



National Institute of Technical Teachers Training and Research, Chandigarh

Volume 11, No. 2
(April –June, 2020)

Newsletter



Message from Professor SS Pattnaik, Director

United we work, together we achieve and team we win. The institute could work against the odds of COVID-19 with this mantra of unity. This newsletter is a compilation of the contributions of the dedicated employees of this institute. As Director of the institute, I am ecstatic to present the sincere efforts of my faculty members and staff to all the stakeholders and well-wishers. Students of this institute are our priority. The institute leaves no stone unturned to support its students. The completion of ME and Ph.D. theses during these hard days are vivid examples of our commitment to help the students. Creativity and innovation cannot be stopped. The research contributions of my faculty very well justify this. The institute has become more proactive to take front seat in the research activities. Our three dedicated employees superannuated after serving the institute. I wish them good health and happy retirement long life. I wish and pray for all to be safe and healthy.

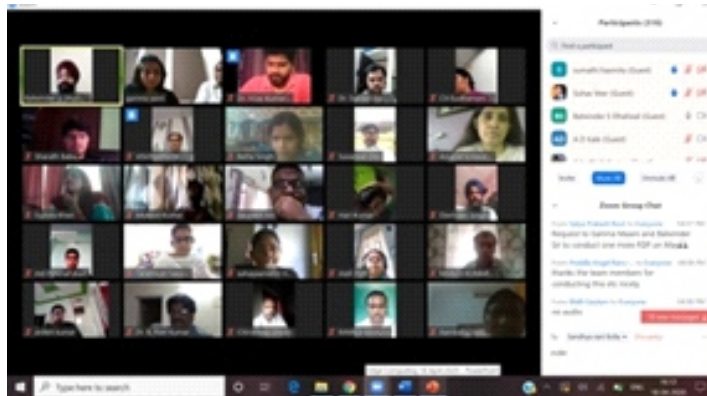
Glimpses of COVID Containment Measures in the Institute



Lock-Down Diaries:

Virtual HRD Endeavour

The NITTTR Chandigarh did not let lockdown hit the conduct of training programs. All the departments conducted the short-term courses through online mode which received overwhelming response from the participants across the country. The Applied Science department conducted 10 one-week STCs and 02 two-week FDPs. The Curriculum Development, and Educational and Educational Management department conducted 11 and 05 one-week courses respectively. The Electronics and Communication Engineering department conducted 09 STCs that comprised of one STC conducted in collaboration with NIT, Jalandhar and one STC in collaboration with Industry. The Electrical Engineering department trained 1755 participant by conducting 08 STCs. The Mechanical Engineering department conducted 12 one-week STCs. The Civil Engineering department trained 1052 participants by conducting 07 STCs. The Computer Science and Engineering department trained more than 5000 participants by conducting 12 STCs which included 02 two-week courses also. The Rural Development department conducted 05 one-week STCs and trained more than 600 participants. The Entrepreneurship Development and Industrial Coordination department conducted 11 one-week STCs and trained 1300 participants. Media Engineering department also trained 148 participants who registered for the STC organized by the department. A total of 26162 faculty members (including 9676 from Polytechnics and 16486 participants from engineering colleges) participated in 93 Online Short Term Training Courses conducted by NITTTR Chandigarh during April 2020 to June 2020 and the department-wise details are shown below:



Sr. No.	Name of Department	No. of STCs Conducted	No. of Candidates Trained
1.	Applied Science	12	1817
2.	Curriculum Development	11	2699
3.	Civil Engineering	7	1052
4.	Computer Science and Engineering	12	5492
5.	Electronics and Communication Engineering	9	4777
6.	Entrepreneurship Development & Industrial Coordination	11	1300
7.	Electrical Engineering	8	1755
8.	Education and Educational Management	5	2211
9.	Mechanical Engineering	12	4292
10.	Media Engineering	1	148
11.	Rural Development	5	619
Total		93	26162

Blooming R&D/ Consultancy Sparkles

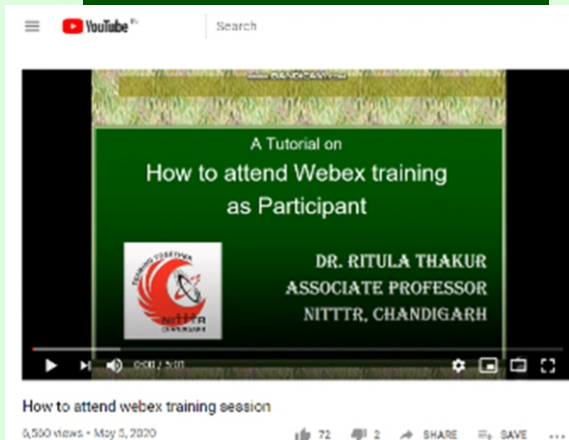
During April-June 2020, the faculty of NITTTR Chandigarh was actively involved in consultancy and research & development activities. The highlights of the activities are as follows:

- Applied Science department has published 05 Manuscripts in SCI Indexed Journals and submitted 03 proposals for funding.
- Electronics and Communication Engineering department published 05 SCI, 03 SCOPUS and 08 other papers.
- Electrical Engineering department submitted two funding proposals and the research scholars of the department completed two ME theses and submitted two PhD theses.
- Mechanical Engineering department faculty submitted 02 proposals for funding to DST and 01 proposal to SERB and published 16 papers in journals of repute.
- The faculty of the Rural Department contributed paper to the proceedings of the 9th International Online Workshop on 'Towards Sustainable Energy-Water-Food Nexus: The Contribution of a Cleaner Production' - Advances in Cleaner Production, Melbourne, Australia.

A total of 66 journal papers have been published by the faculty with the following details:

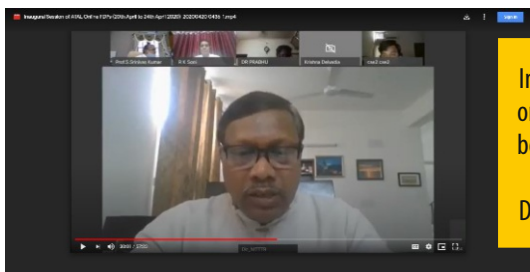
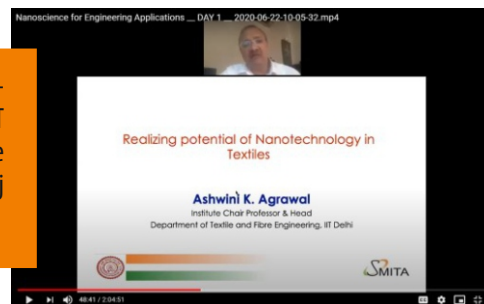
- SCI: 39
- Scopus: 14
- Other journals: 13

- Dr. Ritula Thakur, Associate Professor, Department of Electrical Engineering prepared three short video films titled (i) How to attend WebEx training session (ii) How to conduct WebEx training session and (iii) How to schedule WebEx training session for conducting the online STCs and training programs.
- The e-content and presentations for the STCs were prepared by the respective departments. The faculty members of all the departments were actively involved in the preparation of course content of the upcoming AICTE-NITTT Higher-order Modules for teachers with more than 5 years of experience.
- Laboratory Manuals for 'Digital Image Processing' and 'Digital Signal Processing' were developed by Professor Amod Kumar and 'Programming of Arduino using TINKERCARD' by Dr. Kanika Sharma.
- Dr. Garima Saini, Assistant Professor, Electronics and Communication Engineering Department completed her Ph. D. under the supervision of Prof. S. S. Pattnaik, Director, NITTT Chandigarh.
- A Text Book, '**Statistical Modelling and Machine Learning Principles for Bioinformatics Techniques, Tools & Applications**' (Springer) was published by Professor KG Srinivasa.
- A Text Book, '**Non-Conventional Hybrid Machining Processes: Theory and Practice**' (CRC-Press) was published by Professor Rupinder Singh.



SYNERGY WITH PEERS

NITTT Chandigarh and NIT Jalandhar have recently signed MoU for various joint activities. During June 22-26, 2020, an online STC on '**Nanoscience for Engineering Applications**' was organized jointly with NIT Jalandhar in which 141 teachers from technical institutes from all over the country got the benefit. The focus of the course was on Nano technology for textile applications. Dr. Piush Verma and Dr. Balwinder Raj were the coordinators.



In addition, NITTT, Chandigarh joined hands with AICTE Training and Learning (ATAL) Academy and organized 09 FDPs for faculty of technical institutions in the country in latest/emerging areas given below in the table:

Director of the institute addressing the participants during the inauguration of an ATAL sponsored FDP.

Sr. No.	Name of ATAL FDPs Conducted	Name of the Coordinator	No. of Teachers Trained
1.	Internet of Things	Professor KG Srinivasa	141
2.	Augmented Reality / Virtual Reality	Professor KG Srinivasa	104
3.	Data Sciences	Professor KG Srinivasa	115
4.	Quantum Computing	Professor KG Srinivasa	175
5.	Artificial Intelligence	Professor Maitreyee Dutta	189
6.	Cyber Security Vulnerabilities & Safeguards	Professor C Rama Krishna	73
7.	Cyber Security Vulnerabilities & Safeguards	Professor C Rama Krishna	120
8.	Cyber Security Vulnerabilities & Safeguards	Professor C Rama Krishna	160
9.	Robotics	Professor SS Dhami	155
Total			1232

The institute celebrated National Technology Day-2020 on May 11, 2020 in Collaboration with CSIR- AMPRI, Bhopal. Approximately 1000 participants had joined the event across the country.

A workshop was conducted on “COs Articulation and Mapping with POs: Hands on Approach” under AICTE Margdarshan Scheme on June 15, 2020 by Prof. C Rama Krishna and Dr. Mala Kalra.

NITTR faculty members also delivered lectures for the activities organized by other institutions.

VIVA-VOCE EXAMINATION OF THE THREE PH.D. SCHOLARS WAS CONDUCTED AS PER DETAIL GIVEN BELOW:

Thesis Title	Name of Ph.D. Scholar	Name of Supervisor	Date of Conduct of Viva-Voce Examination
Development of Optimised Antenna with Reduced Size and High Gain for Personal Communication	Ms. Garima Saini	Prof. S.S. Pattnaik, Director, NITTR, Chandigarh	19.05.2020
An Efficient Hybrid Security Model For Wireless Sensor Network	Mr. Sunil Kumar	Prof. C. Rama Krishna, Professor, CSE Deptt.	28-04-2020
Design of an Integrated Authentication and Authorization Approach for Interoperability in Federated Clouds	Ms. Monika Gogna	Prof. C. Rama Krishna, Professor, CSE Deptt.	27-04-2020

Upcoming Activities/STCs

The institute submitted six proposals to UGC for starting following new PG Diploma programmes:

- i. Mobile Communication
- ii. Embedded Systems and IoT
- iii. Cyber Security
- iv. Managing Online Platform Based Business
- v. Establishing and Managing a Business Start-up
- vi. Digital Marketing

Boosting Competency

The NITTR faculty not only organized online training programs for the other stakeholders but also many faculty members attended various competency enhancement programs organized by different reputed institutions. A partial list of different online programs attended by different faculty members include

- Professor Pankaj Sharma and Dr. Ashok Kumar participated in (online) Photonics Europe (Digital Forum) organised by SPIE - The international society for optics and photonic, USA during April 6-10, 2020.
- Professor SS Banwait participated in an Online Summit on “AM Medical Virtual Summit” conducted by ASME, USA on 27-05-2020.
- Dr. Balwinder Raj attended International e-Conference on Innovation Infrastructure Development in India: Issues, Challenges and Way-forward, organized by Innovation Society India in association with Amity College - Florida (USA) and International Association of Research Scholars (IARS) on 8 May, 2020.
- All faculty members attended Capacity Building Modules of AICTE-NITTR
- Professor Pankaj Sharma and Dr. Ashok Kumar participated in (online) International Conference SPIE Defense + Commercial Sensing Digital Forum 2020 organised by SPIE - The international society for optics and photonic, USA during April 27- May 01, 2020.
- Professor SS Dhami participated in Webinar on “Automation Studio on Electro-Hydraulics” by Automation Studio India on June 24-25, 2020.
- Dr. Garima Saini attended Webinar on “Teaching and Learning Modes post COVID-19” conducted by PU Chandigarh held on 29th April 2020.
- Professor Maitreyee Dutta attended Workshop on “ML & AI Using Covid-19 Virus Data Analysis” organized by Finland Labs and NSS - IIT Roorkee from 27 to 28 April 2020
- Professor Sanjay Sharma attended webinar on “Achieving Concrete Durability: Beliefs, Myths, and Reality” on April 25, 2020 conducted by L & T Chennai.

JOINING
GOLDEN AGER
CLUB

SUPER-
ANNUATION



Mr. Bharat Bedi
Graphic Artist
31.05.2020



Mr. Sohan Lal
Sr. Secretariat Assistant
30.04.2020



Ms. Sudesh Kumari
Ass. Section Officer
30.04.2020



National Institute of Technical Teachers Training and Research
Sector 26, Chandigarh - 160 019 (INDIA)

EPABX Line : (0172) 2759500 Fax : (0172) 2791366, 2793893

E-mail:director@nittrchd.ac.in, dirnittrchd@yahoo.com

Website : www.nittrchd.ac.in

Chairman : Professor (Dr.) Sunil Dutt

Co-Chairman : Dr. Balwinder Singh

Team : Dr. HR Vinayak, Dr. Ashok Kumar,
Dr. Kanika Sharma (Member Convener)

Published by : Director, NITTR, Sector 26, Chandigarh

Printed at : Deepak Printpack, Ph: 0172-4622003