energy

#### Track V: National conference on “Electronics, Communication and Networking Technologies” (ECNT-2019)

- Communication theory
- Data communications and networks
- Interdisciplinary and allied areas
- Internet and wireless security
- Mobile computing
- Mobility management
- Optical communications and networks
- Satellite and space communications
- Signal processing in communications
- Soft computing
- VLSI and embedded systems
- Wireless communications
- Wireless sensors

### National Advisory Committee

- Prof. Baldev Singh Dhillon**  
Vice Chancellor, PAU, Ludhiana
- Prof. R. K. Kohli**  
Vice Chancellor, Central University, Bathinda
- Prof. Ajay Sharma**  
Vice Chancellor, PTU, Jalandhar
- Prof. M. P. S. Isher**  
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- Prof. Prabodh S. Halde**  
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- Prof. R. S. Sangwan**  
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- Prof. Narpinder Singh**  
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- Prof. A. K. Puniya**  
Dean, GADVASU, Ludhiana
- Prof. A. K. Srivastava**  
Chairman, ASRB, Delhi
- Prof. G. S. Lehal**  
Director, Centre for AI and DS, Pbi. Univ., Patiala

### Organising Committee

#### Chief Patron:

**Dr. K. K. Talwar**, Chairman, BOM

#### Patron:

**Prof. Shailendra Jain**, Director

#### Co-Patron:

**Prof. Ajat Shatru Arora**, Dean (Acad.)

#### Chairpersons :

**NHFPTN-2019** : Prof. P. S. Panesar, HoD, FET

**RICET-2019** : Dr. Avinash Thakur, HoD, CHE

**RACIT-2019** : Dr. Major Singh Goraya, HoD, CSE

**CTRES-2019** : Prof. Sanjay Marwaha, HoD, EIE

**ECNT-2019** : Prof. Anupma Marwaha, HoD, ECE

#### Coordinators :

##### NHFPTN-2019

Dr. Vikas Nanda, Professor

Dr. Navdeep Jindal, Associate Professor

##### RICET-2019

Mr. Gulshan Kumar Jawa, Associate Professor

Dr. Avinash Thakur, Associate Professor

##### RACIT-2019

Dr. Manoj Sachan, Associate Professor

Dr. Birmohan Singh, Associate Professor

##### CTRES-2019

Dr. Manpreet Kaur, Associate Professor

Dr. Raj Kumar Garg, Assistant Professor

##### ECNT-2019

Dr. Amar Partap Singh Pharwaha, Professor

Dr. Ajay Pal Singh, Associate Professor