



## Scholarly Activities Report



# Scholarly Activities Report

## January 2021 - March 2021

KEY STATISTICS												
Schools/Departments	Journal/Conference/Patents Publications at a glance: January 2021 - March 2021								Yearly Data Till Date (Cycle July 2020 - June 2021)			
	Journal Publications			Conference Publications			Patents		Journals	Confs	Patents	
	WOS	SCOPUS	Other	WOS	SCOPUS	Other	Published	Granted			Published	Granted
SOC	4	1	-	-	4	-	2	1	17	8	5	2
SOPPHI	3	1	-	-	-	-	1	-	12	-	1	-
SOAD	-	-	-	-	-	1	-	-	-	3	-	-
SOPS-Physics	-	1	-	-	-	-	-	-	3	1	-	-
SOPS-Chemistry	2	-	-	-	-	-	-	-	3	-	-	-
SOPS-Mathematics	1	2	-	-	-	4	-	-	8	4	-	-
SOET-EECE	7	-	-	-	1	2	-	-	17	3	-	-
SOET-ME	4	-	-	-	-	-	-	-	5	3	-	-
SOET_CE	1	-	-	-	-	-	-	-	1	2	-	-
SOET-PE	3	-	-	-	-	-	-	-	3	2	-	-
SOLAM-Humanities	-	-	-	-	-	-	-	-	-	-	-	-
SOLAM-Management	-	1	-	-	-	1	-	-	2	10	-	-
<b>Total</b>	<b>25</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>71</b>	<b>36</b>	<b>6</b>	<b>2</b>

## I. ACTIVE SEED PROJECTS UNDERTAKEN AT DIT UNIVERSITY

### SCHOOL OF ARCHITECTURE AND DESIGN

#### Dr. Aanchal Sharma

1. **Project title:** A comparative evaluation of roofing systems thermal performance in the composite climate of Dehradun, **PI:** Dr. Aanchal Sharma, **CO-PI:** Er. Harsh Goyal, **Funding Agency:** DIT University, Seed Money, **Amount Sanctioned:** 1.90 Lakhs, **Current Status:** On-Going, **Duration:** 1 Year, **Approx. Completion Date:** March 2022.

### DEPARTMENT OF EECE

#### Dr. Abhinandan Routray

2. **Project Title:** Optimized Predictive Control of Multilevel Photo voltaic (PV) Inverter with Reduced Leakage Current, **PI:** Dr. Abhinandan Routray, **Funding agency:** DIT University, Seed Money, **Amount Sanctioned-**1.61 Lakhs, **Current Status:** On-going, **Duration-**1 Year, **Approx. completion date:** March 2022.

### SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

#### Dr. Havagiray R. Chitme

3. **Project Title:** Characterization of Proteins Expressed by Stressed Granulosa Cells, **PI:** Dr. Havagiray R. Chitme, **Funding agency:** DIT University, Seed Money, **Amount Sanctioned:** 1.72 Lakhs, **Current Status:** On-going, **Duration-**1 Year, **Approx. completion date:** March 2022.

#### Dr. Arvind Negi

4. **Project Title:** Addressing bacterial antibiotic resistance: Identification and exploration of new druggable antibiotic targets, **PI:** Dr. Arvind Negi, **Funding agency:** DIT University, Seed Money, **Amount Sanctioned:** 1.59100 Lakhs, **Current Status:** On-going, **Duration-**1 Year, **Approx. completion date:** March 2022.

#### Dr. Ashok Behra

5. **Project Title:** Synthesis, characterization and In-vitro evaluation of new 5FU-Octreotideconjugates for targeted chemotherapy, **PI:** Dr. Ashok Behra, **Funding agency:** DIT University, Seed Money, **Amount Sanctioned:** 2 Lakhs, **Current Status:** On-going, **Duration-**1 Year, **Approx. completion date:** March 2022.

### DEPARTMENT OF PETROLEUM ENGINEERING

#### Dr. Tapas Kumar Dora

- Project Title:** Development of Absorbable, Expandable and Haemostatic Aerogel Material for Life Threatening Gunshot Wound, **PI:** Dr. Tapas Kumar Dora, **Funding agency:** DIT University, Seed Money, **Amount Sanctioned:** 2.10 Lakhs, **Current Status:** On-going, **Duration-**1 Year, **Approx. completion date:** March 2022.

#### Mr. Rakesh Kumar Pandey

- Project Title:** Optimized Deep Learning Implementation for Improving the Performance of Upstream Petroleum Operations, **PI:** Mr. Rakesh Kumar Pandey, **Funding agency:** DIT University, Seed Money, **Amount Sanctioned:** To be supported by centralized GPU computing systems, **Current Status:** On-going, **Duration-**1 Year, **Approx. completion date:** March 2022.

## II. ACTIVE EXTERNAL SPONSORED RESEARCH PROJECTS

### SCHOOL OF ARCHITECTURE AND DESIGN

#### Dr. Aanchal Sharma

- Project title:** Thermo - physical evaluation of traditional and contemporary building envelope constructions for developing adaptive model for thermal comfort of naturally ventilated and mixed mode residential buildings, **PI:** Aanchal Sharma, **CO-PI:** Dr. Ashok Kumar, **Funding Agency:** TARE – DST SERB, **Amount Sanctioned:** Rs. 15 Lakhs, **Duration:** 3 years, **Currentstatus:-** on-going, **Approx.completion date:-** March 2023.

### DEPARTMENT OF EECE

#### Dr. Santosh Kumar

- Project Title:** “Modeling and design of all-optical switching devices for DWDM system and sensors for health monitoring system using metal-insulator-metal plasmonic waveguides” **PI:** Dr. Santosh Kumar, **Funding Agency:** SERB (DST), **Amount Sanctioned:** - Rs. 18.30 Lakhs, **Duration:** - 3 year, **Current status:** - on-going, **Approx. completion date:** -Oct 2021.

### SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

#### Dr. Neeraj kr. Sethiya

- Project Title:** Scouting and Documentation of Grassroots Technological Innovations, Novel Agricultural Practices and Outstanding Traditional Knowledge from Remote Villages in Tehri Garhwal District, Uttarakhand, India. **PI:** Dr. Neeraj kr. Sethiya,

**Funding Agency:** National Innovation Foundation-India, Department of Science and Technology, Govt. of India, **Amount Sanctioned:** - Rs. 3.58 Lakhs, **Duration:** - 1 Year, **Current status:** - on-going, **Approx.completion date:** -March 2022.

### Dr. Ashok Behera

- Project Title:** Synthesis, Characterization and biological evaluation of smart novel nannotheranostic for cancer **PI:** Dr. Ashok Behera, **Funding Agency:** TARE-SERB, **Amount Sanctioned:** - Rs. 15 Lakhs, **Duration:** - 3 Year, **Current status:** - on-going, **Approx.completion date:** -March 2023.

## DEPARTMENT OF PHYSICS

### Dr. Parveen Kumar & Dr. Ravi Kumar Shukla

- Project Title:** Synthesis and characterization of Thin Films of Electrocaloric Materials for Solid State Cooling Applications. **PI:** Dr. Parveen Kumar, **Co-PI:** Dr. Ravi K. Shukla, **Funding Agency:** DRDO, **Amount Sanctioned:** - Rs. 21.32 Lakhs, **Duration:** - 3 Year, **Current status:** - on-going, **Approx.completion date:** -July 2021.

## DEPARTMENT OF CHEMISTRY

### Dr. Jabrinder Singh

- Project Title:** Appraisal of environmental streamflow of Rispana with reference to spatio- temporal variation of water quality index and catchment potential, **PI:** Dr. Jabrinder Singh, **Co-PI:** Dr. Naveen Singhal & Dr. Arti Chaturvedi, **Funding agency:** UCOST (DST) Govt. Of Uttarakhand, **Amount Sanctioned:** Rs. 4.05 Lakhs. **Duration:** 1 Year, **Approx. completion date** - June 2022.

## III. SUBMITTED EXTERNAL SPONSORED RESEARCH PROJECTS (BETWEEN JANUARY 1-MARCH 31)

## DEPARTMENT OF EECE

### Dr. Santosh Kumar

- Project Title:** Modeling and design of all-optical switching devices for DWDM system and sensors for health monitoring system using metal-insulator-metal plasmonic waveguides. **PI:** Dr. Santosh Kumar, **Funding Agency:** SERB-DST, **Project Amount:** - Rs. 18.30 Lakhs /-**Duration:** - 3 Year, **Current status:** Under Review.
- Project Title:** Development of rapid and highly sensitive plasmonic biosensors for the detection of diarrhea (Shigella spp.) and cholera (Vibrio cholera) diseases,

**PI:** Dr. Santosh Kumar, **Co-PI:** Dr. Chinmoy Saha (IIST, Thiruvananthapuram),  
**Funding Agency:** CRG-SERB-DST, **Project Amount:** Rs. 61.89568 Lakhs,  
**Duration:** 3 Year, **Current status:** -Under Review.

- Project Title:** Design and development of 2D material-based biosensors for biomolecules detection in human body, **PI:** Dr. Bramha P. Pandey (MMMUT-Gorakhpur), **Co-PI:** Dr. Santosh Kumar (DIT University, Dehradun) & Dr. Dharmendra Kumar (MMMUT, Gorakhpur), **Funding Agency:** CRG-SERB-DST **Project Amount:** Rs. 39.80128 Lakhs, **Duration:** 3 Year, **Status:** Under Review.

### Dr. Kuldeep Choudhary

- Project Title:** Development of LSPR based optical fiber sensors for bio-medical applications, **PI:** Dr. Kuldeep Choudhary, **Co-PI:** Dr. Santosh Kumar, **Funding Agency:** CRG-SERB-DST, **Project Amount:** Rs. 19.20223 Lakhs, **Duration:** 3 Year, **Status:** Under Review.

### Dr. Abhinandan Routray

- Project Title:** Predictive Control of Grid connected Solar Photo Voltaic (PV) Inverter with Reduced Leakage Current for Improved Efficiency, **PI:** Dr. Abhinandan Routray, **Funding agency:** DST, SERB, , **Project Amount** -1.5 Lakhs, **Duration**-2 Year, **Status:** Under Review.

## SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

### Dr. Havagiray R. Chitme

- Project Title:** Gene Ontology and Signaling Mechanism of Follicular Fluid Proteins in Pathogenesis of Polycystic Ovary Syndrome, **PI:** Havagiray R. Chitme, **CO PI:** Dr. Dhirodatta Senapati & Dr. Debasish Manna, **Funding agency:** CRG-SERB-DST, **Project Amount:** 38.77500 Lakhs, **Status:** Under Review.

## DEPARTMENT OF PHYSICS

### Dr. Ravi K. Shukla

- Project Title:** Reduced Graphene oxide/ Graphene Oxide Aqueous and Nonaqueous Lyotropic Liquid Crystals for Energy Storage and Biometric Applications, **PI:** Dr. Ravi K. Shukla, **Co-PI:** Dr. K. K. Raina, **Funding Agency:** SERB, **Project Amount:** 42 Lakhs, **Duration:** 3 Years, **Current Status:** Under Review.

### Dr. Anil Kumar Thakur

8. **Project Title:** Voltage Controlled Configurable Nanoarrays in Nematic Liquid Crystals (VCCNNLC), **PI:** Dr. Anil Kumar Thakur, **Co-PI:** Dr. K. K. Raina, **Funding Agency:** SERB, **Project Amount:** 48.5 Lakhs, **Duration:** 3 Years, **Current Status:** Under Review.

### Dr. Samta Manori

9. **Project Title:** Development of Double Perovskite thin films as electrode material for Solid Oxide Fuel Cell, **PI:** Dr. Samta Manori, **Co-PI:** Dr. Ramesh Chandra, **Funding Agency:** SERB, **Project Amount:** 35 Lakhs, **Duration:** 3 Years, **Current Status:** Under Review.

## DEPARTMENT OF MECHANICAL ENGINEERING

### Dr. Manoj Kumar

10. **Project Title:** Charging and discharging characteristics of finned-tube sensible energy storage system, **PI:** Dr. Manoj Kumar, **Co-PI:** Dr. Anil Kumar Patil, **Funding Agency:** CRG-SERB, **Project Amount:** 8.4 Lakhs, **Duration:** 2 Years, **Current Status:** Under Review

## IV. PUBLICATIONS

### a) RESEARCH PAPERS (IN REFEREED JOURNALS) (BETWEEN JANUARY 1-MARCH 31)

## DEPARTMENT OF EECE

### Dr. Santosh Kumar

1. N. Mishra, B. P Pandey, **S. Kumar**, "Impact of N<sub>2</sub>O gas adsorption upon electronic properties of 2D MoSe<sub>2</sub> monolayer: A DFT Approach," *IEEE Sensors Journal*, Vol. 21, Issue 8, pp. 9756 – 9762, DOI: <https://doi.org/10.1109/ISEN.2021.3057375> [Indexed in Web of Science], [IF:3.076], Feb 2021.
2. D. G. S. Rao, S. Swarnakar, **S. Kumar** "Design of photonic crystal based all-optical 2 × 1 multiplexer for optical processing devices," *Microelectronics* (In Press), DOI: <https://doi.org/10.1016/j.mejo.2021.105046> [Indexed in Web of Science], [IF: 1.405], March 2021.
3. S. Swarnakar, A. Guddati, S. K. Reddy, R. Harijan, **S. Kumar**, "Performance analysis of optimized plasmonic half-adder circuit using Mach-Zehnder interferometer for high-speed switching applications," *Microelectronics* (In Press) <https://doi.org/10.1016/j.mejo.2021.105040> , [Indexed in Web of Science], [IF: 1.405], March, 2021.

### Dr. Kuldeep Choudhary, Dhruva Chaudhary & Dr. Santosh Kumar

4. **K. Choudhary**, A. Singh, A. Singh, D. Chaudhary, **S. Kumar**, "Implementation of highly optimized optical all logic gates on a single chip using Ti-diffused lithium-niobate for high-speed processing in combinational circuits," *Microelectronics*, Vol. 111- 105048, DOI: <https://doi.org/10.1016/j.mejo.2021.105048> [Indexed in Web of Science], [IF: 1.405], March 2021.

### Dr. Nafees Ahamad

5. **N. Ahamad**, A. Sikander, "A novel approach of order diminution using time moment concept with Routh array and Salp Swarm algorithm" *Turkish Journal of Electrical Engineering & Computer Sciences*, Vol. 29, no 2, DOI: [dx.doi.org/10.3906/elk-2005-120](https://doi.org/10.3906/elk-2005-120) [Indexed in Web of Science], [IF : 0.682], Feb 2021.

### Dr. Amrindra Pal

6. **A. Pal**, A. Jha, "A Theoretical Analysis on Sensitivity Improvement of an SPR Refractive Index Sensor with Graphene and Barium Titanate Nanosheets" *Optik*, Vol. 231, pp. 166378 (2021). DOI: <https://doi.org/10.1016/j.ijleo.2021.166378> [Indexed in Web of Science], [IF: 2.187], Jan 2021.
7. **A. Pal**, Md. Z. Ahmed, S. Swarnakar "An Optimized Design of All-optical XOR, OR, and NOT Gates Using Plasmonic Waveguide", *Optical and Quantum Electronics*, Vol. 53, 84 (2021). DOI: <https://doi.org/10.1007/s11082-021-02732-2> [Indexed in Web of Science], [IF: 1.842], Jan 2021.

## DEPARTMENT OF MECHANICAL ENGINEERING

### Dr. Anil Kumar Patil & Dr. Manoj Kumar

8. G.P. Srivastava, **A.K. Patil**, **M. Kumar**, "Parametric effect of diverging perforated cones on the thermo-hydraulic performance of a heat exchanger tube", *Heat Mass Transfer*, DOI: <https://doi.org/10.1007/s00231-021-03035-8>. [Indexed in Web of Science], [IF-1.867], Feb 2021.

### Dr. Manoj Kumar & Dr. Anil Kumar Patil

9. R. Kumar, A.K. Pathak, **M. Kumar**, **A. K. Patil**, "Experimental study of multi tubular sensible heat storage system fitted with wire coil inserts", *Renewable Energy*, Vol. 164, pp. 1244-1253, ISSN 0960-1481, DOI: <https://doi.org/10.1016/j.renene.2020.10.058>. [Indexed in Web of Science], [IF-6.274], Feb 2021.



### Dr. Manoj Kumar

10. A. K. Jain, **M. Kumar**, G. D. Thakre, "Potential of CuS and CuO nanoparticles for friction reduction in piston ring–liner contact," *Tribology - Materials, Surfaces & Interfaces*, DOI: <https://doi.org/10.1080/17515831.2020.1871244> [Indexed in Web of Science], Jan 2021.

### Dr. Subodh Kumar

11. S. Kumar, A. S. Shahi, V. Sharma, D. Malhotra, "Effect of welding heat input and post-weld thermal aging on the sensitization and pitting corrosion behavior of AISI 304L stainless steel butt welds", *Journal of Materials Engineering and Performance*, Vol. 30, pp. 1619-1640, DOI: <https://doi.org/10.1007/s11665-021-05454-4>. [Indexed in Web of Science], [IF-1.652], Jan 2021.

## FACULTY OF MANAGEMENT

### Dr. Vijay Kumar Jain & Dr. Pankaj Kumar

12. V. Joy, **V. K. Jain**, S. Agarwal, **P. Kumar**, "Revisiting Determinants of Social Entrepreneurial Intentions among Indian Students using Interpretive Structural Modelling", *Elementary Education Online*, Vol.20, Issue. (5), ISSN: 4299-4310. <https://doi.org/10.17051/ilkonline.2021.05.472> [Indexed in Scopus], March 2021.

## DEPARTMENT OF MATHEMATICS

### Dr. Sandeep Sharma & Dr. Fateh Singh

13. **S. Sharma, F. Singh**, "Backward bifurcation in a cholera model with a general treatment function." *SN Applied Sciences*, pp. 1-8., ISSN: 2523-3971, DOI: <https://doi.org/10.1007/s42452-021-04189-0>. [Indexed in Scopus], Jan 2021.
14. **S. Sharma, F. Singh**, "Bifurcation and stability analysis of a cholera model with vaccination and saturated treatment." *Chaos, Solitons & Fractals* Vol. 146 (2021): pp. 1-8., ISSN 0960-0779, DOI: <https://doi.org/10.1016/j.chaos.2021.110912>. [Indexed in Web of Science], [IF: 3.764], March 2021.

### Shilpi Singhal

15. A. Dixit, **S. Singhal**, M. Zeyauddin "Model for Modified Holographic Ricci Dark Energy in Gravitation Theory of Branc Dicke", *Walailak Journal of Science and Technology*, Vol. 18, no. 3 DOI: <https://d.o.i.org/10.48048/wjst.2021.6986> [Indexed in Scopus], Feb 21.

## SCHOOL OF COMPUTING

### Dr. Debopam Acharya

16. A. Barthwal, **D. Acharya** and D. Lohani, "Prediction and Analysis of Particulate Matter

(PM2.5 and PM10) Concentrations using Machine Learning Techniques”, *Journal of Ambient Intelligence and Humanized Computing*, in press, DOI: <https://doi.org/10.1007/s12652-021-03051-w> [Indexed in Web of Science], [IF 4.594], March 21.

17. D. Lohani, A. Barthwal and **D. Acharya**, “Modeling vehicle indoor air quality using sensor data analytics”, *Journal of Reliable Intelligent Environments*, in press, DOI: <https://doi.org/10.1007/s40860-021-00137-2> [Indexed in Scopus], Feb 21.

18. K. Rastogi, D. Lohani and **D. Acharya**, “Context-Aware Monitoring and Control of Ventilation Rate in Indoor Environments Using Internet of Things”, *IEEE Internet of Things Journal*, in press, DOI: <https://doi.org/10.1109/IJOT.2021.3057919> 2021. [Indexed in Web of Science], [5Y IF 11.705], Feb 21.

### Dr. Megha Bhushan

19. **M. Bhushan**, A. Negi, P. Samant, S. Goel, A. Kumar, “A Classification and Systematic Review of Product Line Feature Model Defects”, *Software Quality Journal*, Springer, Volume 28(4), 1507–1550, DOI: <https://doi.org/10.1007/s11219-020-09522-1>. [Indexed in Web of Science], [IF: 1.460], Jan 2021.

### Ajay Narayan Shukla

20. **N. Shukla**, V. Bharti, M.L. Garg, “A Greedy Technique Based Improved Approach to Solve Graph Colouring Problem”, *SIS, EAI*, DOI: <https://doi.org/10.4108/eai.16-2-2021.168716> [Indexed in Web of Science], Feb 2021.

## DEPARTMENT OF CIVIL ENGINEERING

### Dr. Rana Acharyya

21. **R. Acharyya**, “Assessment of overall response of interacting skirted strip footings located on layered soil”, *Sādhanā*, Springer, Vol. 46, no. 16, pp. 1-14, ISSN - 0973-7677, DOI: <https://doi.org/10.1007/s12046-020-01547-3> [Indexed in Web of Science], [IF: 0.940], Feb 2021.

## DEPARTMENT OF PETROLEUM ENGINEERING

### Gopal Kumar and Dr. Tapas Kumar Dora

22. **G. Kumar, D. T. K. Dora**, D. Jadav, A. Naudiyal, A. Singh, T. Roy “Utilization and regeneration of waste sugarcane bagasse as a novel robust aerogel as an effective thermal, acoustic insulator, and oil adsorbent”, *Journal of Cleaner Production*, Vol. 298, ISSN:0959-6526 DOI: <https://doi.org/10.1016/j.jclepro.2021.126744>, [Indexed in Web of Science], [IF: 7.246], Mar 2021.

### Rakesh Kumar Pandey

23. **R. K. Pandey**, A. Dahiya, A. Mandal, , "Identifying Applications of Machine Learning and Data Analytics Based Approaches for Optimization of Upstream Petroleum Operations," *Energy Technology*, Vol. 9, no. 1, ISSN 2194-4296, DOI: <https://doi.org/10.1002/ente.202000749>. [Indexed in Web of Science] [IF: 3.404], Jan 2021.

### Gaurav Richhariya and Dr. Tapas Kumar Dora

24. **G. Richhariya, D.T. K Dora**, Naveen Singhal, "Synthesis of Ultra-light Cement using Solid Waste Fly Ash Cenosphere for Low Fracture Gradient Formation with Reduced Shrinkage", *Journal of Hazardous, Toxic, and Radioactive Waste (ASCE)*, Vol. 25, no. 2, DOI: [https://doi.org/10.1061/\(ASCE\)HZ.2153-5515.0000587](https://doi.org/10.1061/(ASCE)HZ.2153-5515.0000587). [Indexed in Web of Science] Jan 2021.

## SCHOOL OF PHARMACEUTICAL & POPULATION HEALTH INFORMATICS

### Dr. Md. Habban Akhter

25. **Md. H. Akhter et al**, "Lipid/Polymer based nanocomplexes in mRNA delivery as cancer vaccines. 2021", *Drug Discov Today*, [In Press] DOI: <https://doi.org/10.1016/j.drudis.2021.02.013>. [Indexed in Web of Science], [IF: 7.32], Feb, 2021.
26. Md A. Mujtaba, **Md. H. Akhter**, Md S. Alam, M. D. Ali, A. Hussain, "An updated review on therapeutic potential and recent advances in drug delivery of Berberine: Current status and future prospect", *Current Pharm. Biotech 2021*, doi: <https://doi.org/10.2174/1389201022666210208152113> [Indexed in Web of Science], [IF: 2.12] Feb, 2021.
27. Shadab Md, **Md. H. Akhter**. Plumbagin loaded glycosome gel as a topical delivery system for Skin Cancer therapy", *Polymers 2021*, 13(6), 923; <https://doi.org/10.3390/polym13060923>. [Indexed in Web of Science], [IF: 3.43] March, 2021.

### Dr. Arvind Gulbake

28. S. Kashte, **A. Gulbake**, S.F. El-Amin III, A. Gupta, "COVID-19 vaccines: rapid development, implications, challenges and future prospects". *Human Cells*, Vol. 34, pp. 1-23, DOI: <https://doi.org/10.1007/s13577-021-00512-4> [Indexed in Scopus], [IF: 3.46], March, 2021.

## DEPARTMENT OF PHYSICS

### Dr. Ravi Kumar Shukla

29. P. Chamoli, **R.K. Shukla**, A.N. Bezbaruah, K.K. Kar, K.K. Raina, "Microwave-assisted rapid synthesis of honeycomb core-ZnO tetrapods nanocomposites for excellent photocatalytic activity against different organic dyes" *Applied Surface Science*, ISSN: 0169-4332, <https://doi.org/10.1016/j.apsusc.2021.149663> [Indexed in Scopus], [I.F: 6.1] March 2021.

### DEPARTMENT OF CHEMISTRY

### Dr. Suheel Porwal

30. P. Agarwal, **S.K. Porwal**, "Non-edible/waste cooking oil-derived sustainable green multifunctional copolymeric additives for mineral base oil", *Biomass Conv. Bioref*, <https://doi.org/10.1007/s13399-021-01336-w>. [Indexed in Web of Science], Feb 2021.
31. P. Agarwal, Chaudhary, **S.K. Porwal**, J. et al, "Evaluation of renewable feedstock-derived copolymers of stearyl methacrylate-co-triglyceride as multifunctional green additives in lubricant", *Polym. Bull*, <https://doi.org/10.1007/s00289-021-03611-2>. [Indexed in Web of Science], March 2021.

### **b) BOOKS (AUTHORED/ EDITED) (BETWEEN JANUARY 1-MARCH 31)**

### SCHOOL OF COMPUTING

### Dr. Rakesh Kumar Saini

1. **R. K. Saini**, H. Sharma, S. Kumar, A. Kumar "Operating System Organisation & UNIX", Yaju Publication of India, New Delhi, ISBN No. 9380712103, Edition 2021.

### Dr. Megha Bhushan

2. M. Mangla, A. Kumar, V. Mehta, **M. Bhushan**, S.N. Mohanty, Real-Life Applications of the Internet of Things: Challenges, Applications, and Advances, CRC Press, Taylor & Francis Group, 9781774638477. Available at: <https://www.appleacademicpress.com/real-life-applications-of-internet-of-things-challenges-applications-and-advances/9781774638477>, Jan 2021.

## SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

### Dr. Havagiray R. Chitme

3. **H. R. Chitme** and Ajay K. Gupta, Practice School: Clinical Pharmacy – A Manual – Unnati Publications, India ISBN: 978-9384875619

### Dr. Bhavna and Dr. Abhijeet Ojha

4. **Bhavna** and **A. Ojha**, Textbook of Physical Pharmaceutics-II, Publisher, SciTech Publications, India (PVT) LTD (ISBN 978 93 85983) (Published- **Jan 2021**)

## **c) BOOK CHAPTERS (BETWEEN JANUARY 1-MARCH 31)**

### DEPARTMENT OF MATHEMATICS

#### Dr. Sandeep Sharma & Dr. Fateh Singh

1. S. Kumar, **S. Sharma**, **F. Singh**, P.S. Bhatnagar, N. Kumari, “A Mathematical Model for COVID-19 in Italy with Possible Control Strategies, *SPRINGER Mathematical analysis of transmission of COVI-19*, DOI: <https://doi.org/10.1007/978-981-33-6264-2> , **March 2021**.

#### Dr. Nitin Kamboj & Dr. Sandeep Sharma

2. **N. Kamboj**, S. Sharma, **S. Sharma**, “Modelling and Sensitivity Analysis of COVID-19 under the Influence of Environmental Pollution, *SPRINGER Mathematical analysis of transmission of COVI-19*, DOI: <https://doi.org/10.1007/978-981-33-6264-2>, **March 2021**.

#### Dr. Naresh M Chadha

3. **N. M Chadha** “Advanced Numerical Methods for Differential Equations” *Applications in Science and Engineering*, CRC Press Taylor & Francis Group, ISBN: 9780367473112, **March 2021**.

### DEPARTMENT OF CIVIL ENGINEERING

#### Dr. Rana Acharyya

4. **R. Acharyya**, A. Dey, “Influence of footing typologies on the stability of a transmission tower resting on the bench of a hill slope”, *International Conference of the International Association for Computer Methods and Advances in Geomechanics*, SPRINGER, Vol. 2, PP. 423-430, DOI: [https://doi.org/10.1007/978-3-030-64518-2\\_50](https://doi.org/10.1007/978-3-030-64518-2_50), **Jan 2021**.

## DEPARTMENT OF MECHANICAL ENGINEERING

### Dr. Manoj Kumar

5. A. K. Jain, **M. Kumar**, G. D. Thakre, "Effect of the Material Hardness and Operating Conditions on the Friction and Wear During Lubricated Sliding," *Advances in Engineering Design*, Select Proceedings of ICOIED 2020, Springer Singapore, DOI: [https://doi.org/10.1007/978-981-33-4018-3\\_11](https://doi.org/10.1007/978-981-33-4018-3_11), Jan 2021.

## DEPARTMENT OF EECE

### Dr. Amrindra Pal

6. A. Soni, D. Dharmacharya, **A. Pal**, V. K. Srivastava, "Design of a Machine Learning based Self-Driving Car," **Springer Nature in Machine Learning for Robotics Applications (Accepted)**.
7. P. Nigam, A. Muduli, S. Sharma, **A. Pal**, "The Substrate Integrated Waveguide Based Dumbbell-shaped Self Diplexing Cross Slot Antenna" **Advances in Systems Engineering (Springer Nature Singapore)** pp 523-534 (2021). DOI: [https://doi.org/10.1007/978-981-15-8025-3\\_51](https://doi.org/10.1007/978-981-15-8025-3_51).
8. P. Nigam, S. Sharma, A. Muduli, **A. Pal** (2021), "Highly Isolated Self-Multiplexing 5G Antenna for IoT Applications". In: Tanwar S. (eds) *Blockchain for 5G-Enabled IoT*. Springer, Cham. [https://doi.org/10.1007/978-3-030-67490-8\\_23](https://doi.org/10.1007/978-3-030-67490-8_23).
9. **A. Pal**, B. Chauhan, V. K. Srivastava, S. Vijay, "Conformal wearable antenna design, implementation and challenges" **Next Generation Antennas: Advancement and Challenges**, Wiley.

## SCHOOL OF COMPUTING

### Anuj Kumar, Naveen Kumar & Dr. Rakesh Kumar Saini

10. **A. Kumar**, **N. Kumar** and **R. K. Saini**, "To Study the effect of varying camera parameters in the process of matching and Reconstructions", in *Recent innovation in computing. Lecture Notes in Electrical Engineering*, Springer, Singapore, 701, **[Indexed in Scopus]** DOI: [https://doi.org/10.1007/978-981-15-8297-4\\_40](https://doi.org/10.1007/978-981-15-8297-4_40), Jan 2021.

### Dr. Megha Bhushan

11. R. Arya, A. Kumar, **M. Bhushan**, "Affect Recognition using Brain Signals: A Survey", In: Singh V., Asari V.K., Kumar S., Patel R.B. (eds) *Computational Methods and Data*

Engineering. *Advances in Intelligent Systems and Computing*, Vol 1257, Springer, Singapore, DOI: [https://doi.org/10.1007/978-981-15-7907-3\\_40](https://doi.org/10.1007/978-981-15-7907-3_40), 2021.

### **DEPARTMENT OF PETROLEUM ENGINEERING**

#### **Gaurav Richhariya and Dr. Tapas Kumar Dora**

12. **G. Richhariya, T.K Dora**, N. Singhal, M. Rai, Y. Goyal, P. Singh, P.P. Kundu, K. Lal, P. Rakesh "Ultra-Lightweight Cenospheres Cement for Lost Circulation Control with Improved Curing and Reduced Shrinkage". In: Rakesh P.K., Sharma A.K., Singh I. (eds) *Advances in Engineering Design. Lecture Notes in Mechanical Engineering*. Springer, Singapore. [https://doi.org/10.1007/978-981-33-4018-3\\_45](https://doi.org/10.1007/978-981-33-4018-3_45). **March 2021.**

### **d) CONFERENCE/SYMPOSIUM/WORKSHOP PROCEEDINGS (BETWEEN JANUARY 1-MARCH 31)**

#### **SCHOOL OF ARCHITECTURE AND DESIGN**

#### **Ar. Upendra Joshi**

1. **U. Joshi**, "Significance of Café as an Inclusive Place in Urban Context in India", in TEQIP III *National Online Conference on Planning, Design and Management-2021 CoEP Pune*, India, 26<sup>th</sup> & 27<sup>th</sup> Feb, 2021.

#### **DEPARTMENT OF EECE**

#### **Dr. Kuldeep Choudhary, Saurabh Mishra, Dr. Sonika Singh, & Dr. Santosh Kumar**

2. **K. Choudhary, S. Mishra, S. Singh, S. Kumar**, "Design of all-optical OR/NAND logic gate using plasmonic metal-insulator-metal waveguide", *Proc. SPIE 11680, Physics and Simulation of Optoelectronic Devices XXIX*, 116801J <https://doi.org/10.1117/12.2576753> [**Indexed in Scopus**], **March 2021.**

#### **Dr. Abhinandan Routray, Dr. Sonika Singh, Dr. Gagan Singh**

3. **A. Routray**, G. Dhiman, **S. Singh, G. Singh**, "Sensor Less Indirect Vector Control of Induction Motor Drive using Fuzzy PID based Model Reference Adaptive Control," 2021, **IEEE International Conference for Emerging in Technology, INCET-2021**, Bangalore, India, **March 2021.**
4. G. Dhiman, **A. Routray, S. Singh, G. Singh**, "Analysis of Short Channel Effects for Junction

Less MOSFET With Metal Gates and High- $\kappa$  Spacers,” 2021, IEEE International Conference for Emerging in Technology, INCET-2021, Bangalore, India, **March 2021**

### FACULTY OF MANAGEMENT

#### Dr. Pankaj Kumar

5. P. Kumar, “Management Skills: To learn from Captaincy of Indian Cricket Team” in *ICCBP 2021*), conducted by **Management Development Institute (MDI)**, Murshidabad, **19<sup>th</sup> - 21<sup>st</sup> March, 2021**

### SCHOOL OF COMPUTING

#### Dr. Rakesh Kumar Saini

6. M. K. Saini and **R. K. Saini**, “Agriculture monitoring and prediction using Internet of Things (IoT)”, In 6<sup>th</sup> *International Conference on Parallel, Distributed and Grid Computing (PDGC)*, Wagnaghat, Solan, India, **IEEE Proceeding**, pp. 53-56, **ISBN: 978-1-7281-7132-6**, **Electronic ISSN: 2573-3079**, **DOI: <https://doi.org/10.1109/PDGC50313.2020.9315836>**, **[Indexed in Scopus]**, **Jan 2021**.
7. S. Jiyal and **R. K. Saini**, “Prediction and Monitoring of Air Pollution Using Internet of Things (IoT)”, In 6<sup>th</sup> *International Conference on Parallel, Distributed and Grid Computing (PDGC)*, Wagnaghat, Solan, India, **IEEE Proceeding**, pp. 53-56, **ISBN: 978-1-7281-7132-6**, **Electronic ISSN: 2573-3079**, **DOI: <https://doi.org/10.1109/PDGC50313.2020.9315836>**, **[Indexed in Scopus]**, **Jan 2021**.
8. **R. K. Saini**, M. Singh, P. Saini, “Improve energy-efficiency of sensors using cross-layer design technique in WSNs”, in *Journal of Physics: Conference Series*, Vol. 1714, **DOI: <https://doi.org/10.1088/1742-6596/1714/1/012031>**, **[Indexed in Scopus]**, **Jan 2021**.

#### Naveen Kumar

9. **N. Kumar**, S. K. Yadav, D. S. Yadav, “Similarity Measure Approaches Applied in Text Document Clustering for Information”, in IEEE *International Conference on Parallel, Distributed and Grid Computing (IEEE PDGC)*, Wagnaghat, India, **DOI: <https://doi.org/10.1109/PDGC50313.2020.9315851>** **[Indexed in Scopus]**, **Jan 2021**.

### DEPARTMENT OF MATHEMATICS

#### Dr. Dheeraj Kumar joshi

10. **D. K. joshi**, “Study of Correlated Markov noise channels and its effect on Quantum Speed Limit”, in *International Conference on Science and Computing (ICSC 2021)*, **Jan 2021**.

#### Dr. Pooja S Saxena



11. **P. S. Saxena**, "Application of Differential geometry in Econometrics" in *International Conference on Science and Technology- ICOST 2021, Jan, 2021*.

### Dr. Fateh Singh

12. **F. Singh**, "Did the COVID-19 Lockdown in India Succeed? A Mathematical Study", in *International Conference on Mathematical Modelling and Computational Intelligence Techniques (ICMMCIT-2021)*, Gandhigram, Tamil Nadu, India, **Feb 2021**.

### Dr. Sandeep Sharma

13. **S. Sharma**, "Modelling the role of police in making COVID-19 lockdown a success", in *International Conference on Mathematical Modelling and Computational Intelligence Techniques (ICMMCIT-2021)*, Gandhigram, Tamil Nadu, India, during **Feb 2021**.

## **e) ATTENDED CONFERENCE/SYMPOSIUM/WORKSHOP AND INVITED TALKS (BETWEEN JANUARY 1-MARCH 31)**

### **SCHOOL OF ARCHITECTURE AND DESIGN**

#### Dr. Chhabi Mishra

1. Participated in webinar on "Live Sustainably "In AWE and WICCI (Women's Indian Chamber of Commerce and Industry) on **Jan 5, 2021**.
2. Participated in "Eco Restoration event series "Rainforest, Eastern Himalaya" by ISOLA on Feb **27<sup>th</sup>, 2021**.
3. Participated in webinar on "Role and Challenges of Women with "In AWE and WICC" (Women's Indian Chamber of Commerce and Industry) on Jan12, 2021, 3pm
4. Participated in webinar on "More Restoration" Paul Blanchflower Old Industrial Sites, Auroville organized by ISOLA (Indian Society of Landscape Architect) on **March 3<sup>rd</sup>, 2021**.
5. Attended a webinar on Sustainable Urban Water Management: Challenges and Opportunities in mainstreaming climate adaptation organized by Center of Science and Environment (CSE) in partnership with Global water adaptation (AGWA) on March **5<sup>th</sup>, 2021**.
6. Attended the IUCEE Virtual Academy: "Performance Insight 360 - Quality Analytics for Academia". Ankur Gupta, Director, modei Institute of Engineering and Technology, Jammu on **Mar 17, 2021**.

#### Ar. Vartica Saxena

7. Attended a webinar on "**Remedial Waterproofing for Buildings**"By Er.Sunny Surlaker on Saturday **Jan, 23, 2021**.

8. Attended a National seminar on 'Dialogues on the sustainable development goals in the Hilly areas' delivered by Prof Jay Thakkar and Ar. Rashi Sirohi, organized by the coa TRC, Bhopal and DIT University, on **5<sup>th</sup> Feb, 2021**.
9. Attended a talk on 'Re-imagining Learning', to help educators, parents and students adapt to remote learning while also using this moment to radically reimagine what we need our education systems to be, on **13<sup>th</sup> Feb 2021**.
10. Attended a webinar on "**Construction Safety Challenges and their Solution**" By Dr. Bikarama Prasad Yadav on Saturday **20<sup>th</sup> Feb 2021**.
11. Attended a workshop conducted by Prof. Kartik Vohra on 'How to populate a cuboid?' on **27<sup>th</sup> and 28<sup>th</sup> of March, 2021**

### **Ar. Abhilasha Pathak**

12. Participated in e – seminar on “affordable housing” by ultra tech”, on **5<sup>th</sup> Feb 2021**.

### **Ar. Charles Porwal**

13. Attended 56<sup>th</sup> ISOCARP international conference held in January and **Feb 2021**.

### **Ar. Ankita Gaur**

14. Attended webinar on In Search of Habitat - Moshe Safdie on **5<sup>th</sup> March 2021**

### **Ar. Nagabhoina Tejendra**

15. Invited as guest speaker for webinar 105: what to do after Bachelor of Architecture (masters in urban design), by *Samanuvidhatr* on **20<sup>th</sup> March 2021**

### **Ar. Manmeet kaur**

16. Invited as a Speaker in Webinar-106: What to do after Bachelor of Architecture? (Masters in Landscape Design) organized by *Samanuvidhatr*, on **27<sup>th</sup> March 2021**
17. Attended one-week online Faculty Development Program on “NEP 2020: Inculcating Research culture in teaching and learning process”, organized under the scheme “Pandit Madan Mohan Malaviya Nation Mission on Teachers and teaching” by Teaching learning center - Central university of Rajasthan, from **22- 26<sup>th</sup> Feb, 2021**,

## **FACULTY OF MANAGEMENT**

### **Dr. Pankaj Kumar**

1. Attended Digital Conference on Social Enterprise: Values and Processes held from **7<sup>th</sup> to 9<sup>th</sup> Jan 2021**, conducted by **Tata Institute of Social Sciences**, Mumbai.

2. Completed two-week Refresher Course titled “ADVANCED RESEARCH METHODOLOGY Tools and Techniques” from **31th Jan - 14th Feb 2021** Conducted by Ramanujan College, (University of Delhi)

### DEPARTMENT OF MATHEMATICS

#### Dr. Dheeraj Kumar joshi

1. Delivered a talk in “INTERNATIONAL CONFERENCE ON SCIENCE AND COMPUTING (ICSC 2021)” Paper Entitled: Hesitant Probabilistic Fuzzy Set Based MCDM Method with Applications in Portfolio Selection Process. **23rd-24th Jan 2021.**

#### Dr. Fateh Singh

2. Attended 2 days online workshop on Statistical techniques using software '21 (STUS '21) **19-20 JAN '21**

#### Dr. Pooja S Saxena

3. Attended Workshop on “Statistical Techniques using Software” during **19<sup>th</sup> -20<sup>th</sup> Jan 2021.**

#### Dr. Pooja S Saxena

4. Attended Webinar on “Analyzing the knowledge of students & Structural design: R & D Model approach on education” on **30<sup>th</sup> Jan 2021.**
5. Attended Webinar on “Role of deep learning in Multimedia” on **30<sup>th</sup> Jan 2021,**
6. Attended Webinar on “Strategic Research platform in Competitive world” on **31<sup>st</sup> Jan 2021.**
7. Attended Webinar on “Empowering Diversity in Science” on **9<sup>th</sup> Feb. 2021**
8. Attended Faculty Development Program on “NEP 2020: Impetus for Life Skills and Holistic Development” from **1<sup>st</sup> - 5<sup>th</sup> March 2021.**
9. Attended “Two weeks Refresher course in Mathematics” completed with grade ‘A’, from **16<sup>th</sup> to 30<sup>th</sup> March, 2021.**

#### Dr. Shilpi Singhal

10. Attended 2 days online workshop on Statistical techniques using software '21 (STUS '21) **19-20 Jan 2021,**
11. Attended One Week Online Faculty Development Program on “NEP 2020: Impetus for Life Skills and Holistic Development” TLC, Central University of Rajasthan, **1st - 5th March, 2021.**
12. Attended International webinar on Recent Developments in modified Gravity and cosmology during **9<sup>th</sup> -11<sup>th</sup> March 2021.**

### DEPARTMENT OF CIVIL ENGINEERING

#### Dr. Rana Acharyya

1. Attended 2-days international workshop on “Case Histories in Geotechnical and Geological Engineering – Theory to Practice” Organized by IGS Surathkal Chapter and NIT Surathkal, Surathkal on **25<sup>th</sup> -26<sup>th</sup> March 2021**.

### **DEPARTMENT OF EECE**

#### **Vivek Kumar Gupta**

1. **Vivek Kumar Gupta** attended a Faculty Development Program under ATAL Portal on “Sensors Technology” conducted by Punjab Technical University, Bhatinda, from **22-26 Feb 2021**.

#### **Dr. Kuldeep Choudhary**

2. **Dr. Kuldeep Choudhary** attended a Semi-virtual National Conference on “Nanomaterials for Energy and Advanced Technologies (NEAT-2021)” from **March 25-26, 2021** in Association with Materials Research Society of India (MRSI) Delhi Chapter.

#### **Dr. Nafees Ahamad**

3. **Dr. Nafees Ahamad** attended an Expert Lecture on Application of BLDC motor in Industrial Automation, TEQIP Sponsored Five Days Workshop on Emerging Technology in Industrial Automation, Organized by Rajasthan Technical University, Modi Institution of Technology, Kota, Rajasthan, **Feb 1-5, 2021**
4. **Dr. Nafees Ahamad** attended one-week TEQIP sponsored workshop on Emerging Technology in Industrial Automation organized by Rajasthan Technical University & Modi Institute of Technology, Kota, Rajasthan, India. **Feb 2021**.

### **SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS**

#### **Dr. Neeraj Kr. Sethiya**

1. Delivered expert talk on “Entrepreneurship Development Phase” at LNCT College of Pharmacy, Bhopal on **25<sup>th</sup> Jan 2021**.
2. Delivered expert talk on “Innovation, Start-up, and Entrepreneurship in Higher Education: A way ahead to flourish Self-Reliant India Mission” at Sushant University, Gurugram on **26<sup>th</sup> March 2021**.

### Dr. Havagiray R. Chitme

3. Attended DBT-Skill Vigyan Program in UCOST, Dehradun, on **25<sup>th</sup> Feb 2021**.
4. Attended NAAC Assessors training programme regarding Peer Team Visit Virtual Meeting on **17<sup>th</sup> March 2021**.
5. Participated as a Chairperson at the two days virtual International Conference on “Stem cells and regenerative medicine–academic and industrial outlooks” (SCRM-AIO-2021), organized by the Department of Stem cell and Regenerative medicine, Centre for Interdisciplinary Research, D.Y. Patil Education Society, (Institution Deemed to be University), Kolhapur, Maharashtra, India-416006, during **March 19-20, 2021**.

### Dr. Bhavna

6. Actively participated in UGC STRIDE Workshop on “MOLECULAR PHYLOGENY AND MOLECULAR DOCKING” at the Mizoram University, Aizawl, held from **19<sup>th</sup>- 27<sup>th</sup> Jan 2021**.

### Dr. Manmohan Singhal

7. Attended two weeks comprehensive online patent information course organised by turnip innovations Mumbai from **26<sup>th</sup> Feb to 12 March 2021**.
8. Dr. Manmohan Singhal attended The Accreditation Council for Medical Affairs (ACMA) sponsored educational activity titled Diversity in Clinical trials on **Jan 2021**.

## DEPARTMENT OF PHYSICS

### Dr. Surbhi Sachdev

1. Attended a semi virtual national conference on “NanoMaterial for energy and Advanced Technologies (NEAT), **25<sup>th</sup> -26<sup>th</sup> March 2021**.

### Dr. Manoj Bhatnagar

2. Attended a semi virtual national conference on “NanoMaterial for energy and Advanced Technologies (NEAT), **25<sup>th</sup> -26<sup>th</sup> March 2021**.

### Dr. Ravi Kumar Shukla

3. Attended a semi virtual national conference on “NanoMaterial for energy and Advanced Technologies (NEAT), **25<sup>th</sup> -26<sup>th</sup> March 2021**.

### Dr. Samta Manori

4. Attended a semi virtual national conference on “NanoMaterial for energy and Advanced Technologies (NEAT), **25<sup>th</sup> -26<sup>th</sup> March 2021**.

### Dr. Vishakha Kaushik

5. Attended a Semi-virtual National Conference on "Nanomaterials for Energy and Advanced Technologies (NEAT-2021)" from **25<sup>th</sup> -26<sup>th</sup> March 2021**.

### **Dr. Natasha Awasthi**

6. Attended a semi virtual national conference on "Nano Material for energy and Advanced Technologies (NEAT), **25<sup>th</sup> -26<sup>th</sup> March 2021**.
7. **Dr. Natasha Awasthi** delivered a talk in "INTERNATIONAL CONFERENCE ON SCIENCE AND COMPUTING (ICSC 2021)" Paper Entitled: Study of Correlated Markov noise channels and its effect on Quantum Speed Limit. **23rd-24th Jan 2021**.

## **SCHOOL OF COMPUTING**

### **Dr. Rakesh Kumar Saini**

1. Attended one Weak QIP Short Term Course on "Machine Learning for Natural Language Processing and Internet of Things", organized by Department of Computer Science and Engineering, Indian Institute of Technology Roorkee under Quality Improvement Program Center at IIT Roorkee, from **22th -26th Jan 2021**.

### **Dr. Rama Sushil**

2. **Dr. Rama Sushil**, Keynote speaker in international webinar series by Indrashil University, Gujrat, in association with GUJCOST, DST, Govt. Of India, topic of the talk "Artificial Intelligence is a need for health care", **10<sup>th</sup> March 2021**.
3. **Dr. Rama Sushil** delivered invited talk on the topic "Artificial Intelligence in health sciences", organized at National level by Aarogya club, School of Pharmacy, DIT University, **7<sup>th</sup> Jan 2021**.
4. **Dr. Rama Sushil** participated in one week online FDP on "NEP 2020: Inculcating Research Culture in Teaching and Learning Process", and was volunteer to brief for all the session's talks in valedictory function of FDP, Central University of Rajasthan. **22-26 Feb 2021**

### **Dr. Srabanti Maji**

5. **Dr. Srabanti Maji**. Application of AI in Bioinformatics and Biomedical science. Akkamahadevi Womens University, Vijayapura, Under Dept of Bioinformatics, Under CURIE-AI, DST, New Delhi. **26th Jan-6<sup>th</sup> Feb 2021**.

### **Anuj Kumar Yadav**

6. TEQIP-III SPONSORED Five Days Online Workshop on "Fuzzy Logic Systems in Engineering Applications (FLSEA 21)", held at NIT Sikkim in online mode, from **March 15-19, 2021**.

### Ashish Singh Parihar

7. Successfully completed 5 days workshop on “Entrepreneurship & Regional Development” organized by Institute Innovation Council & Startup Cell, NIT Arunachal Pradesh from **22 -26 Feb 2021** in online mode, sponsored by **TEQIP III**.

### Chandra Prakash

8. Participated & completed successfully AICTE Training and Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from **2021-Jan-21 to 2021-Jan-25** at SIKSHA O ANUSANDHAN University.
9. Attended One Day Webinar on “Criteria 3 – NBA Accreditation” organized by InPods Ed-tech, **Jan 28, 2021**.
10. Participated in AICTE sponsored Quality Improvement Programme (QIP) short-term course on "Machine Learning for Natural Language Processing and Internet of Things" organized via online mode by the Department of Computer Science and Engineering, Indian Institute of Technology Roorkee, during **22-Jan-2021 to 26-Jan-2021**.

### Naveen Kumar

11. Attended AICTE sponsored Quality Improvement Programme (QIP) short-term course on "Machine Learning for Natural Language Processing and Internet of Things" organized via online mode during 22-01-2021 to 26-01-2021 by the Department of Computer Science and Engineering, Indian Institute of Technology Roorkee, **Jan 2021**.
12. Attended AICTE sponsored Quality Improvement Programme (QIP) short-term course on “Deep Learning and Its Applications” organized via online mode during 08-03-2021 to 12-03-2021 by the Department of Computer Science and Engineering, Indian Institute of Technology Roorkee, **March 2021**.

### Nitin Thapliyal

13. Participated in AICTE ISTE Sponsored one week Induction/Refresher Programme on machine learning **9-15 Feb 2021**.
14. Participated on FDP on “NEP” by central university, Rajasthan from **22-26 March, 2021**.

### Ruchi Sharma

15. Attended a webinar on “criteria 3- NBA Accreditation” on **Jan 28, 2021**.
16. Participated and completed successfully AICTE Training and learning (ATAL) academy online FDP on “System Engineering” from **01-Feb-2021 to 05-Feb-2021** organized by Malviya National Institute of technology, Jaipur.

### Sanjeev Sharma

17. Attended Webinar on “Marching towards Aatmanirbhar Bharat : A Contribution of Science and Technology” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **08th March, 2021**.
18. Attended webinar on “The Parallel Shift” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **09th March, 2021**.
19. Attended webinar on “Artificial Intelligence is a need for Healthcare” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **10th March, 2021**.
20. Attended webinar on Role of Data Science for Food Security” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **13th March, 2021**.
21. Attended webinar on “Deep learning Framework for Clinical Diagnosis - A Healthcare System” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **04th March, 2021**.

### **Tarun Kumar**

22. Attended Webinar on “Marching towards Aatmanirbhar Bharat : A Contribution of Science and Technology” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **08th March, 2021**.
23. Attended webinar on “The Parallel Shift” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **09th March, 2021**.
24. Attended webinar on “Artificial Intelligence is a need for Healthcare” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **10th March, 2021**.
25. Attended webinar on Role of Data Science for Food Security” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **13th March, 2021**.
26. Attended webinar on “Deep learning Framework for Clinical Diagnosis - A Healthcare System” Organized by Department of Computer Science & Engineering, School of Engineering, Indrashil University, Rajpur, Kadi, Gujarat held during **04th March, 2021**.

### **SCHOOL OF LIBERAL ARTS & MANAGEMENT (HUMANITIES)**



### Dr. Deepesh Kumar Thakur

1. Participated in winter school on “Artificial Intelligence in Healthcare”, organised by DIT Faculty of Pharmacy, DIT University, and Dehradun. **04 - 08 Jan 2021.**
2. Participated in the Two-day Faculty Development (FDP) on “Investing in challenging Times”, organised by University of Calcutta, Kolkata & Bombay Stock Exchange, Mumbai on **8th & 9th Jan, 2021.**
3. Participated in the national webinar on “Fostering Effective Communication Skills”, organised by Government PG College, Tikamgarh, M.P. on **5th Jan 2021.**
4. Participated in NAAC Sponsored One Day Online National Level Conference on “Revised Assessment and Accreditation Framework of NAAC: An Approach” organised by Internal Quality Assurance Cell (IQAC) of Smt. Sushil Devi Deshmukh Senior College, Latur on **16th Jan 2021.**
5. Attended the Case Writing Competition & Conference, organized by All India Management Association-AIMA & India Case Research Centre-ICRC, New Delhi on **30th & 31st March 2021.**
6. Attended the Workshop on “How to prepare for India Skills”, organized by S.S.T. College of Arts & Commerce, Ulhasnagar-4, on **17th & 20th March 2021.**
7. Delivered guest lecture ON “Emerging Issues in Human Rights with Special Emphasis on Women and Child Rights” organized by ICFAI Law School, The ICFAI University, Dehradun on **29th Jan 2021.**

### Dr. Vikash Kumar Mishra

8. One Week Online Faculty Development Program on “NEP 2020: Impetus for Life Skills and Holistic Development” organized by Teaching Learning Centre (TLC), Central University of Rajasthan **1-5th March 2021.**

### Dr. Kiran B. Mamgain

9. Attended a Faculty Development Programme organised by Rajasthan University, Rajasthan **1st to 5th March 2021.**

## DEPARTMENT OF PETROLEUM ENGINEERING

### Rakesh K. Pandey

1. **R. K. Pandey** attended panel discussion on “The Role of Science, Technology and Innovation in Shaping the Future of Education, Skills and Work” organized by CSIR-IIP, Dehradun, India, held on **28th Feb, 2021**

## DEPARTMENT OF CHEMISTRY

### Dr. Naveen Singhal

1. Naveen Singhal. Implementation of NEP in Higher Education (One week 17-23 March, 2021 Refresher Course). Bundelkhand University, Jhansi.

### **f) BOOK REVIEWS (BETWEEN JANUARY 1-MARCH 31)**

**Nil**

### **g) MONOGRAPHS/ POLICY PAPERS (BETWEEN JANUARY 1-MARCH 31)**

**Nil**

### **h) CREATIVE WORK AND PERFORMANCES(BETWEEN JANUARY 1-MARCH 31)**

## SCHOOL OF ARCHITECTURE AND DESIGN

### Ar. Vartica Saxena

1. Attended an online 'Jaipur Literature festival' held on **19<sup>th</sup> -28<sup>th</sup> of Feb 2021**,
2. Attended an online theatre by the name 'Satya Kadam' by E-Sanskriti **14<sup>th</sup> March 2021**.

## SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

### Dr. Dhirodatta Senapati

1. **Dr. Dhirodatta Senapati**, organising journal club among PhD students to increase their presentation and scientific skills.

### **i) NEWSPAPER/MAGAZINE ARTICLE AND EDITORIALS(BETWEEN JANUARY 1-MARCH 31)**

**Nil**

### V. PATENTS PUBLISHED/GRANTED ((BETWEEN JANUARY 1-MARCH 31)

#### SCHOOL OF COMPUTING

##### Dr. Rama Sushil, Diwaker, Anurag Shrivastava, Ankit Agarwal

1. **R. Sushil, Diwaker, A. Shrivastava, A. Agarwal** "IoT Based Emergency Healthcare System" Indian Patent Application No. 202111002809, dated: **Jan 2021 [Published]**.

##### Dr. Megha Bhushan

2. A. Kumar, **M. Bhushan**, P. Samant, S.K. Tiwari, R. Gupta, S. Gupta, A. Negi, S. Bansal, G. Kaur, H. Taneja, I.S. Dhindsa, J.S. Negi, Intelligent Shoe Rack, Australian Government, <http://pericles.ipaustralia.gov.au/ols/auspat/applicationDetails.do?applicationNo=2020103647>, Application no. 2020103647, **Jan 2021. [Granted]**.

##### Dr. Kumar Shashvat

3. **K. Shashvat**, N. Goyal, H. Taneja, A. Pal, G. Sharma "METHOD AND SYSTEM FOR SANITIZING A TOILET SEAT" Indian Patent Application No. 202111006152 dated **Feb 2021 [Published]**.

#### SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

##### Dr. Bhavna

4. **Bhavna** and Deepika Sharma, "Linagliptin nanosuspension for neurodegenerative disorders" (Application no: 201911034265 on **5<sup>th</sup> March 2021**). **[Published]**.

### VI. ORGANIZATION OF NATIONAL/INTERNATIONAL CONFERENCES/ MEETINGS/ WORKSHOPS (BETWEEN JANUARY 1-MARCH 31)

#### SCHOOL OF ARCHITECTURE AND DESIGN

##### Dr. Chhabi Mishra

1. Conducted a One Day National Seminar on "Dialogues on the Sustainable Development Goals in the Hilly Areas for School of Architecture and Design on Friday, **5<sup>th</sup> Feb 2021**.
2. Conducted a Meeting on Collaboration with Indian Institute of Remote Sensing (IIRS) and School of Architecture and Design (SoAD), in launching of new M-Plan in (MURP) in DIT University on **25<sup>th</sup> March 2021**.

### Ar. Jitendra Kumar Sarohi

3. Organized A One Day National Seminar on Dialogues on the Sustainable Development Goals in the Hilly Areas on Friday, **5<sup>th</sup> Feb 2021**.

### Dr. Aanchal Sharma

4. Organized A One Day National Seminar on Dialogues on the Sustainable Development Goals in the Hilly Areas on Friday, **5<sup>th</sup> Feb 2021**.

### Ar. Ankita Gaur

5. Organised Guest Lecture on Technology and Architecture: Understanding the relationship through BIM on **4<sup>th</sup> March 2021**.

## SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

### Dr. Havagiray R. Chitme

1. **Dr. Havagiray R. Chitme** organized Panel Discussion on “**IP Valuation and Licensing Techniques**”, in Collaboration with ASSOCHAM Intellectual Property Talent Search Examination, **10<sup>th</sup> March 2021**.

### Dr. Neeraj Kr. Sethiya

2. **Dr. Neeraj Kr. Sethiya** organized three days “Entrepreneurship Awareness Camp” at Govt Polytechnic College Amwala including 1-day Industrial tour to student. The program was supported by EDII, Gandhinagar, Govt of India, from **4<sup>th</sup> March 2021 to 6<sup>th</sup> March 2021**.
3. **Dr. Neeraj Kr. Sethiya** organized three days “Entrepreneurship Awareness Camp” at DIT University, Dehradun including 1-day Industrial tour to student. The program was supported by EDII, Gandhinagar, Govt of India, from **18<sup>th</sup> March 2021 to 20<sup>th</sup> March 2021**.

### Dr. Arvind Gulbake

4. **Dr. Arvind Gulbake** organized Workshop series 1 as a Coordinator on “Product development approaches” at FOP, DIT University, on **19 Feb 2021**.

## DEPARTMENT OF PHYSICS

### Dr. Parveen Kumar

1. **Dr. Parveen Kumar** organized a semi virtual national conference on “Nano Material for energy and Advanced Technologies (NEAT), 25<sup>th</sup> -26<sup>th</sup> March 2021.

### VII. MEMBERSHIP OF PROFESSIONAL BOARDS/ COMMITTEES (OUTSIDE DIT UNIVERSITY), REFEREEING FOR JOURNALS/CONFERENCES/PROJECTS

#### DEPARTMENT OF CIVIL ENGINEERING

##### Dr. Rana Acharyya

1. **Dr. Rana Acharyya** reviewed a technical paper on Rescue the Stuck TBMs in Conglomerate Boulder Layer for Journal of Geotechnical Engineering, Proceedings of ICE (Institute of Civil Engineers) on **26<sup>th</sup> Jan 2021**.
2. **Dr. Rana Acharyya** reviewed a technical paper on Pose control of constrained redundant arm using recurrent neural networks and one-iteration computing algorithm for Journal of Applied Soft Computing, Elsevier on **14<sup>th</sup> Feb 2021**.
3. **Dr. Rana Acharyya** reviewed a technical paper on Performance of an open deep excavation in a multi-layered soil site for a critical nuclear facility on the South Coast of India for Journal of Innovative Infrastructure Solutions, Springer on **14<sup>th</sup> Feb 2021**.
4. **Dr. Rana Acharyya** reviewed a technical paper on Data Analytics for Discovering Implicit Human Resource Knowledge for Journal of Applied Soft Computing, Elsevier on **14<sup>th</sup> Feb 2021**.
5. **Dr. Rana Acharyya** reviewed a technical paper on Effectiveness of Bagasse Ash for Performance Improvement of Asphalt Concrete Pavements for Journal of SN Applied Sciences, Springer on **10<sup>th</sup> March 2020**.
6. **Dr. Rana Acharyya** reviewed a technical paper on Load-settlement behaviour analysis the responses of the vertical loads under a pile group for Journal of Geotechnical Engineering, Proceedings of ICE (Institute of Civil Engineers) on **12<sup>th</sup> March 2021**.
7. **Dr. Rana Acharyya** reviewed a technical paper on Physico-mechanical characterization of schists in Tazzeke complex for Journal of Innovative Infrastructure Solutions, Springer on **13<sup>th</sup> March 2021**.

#### DEPARTMENT OF MATHEMATICS

##### Dr. Naresh M Chadha

1. Reviewed a paper for **Elsevier** of “Thermal Properties, Super statistics, Expectation Values and Eigen-Solutions to Schrödinger Equation Using Coulomb plus Screened Exponential Hyperbolic Potential of Applied Mathematics & Computation” (AMC-D-21-00285), Mar 2021. 21-00285), **March 2021**.
2. Reviewed a paper for **Elsevier** of “Nth-order rogue wave solution of multicomponent nonlinear Schrödinger equations of Applied Mathematics & Computation” (AMC-D-20-06735), **Feb 2021**.

### **Dr. Dheeraj Kumar Joshi**

3. Reviewed a paper for Egyptian Informatics Journal, [I.F. 3.119], **Feb 2021**.

## **SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS**

### **Dr. Neeraj Kr. Sethiya**

1. **Dr. Neeraj Kr. Sethiya** received International Honorary Membership from Asian Council of Science Editors (ACSE) from **1<sup>st</sup> Jan 2021**.

### **Dr. Nisha Sharma**

2. **Dr. Nisha Sharma** received membership of (European Renal Association - European Dialysis and Transplant Association) ERA-EDTA conference.
3. **Dr. Nisha Sharma** received membership of Indian Pharma Education Society [IPES]

## **VIII. AWARDS/ HONORS/ FELLOWSHIPS (BETWEEN JANUARY 1- MARCH 31)**

### **DEPARTMENT OF EECE**

### **Dr. Sonika Singh**

1. Awarded by The Academic Council of uLektz as one of the India's Top 50 Women Leaders in the Education Industry for the year **2021**.

### **Dr. Santosh Kumar**

2. Delivered a Keynote talk in International Conference on VLSI and Microwave and Wireless Technologies (ICVMWT-2021) held at Madan Mohan Malaviya University of Technology (MMMUT), Gorakhpur (Uttar Pradesh), India **20<sup>th</sup> -21<sup>st</sup> March 2021**.
3. Delivered a Keynote talk in National Conference - NEAT-2021 held at DIT University, India during **March 2021**.
4. Elected as Chair-Elect of OSA Optical Biosensors Technical Group on **March 2021** [Optical Society of America, USA].
5. Reviewed 100 International SCI Journals of IEEE, Elsevier, OSA, SPIE, Nature, etc, during **Jan. - March, 2021**. <https://publons.com/researcher/1235205/santosh-kumar/metrics/>

### Dr. Kuldeep Choudhary

6. Reviewed 1 International SCI Journals of IEEE during **Jan. - March, 2021**.

## DEPARTMENT OF PETROLEUM ENGINEERING

### Gaurav Richhariya

1. **Mr. Gaurav Richhariya** received Young Scientist Award at International Science and Technology Festival -2020 for Development of Self-Healing Cement for Oil Well organized by Institutions of Engineers India (IEI) & Uttarakhand State Council for Science and Technology (UCOST), **9<sup>th</sup> -11<sup>th</sup> Jan 2021**.

## SCHOOL OF LIBERAL ARTS & MANAGEMENT (HUMANITIES)

### Dr. Kiran B. Mangain

1. Received India Iconic Education Award 2021 on **14<sup>th</sup> March 2021** for excellence in Teaching and Research.

## SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

### Dr. Neeraj Kr. Sethiya

1. **Dr. Neeraj Kr. Sethiya** recognized as Innovation Ambassador from Innovation Cell, Ministry of Education, Govt. of India from **16<sup>th</sup> Feb 2021**.
2. **Dr. Neeraj Kr. Sethiya** received certification as Certified Publons Academy Supervisor

on 28<sup>th</sup> March 2021.

### DEPARTMENT OF PHYSICS

#### Dr. Ravi Shukla

1. **Dr. Ravi Shukla** reviewed a paper for Journal of Inorganic and Organometallic Polymers and Materials, [I.F. 1.92], Feb 2021.
2. **Dr. Ravi Shukla** reviewed two papers for IEEE Sensors Journal, [I.F. 3.06], Feb & March 2021.

### DEPARTMENT OF PHYSICS

#### Dr. Naveen Singhal

1. Certificate of Appreciation for Societal Work by **Assam Book of Records**.

#### Dr. Jabrinder Singh

2. Certificate of reviewing in recognition for as reviewer for Science of Total Environment (Elsevier), **March 2021**.

## **IX. DOCTORAL STUDENTS AWARDS/ACHIEVEMENTS (BETWEEN JANUARY 1-MARCH 31)**

### SCHOOL OF LIBERAL ARTS & MANAGEMENT (HUMANITIES)

#### Dr. Kiran B. Mamgain

1. Submission of PhD Thesis by the Research Scholar (Ms. Simranjyot Kour) on **19th Feb 2021**

### DEPARTMENT OF CHEMISTRY



### **Dr. Naveen Singhal**

1. Ph.D. Scholar Mr. Gaurav Ricchariya Submitted Doctoral Thesis.
2. Ph.D. Scholar Mr. Gaurav awarded with Young Scientist Award at IISF-2021.

## **X. CONSULTANCY DETAILS (BETWEEN JANUARY 1-MARCH 31)**

**Nil**

## **XI. OTHER ACHIEVEMENTS (BETWEEN JANUARY 1-MARCH 31)**

### **SCHOOL OF ARCHITECTURE AND DESIGN**

#### **Ar. Jitendra Kumar Sarohi**

1. Deputed as Examiner for IIT JEE (Main) 2021 Evaluation by National Testing Agency (NTA), March 2021.

#### **Ar. Abhilasha Pathak**

2. Recognised as a reviewer for the "Journal of Institute of scholars" by INSC Institute of scholars, on **4<sup>th</sup> Feb 2021**.

### **FACULTY OF MANAGEMENT**

#### **Dr. Pankaj Kumar**

1. Completed Three-week certificate course title "The New Age HR Analytics" organised by Centre for Study on Unorganized Labour RUSA 2.0, from **12<sup>th</sup> March to 2<sup>nd</sup> April, 2021**

### **SCHOOL OF COMPUTING**

#### **Dr. Garima Verma**

1. Delivered expert lecture on "AI and ML", at Ordinance Factory, Dehradun, on **5<sup>th</sup> Feb 2021**

#### **Anuj Kumar Yadav**

2. The online certification course on "Master Mathematical Cryptography 2020", conducted by Udemy.

## SCHOOL OF PHARMACEUTICAL & POPULATIONS HEALTH INFORMATICS

### Dr. Manmohan Singhal

1. **Dr. Manmohan Singhal** completed the SWAYAM MOOC ARPIT course for career advancement scheme promotion online refresher course in Pharmacy for higher education on **20 Jan 2021**.
2. **Dr. Bhavna** has been awarded Certificate of Excellence, for presenting a Scientific paper on “Nose to brain delivery of an anti-diabetic agent for the treatment of neurodegenerative disorders” as a Speaker of the scientific session of “ 3<sup>rd</sup> World Congress on Drug discovery and Development 2021”, held on **21<sup>st</sup> Feb 2021**, Virtually from BioGenesis Health Cluster, Bengaluru , **2021**.