TECHNODAYA

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National Institute of Technology Arunachal Pradesh

# **DIRECTOR'S MESSAGE**Greetings!



Prof. Pinakeswar Mahanta Director, NIT Arunachal Pradesh

I feel great pride and pleasure to share the current issue of Technodaya, NITAP Newsletter with you. During the last two months (Sept-Oct, 2020), our faculty members and officers had achieved exemplary strides of advancements in many academic, research and outreach activities standing out as milestones in our mission of pursuit of overall excellence. I extend my heartiest congratulations to each and every one, involved directly and indirectly in these achievements, some of which are inauguration of infrastructure facilities at NITAP Jote Campus by Hon'ble Shri Ramesh Pokhriyal 'Nishank', Minister of Education, Certificate of Recognition for framing Action Plan and for improving facilities in the Campus as well as Community/Adopted Villages in Sanitation & Hygiene, Waste & Water Management, Energy Conservation & Greenery by Dept. of Higher Education, Govt. of India and Memoranda of Understanding (MoU) with national and international collaboration. Centre for Skill Development in Appropriate Technology was approved by NECTAR (DST). Sponsored projects from SERB (DST) and CSIR were also approved.

Online classes, webinars, summer courses, workshops and NPTEL courses were hosted successfully ensuring maximum participation of both students and faculty members. Online webinars and various competitions of EBSB, GSC, and Vigilance Awareness Week were organized as outreach activities. With this note, I wish you all "Stay home, Stay safe". Though we are physically away but achieving institute's vision and mission, we are together. Let's unite and achieve our goals together. With Best Wishes.

Dr. K. Vijayakumar

### **Editor-in-Chief's Message**

I thank my team members Dr. Shubhajit Das, Dr. Millo Yasung and Ms. Elsa Cherian for their supports and suggestions. Special thanks to my colleagues of all the departments for their valuable comments to make this current edition more perfect.

I invite all students, alumni, faculty members, officers, supporting staff and various stakeholders associated with NITAP to support us and send us news to technodaya@nitap.ac.in.

#### **Newsletter Editorial Board**

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### Inauguration of infrastructure facilities at NIT Arunachal Pradesh:

Hon'ble Shri Ramesh Pokhriyal 'Nishank', Minister of Education inaugurated Mechanical Academic Block, Chemical & Bi-Technology Academic Block, Central Instrumentation Facility and Reaction Engineering Lab (labs are funded by TEQIP-III) on 26<sup>th</sup> October 2020 through online. Prof. Pinakeswar Mahanta proposed welcome address highlighting the achievements of NITAP. Hon'ble Minister of State (Independent Charge) Ministry of Youth Affairs and Sports Shri Kiren Rijiju, Sri Pema Khandu, Hon'ble Chief Minister, Govt. of Arunachal Pradesh and Shri Taba Tedir, Hon'ble Minister of Education, Govt. of Arunachal Pradesh graced the occasion. Speaking on the occasion the Pokhriyal said that NITAP can be a torchbearer in the entire northeastern region, one of the missions of this institute is "To identify regional, Indian and global need to serve the society better" which is a mission of any institute of national importance.





Photo: Inauguration of infrastructure facilities at NITAP

### Certificate of Recognition:

NITAP is recognized as one of the Social Entrepreneurship, Swachhta & Rural Engagement Cell (SES REC) Institutions in North-East Region by Mahatma Gandhi National Council of Rural Education, Department of Higher Education, Ministry of Education, Government of India. NITAP has successfully framed the SES REC Action Plan and constituted ten working committees for improving facilities in the Campus as well as the Community/Adopted Villages in the areas of Sanitation & Hygiene, Waste Management, Water Management, Energy Conservation and Greenery.



### Memorandum of Understanding (MoU):

- 1.Memorandum of Understanding has been signed between NITAP and National Highways Authority of India (NHAI) on 12 Oct, 2020. Prof. Pinakeswar Mahanta, Director, NITAP, Regional Officer, NHAI and faculty members and officers participated in the event.
- 2. Memorandum of Understanding has been signed between NITAP and Ministry of Micro, Small and Medium Enterprises (MSME), New Delhi in Oct, 2020 through video-conference for promoting domestic manufacturing of toys in India and bringing Indian manufacturing sectors and Design expertise/ Design fraternity on to a common platform to provide expert advice and cost effective solution on real time design problems, resulting in new product development.



Photo: MoU Signing Ceremony at NHAI

### Following statuary meeting were conducted during the period of September 2020 and October 2020:

Board of Governors Meeting (BoG)

SI . No Date Activities
1 11/09/2020 31st BoG Meeting Online Mode

Finance Committee	Meeting	(FC)
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SI . No	Date	Activities
1	11/09/2020	FC Meeting Online Mode

### Board of Studies (BoS) Meeting at Dept. of M&H:

Departmental BoS was convened online on 29<sup>th</sup> Oct 2020. The main agenda was to revise/update PG and PhD syllabus as well as to introduce new syllabus for upcoming semesters. Prof. Rajive Mohan Pant, Director, National Institute of Rural Development & Panchayati Raj, Guwahati as an External Expert and Prof. J. Anbazhagan Vijay, Professor of English, Government College of Technology, Coimbatore as a Special Invitee discussed about the curriculum of Management and Humanities in detail. Dr. K. Vijayakumar, HoD, Prof. M. K. Shome, Professor and Dr. M.M. Singh, Assistant Professor, Dept. of M&H were present during the meeting.

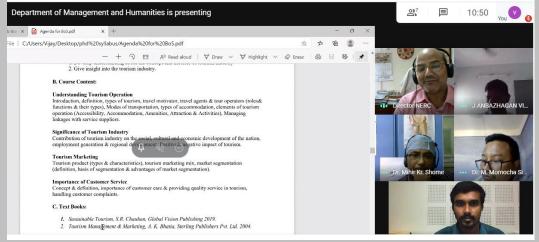


Photo: BoS Meeting at Dept. of M&H

### **Invited/ Expert Lectures:**

- 1. Dr. Manjula Das Ghatak, Assistant Professor, Dept. of ME delivered an expert talk on "Fundamentals of Engine Combustion & Emissions" in a Webinar on Engine Combustion and Emission Diagnostics organized by NIT, Agartala, 05-09 Oct, 2020.
- 2. Dr. Sanjeev Kumar Metya, Assistant Professor, Dept. of ECE delivered an expert talk on "Recent Advances in Nano-Photonics Technology" in a AICTE-AQIS sponsored (online) Short Term Training Program (STTP) on (RANPT-2020), organized by Swami Keshvan and Institute of Technology, Management & Gramothan, Jaipur. 26-31 Oct, 2020.

3. Prof. Pinakeswar Mahanta, Director, NITAP was invited as Guest for Launch of FDP for CBSE teachers and inauguration of 42 online FDP's by ATAL Academy, AICTE, MoE, Govt. of India and delivered special a note address among CBSE teachers on 02 Oct, 2020.



Photo: Launch of FDPs for CBSE Teachers

- 4. Dr. Brajagopal Datta, Assistant Professor, Dept. of EE delivered an expert talk on "Artificial Intelligence" in an ATAL FDP organised by NERIST, Arunachal Pradesh, 14-18 Sep, 2020.
- 5. Dr. Sahadev Roy, Assistant Professor, Dept. Of ECE delivered an expert talk on "Recent Innovation in Automation and Robot Operating System" in online short term Training Program organised by Govt. Engineering College, Ajmer twining with Veermata Jijabai Technological Institute, Mumbai, 26-30 Oct, 2020.
- 6. Dr. Achyuth Sarkar, Assistant Professor, Dept. Of CSE delivered a keynote address on "Blockchain and its Role in Supply Chain Management During Covid-19" in the international conference on "Multidisciplinary Research Innovation in Engineering, Science and Technology for Sustainable Development" organized by B.T. Kumaon Institute of Technology, Dwarahat, Uttarakhand, 26 Oct-07 Nov, 2020.

### Workshop/FDP/Seminar/Conference/Webinar:

1. Online FDP on 'Photography: Exploring Stories through the Lens' (sponsored by AICTE) was conducted by Dr. Rajen Pudur, Assistant Professor, Dept. of EE at NITAP. 12-16 Oct, 2020.



Photo: Online FDP on Photography: Exploring Stories through the Lens

- 2. Online training program on 'Advanced Workshop Practice and CNC Training' was conducted by Dr. Shubhajit Das, Assistant professor, Dept. ME, NITAP, 01-19 Oct, 2020.
- 3. Online workshop on "Computational Science and Biology (Computational Biology)" was conducted by Dr. A. Vanav Kumar, Assistant Professor, Dept. of BAS, NITAP, 05- 09 Oct, 2020.

### Patent:

- 1. Dr. Abir Jyoti Mondal, Assistant Professor, Dept. of ECE, "A Programmable Delay Circuit Device" (Application No.: 202031046192), 22 Oct, 2020 (Filed).
- 2. Dr. Achyuth Sarkar, Assistant Professor, Dept. of CSE, "Technique for Multilayer Protection from Quantifiable Vulnerabilities in Industrial Cyber Physical System" (Application No.: 2020102142), 04 Sep, 2020.
- 3. Dr. Achyuth Sarkar, Assistant Professor, Dept. of CSE, "Geographical Data Visualization and Dimension Reduction by Unsupervised Locally Liner Embedding (LLE) Learning Algorithm" (Application No.: 2020102383), 23 Sep, 2020.

### **Projects/Consultancy Works:**

SI. No.	Project Title	Investigator and Co-investigator	Sponsoring Institute	Dept.	Year
1.	Centre for Skill Development in Appropriate Technology(Approved)	PI: Prof. P.Mahanta, Co-PI: Dr. P.K. Mohanty, Dr. Anup Paul, Dr. Shubhajit Das, Dr. Manjula Das Ghatak, Dr. Alak Majumdar, Dr. Saikat Jana, Dr. Pallavi Kalita Hui, Dr. Rajen Pudur, Dr. A.K. Atta.	NECTAR (DST)	Institute	2020
2.	Development of an automatic dialect identification (ADI) system for a low resourced, native Arunachali spoken language-Nyishi	PI: Dr. Yang Saring.	SERB(DST)	ECE	2020
3.	Insight into Putative Insulinase PF11_0189 in correlation to hyperglycemia during severe malaria	PI: Dr.Kimjolly Lhouvum.	SERB(DST)	BT	2020
4.	Investigation of Micro Hydro and Wind Power off-grid Integrated System using Electronic Load Controller with Pump Storage as a Dump Load for Rural Area	PI: Dr. Rajen Pudur.	SERB(DST)	EE	2020
5.	Fluconazole Functionalized Zinc Oxide Nanobiocomposite: Processing and Bioengineering Applications	PI: Dr. Nabakumar Pramanik, Co-PI: Dr. A. K. Atta.	CSIR, New Delhi	Chemistry	2020

### Paper Publication/Presentation:

- 1. S. Ghosh, S. Ghosh, N. Pramanik, "Bio-evaluation of doxorubicin (DOX)-incorporated hydroxyapatite (HAp)-chitosan (CS) nanocomposite triggered on osteosarcoma cells", Advanced Composites and Hybrid Materials, vol.3, pp.303-314, 2020.
- 2. Gajendra Singh, Abhijit Paul, Himanshu Shekhar, Anup Paul, "Pulsed ultrasound assisted thermo-therapy for subsurface tumor ablation: a numerical investigation", J of Therm. Sci. and Engg. Appl., Transac. of the ASME, pp. 1-44 (IF: 1.544), 2020 (Accepted).
- 3. Yang Saring, "Selection Combining based Packet Combining Schemes for Multi-path Diversity System", Journal of The Institution of Engineers (India): Series B, 2020, (Accepted).
- 4. Anirban Tarafdar, Abir J. Mondal, U. Bera and B. K. Bhattacharyya, "A PVT aware differential delay circuit and its performance variation due to power supply noise", Integration the VLSI Journal, Elsevier, 2020, (in production).
- 5. Mohanty, P.K., "An intelligent navigational strategy for mobile robots in uncertain environments using smart cuckoo search algorithm", J Ambient Intell Human Comput, Springer, 2020.
- 6. Mainak Mallik. Sujay Santra and Saurav Bej, "Effect of Infill wall on Framed Building", 1<sup>st</sup> International Conference on Recent Advances in Computational and Experimental Mechanics, 2020.
- 7. Piash Ghosh, Saurabh Kumar Singh, Mainak Mallik and Damodar Maity, "Comparative Study on the Effectiveness between Shear Wall and Bracing Systems on High-rise Structures", International Conferences on Recent Advances in Computational and Experimental Mechanics, 2020.
- 8. Sangeeta Das, Abhishek Madhesiya, Shubhajit Das, Satyam Shivam Gautam, Chandkiram Gautam, "Mechanical, surface morphology and multi-objective optimization of tribological properties of V2O5 doped lead calcium titanate borosilicate glass ceramics", Ceramics International, Vol. 46, Issue 11, pp. 19170-19180, Part B, 2020.
- 9. L. Jino, A. Vanav Kumar, S. Maity, P. Mohanty, D. S. Sankar, "Mathematical modeling of a nanofluid in a porous cavity with side wall temperature in the presence of magnetic field", AIP Conference Proceedings (Accepted).
- 10.L. Jino, A. Vanav Kumar, "Heat and Fluid Flow Characteristics of Natural convection with Magnetic Field Effects in a Porous Cavity", The International Journal of Engineering and Science (IJES) (Accepted).
- 11.M. Maiti, S. Chakrabartty, A. Al-Shidaifat, H. Song, BK Bhattacharyya and A. Majumder, presented a paper entitled "A 90nm PVT Tolerant Current Mode Frequency Divider with Wide Locking Range" at IEEE Nordic Circuits and Systems Conference (NorCAS 2020), Oslo, Norway, 27-28, Oct 2020.
- 12.S. Awasthi, S. Sharma, S. K. Metya and A. Majumder, presented a paper entitled "Electro-Optic Reversible Toffoli Gate with Optimal Count of LiNbO3 Mach-Zehnder Interferometers" at IEEE Nordic Circuits and Systems Conference, Oslo, Norway, 27-28 Oct, 2020, (Accepted).
- 13. Momocha M.S., Chaitan K., "Need of Techno-Preneurship and Innovations for Community-Level Cancer Screening in Arunachal Pradesh" Electronic Systems and Intelligent Computing, vol. 686. Springer, 23 Sep 2020. (Scopus Indexed)
- 14. A. Saha, P. Mazumder, D. Dutta, B. K. Debnath, "Multi-attribute decision making using q-rung orthopair fuzzy weighted fairly aggregation operators", Journal of Ambient Intelligence and Humanized Computing (Accepted in Sept. 2020, Q1 category, SCI, Impact factor: 4.59).
- 15. P. Devaki, A. Subba Rao, Ram Prakash Sharma and S. Sreenadh, "Impact of hematocriton the flow of Casson liquid in contact with Jeffery liquid over narrow pipe", Indian Journal of Pure & Applied Physics, Vol. 58, pp. 758-764, Oct, 2020.
- 16.S. Jena, S. R. Mishra, P.K. Pattnaik, and Ram Prakash Sharma, "Nanofluid Flow Between Parallel Plates and Heat Transfer in Presence of Chemical Reaction and Porous Matrix", Latin American Applied Research An International Journal (LAAR), vol. 50(4), pp. 283-289, 2020.

- 17. M. M. Khader, Ram Prakash Sharma, "A numerical solution of the effect of thermal radiation and non-uniform heat source/sink on unsteady MHD micropolar fluid flow past a stretching/shirking sheet by fourth-order predictor-corrector finite difference method", Mathematics and Computers in Simulation, vol. 181, pp. 333–350, 2021.
- 18.J. K. Dash, G. Girish, P. P. Kumar, E. Sudarshan, A. Sarkar, "Classification of Lung Tissue Patterns on HRCT Images: Nature of Region of Interest and Classifier Performance", International Journal of Control and Automation, Vol. 13 No. 4.
- 19. Md Faysal Kabir, Sahadev Roy, "Design of hazard based model and collision avoidance system", Journal of Critical Reviews, vol. 7(19), pp. 5979-5989, 2020.
- 20. Shome, M.K., presented a paper entitled, "Women Entrepreneurship in India" at International Conference on Recent Trends in Multidisciplinary Research 2020 (ICORM-2020), organized by Eudoxia Research Centre, 19-20 Sep, 2020.
- 21. Shome, M.K., presented a paper entitled, "Descriptive Statistics and Data Analysis" at International workshop on Research and Methodology (WORAM -2.0-2020), organized by Eudoxia Research Centre, 5 Aug-3 Sep, 2020.
- 22. Shome, M.K., presented a paper entitled, "Rural Entrepreneurship" at World Summit on Startup, Entrepreneurship and MSME Development, organized Eudoxia Research Centre, 18-19 Oct, 2020.

### **Book/Chapter Publication:**

- 1. L. Jino, A. Vanav Kumar, "Simulation of Nano fluid Filled Inside a Porous Square Cavity Heated Partially on the Bottom Wall in Presence of Magnetic Field", Advances in Science and Technology, McGraw Hill, 2, pp. 35-40, 2020 (Accepted).
- 2. D. Dutta, "GATE Engineering Mathematics", Khanna Publisher, New Delhi, ISBN: 978-93-873949-7-1, Sept, 2020.
- 3. D. Dutta, "An introduction to Basic Number Theory", Prentice Hall of India (PHI), International Publisher (In press for printing, October 2020).
- 4. D. Dutta, "Bulbul Disaster assessment using single-valued spherical Hesitant Neutrosophic Dombi weighted aggregation Operators", Neutrosophic Operational Research, Springer Book (in the press for printing, October, 2020).
- 5. Sachi Nandan Mohanty, G. Nalinipriya, Om Prakash Jena, Achyuth Sarkar, "Machine Learning for Healthcare Applications" Publisher: Wiley-Scrivener, ISBN 9781119791812. 20 Oct, 2020.

### **Faculty Empowerment Programmes:**

- 1. Dr. Nabakumar Pramanik, Dept. of CHE attended an International Virtual Conference on "Advances in Functional Materials", organized by KIIT University, Odisha, 26-28 Aug, 2020.
- 2. Dr. Manjula Das Ghatak, Dept. of ME attended an Online Webinar on "Implementation of reservation policy in service for SC/ST/OBC & PWD in Government institutes" sponsored by TEQIP-III, organized by SC/ST/OBC Cell, NITAP, 31 Aug-04 Sep, 2020.
- 3. Dr. Sanjeev Kumar Metya, Dept. of ECE attended a webinar on "Paving the Way for InP Photonic Integrated Circuits from Concept to Tape-out", organized by the OSA, 10 Sep, 2020.
- 4. Dr. Sanjeev Kumar Metya, Dept. of ECE attended a webinar on "Plasma Photonic Crystals and the Tunable Parameters Control of the Bandgaps", organized by the OSA, 11 Sep, 2020.
- 5. Dr. Nabakumar Pramanik, Dept. of CHE attended an International Virtual Conference on "Emerging Frontiers for Healthcare and Delivery", organized by KIIT University, Odisha, 12-14 Sep, 2020.
- 6. Dr. Sanjeev Kumar Metya, Dept. of ECE attended a webinar on "Next Gen Pluggable Networks 400G", organized by the OSA, 15 Sep, 2020.
- 7. Dr. M. Berlin, Dept. of CE attended a training programme on "Research Prospects in Water Resources and Environmental Engineering", organized by TKM College of Engineering, Kerala, 15-19 Sep, 2020.
- 8. Dr. Jumrik Taipodia, Dept. of CE, attended an online FDP on "Earthquake Geotechnics" organized by NIT Andhra Pradesh, 22-26 Sep, 2020.

- 9. Dr. Sanjeev Kumar Metya, Dept. of ECE attended a webinar on "Advanced DSP and Coding for Next Generation Coherent Optical Systems", organized by the OSA, 21 Oct, 2020.
- 10.Mr. Mohit Kumar De, Assistant Librarian attended webinar on "COVID-19 and the Future of Libraries Accepting the Challenge and Recognizing Opportunities" organized by Elsevier, 01 Sep, 2020.
- 11.Dr. Shubhajit Das, Dept. of ME attended webinar on "Researches in Surface Engineering for Reliable Tribology" organized by GIMT Guwahati, 01-05 Sep, 2020.
- 12.Mr. Mohit Kumar De, Assistant Librarian attended webinar on "Trends in Biomedicine & Life Science Publishing and Nuances & Tools of Scientific Publishing" organized by Springer Nature, 02 Sep, 2020.
- 13.Mr. Mohit Kumar De, Assistant Librarian attended webinar on "Abstracting & Indexing how to get indexed and how to increase research impact" organized by Springer Nature, 09 Sep, 2020.
- 14.Mr. Mohit Kumar De, Assistant Librarian attended webinar on "International Webinar on Paradigm Shift Towards Online Libraries During pandemic" organized by New Age International Publishers, 12 Sep, 2020.
- 15.Mr. Mohit Kumar De, Assistant Librarian attended webinar on "Publishing Ethics in Biomedicine & Life Sciences Research" organized by Springer Nature, 16 Sep, 2020.
- 16.Mr. Mohit Kumar De, Assistant Librarian attended webinar on "Wiley APAC's Virtual Librarian Summit 1" organized by John Wiley and Sons, 18 Sep, 2020.
- 17.Dr. Shubhajit Das, Dept. of ME attended FDP on "Outcome Based Engineering Education and Accreditation (OBEEA 2020)" organized by NIT Meghalaya, 21-23 Sep, 2020.
- 18. Mr. Mohit Kumar De, Assistant Librarian attended webinar on "It's not what libraries hold, but who libraries serve" organized by My Loft, 24 Sep, 2020.
- 19. Dr. Mainak Mallik, Dept. of CE, attended short term course on "Recent advances in Structural Engineering" organized by IIT-Indore, 08-10 Oct, 2020.
- 20. Dr. P. K. Swain, Assistant Professor, Dept. of Physics attended webinar on "Shedding Light on the Dark Matter in the Universe" organized by Padma Shri 2019 awardee Prof. Rohini Godbole, IIT Alumni Centre, Bangalure, 10 Oct, 2020.
- 21.Dr. Mainak Mallik, Dept. of CE, attended short term course on "Sustainable Construction Practices" organized by IIT-Indore, 12-18 Oct, 2020.
- 22. Dr. Brajagopal Datta, Assistant Professors, Dept. of EE attended FDP on 'Photography in thrust area of Art and Craft' organized by NITAP, 12-16 Oct, 2020.
- 23. Dr. Shubhajit Das, Dept. of ME attended online FDP on "Photography" organized by NITAP, 12-16 Oct, 2020.
- 24. Dr. Ram Prakash Sharma, Dept. of ME attended Workshop on "NBA Accreditation Process" organised by B. K. Birla Institute of Engineering & Technology, Pilani, Rajasthan, 29-31 Aug, 2020.
- 25. Dr. U.K. Saha, Dept. of BAS, attended webinar on "Implementation of reservation policy in service for SC/ST/OBC & PWD in Government institutes" organized by SC/ST/OBC Cell, NITAP, 31 Aug-04 Sep, 2020.
- 26. Dr. Ram Prakash Sharma, Dept. of ME attended International Conference "ICAMST-2020", organized by Rajiv Gandhi University, Arunachal Pradesh, 01-03 Sep, 2020.
- 27. Dr. U. K. Saha, Dept. of BAS attended webinar on "Applications of Orthogonal Polynomials in Engineering Problems" organized by Rajasthan Technical University, Kota, 02 Sep, 2020.
- 28. Dr. U. K. Saha, Dept. of BAS attended webinar on "An Introduction to Hydrodynamic Stability Analysis" organized by Rajasthan Technical University, Kota, 06 Sep, 2020.
- 29. Dr. Ram Prakash Sharma, Dept. of ME attended webinar on "An Introduction to Hydrodynamic Stability Analysis" organized by Rajasthan Technical University, Kota, 06 Sep, 2020.
- 30.Dr. U. K. Saha, Dept. of BAS attended webinar on "Multi-Criteria Decision Analysis using Goal Programming" organized by Rajasthan Technical University, Kota, 10 Sep, 2020.
- 31.Dr. Ram Prakash Sharma, Dept. of ME attended International webinar on "Geometry of Continued Fractions: Ramanujan and his successors" organized by CUHP, TAB-Shahpur, 14-15 Sep, 2020.

- 32.Dr. U. K. Saha, Dept. of BAS attended webinar on "Mathematical Modeling of Engineering Systems" organized by MBM Engineering College Jodhpur, 16 Sep, 2020.
- 33.Dr. Ram Prakash Sharma, Dept. of ME attended webinar on "Numerical Simulation using Maple 2020" organized by Siksha 'O' Anusandhan with Binary Semantics, 19 Sep, 2020.
- 34. Dr. Ram Prakash Sharma, Dept. of ME attended one-Day Visitor's Conference on "Implementation of National Education Policy" organized by Govt. of India, 19 Sep, 2020.
- 35. Dr. Ram Prakash Sharma, Dept. of ME attended workshop on "ODEs, PDEs, and Integral Equations: Their Engineering Context", organized by National Institute of Technology Uttarakhand, 21-26 Sep, 2020.
- 36. Dr. U. K. Saha, Dept. of BAS attended Virtual Lecture Series on "Theory and Applications of Special Functions and Fractional Calculus" organized by Charotar University of Science and Technology, Gujarat, 25 -27 Sep, 2020.
- 37. Dr. Ram Prakash Sharma, Dept. of ME attended "Dr Savita Datta Memorial Lecture" organized by Maitreyi College, 30 Sep, 2020.
- 38. Dr. Ram Prakash Sharma, Dept. of ME attended FDP on 'Photography in thrust area of Art and Craft' organized by NITAP, 12-16 Oct, 2020.
- 39. Dr. Ram Prakash Sharma, Dept. of ME, attended e-colloquium on "Recent Advancements in Fluid Flow and Heat Transfer" organized by IIT, Roorkee 19-25 Oct, 2020.
- 40. Dr. Achyuth Sarkar, NCC Coordinator, attended online interaction session organized by Major General Ananta Bhuyan, SM, Additional Director General (ADG), NCC, NER Region with all the NCC Officers of Tezpur Group HQ and Arunachal Pradesh, 17 Sep, 2020.
- 41. Dr. Achyuth Sarkar, NCC Coordinator, attended online interaction session on NEP 2020 organized by ADG of NER NCC Shillong and other Officers in Tezpur group HQ, 05 Oct, 2020.
- 42. Dr. Achyuth Sarkar, Dept. of CSE, attended FDP on Outcome Based Engineering Education and Accreditation (OBEEA 2020), organized by National Institute of Technology, Meghalaya, 21-23 Sep, 2020.
- 43. Dr. Achyuth Sarkar, Dept. of CSE, attended FDP on Formal Verification of Cyber-Physical Systems: Opportunities and Challenges, organized by Dr B R Ambedkar National Institute of Technology, Jalandhar, Punjab, 11-15 Sep, 2020.
- 44. Dr. Achyuth Sarkar, Dept. of CSE, attended FDP on Advanced Research Trends in Artificial Intelligence, Pattern Recognition and Image Processing, organized by Bipin Tripathi Kumaon Institute of Technology Dwarahat Almora, Uttrakhand, 25-30 Sep, 2020.
- 45. Prof. M. K. Shome, Dept. of M&H attended webinar on "Research Methodology: Fundamentals, Best Practices and Common Pitfalls" organized by Anusandhan Prakoshth, BSM-Arunachal, 20 Oct, 2020.
- 46. Prof. M. K. Shome, Dept. of M&H attended webinar on "Strategies for Implementation of National Education Policy (NEP) 2020 for Technical Education" organized by MHRD, 2 Sep, 2020.

**Support for Institute** 

### **TEQIP-III**

### **Twining Activity:**

1. Prof. Pinakeswar Mahanta, Director, NITAP was invited as Special Invitee for 37<sup>th</sup> Board of Governance Meeting held at Government College of Technology, Coimbatore through Video Conference on 25 Sep, 2020.

- 1. Dr. Sanjeev Kumar Metya Assistant Professor, Dept. of ECE was a *Reviewer* of 'Innovation in Science Pursuit for Inspired Research' (INSPIRE).
- 2. Dr. Manjula Das Ghatak, Assistant Professor, Dept. of ME was a *Reviewer* for table of contents of the book of "Engineering Mechanics: Statics & Engineering Mechanics: Dynamics, SI Version", 9<sup>th</sup> Edition by J.L. Meriam, L.G. Kraige, J.N. Bolton" (Wiley).
- 3. Dr. S. K. Metya, Assistant Professor, Dept. of ECE was invited as *National Advisory Committee* & *Reviewer* of "International Conference on Advancements in Nano-electronics and Communication Technologies (ANCT-2021)", organized by Swami Keshvanand Institute of Technology, Management & Gramothan, India
- 4. Dr. S. K. Metya, Assistant Professor, Dept. of ECE was invited as *Technical Committee Member & Reviewer* of "5<sup>th</sup> IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE 2020)", organized by Poornima College of Engineering, India.
- 5. Dr. Ram Prakash Sharma, Associate Professor, Dept. of ME, chaired the session of 3 day First International Conference "ICAMST-2020", organized by Rajiv Gandhi University, Arunachal Pradesh, 01-03 Sep, 2020.
- 6. Dr. Ram Prakash Sharma, Associate Professor, Dept. of ME, chaired the session of two-Day International webinar on "Geometry of Continued Fractions: Ramanujan and his successors" organized by CUHP, TAB-Shahpur, 14-15 Sep, 2020.
- 7. Dr. Manjula Das Ghatak, Dept. of ME chaired a session in ATAL FDP on "Computational Science and Biology", 05-09, Oct, 2020.
- 8. Dr. Abhik Banerjee, Dept. of EE ECE was a Reviewer of Applied Science under Springer Nature (SNAS).
- 9. Dr. N. Pramanik, Assistant Professor, Dept. of CHE was a *Reviewer* for paper entitled "Synthesis, microscopic, and comparative rheological study of NiFe2O4 nanoparticles incorporated G. ghatti-cl-P(AAm)", Polymer Bulletin, Springer Nature Publications.
- 10. Dr. M. K. Shome, Professor, Dept. of M&H was a *Keynote Speaker* at two days "International Conference on Recent Trends in Multidisciplinary Research 2020 (ICORM-2020)", organized Eudoxia Research Centre from 19-20 Sep, 2020.
- 11. Dr. M. K. Shome, Professor, Dept. of M&H was an *Invited Speaker* of the one month "International workshop on Research and Methodology (WORAM -2.0-2020)", organized by Eudoxia Research Centre, 5 Aug-3 Sep, 2020.
- 12. Dr. M. K. Shome, Professor, Dept. of M&H was a *Keynote Speaker* at two days "World Summit on Startup, Entrepreneurship and MSME Development", organized Eudoxia Research Centre, 18-19 Oct, 2020.

## **Training and Placement**

### **Campus Recruitment Details of Students 2020-21:**

SI.	Name of the	Number of Students	Departments					Package Offered (in		
No.	Company	Placed	ВТ	CE	CHE	CSE	ECE	EE	ME	Lakhs)
1.	Capgemini	03	0	0	0	2	0	01	0	6.8LPA
2.	LTI	02	0	0	0	01	01	0	0	6.5 LPA
3.	College Duniya	03	0	0	0	0	01	01	01	5 LPA
4.	Grifeo	07	0	01	0	02	02	02	0	4.8 LPA

#### TechTOY 2020:

The Startup Cell, Prakousol of NIT Arunachal Pradesh organized TechToy 2020 i.e. Toy Hackathon on 15-16 September via Google Meet (Sponsored by TEQIP-III). This kind of hackathon may be the first time in our nation, and contestants are in all categories of School Children, Engineering Students, and General Public also. We were looking for innovations in toy technology and design, to reflect Indian ethos and values a design from ideation to product format. Our aim was to boost the manufacturing and global imprint of Indian indigenous toys and smart toys which not only have a cultural connection but also play a major role in building life-skills among children at an early age. This hackathon was organized under the guidance of Prof. (Dr.) Pinakeswar Mahanta (Director, NIT Arunachal Pradesh), Coordinator Dr. Sahadev Roy, Assistant Professor, Dept. of ECE, Conveners Dr. Tushar Dhabal Das, Assistant Professor, Dept. of BAS and Dr. Prases K Mohanty, Assistant Professor, Dept. of ME.

The Winners are:

	Category-I Play Toy	Category-II Smart Toy	Category-III Home Toy
Position	Participant Name	Participant Name	Participant Name
1.	Atharva C Mahajan	Kritartha Gautam	Katit Modi
2.	Prajwal Nh	Preetinder Singh	Guruprasad Pan
3.	Riti Mukherjee	Kaushal Mukherjee	Chandana Banerjee
4.	Srinika Paul	Ashish Saha	Mahadev Roy
5.	Divya Sreenidhi Arigala	Ajay Yadav	Krishna Roy
6.	Rohan Sreekar Arigala	Jyoti	Kamala Kanta Bagdi
7.	Bhavya Patel	Rituraj Saha	Aparna Adhikari
8.	Muskan Nandlal	Nataraj Das	Arpita Bhattacharyya
9.	Aniketh	Kangkana Baruah	Momin Mukherjee
10.	Aditya M	Harsh Dokania	Dr. Manjula Das Ghatak
11.	Kartikeya Chaturvedi	Soumya Bhattacharyya	Rajrani Roy
12.	Guruchintna Angelo	Katit Modi	Shefali Mukherjee
13.	Dayyan Shirazi	Vikas Kumar	Tapati Roy Banerjee
14.	Archana Hunjan	Sudipta Chatterjee	Purnima Bhattacharyya
15.		Tejas M N	Priyadharshini B
16.		Neeraj Jagdish Badgujar	Riti Mukherjee
17.		Ashish Saha& Sriman Chakri	Sriman Ghosh
18.		Aman Tripathi	Praveena Negi
19.		Harshul Aggarwal	Tanmay Ghosh
20.			Sunil Gureja
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#### **Thesis Submitted:**

1. Cristina Gammeng has submitted her thesis entitled "Investigations in fractional calculus and certain special functions" on 29 Sep, 2020 under Dr. U. K. Saha as supervisor and Dr. S. Maity as Co-Supervisor.

#### **Outreach Activities**

#### **EBSB Cell:**

Online Painting Competition was organized by Dr. Vijayakumar, Coordinator, Ek Bharat Shrestha Bharat (EBSB) Club, NITAP on 27th Sep. 2020 to celebrate World Tourism Day with the theme "Tourist Places of Arunachal Pradesh". More than 70 paintings across the country were received and the winners:







First Prize by Dulley Takar

Second Prize by Tarh Gonkap

Third Prize by Michi Tasser

### **Gandhi Study Centre:**

Online webinar on 'Revalidating Gandhi in the Covid Era' (sponsored by TEQIP-III) was conducted by Dr. Kimjolly Lhouvum, Assistant Professor, Dept. of BT in commemoration of Gandhi Jayanti at NITAP. 02 Oct, 2020. Prof. Vidya Jain, Eminent Gandhian Scholar and Former Director Gandhi Study Centre, University of Rajasthan, was a Chief Guest and delivered lecture on "Revalidating Gandhi in the Covid Era".



Photo: Online FDP on 'Revalidating Gandhi in the Covid Era'

### **Observance of Vigilance Awareness Week 2020:**

The observance of Vigilance Awareness Week each year is a representation of Institute's effort to encourage all stakeholders to collectively participate in the prevention of and fight against corruption and with the aim of creating environment of integrity, transparency and accountability in the mind-set of every stakeholders of the Institute. This year it was organized by Dr. Dipak Sen, CVO, NITAP from 27<sup>th</sup> October to 2<sup>nd</sup> November 2020 with the theme "Vigilant India, Prosperous India".

It was inaugurated on 27<sup>th</sup> October 2020by Shri Mukesh Kumar, ITS, CVO, Railtel Corporation of India Ltd. and Former Director, Central Vigilance Commission, New Delhi. In the presence of the Hon'ble chief guest, all the employees of the institute took integrity pledge followed by flag march for raising awareness against corruption.





Photo: Inauguration, Pledge Taking, Flag March and Sanitization

Various activities such as painting competition, poster making competition and essay writing competitions were conducted on the theme of "Vigilant India, Prosperous India" over the entire week to raise concern against corruption. As per the COVID19 protocol a sanitization drive was also carried out in the college campus on 2 Nov, 2020.



Photo: Painting and Poster Making



#### NCC Cell:

### **Orientation Program:**

Col K . Kar, Commanding Officer of 1st AP Battalion of NCC visited NIT Arunachal Pradesh and he had interaction with Lt (Dr.) Achyuth Sarkar, NCC Coordinator on 09 Sep, 2020.

### NCC C Certificate Examination:

NCC C Certificate examination was held at NIT Yupia Campus on 18 Oct, 2020.



Photo: Visit of Commanding Officer and NCC S
Certificate Examination





### **Vaishwik Bharatiya Vaigyanik Summit:**

Prof. Pinakeswar Mahanta, Director, NITAP participated as Guest in the inaugural session of Vaishwik Bharatiya Vaigyanik Summit inaugurated by Honorable Prime Minister, Narendra Modi on 02 Oct, 2020. The aim of the summit is to bring Indian origin luminaries in academic institutes and research and development (R&D) organizations across the world and resident counterparts on a single platform to debate upon collaboration mechanisms to strengthen academic and a Science and Technology (S&T) base in India for global development.



Photo: Vaishwik Bharatiya Vaigyanik Summit

### Jan Andolan Campaign:

Prof. Pinakeswar Mahanta, Director, NITAP, faculty members, officers and staff participated in Jan Andolan Campaign and took pledge on 08, Oct, 2020. The event was organized by Physical and Mental Wellbeing Committee.



Photo: Pledge Taking Ceremony

### **National Unity Day:**

National Unity Day was organized by NITAP in association with EBSB Cell, NCC Unit, NSS Unit, SBA Cell, GSC and UBA Cell at TEL Auditorium, NITAP on 31 Oct, 2020. National Unity Day Pledge was taken in Hindi as well as English to re-affirm the inherent strength and resilience of our nation to withstand the actual and potential threats to the unity, integrity and security of our country. Prof. Pinakeswar Mahanta, Director delivered a special speech on National Unity.



Photo: Celebration of National Unity Day

#### **Tobacco Free Educational Institute:**

Awareness Programme on Tobacco Free Educational Institute was organized by NITAP in association with EBSB Cell, NCC Unit, NSS Unit, SBA Cell, GSC and UBA Cell at TEL Auditorium, NITAP on 31 Oct, 2020. Dr. Rajen Pudur, Dean Academic and Mr. Nabam Talar, Sport Officer were nominated as Ambassadors for Tobacco Free Educational Institute. Prof. Pinakeswar Mahanta, Director delivered a special speech on how to control tobacco consumption at campus.



Photo: Awareness Programme on Tobacco Free Educational Institute

### **Announcements**

### 7<sup>th</sup> Convocation at NITAP:

The 7<sup>th</sup> Convocation of NIT Arunachal Pradesh is scheduled during the second week of December 2020. The convocation will be conducted in blended mode.

#### **International Conference:**

International Conference on "Control Assistive Technology in Industry 4.0 Healthcare" (Springer) will be jointly organized by National Institute of Technology Arunachal Pradesh, G. B. Pant University and Women Institute of Technology Uttarakhand India on 23 - 24 April 2021. Dr. Achyuth Sarkar, Assistant Professor, Dept of CSE, NITAP will be the Conference Co-Chair. Mobile: 9436289227, Email: achyuth@gmail.com.



Contact us: Newsletter Editorial Board, NITAP. Email: <a href="technodaya@nitap.ac.in">technodaya@nitap.ac.in</a>.