MCKV
INSTITUTE OF ENGINEERING

MCKV

A+
NAAC
ACCREDITED WITH GRADE

ANNUAL REPORT
2020

NBA
NATIONAL BOARD OF ACCREDITATION

Intertek

UKAS

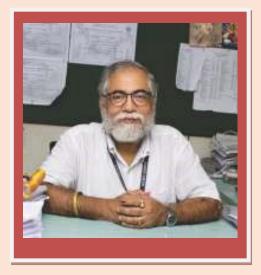## From the Desk of Chairman

The sudden outbreak of the novel coronavirus from March 2020, has taught each and every global citizen to think dynamically. The entire world was compelled to confine themselves within the four walls to abide by the government mandates. Each and every sector including the education sector, felt the heat of this global turmoil.

To cope up with this unprecedented pandemic, MCKV family was never short of enthusiasm to venture on the innovative techniques to follow the mantra "the show must go on". All the stake holders have put in their collective wisdom and committed endeavour towards creating a new kind of academic ambience where our students benefited the most.

Every coin has two sides, if one side of the coin was total shut down during pandemic the other side is surely the effort made by our students and faculty members for proper utilisation every bit of opportunities to the best of their abilities. They have attended innumerable online workshops, webinar regularly to keep updated in their domain area. In this pandemic year also, we could provide placement assistance to 93 % students of 2020 passing out batch. It is our proud privilege that we could organise different Short Term Training Program and Faculty Development Program on different emerging areas. To keep up with the expectation of our most proactive Rotaract club - the Rotarians organised different drives and social awareness programs to fight against this Corona Virus in this crisis situation. The Annual Report of 2020 at a glance will highlight on the various academic and non-academic activities of MCKV Institute of Engineering.

Mr. Kishan Kumar Kejriwal
Chairman, MCKVIE

Thinking of a Global College…As a new UGC Autonomous College, our interests to date have shown a number of emerging demands of education systems on the higher education path, which require us to analyze, clarify and reframe the accountability as per NEP2020. Four key goals or guiding principles in this area are beginning to take shape.

First, more useful and relevant information is needed. The regulatory and statutory bodies currently collect a vast amount of information for academic survey, but unfortunately continue to un-publish decisions in public.

Second, we need to improve, and even fix, current accountability processes, such as accreditation, to ensure that our college is providing the highest quality education to their students.

Third, we need to do a much better job of aligning our resources to our broad societal needs. In order to remain competitive, our system of higher education must provide a world-class education that prepares students to compete in a global knowledge economy.

And finally, we need to assure that the Indian public understands through access to sufficient information, particularly in the area of student learning, what they are getting for their investment in a college education.

At our regular academic meetings, we have seen many discussions on "Accountability" and informal consensus developed to measure and compare institutional performance and student learning in consumer-friendly formats, defining consumers broadly as students, families, policy makers and the general public.

The college education thus needed for the competitive, global environment in the future is far more than specific, factual knowledge; it is about capability and capacity to think and develop and continue to learn.

There is a gathering momentum for measuring through testing what students learn or what skills they acquire in college beyond a traditional degree.

Very recently, new testing instruments have been developed which measure an important set of skills to be acquired in college: critical thinking, analytic reasoning, problem solving, and written communications.

The College may review, promising new developments in the area of student testing, which indicate a significant improvement in measuring student learning and related institutional performance.

An evaluation of these new testing regimes may provide us evidence of a significant advancement in measuring student learning, especially in measuring the attainment of skills most needed in the future. Furthermore, new educational delivery models are being created as per NEP2020, such as the built-in assessment ERP techniques to determine the achievement of certain skills being taught, rather than hours-in-a-seat.

There are constructive examples of leadership in higher education in addressing the issues of accountability and student learning, such as the excellent work by new AICTE and UGC models.

These models focus on education and emphasize new learning outcomes. This specifically does not endorse a single standardized test, but acknowledges that testing can be a useful part of the multiple measures recommended in their framework.
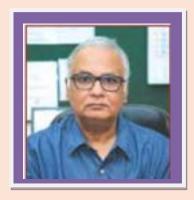
What is clearly lacking is a nationwide system for comparative performance purposes, using standard formats like NIRF. Private ranking systems use a limited set of data, which is not necessarily relevant for measuring institutional performance or providing the public with information needed to make critical decisions.

Historically, NAAC or NBA accreditation has been the nationally mandated mechanism to improve institutional quality and assure a basic level of accountability in higher education.

Accreditation and related issues of articulation are in need of reform in the light of NEP-2020, especially the need for more outcomes-based liberal approaches. Also it is in need of substantial improvements of the regional variability in India's context of different state patterns of education standards.

Prof. (Dr.) Parthasarathi Chakraborthy

CEO, MCKV Group

MCKV Institute of Engineering is the first private Engineering College in Howrah District, catering its services to produce Engineers of various disciplines since 1999. Swami Vivekananda Centre for Positive Thinking was established at the guidance of Sri Ramakrishna Math, Belurmath to promote the culture of self-realisation through deep meditation. Each student of each department is a student member of the Professional Association of their own domain, which gives them ample scopes to hear and interact with the various professional experts of their own domain from the very beginning.

The students are well placed through an organised Training and Placement Cell, where all Heads of the Departments take active part. Most of all, it is a ragging-free institute. The students are coached regularly from the second year itself free of costs beyond the domain knowledge to develop Aptitude skill, programming skills and Personality development keeping an eye to crack the Corporate Interviews.

The excellence of the teaching-learning and outcome-based learning can be seen by the way of receiving National Board of Accreditation **(NBA)** tag in at least 80% of the UG courses. Based on the overall performance assessment by University Grant Commission (UGC), this Institute obtained National Assessment and Accreditation Council **(NAAC)** Accreditation obtaining **"A" Grade**. Later, quite recently, UGC conferred very prestigious **Academic Autonomy** on us. With the guidance of UGC Rules, the Institute is poising and determined to enforce Autonomy within the ambit of stricter disciplines.

All our UG and PG Courses are approved by All India Council for Technical Education **(AICTE)**, New Delhi. They are the regulating Authority apart from the Maulana Abul Kalam Azad University of Technology **(MAKAUT)**. Even though the UGC accorded Academic Autonomy, but the syllabi were prepared primarily based on AICTE and International acclaimed model curricula.

The scopes of development of this institute are very high with the support of the Chairman, CEO, faculty, teaching associates and the non-teaching staffs. We are determined for a smooth take off to a higher altitude.

Though due to the all-pervading Covid-19 Pandemic situations, we are bound to opt for online classes and exams, this might not be easy for any of us. But we shall come back to offline, once the situation improves and the Government permits us to do so.

To end the short brief, kindly permit me to quote the famous saying of **Madam Curie** the famous Nobel Laureate (twice, once for Physics and another for Chemistry), "*Life is not easy for any of us, but what of that? We must have perseverance and above all, confidence in ourselves. We must believe that we are gifted for something and that thing at* **whatever costs** *must be* **achieved**."

Prof. (Dr.) Buddhadeb Chattopadhyay

Principal, MCKVIE

International Seminar Organised

CSE Department has organized One Day International Seminar which was held on 17th January, 2020 wherein Prof. Dariusz Plewczynski, Ph. D and a Professor at University of Warsaw in Center of New Technologies CeNT, Warsaw, Poland, was the Chief Guest and Invited Speaker for the International Seminar. He delivered his speech on "Human Genome in Three Dimensions: our present understanding of the spatial complexity of DNA" followed by visit to Central Facilities of our Institute.

International Seminar held on 17th January, 2020

NPTEL

Out of 51 participants, 10 participants received Elite and Silver certificate (75-89 %), 21 participants received Elite certificates (60-74%), and 5 of them successfully completed the Examination.

Important Activities

➢ A memorial service in the memory of our beloved Chairman, Late Sri Shyam Sundar Kejriwal was arranged at the M.C. Kejriwal Vidyapeeth on 11th January, 2020 from 12 Noon to 2.00 PM.

➢ A Workshop was conducted by Prof. (Dr.) Suresh Kumar on "Autonomy" at Malay Manch on 4th February, 2020. He is the UGC nominee for GB and Chairperson, Dept. of Electronic Science, Kurukshetra University, Haryana.

Memorial service in the memory of our beloved Chairman, Late Sri Shyam Sunderji Kejriwal

Orientation Program 2020

➢ The online **Orientation Program** for the first year B.Tech students was held on 22nd November, 2020 which was mandatory for all students. The parents also attended the same. The Guest of Honour for the program were Mr. Subhasish Sarkar, Regional Lead-East, IT-ITeS Sector Skills, Council, NASSCOM and Mr. Indrajit Bhowmick - Graduate of IIT Kharagpur in 1968 – with nearly 50 years of business management and professional experience blessed the students.

Annual Events

➢ **PRAGATI-2020:** The Annual Technology fest was conducted on 27th and 28th January, 2020.   Mr. Devasish Basu, General Manager Electrical, Dedicated Freight Corridor Corporation of India Limited (under Ministry of Railways) was the Guest of Honour of the program. Along with our institute, other organizations like TIME, AILABS, ARDENT, WEB SKITTERS etc. were the sponsors of the program. More than 1000 students from various institutes including ours have participated in 19 different events including Robo-Games, Coding Contest, Mathemania, Enigma, Big-Show, Treasure Hunt, Catia, PUBG, 8 Ball Pool, & Computer Games Contests on LAN etc. were held in the Tech fest. Certificates and prizes were awarded to 1st, 2nd and 3rd rank holders; e-certificates were awarded to all the participants. The program ended with a grand success.

➢ **UTOPIA-2020**: The traditional Annual Fest was held from 29th to 31st January, 2020. The festival had a host of singing performances (Octet), inter-college dance competitions (Flight of Feet), inter-college signing competitions, The Walk of Fame - inter-college fashion show competition, DJ night, celebrity band performance by MSonic, gaming events, stand up comedies, and celebrity solo performance by Emon Chatterjee. The students enjoyed the UTOPIA with joy and merriment as usual.

➢ **BITM-2020**: Like every year our students participated in the Eastern Region Science & Engg. Fair (BITM-2020) which was held during 14th to 18th January, 2020. Our students bagged the 2nd Best Prize comprising of Rs.9600/- each for the project EARS (Early Accident Response System) and special prize of Rs.2000/- each for the project Safe Driving in SMART CAR with Safety Glasses.

Saraswati Puja 2020   Viswakarma Puja2020

**Awareness camp on Cyber Security
at Jhargram.**

➤ **Saraswati Puja** was celebrated in the campus jointly by MCKV & MCKVIE on 30th January, 2020.

➤ **SIH– 2020:** The internal Hackathon for the Institute was organized on 6th February, 2020. Total 07 teams (each team comprises of 06 members) of different departments participated in the event, out of which 4 teams were selected in software division and 2 teams were selected from the hardware section for second level of competition for SIH-2020. Two external judges were invited from TCS, Kolkata for final selection of these proposals.

➤ **Viswakarma Puja** was celebrated in the campus on 17th September, 2020.

Sports & Games

Annual Sports & Games-2020: Like every year Annual Games & Sports 2020 was conducted during 14th to 15th March, 2020 at MCKVIE. More than 200 students participated in eight events (Football, Cricket, Badminton, Carom, Table-Tennis, Shotput, Basketball etc.), out of which in 6 events both boys & girls participated enthusiastically.

Other Activities

➤ Mr. Arindam Das & Mr. Arijit Sarkar from IT department imparted an Awareness camp on Cyber Security towards school students of Sri Saradapeeth Kanya Gurukul, Jhargarm on 28th February, 2020 as part of departmental CSR Activities.

➤ Best Practices followed: Mock Drill on Fire Extinguisher at MCKVIE on 15th January, 2020 organized by Admin. Dept. & Agni Kanchan, Supplier of Fire and safety equipments.

Recognition

➢ **Roshni Dey** and **Satyaki Sinha** students of CSE Dept. became the winner of State Student Convention 2020, West Bengal which was held on 5th December, 2020.

➢ **Ayan Banerjee** of 3rd year AUE Dept. of MCKVIE has been awarded 2nd prize in poster competition (STEM-2020) organized by MAKAUT on 5th February, 2020.

Roshni Dey and Satyaki Sinha became the Winner of State Student Convention 2020

2nd prize won by Ayan Banerjee, 3rd yr AUE in poster competition (STEM-2020) organized by MAKAUT.

➢ **Simron Khamrui** of 3rd year EE department has been selected as the Chairman of IET MCKVIE Student chapter from IET(UK) and has attended the IETYPCVC on 22nd February, 2020 being the representative of MCKVIE IET Student chapter.

➢ **Abhishek Prajapat** a fourth-year student of IT Dept. had hosted **"The Linkedin Marketing Webinar"**, a paid Webinar on 3rd May, 2020 with a total of 51 participants joining in (48 from India, 3 from Singapore, Mauritius and Kuwait respectively). The sections he covered in the webinar were: Marketer Mindset. 2. Profile Optimization. 3. Posting Guidelines. 4. Lead generation content creation. 5. Sailing the Linked in Pulse Algorithm. Webinar fees were Rs,200 per person by which he raised a total of Rs. 10,201.00 and thereby donated it to PM CARES FUND for Corona Relief in India.

➢ **Saptaparni Pal** of ECE 6th sem received The Fundamental of digital Marketing certificate from Google Digital Unlocked on 26th June, 2020.

➢ **Pritam Bose, Debojyoti Bhattacharyya, Subhadeep Nandi** of IT Dept. worked together and contributed in a project named **"Whisper to Neutral Speech Conversion"** for SPIRE Lab, EE Dept., Indian Institute of Science (IISc), Bangalore, Karnataka, India from 17th August, 2020 to 8th January, 2021.

➢ **Saurav Pati** of ECE 5th semester earned 4th star on the Problem-Solving Badge on **Hacker Rank**.

Book Chapter Publication

➤ Mahua Nandy Pal, **Shuvankar Roy, Supriya Kundu**, Sasmita Subhadarsinee Choudhury, "Visualization and Prediction of Trends of Covid-19 Pandemic during Early Outbreak in India using DNN and SVR", Chapter in Springer book titled "Big Data Analytics Intelligence Against COVID-19: Innovation Vision and Approach" (from Series in Big Data, Springer Nature (SCOPUS). Published on 14th October, 2020.

➤ Sayak Das, Nirvik Ranjan Das, Soumik Kr. Basu, Hriddhi Mondal, Avijit Bose, "Page Replacement Technique on the Basis of Frequency of Occurrence of Pages" Part of the Advances in Intelligent Systems and Computing book series (AISC, volume 1255) in October, 2020.

➤ Soutrik Bose, Samiran Samanta, Vibhav, Prashant Bharti, Titas Nandi of Mechanical Engineering Department published a book chapter titled "Optimization of Process Parameters for Wired Electro-Discharge Machining of Titanium Based Hybrid Compo-Sites Using Response Surface Methodology", International Conference on Advances in Mechanical Processing and Design, Advances in Mechanical Processing and Design (Lecture Notes on Multidisciplinary Industrial Engineering), 399-411, 978-981-15-7778-9, 2020.

Publications in International/National Conference

➤ **Shuvankar Roy**, Mahua Nandy Pal, Sonali Bhattacharyya, & Srirup Lahiri, Implementation of an Informative Website–" **Covid19 Predictor**", Highlighting COVID-19 Pandemic Situation in India. In 2020 IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS) (pp. 1-6). IEEE. 8th October, 2020.

➤ Sasmita S. Choudhury, Mahua Nandy Pal and **Supriya Kundu**, "**Visualizing Representations and Predictions of the Trends of 2019-Novel Corona Virus Outbreak in India using SVR Models**" I3CIT 2020, Chennai Institute of Technology, Chennai, Tamil Nadu. Proceedings published on 30th July, 2020.

➤ Soutrik Bose, Sourav Ganguly of ME Dept. participated and presented a research paper titled "**Selection of advanced material for magnetic levitated GPS activated car using advanced MCDM approaches**", International Conference on Energy and Sustainable Development (ICESD 2020), jointly organized by ME Dept., Jadavpur University and The Institution of Engineers, India, during 14th to 15th February, 2020.

➤ **Pradeep Viswakarma** Published a paper titled "**Realization of OTRA based First Order and Second Order Low Pass Filter and High Pass Filter and Their Different Analysis**", in 2nd International Conference (Digital) on Research and Innovations in Science, Engineering and Technology (ICRISET-2020) held during 4th to 5th September, 2020 organized by BVM Engineering College, Gujrat, India.

➤ **Saita Das, Sucharita Dutta, Poulami Chakraborty, Sayantani Chattejee** published a paper titled "**Applications of Electronics Circuit for RF Energy Harvesting**", in Student Paper Contest-2020 (SPC-2020), held online on 12th September, 2020, organised by IEEE Solid State Circuits Society, Kolkata Chapter.

➤ Debopoma Kar Ray, **Anirban Dey**, Surajit Chattopadhyay, S. Sengupta, "AC locomotive brush loose contact analysis using MRA of DWT", in proceedings of MFIIS-2020, HHI, October, 2020.

➤ Raktim Basak, **Sayan Basu,** Debopoma Kar Ray, Surajit Chattopadhyay, "Condition monitoring and cost optimization in solar roof-top generating system", in proceedings of MFIIS-2020, HHI, October, 2020.

➤ Sudeep Samanta, **Subhadeep Bhattacharjee**," Application of Millman's theorem for unsymmetrical fault diagnosis of six phase electric network", in proceedings of MFIIS-2020, HHI, October, 2020.

➤ Debopoma Kar Ray, **Simron Khamrui**, Surajit Chattopadhyay, "Diagnosis of generator excition failure in solar wind hybrid micro-grid using S-Transform", in proceedings of MFIIS-2020, HHI, October, 2020 has been awarded session best in the conference and has been forwaded to IET smart grid with 80% extension for consideration.

- Soutrik Bose, **Deep Mondal, Arka Chattaraj, Rishav Rakshit,** Titas Nandi of Mechanical Engineering Department published research paper titled "**A proximate analysis in Aluminum Hybrid Metal Matrix Composites using Additive Ratio Assessment Approach with the experimental results altering different proportions of the Reinforcements**", International Conference on Advances in Materials and Manufacturing Applications, Materials Today: Proceedings, 24 (2), pp. 538-547, 2020.

- Prasenjit Chatterjee, Nabankur Mandal**, Sreerupa Dhar,** Saikat Chatterjee, Shankar Chakraborty, **"A novel decision-making approach for light weight environment friendly material selection",** Materials Today: Proceedings (SCOPUS), 22 (4), pp. 1460-1469.

Faculty & Staff Achievements

Book Published

- **Indrajit De**, published book "No Reference Image Quality Metric – An Integrated Approach", Laplambert Academic Publishing, July 14, 2020 ISBN10: 6200222460 ISBN13: 978-6200222460.

Patent Published

- **Tapas Kumar Biswas,** Patent title: Shaft Independent Motor cooler, Date:16th October, 2020, Issue number: 42/2020, Official Journal of the Patent Office, India.

Higher Degree Received

- **Mr. Utpal Sarkar**, Assistant Professor in Mathematics of Basic Science obtained his Ph.D under the he guidance of Dr. Arun Kr. Jalan and Dr. Bibhas Ch.Giri on "**Development of some mathematical Fuzzy models for the control of inventories and supply chains of physical goods**", from MAKAUT.

- **Mr. Tapas Kumar Biswas** has successfully completed one-year Post Graduate Diploma in "Logistics And Supply Chain Management" from St. Xavier's College, Park Street, Kolkata on November, 2020.

Registered/ Enrolled for Higher Degree

- **Ms. Soma Bandyopadhyay** has been granted registration for Ph.D Program in CSE-IT in MAKAUT under the guidance of Dr. S. S. Thakur, HOD-CSE on 14th February, 2020 with effect from 27th September, 2018.

- **Mr. Nabankur Mandal** has enrolled in Ph.D. Program in Mechanical Engineering Department at Aliah University, New Town, Kolkata on 26th June, 2020.

Invited as Resource Person

- **Dr. Prasenjit Chatterjee** delivered an invited talk on theme Research techniques for Decision Making using Qualitative Research on 20th July, 2020 in one week Research methodology workshop, organized by Doon University.

➢ **Mr. Diptayan Bhattacheryya** became a member of All India Management Association (AIMA)-Local Management Association (LMA)-Kolkata for the year 2020-21.

Recognition

➢ **Prof. (Dr.) Arghya Sarkar** is nominated as external expert of BOS of EE departments, Brainware University in 2020.

➢ **Dr. Swarup Kumar Mitra** has been certified as Microsoft Innovative Educator on 10th October, 2020 by Microsoft Education Center.

➢ **Dr. Kalyan Biswas** participated in 2nd International Conference on VLSI Device, Circuit and System" (VLSI DCS-2020) organized by IEEE Electron Device MSIT Student Branch Chapter as **session Chair** and paper presenter from 18th to 19th July, 2020 in online mode.

➢ **Dr. Shampa Sengupta** was nominated as a **Program Committee Member** of 2nd International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2020)," scheduled from 2nd to 4th July, 2020 in Kolkata.

➢ Mr. Nilanjan Byabarta has enrolled for Ph.D Program in ECE Dept., MAKAUT under the supervision of **Dr. Swarup Kumar Mitra** on 5th October, 2020.

Research Paper Publications:

CSE Department

Journal

➢ P. K. Naskar, **Surojit Bhattacharyya**, D. Nandy, A. Chaudhuri. "A robust image encryption scheme using chaotic tent map and cellular automata". Nonlinear Dynamics, Springer Nature. vol. 100 (3), pp. 2877–2898, May, 2020.

➢ **Mahua Nandy Pal**, Minakshi Banerjee, "Feature Enhancement of Retinal Images in Deep Convolution Pipeline, Its Reconstruction, Extraction and Analytical Evaluation", International Journal of Computer Science Engineering (IJCSE), vol. 9 (6), December, 2020.

Book Chapter

➢ Madhusree Kuanr, Puspanjali Mohapatra, **Sasmita Subhadarsinee Choudhury**, "TSARS: A Tree Similarity Algorithm Based Agricultural Recommender System", Recommender System with Machine Learning and Artificial Intelligence: Practical Tools and Applications in Medical, Agricultural and Other Industries, John Wiley & Sons, Inc. 17th June, 2020.

➢ **Soma Bandyopadhyay, Subhro S. Thakur,** J.K. Mandal, "Implementation of Real-Time Virtual Dressing Room Using Microsoft Kinect SDK and Supervised Learning", In: D. Bhattacharjee, D. K. Kole, N. Dey, S. Basu, D. Plewczynski (eds) Proceedings of International Conference on Frontiers in Computing and Systems. Published in Advances in Intelligent Systems and Computing, vol 1255. Springer, Singapore, November, 2020. https://doi.org/10.1007/978-981-15-7834-2_2,

- **Rachita Ghoshhajra,** S. Chatterjee, S. Barman Mandal, "Identification of Some Transposable Elements of DNA using BP Suche Algorithm", A. K. Das et al (eds.), Computational Intelligence in Pattern Recognition, Advances in Intelligence Systems and Computing 999, Springer Nature Singapore Pte Ltd. 2020. https://doi.org/10.1007/978-981-13-9042-5_6
- **Rachita Ghoshhajra**, S. Chatterjee, S.Barman Mandal, "Study of Evolution by Searching Alu Pattern from Primate Transposon", S.Kundu et al(eds.), Proceedings of the 2nd International Conference on Communication, Devices and Computing, Lecture Notes in Electrical Engineering 602 , Springer Nature Singapore Pte Ltd. 2020. https://doi.org/10.1007/978-981-15-0829-5_47

Conference

- **Avijit Bose, Sumit Majumdar, Prasenjit Das**, "Voting Rule Applied to Mobile service Provider's Survey-An Indian Perspective", in proceedings of the 2nd International Conference on Communication, Devices and computing, 2020, Scopus Indexed. January, 2020.
- **Mahua Nandy Pal**, Dr. Minakshi Banerjee, "Evaluation of Effectiveness of Image Enhancement Techniques with Application to Retinal Fundus Images ", in proceedings of CINE 2020, April, 2020. DOI: 10.1109/CINE48825.2020.234389.

EE Department

Journal

- **Debopoma Kar Ray**, **Tamal Roy**, Surajit Chattopadhyay, "Single and diagonal double thrust failure assessment of quad-copter at starting", ELSEVIER Measurement, vol. 156, 2020.
- **Debopoma Kar Ray**, Surajit Chattopadhyay, "Fault analysis in solar–wind microgrid using multi-resolution analysis and Stockwell transform-based statistical analysis", IET Science Measurement and Technology, vol. 14 (6), pp. 639-650, August, 2020.
- **Debopoma Kar Ray**, **Tamal Roy**, Surajit Chattopadhyay, "Skewness Scanning for Diagnosis of a Small Inter-Turn Fault in Quadcopter's Motor based on Motor Current Signature analysis", IEEE Sensors Journal, Early Access, November, 2020. DOI:10.1109/JSEN.2020.3038786

Conference

- Mita Pal, Gauam Sarkar, R. K. Barai, **Tamal Roy**, "Model reference adaptive xcontrol of wheel mobile robot", in proceedings of MFIIS-2020, HHI, October, 2020.
- **Sohrab Hossain**, A. Gaffar, **Tamal Roy**, Surajit Chattopadhyay, "Adaptive AI based short duration fault diagnosis of PMDC motor used in air-circulation system of light motor vehicle", in proceedings of MFIIS-2020, HHI, October, 2020.
- **Arghya Sarkar, Barnali Kundu,** "Self-synchronized ADALINE based photovoltaic incorporated shunt active power filter", in proceedings of ICORE 2020, GNIT, 2020.
- **Suman Das**, "Efficient energy metering of PV-system using Arduino-328P & ESP-8266", in proceedings of ICORE 2020, GNIT, 2020.

ECE Department

Journal

- **Joydeep Banerjee**, M. Mitra, "Effect of Charge Bump Position Shifting on Negative Resistance and Noise Performance of Lo-Hi-Lo IMPATT", IETE International

  Journal of Research, January, 2020. DOI: 10.8080/03772063.2019.1709569

- Trilochan Patra, **Swarup Kumar Mitra**, "Rain Attenuation Predicted Model for 5G Communication in Tropical Regions", International Journal of Engineering and Advanced Technology (IJEAT), vol. 9 (3), February, 2020.

Book Chapter

- Mourina Ghosh, **Subhasish Banerjee**, Shekhar Suman Borah, Pulak Mondal, "Single OTRA Based Implementation of Second Order Band Reject Filter (Three Configurations)", in proceedings of International Conference on Modelling, Simulation & Inteligent Computing (MoSICOM 2020), in Lecture Notes in Electrical Engineering, vol 659, pp.-319-327, July 2020.

Conference

- Piyush Raj, **Kalyan Biswas**, "Design of a Boost Converter Circuit for application in Piezoelectric Energy Harvesting System", in proceedings of International Conference on Future Trends and Technological Advancement in Engineering-2020 (ICFTTAE-2020), NIT, Kolkata, February, 2020.

- **Kalyan Biswas**, Angsuman Sarkar, Arghyadeep Sarkar, "Effect of Channel Doping and Fin Shapes on Performance of Junctionless bulk FinFET", in proceedings of 2nd International Conference on VLSI Device, Circuit and Systems (2020 IEEE VLSI DCS), July, 2020, DOI: 10.1109/VLSIDCS47293.2020.9179912.

- **Rajarshi Sanyal**, Srimita Coomar, Debasree Chanda (Sarkar), Partha Sarathi Bera, Partha Pratim Sarkar, "Design of UWB Monopole Antenna with 5.5/7.5 GHz Enhanced and Controllable Dual Band Rejection Characteristics", in proceedings of IEEE International Conference for Convergence in Engineering , Netaji Subhash Engineering College, Kolkata, September, 2020.

- **Soham Lodh**, Rajib Chakraborty, "Low cost coating of high refractive index multilayer TiO2 film for improved photonic applications", in proceedings of Frontiers in Optics / Laser Science © OSA 2020, The Optical Society, September, 2020.

- **Rajarshi Sanyal**, Srimita Coomar, Debasree Chanda (Sarkar), Partha Sarathi Bera, Partha Pratim Sarkar, "A Compact UWB Monopole Antenna with Sharp Roll-Off Band Notch", in proceedings of MFIIS-2020, HHI, October, 2020.

- **Susmita Bandyopadhyay**, Tamal Roy, "System Identification and Control of Wheeled Mobile Robot", in proceedings of MFIIS-2020, HHI, October, 2020.

- Trilochan Patra, **Swarup Kumar Mitra**, "Hardware Implementation of a Communication Link for 5G Communication in the Tropical Regions", International Journal of Engineering and Advanced Technology (IJEAT), vol. 9 (3), February, 2020.

- I. Saha , N. Ghosh, **Debasree Maity**, N. Sharma, J. P. Sarkar and K. Mitra, "Genome-wide analysis of Indian SARS-CoV-2 genomes for the identification of genetic mutation and SNP", International Journal , Infection, Genetics and Evolution, vol. 85, pp. 104457-104465, July, 2020.

- I. Saha , N. Ghosh, **Debasree Maity**, N. Sharma and K. Mitra, "Inferring the genetic variability in Indian SARS-CoV-2 genomes using consensus of multiple sequence alignment techniques", International Journal Infection, Genetics and Evolution, vol. 85, pp. 104522-104528, 2020.

- **Soham Lodh,** Rajib Chakraborty, Rajib Ghosh, "Studies on high refractive index amorphous TiO2 thin film for possible improvement of light extraction efficiency in organic light emitting diodes", International Journal Optical Engineering, vol. 59 (10), pp. 107104-1 – 107104-12, 2020.

- **Kalyan Biswas**, "Design of a Sensor System Using Fiber Bragg Grating for Liquid Level and Liquid Density Measurement", Sensor Letters, American Scientific Publishers, pp. 889-893, vol. 18(12), December, 2020.

- Trilochan Patra, **Swarup Kumar Mitra**, "Link Budget Analysis for 5G Communication in the Tropical Regions", Hindawi Wireless Communications and Mobile Computing, vol. 2020, December, 2020.

Book Chapter

- **Amit Phadikar**, "Quality Access Control to Provide Security to Data Owners in Cloud Computing", Information Technology for Management (ISBN 978-81-947839-1-6), K.D. Publications, vol. 1, pp. 58-91, Nov, 2020.

Conference

- Sunanda Das, **Shampa Sengupta,** "Feature Extraction and Disease Prediction from Paddy Crops Using Data Mining Techniques", in proceedings of International Conference on Computational Intelligence in Pattern Recognition-2020, Springer AISC series, vol. 1120, 2020.

Journal

- **Prasenjit Chatterjee**, Dilbagh Panchal, Shankar Chakraborty, "A developed meta-model for biomaterials selection", Trends in Biomaterials and Artificial Organs, vol. 34 (1), pp. 20-32, 2020.
- Željko Stević, Dragan Pamucar, Adis Puska, **Prasenjit Chatterjee**, "Sustainable supplier selection in healthcare industries using a new MCDM method: Measurement of Alternatives and Ranking according to COmpromise Solution (MARCOS)", Computers & Industrial Engineering, vol. 140, 2020.
- Morteza Yazdani, Dragan Pamucar, Madjid Tavana**, Prasenjit Chatterjee,** "A Rough Based Multi-Criteria Evaluation Method for Healthcare Waste Disposal Location Decisions", Computers & Industrial Engineering, vol. 143, 2020.
- Mališa Žižović, Dragan amučar, Miloljub Albijanić, **Prasenjit Chatterjee**, Ivan Ibisevic, "Eliminating rank reversal problem using a new multi-attribute model- The RAFSI method", Mathematics, vol. 8 (6), 2020.
- MortezaYazdani, **Prasenjit Chatterjee**, Dragan Pamucar, and Shankar Chakraborty "Development of an integrated decision making model for location selection of logistics centers in the Spanish autonomous communities", Expert Systems with Applications, ELSEVIER, vol. 148, 2020.
- Morteza Yazdani, Ali Ebadi Torkayesh, **Prasenjit Chatterjee**, "An integrated decision-making model for supplier evaluation in public healthcare system: the case study of a Spanish hospital", Journal of Enterprise Information Management, vol. 33 (5), pp. 965-989, 2020.
- Morteza Yazdani, Dragan Pamucar**, Prasenjit Chatterjee**, Shankar Chakraborty, "Development of a Decision Support Framework for Sustainable Freight Transport System Evaluation using Rough Numbers", International Journal of Production Research, vol. 58(14), pp. 4325-4351, 2020.
- Ankit Singh, Ranjan Kumar Ghadai, Kanak Kalita, **Prasenjit Chatterjee,** Dragan Pamučar, "EDM Process Parameter Optimization for Efficient Machining of INCONEL-718", Facta Universitatis, Series: Mechanical Engineering (FU Mech Eng), vol. 18 (3), pp. 473-490, 2020.
- **Soutrik Bose**, Titas Nandi, "Experimental investigation of WEDM on titanium hybrid composite reinforced with boron powder: a novel approach", The European Physical Journal Plus, vol. 135 (11), pp. 1-34, 2020. https://doi.org/10.1140/epjp/s13360-020-00904-9.
- **Soutrik Bose,** Titas Nandi, "Statistical and experimental investigation using a novel multi-objective optimization algorithm on a novel titanium hybrid composite developed by lens process", Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol. 235 (16), pp. 2911-2933, 2020. https://doi.org/10.1177/0954406220959101.
- **Soutrik Bose,** Titas Nandi, **"A novel optimization algorithm on surface roughness of WEDM on titanium hybrid composite",** Sādhanā, vol.45 (1), pp. 1-10, 2020. https://doi.org/10.1007/s12046-020-01472-5.
- **Soutrik Bose, Nabankur Mandal**, Titas Nandi, "Comparative and Experimental study on Hybrid Metal Matrix Composites using Additive Ratio Assessment and Multi-Attributive Border Approximation area Comparison methods varying the different Weight Percentage of the Reinforcements", Materials Today: Proceedings, vol. 22 (4), pp. 1745-1754. https://doi.org/10.1016/j.matpr.2020.03.007.

- **Soutrik Bose, Nabankur Mandal**, Titas Nandi, "Selection and Experimentation of the Best Hybrid Green Composite Using Advanced MCDM Methods for Clean Sustainable Energy Recovery: A Novel Approach", International Journal of Mathematical, Engineering and Management Sciences, vol. 5 (3), pp. 556-566. 2020. https://doi.org/10.33889/IJMEMS.2020.5.3.046.
- **Jaideep Dutta,** Ranjib Biswas, Balaram Kundu, "Analytical solution of dual-phase-lag based heat transfer model in ultrashort pulse laser heating of A6061 and Cu3Zn2 nano film", Optics and Laser Technology, vol. 128, pp. 1-10, 2020. https://doi.org/10.1016/j.optlastec.2020.106207.
- **Jaideep Dutta,** Balaram Kundu, "2-D Hybrid Analytical Approach for Investigation of Thermal Aspects in Human Tissue undergoing Regional Hyperthermia Therapy", Proceedings of Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol. 234 (20), pp. 3951–3966, 2020. https://doi.org/10.1177/0954406220919460.
- **Jaideep Dutta,** Balaram Kundu, "Exact Analytical Formulation of Three-dimensional Pennes Bioheat Model in Regional Hyperthermia with Modified Initial Condition", Journal of The Institution of Engineers (India): Series C, vol. 101, pp. 271-279, 2020. https://doi.org/10.1007/s40032-019-00534-w
- **Jaideep Dutta,** Balaram Kundu, "Exact Solution of Three-dimensional Dual-phase-lag Temperature Response in Regional Hyperthermia Therapy of Human Body", Journal of Applied Mechanics and Technical Physics, vol. 61 (9), pp. 955-963, 2020. https://doi.org/10.1134/S0021894420060073
- **Abhijit Dutta**, Himadri Chattopadhyay, "Exergetic Analysis of Human Respiratory System Including Effect of Age and Gender", International Journal of Exergy (INDERSCIENCE), vol. 31 (4). pp. 370-385, 2020. DOI: 10.1504/IJEX.2020.107194.

Basic Science Department

Journal

- Joyeeta Ghosh, Sakrit Hait, **Soumyajit Ghorai**, Dipankar Mondal, Sven Wiessner, Amit Das, **Debapriya De,** "Cradle-to-cradle approach to waste tyres and development of silica based green tyre composites", Resources, Conservation and Recycling, vol 154, March, 2020. DOI: 10.1016/j.resconrec.2019.104629.

Conference

- Binoy Krishna Ghosh, **Dipankar Ghosh**, and Mousumi Basu, "Optical Pulse Reshaping in Highly Nonlinear Dispersion Compensating Fibers Operating at Different Wavelengths", in proceedings of International Conference on Power, Computer, Communication & Applied Innovations, JECRC University, September, 2020.

MSH Department

Journal

- **Juin Ghosh Sarkar**, "Deep Learning-Based Classification of Customers Towards Online Purchase Behaviour: A Recent Empirical Study for Home Appliances", International Journal for Online Marketing, pp. 74-86, vol. 10 (4), 2020.

AUE Department

Journal

- **Animesh Talapatra**, "A molecular dynamics-based investigation on tribological properties of functionalized graphene reinforced thermoplastic polyurethane nanocomposites", Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 2020. DOI: 10.1177/1350650120912612, 1.137

- **Tapas Biswas, Prasenjit Chatterjee,** Bikash Choudhuri, "Selection of commercially available alternative passenger vehicle in automotive environment", Operational Research in Engineering Sciences: Theory and Applications, vol. 3 (1), pp. 16-27, 2020.

- **Animesh Talapatra**, "Atomistic investigation of the interfacial mechanical characteristics of graphene reinforced thermoplastic polyurethane composite", Composite Interfaces, pp. 1-22, 2020, https://doi.org/10.1080/09276440.2020.1783943, 2.32

- **Sudipta Chaki**, Digbalay Bose, R. N. Bathe, "Multi-Objective Optimization of Pulsed Nd: YAG Laser Cutting Process Using Entropy-Based ANN-PSO Model", Lasers in Manufacturing and Material Processing, Spriner, vol.7, 2020. https://doi.org/10.1007/s40516-019-00109-8.

- **Tapas Kumar Biswas, Manik Chandra Das** "Selection of The Bar Riers of Supply Chain Management in Indian Manufacturing Sectors Due to COVID 19 Impacts" Operational Research in Engineering Sciences: Theory and Applications, vol. 3 (3), pp. 1-12, 2020. DOI: https://doi.org/10.31181/oresta2030301b.

- Rana Basu, Prabha Bhola, **Manik Chandra Das** "A framework of quality management practices for Indian services SMEs", Quality Management Journal, vol. 20 (1), pp.62-75 2020.

FDP/Seminar/Conference/Workshop/FDP organized

- AUE Dept. organized a Practical training program on "**BSVI Technology**" at MCKVIE-EICHER Centre for Automobile Technology for students of MCKVIE with help of Mr. Afroz Alam, Zonal Competence Development Head, VE Commercial Vehicles, India during 3rd to 14th February, 2020.

- CSE Dept. organized One Day Seminar on "**Scrum Agile**" on 5th February, 2020. The speaker was Mr. Sayan Hazra, Senior Manager, SIEMENS India (Pvt) Ltd.

- ECE Dept. organized a Seminar on "IoT using ARDUINO & Artificial Intelligence" on 13th February, 2020.

- ECE Dept. organized **32nd CII Regional Work skill Competition-2020** on 13th February, 2020.

- ECE Dept. organized Test cum Seminar on "**CAT- as an academic prospect**" on 20th February, 2020.

- AUE Dept. organized a Workshop on "**Engine Management System for New Generation Automobiles**" for final year students pursuing diploma in Automobile Engineering in different polytechnics of West Bengal on 28th February, 2020.

1st Workshop on Engine Management System for New Generation Automobiles

Practical training program on "BSVI Technology

- IT Dept. organized a Webinar on "**PHP and Angular JS**" on 1st April, 2020.

- IT Dept. organized a Webinar on "**Application of PHP and MySQL in implementation for ERP Modules**" on 3rd April, 2020.

- ECE Dept. organized One Day seminar on 6th April, 2020 on "**E-CAD**" wherein ARDENT Computech Pvt. Ltd gave lecture.

- EE Dept. organized One Day workshop on 13th April, 2020 on "**Introduction to Python Programming**".

- IT Dept. organized an Online Alumni Interaction on "**Placement Scenario in India before and after Coronavirus pandemic**" on 15th April, 2020.

- CSE Dept. organized webinar on "**Careers in Data Science**" on 29th April, 2020. The speaker was Mr. Kaustabh Datta Choudhury, Sr. Data Sciencetist, Rentomojo. The audience were the Parents of (10+2) standard students and Stakeholders.

- IT Dept. organized webinar on "**Importance of Aptitude and Competitive Performance for JOB Interview**" on 1st May, 2020.

- IT Dept. organized a Webinar on "**Overview on SAP Platform**" on 2nd May, 2020.

- CSE Dept. organized Webinar on "**IoT**" on 3rd May, 2020. The speaker was Mr. Debasish Ghosh from Webskitters Technology Solutions Pvt. Ltd.

- CSE Dept. organized webinar on "**Web Development with Angular JS**" on 9th May, 2020. The speaker was Mr. Soumya Raha from Ardent Computech and the audience were the students from CSE 4th sem, CSE 6th sem & CSE 8th sem.

- ECE Dept. organized One Day Seminar on "**Careers in VLSI Design**" on 5th June, 2020.

- CSE Dept. organized National Webinar on "**Technical Writing using LaTex**" in collaboration with ? on 26th June, 2020. The speakers were Ms. Mili Ghosh from University of North Bengal, Dr. Somnath Mukhopadhyay from Assam University, Silchar & Dr. Koushik Dasgupta, from Kalyani Govt. Engineering College. The audience were the faculties and the students.

- CSE Dept. organized webinar on "**Future of Technology Lies Here**" on 5th July, 2020. The speaker was Prof. Sheikh Rafiul Islam & Prof. Arijit Das from AI Labs, DCL Group. The audience were CSE 4th Semester Students.

- ECE Dept. organized "**Pre-Placement Practice Program**" from 8th to 19th September, 2020.

- ECE Dept. organized workshop on "**How to Crack Placement Drives in IT Companies"** on 8th and 13th September, 2020.

- ECE Dept. organized "**Special Preparatory Session for Appearing in VLSI Companies"** on 14th September,2020.

- IT Dept. organized AICTE Sponsored Six Days Online STTP Programme on "**Big Data Analytics using Soft Computing Tools (Phase-1)"** from 5th to 10th October, 2020.

Big Data Analytics using Soft Computing Tools (Phase-1)

- ME Dept. organized 5 days STTP (online) on "**Optimization Techniques: Recent Trends & Applications in Engineering"** during 5th to 10th October, 2020.

- CSE Dept. organized AICTE Sponsored STTP Program on "**Business Analytics (Phase I)"** during 12th to 17th October, 2020. The audience were faculty Members from different AICTE approved Colleges and Research Scholars. Speakers were from Jadavpur University, IIEST Shibpur, IITBHU, TCS etc. **Dr. S. S. Thakur** was the coordinator of the program. **Mr. Avijit Bose** and **Mr. Prasenjit Das** were joint convener of the same. **Ms. Soma Bandyopadhyay** delivered lecture on "Relevance of Data Mining in Business Analytics" on 12th October, 2020 and **Dr. S. S. Thakur** delivered lecture on "Vehicle Insurance and Claim: Proposed Business Model using Web Service Negotiation" on 17th October, 2020.

- ECE Dept. organized One day Workshop on "**Circuit Design using LTSPICE"** (Technical Sponsorship: IEEE, SSCS, Kolkata Chapter) on 18th October, 2020

- AUE Dept. organized "**Changing Business Environment: Technology and Innovation & Electric Vehicles and Battery Technology"** with the help of Mr. Swapnil Sur, Senior Engineer, Robert Bosch Engineering and Solutions Pvt. Limited, Ms. Niharika Thakur, Manager-Process Development (After Sales), on 10th November, 2020.

- IT Dept. organized a Webinar on "**Importance of Soft Skill in Technical Education and Employment"** on 28th November, 2020.

- AUE Dept. organized Online alumni interaction session on "**Expectations of the present automotive industry from fresher's"** for students with the help of Mr. Aritra Sen, Manager-Service Execution, Mahindra & Mahindra, Mr. Sayandeep Basu, Claims Service Manager, Tata AIG, Mr. Pranta Dasgupta, Engineer Trainee, Claims Auto Department, Tata AIG on 9th December, 2020.

Industry Visit Organised

- ECE Dept. organized Industry visit to Webskitters Technology Solutions Pvt. Ltd., Eco Intelligent Park, Sector-V, Salt Lake City, Kolkata on 21st February, 2020.
- ECE Dept. organized Industry visit to Webskitters Technology Solutions Pvt. Ltd., Eco Intelligent Park, Sector-V, Salt Lake City, Kolkata on 28th February, 2020.

FDP/STTP/Conference/Workshop/Webinar etc. Attended:

FDPs Attended:

- **Ms. Jayanti Mahata** participated Five days FDP on "**Data Science and Big Data Analytics**" organized by MCKV Institute of Engineering from 13th to 17th January, 2020.

- **Mr. Prasenjit Das and Mr. Sumit Majumdar** attended AICTE ATAL Program on "**Data Science and Data Mining**" during 10th to 14th February, 2020.

- **Dr. Indrajit De, Dr. Shampa Sengupta, Ms. Jayanti Pathak Rudra, Ms. Jayanti Mahata, Ms. Nabamita Majumder, Mr. Arindam Das** participated Three Days FDP on "**Artificial Intelligence in Healthcare Applications**" organized by MCKVIE from 12th to 14th February, 2020.

- **Dr. Dipankar Ghosh** participated in Two Weeks FDP on "**Digital Transformation in Teaching Learning Process**" organized by NPIU, offered by IIT Bombay, powered by Swayam, during 14th February to 6th March, 2020.

- **Mr. Nabankur Mandal** participated and completed AICTE approved Online FDP Course by Swayam on "**Digital Transformation in Teaching Learning Process**" organized by IIT, Bombay, dated on 14th February to 6th April, 2020.

- **Dr. Amit Phadikar** participated One Week AICTE Sponsored FDP on "**Research Trends in VLSI Design**" organized by NITTTR Chandigarh from 25th to 29th May, 2020.

- **Ms. Sasmita S. Choudhury** completed online FDP on "**R Programming Language**", organized by SKSVMA College of Engg & Technology, Karnataka in association with spoken tutorial, IIT Bombay during 28th to 30th May, 2020.

- **Dr. Amit Phadikar** participated One Week AICTE Sponsored FDP on "Outcome Based Curriculum" organized by NITTTR Chandigarh from 1st to 6th June, 2020.

- **Mr. Tapas Kr. Biswas** participated Five Days FDP on "**Recent Innovations and Technologies in Electric Vehicles**" organized by GATES Institute of Technologies, Andhra Pradesh from 8th to 12th June, 2020.

- **Mr. Nabankur Mandal** participated Online FDP on '**Welding for Additive Manufacturing**', organized by Indian Welding Society (ISW), Coimbatore Institute of Engineering and Technology, dated on 10th to 15th June, 2020.

- **Ms. Moumita Goswami** completed National Level Online Five Days FDP on "**Machine Learning and Research Opportunities**", organized by Sapthagiri College of Engineering, Bengaluru-57 during 15th to 19th June, 2020.

- **Dr. Amit Phadikar** participated One Week AICTE Sponsored FDP on "**Applications of IoT**" organized by NITTTR Chandigarh from 16th June, 2020 to 20th June, 2020.

- **Mr. Nabankur Mandal** participated Online FDP on "**Research Methodology for Social Sciences Council for Teacher Education Foundation**" organized by Multani Mal Modi College, Patiala during 20th June to 26th June 2020.

- **Ms. Soma Bandyopadyay** completed One Week online FDP on "**Image Authentication, WSN & IOT**", organized by JIS College of Engineering in association with Computer Society of India, Kolkata Chapter, during 22nd to 26th June, 2020.

- **Mr. Nabankur Mandal** participated Online Two Weeks FDP on "**Effective Use of ICT Tools in Online Teaching**" organized by IQAC and ECE Dept. Maharashtra Institute of Technology, Aurangabad during 22nd June to 4th July, 2020.

- **Dr. Amit Phadikar** participated One Week AICTE Sponsored FDP on "**Data Analytics with Python**" organized by NITTTR Chandigarh from 22nd June, to 26th June, 2020.

- **Dr. Dipankar Ghosh** participated in Five Days FDP on "**Advancements in Science and it's Applications in Engineering**" organized by Hyderabad Institute of Technology & Management, during 22nd to 26th June, 2020.

- Ms. **Moumita Goswami** completed Five Days Online National FDP on "**Applications of Machine Learning and Deep Learning**" organized by Raj Kumar Goel Institute of Technology, Ghaziabad organized by the CSE Dept. during 24th to 28th June, 2020.

- Dr. **Dipankar Ghosh** participated in Five Days FDP on "**ICT Based Teaching and Learning Process**" organized by Roorkee College of Polytechnic, during 1st July to 5th July, 2020.

- Dr **Swarup Kumar Mitra** participated in Three Days Virtual FDP entitled "**Effective Teaching & Learning**" organized by Bharti Group of Institutions from 5th to 7th July, 2020.

- Ms. **Moumita Goswami and Ms. Sasmita S. Choudhury** completed FDP on "**IOT and Cloud Applications**", organized by Dayananda Sagar Academy of Technology & Management during 6th to 10th July, 2020.

- Dr. **Amit Phadikar** participated One Week FDP on "**Future Nano Electronic Devices & Circuits**" organized by Department of ECE, MGIT, Hyderabad from 6th to 10th July, 2020.

- Mr. **Mojammel Rahaman** participated in Seven Days FDP on "**Online Students Induction Programme (eSIP)**" organized by All India Council for Technical Education (AICTE), during 7th July to 13th July, 2020.

- Dr **Swarup Kumar Mitra** participated in 5 Day International FDP on "**Emerging Trends in Sensors, Security and Smart Automation Systems**" organized by Department of Electrical Engineering B. P. Poddar Institute of Management & Technology, Kolkata from 8th to 12th July,2020.

- Mr. **Arijit Sarkar** participated FDP on "**Advancement of Digital Education in Pandemic Era**" organized by Maharana Pratap College of Pharmacy, Kanpur from 9th to 11th July, 2020.

- Mr. **Sourav Ghorai** participated in Five Days FDP on "**Research Methodology**" organized by Balaji Institute of Management Sciences, during 13th July to 17th July, 2020.

- Dr. **Dipankar Ghosh, Mr. Mojammel Rahaman and Mr. Tushar Kanti De** attended a Six Days Online FDP on "**ICT in Teaching & Evaluation**" organized by MSP Mandal's Shri Shivaji College, Parbhani (Maharashtra), during 13th to 18th July, 2020.

- Ms. **Moumita Goswami and Ms. Sasmita S. Choudhury** completed Online FDP on "**Machine Learning with Python**", organized by KKR & KSR Institute of Technology and Sciences, during 13th to 18th July, 2020.

- Ms. **Sasmita S. Choudhury** completed Online FDP on "**Python Programming**", organized by K.L Deemed to be University in association with IIT Bombay spoken tutorial, during 15th to 18th July, 2020.

- Mr. **Sachin Balo** participated Four days FDP on "**Data Science Prerequisites**" organized by Department of Computer Applications, The Standard Fireworks Rajaratnam College for Women, Sivakasi from 15th July, 2020 to 18th July, 2020.

- Dr. **Dipankar Ghosh and Mr. Mojammel Rahaman** attended a Twelve Days Online FDP on "**Online Teaching - Learning and Research Methodology**" organized by Govt. P. G. College, Bilaspur with RUSA and IQAC, during 18th to 29th July, 2020.

- Dr. **Amit Phadikar** participated FDP on "**Effective Teaching Pedagogy**" organized by Department of ECE, IPEC, Ghaziabad from 20th to 22nd July, 2020.

- Mr. **Sachin Balo, Mr. Priyanath Mahanti** participated Five Days FDP on "**VLSI- Industrial and Research Perspectives**" organized by Saranathan College of Engineering from 20th to 24th July, 2020.

- Dr. **Amit Phadikar** participated One Week FDP on "**Cyber Attacks & Digital Forensics**" organized by Department of IT, MGIT, Hyderabad from 20th to 24th July, 2020.

- Mr. **Nabankur Mandal** participated FDP on "**Advanced Materials (Fabrication, Characterization and Applications)**" organized by School of Mechanical Engineering, Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, Bhubaneswar-751024, Odisha, dated on 20th July to 25th July, 2020.

- Mr **Subhasish Banerjee** participated in One week FDP on "**Recent Trends in Communication Systems and Devices**" organized by B. P. Poddar Institute of Management and Technology from 21st to 25th July,2020 in online mode.

- Dr. **Kalyan Biswas** participated in One Week FDP on "**Recent Trends in Communication Systems and Devices**" organized by ECE Department, BPPIMT, Kolkata from 21st to 25th July, 2020 in online mode.

- **Mr. Subir Gayen** attended a Five Days FDP on "**Orienting Applications & Conceptualized Aspects of Science & Humanities**" organized by Balaji Institute of Technology & Science, during 21st July to 25th July, 2020.

- **Dr. Dipankar Ghosh** attended a Six Days FDP on "**Educational Video Creation i.e., E-content Development for Teachers**" organized by Rajarshi Chhatrapati Shahu College, Kolhapur, during 22nd July to 27th July, 2020.

- **Mr. Sachin Balo, Mr. Priyanath Mahanti**, **Ms. Rachita Ghoshhajra** participated a FDP on "**IT Infrastructure and Cyber Security**" organized by Dept. of IT, Oriental College of Technology, Bhopal, MP from 25th to 26th July, 2020.

- **Ms. Moumita Goswami** attended Two-week Online FDP on "**Wireless Communication Technologies for IoT**", organized by Electronics & ICT Academy Supported by Ministry of Electronics and Information Technology (MeitY), Govt. of India Indian Institute of Technology Guwahati during 27th July to 7th August, 2020.

- **Mr. Sougata Dey** participated Three days TEQIP-III Sponsored FDP on "**Emerging Trends in Organic Electronics (ETOE -2020)**" organized by Rajasthan Technical University, Kota and Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur, India from 27th July, 2020 to 29th July, 2020.

- **Dr. Amit Phadikar** participated One Week AICTE sponsored FDP on "**Foundations of Block chain Technology**" organized by NITTTR Chandigarh from 27th to 31st July, 2020.

- **Ms. Sasmita S. Choudhury** completed Online FDP on "**Statistical applications Using SPSS software**", organized by G.L Research Academy during 27th to 31st July, 2020.

- **Mr. Subhra Nath Maiti** and **Mr. Diptayan Bhattacheryya** participated in the AICTE Universal Human Values FDP from 28th July to 1st August, 2020.

- **Mr. Sachin Balo, Mr. Sougata Dey** participated One Week TEQIP-III Sponsored FDP on "**Embedded Systems and IoT (ESI-2020)**" organized by Rajasthan Technical University, Kota and Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur, India from 4th to 8th August, 2020.

- **Dr. Arun Kumar Jalan** had attended a Seven Days FDP on "**Introduction to Cross-Sectional Data Analysis using SPSS and JAMOVI**" organized by Kidderpore College, Kolkata in Collaboration with Department of Commerce, CU & ICA India, during 7th to 23rd August, 2020.

- **Dr. Dipankar Ghosh, Ms. Debanjali Chowdhury, Ms. Jayanti Mahata, Mr. Mr. Soutrik Bose**, **Nabankur Mandal, Mr. Swagata Sannigrahi** attended a Five Days FDP on "**Inculcating Universal Human Values in Technical Education**" organized by AICTE, during 10th to 14th August, 2020.

- **Ms. Sasmita S. Choudhury** attended FDP on "**Education 4.0 The Future Ahead**", organized by International Quality Assurance Cell in association with Dept. of Science & Humanities, during 10th to 14th August, 2020.

- **Ms. Juin Ghosh Sarkar** participated in the Five Days FDP organized by MAKAUT on "**Advanced Research Technique**" in August 2020.

- **Mr. Animesh Talapatra** attended one-week FDP on "**NEMS Technologies: Modern Interdisciplinary Approach in Engineering (NEMS Tech 2020)**"organized by NIT, Silchar, during 17th to 21st August, 2020.

- **Ms. Sasmita S. Choudhury** attended FDP on "**Big data Analytics with Deep Learning**", organized by ATAL, Poornima Institute of Engineering & Technology, during 18th to 22nd August, 2020.

- **Mr. Sougata Dey** participated one week TEQIP-III Sponsored FDP on "**Recent Trends in Material Science and Engineering (RTMSE-2020)**" organized by Rajasthan Technical University, Kota and Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur, India from 20th to 21st August, 2020.

- **Dr. Sudipta Chaki** Attended ATAL FDP on "**Advancement in Manufacturing Technologies for Industrial Applications**" organized by Gyan Ganga Institute of Technology & Sciences, Jabalpur during 24th to 28th August, 2020.

- **Dr. Tanmoy Roy Choudhury** attended a Five Days FDP on "**Universal Human Values-I**" organized by All India Council for Technical Education (AICTE), during 5th to 9th September, 2020.

- **Mr. Swagata Sannigrahi** attended ATAL FDP on "**Alternate Fuels**" organized by Christian College of Engineering & Technology during 7th to 11th September, 2020.

- **Mr. Animesh Talapatra** attended "**Fundamentals of Corrosion Science and Technology**" organized by Dept. of Metallurgy Engineering and Materials Science (MEMS), IIT Indore from 9th to 14th September, 2020.

- **Ms. Rachita Ghoshhajra, Mr. Prasenjit Das, Ms. Jayanti Mahata, Mr. Arindam Das, Mr. Puspen Lahiri** attended FDP on " **Intelligent Computing** ", organized by CSE Dept, MAKAUT and IUST, Jammu & Kashmir, during 11th to 15th September, 2020.

- **Mr. Sourav Ghorai** attended a Five Days FDP on "**Mathematical skills for Science and Engineering using Contemporary Tools**" organized by MAKAUT, during 14th to 18th September, 2020.

- **Mr. Sachin Balo, Mr. Arindam Das** participated One Week FDP on "**Artificial Intelligence using Python**" organized by Dept of CSE, GMR Institute of Technology, Rajam, AP in association with Brainovision Solutions India Pvt. Ltd., National Youth Council of India, Computer Society of India, and ISTE from 14th to 19th September, 2020.

- **Ms. Rachita Ghoshhajra, Ms. Mahua Nandy Pal, Ms. Soma Bandyopadhyay**, **Ms. Sasmita S. Choudhury, Mr. Abhisek Saha and Mr. Kailash Chandra Mahatab** attended FDP on "**Artificial Intelligence using Python**", organized by Government College of Engineering and Ceramic Technology during 14th to 19th September, 2020.

- **Ms. Ipsita Dolui** participated Three Days FDP on "**Advanced Engineering Mathematics**" from 17th to 19th September, 2020.

- **Mr. Sourav Ghorai** attended a Three Days FDP on "**Foundation of College Mathematic**s" organized by Sovarani Memorial College & Saldiha College, during 21st to 23rd September, 2020.

- **Mr. Mojammel Rahaman** attended a Five Days FDP on "**Designing Pedagogies for Online Teaching & Learning**" organized by NIT Kurukshetra & Engg. College of Bikaner, Bikaner, during 23rd to 27th September, 2020.

- Ms. **Moumita Goswami** attended Two Days TEQIP-III Sponsored FDP On "**Software Testing**", organized by Compucom Institute of Technology and Management, Jaipur, during 26th to 27th September, 2020.

- **Mrs. Sasmita S. Choudhury** attended online workshop on Universal Human Value on "**Inculcating Universal Human Values in Technical Education**", organized by AICTE, during 28th September to 2nd October, 2020.

- **Dr. Dipankar Ghosh** attended a Five Days FDP on "**Photonics**" organized by C.V. Raman Global University, Orissa, during 28th September to 2nd October, 2020.

- **Mr. Swarup Chandra Giri** attended Online ATAL FDP on "**3D Printing & Design**" organized by University Visvesvaraya College of Engineering. from 5th to 9th October 2020.

- **Ms. Antara Sengupta, Mr. Anjan Goswami, Mr. Partha Pratim Saha and Ms. Sharmistha Banerjee** attended FDP on "**Big Data Analytics Using Soft Computing Tools**" organised by IT Dept. MCKVIE during 5th to 10th October, 2020.

- **Mrs. Sharmistha Banerjee** attended FDP on "**Cyber security**" organised by NIT, Patna during 5th to 11th October, 2020.

- **Mr. Soutrik Bose** participated in ATAL FDP on "**FEM/CFD**" organized by ME Dept. of Lakshmi Narain College of Technology, during 14th to 18th October, 2020.

- **Dr. Amit Phadikar** participated in ATAL FDP on "**Data Sciences**" organized by Ramakrishna Mission Vivekananda Educational and Research Institute from 20th to 24th October, 2020.

- ➢ **Mr. Sourav Ghorai** attended a Two Days FDP on "**ICT add on teaching, learning and administration**" organized by Scrolwell Edutech LLP, on 31st October and 1st November, 2020.

- ➢ **Dr. Dipankar Ghosh** attended a Five Days FDP on "**Data Sciences**" organized by Francis Xavier Engineering College, Tamil Nadu, during 2nd to 6th November, 2020.

- ➢ **Mr. Diptayan Bhattacheryya** participated in ATAL FDP on "**Life-skill Empowerment for Holistic Personality Development**" from 2nd to 6th November, 2020.

- ➢ **Ms. Soma Bandyopadhyay** attended FDP on "**The Art and Graft of Scientific & Technical Writing**", organized by MAKAUT and IUST during 2nd to 6th November, 2020.

- ➢ **Ms. Mahua Nandy Pal** completed ATAL FDP on "**AR/VR**", organized by C V Raman Global University Bhubaneswar during 2nd to 6th November, 2020.

- ➢ **Mr. Surojit Bhattacharyya, Mr. Abhisek Saha and Mr. Puspen Lahiri** completed ATAL FDP on "**Data Sciences**", organized by Hindusthan College of Engineering and Technology during 2nd to 6th November, 2020.

- ➢ **Dr Swarup Kumar Mitra** participated in ATAL FDP on "Sensors Technology" organized by Physics, Dept., University of Burdwan from 3rd to 7th November, 2020.

- ➢ **Mr. Avijit Bose and Ms. Rachita Ghoshhajra, Dr. Kalyan Biswas** attended Five Days FDP Program on "**Internet of Things Security**", organized by CSE Dept. MAKAUT and IUST, Jammu & Kashmir, during 7th to 11th November, 2020.

- ➢ **Mr. Swagata Sannigrahi** attended Five Days ATAL FDP on "**Electric Vehicle**" organized by NIT Mizoram from 10th to 14th November, 2020.

- ➢ **Mr. Animesh Talapatra, Mr. Kajal Kumar Ghosh, Mr. Swagata Sannigrahi** attended Five Days FDP on "**Recent Advances in Mechanical Science and Engineering**" organized by Siddartha Institute of Science and Technology (SISTK), Puttur from 18th November to 22nd November, 2020.

- ➢ **Mr. Nabankur Mandal** participated completed ATAL FDP on "**Micro-electromechanical Systems**" at Sardar Patel College of Engineering from 23rd to 27th November, 2020.

- ➢ **Mr. Soutrik Bose** participated in ATAL FDP on "**Tribology in Design and Manufacturing**" organized by ME Dept., IIT Jammu, during 23rd to 27th November, 2020.

- ➢ **Dr. Amit Phadikar** participated ATAL FDP on "**Artificial Intelligence**" organized by Sarvajanik College of Engineering and Technology from 23rd to 27th November, 2020.

- ➢ **Ms. Sasmita S. Choudhury** attended AICTE sponsored FDP on "**Data Science using Python**" during 23rd November to 5th December, 2020.

- ➢ **Mr. Nabankur Mandal** completed ATAL FDP on "**Electric Vehicles**" at Bhilai Institute of Technology from 7th to 11th December, 2020.

- ➢ **Mr. Swarup Chandra Giri** attended Five Days ATAL FDP on "**Internet of Things (IoT)**" organized by IIIT, Allahabad during 7th to 11th December, 2020.

- ➢ **Mr. Swagata Sannigrahi** attended Five Days ATAL FDP on "**Green Technology & Sustainability Engineering**" organized by NIT Raipur during 8th to 12th December, 2020.

- ➢ **Ms. Jayanti Mahata** participated ATAL FDP on "**Data Sciences**" ATAL Academy at Sri Krishna College of Engineering and Technology from 7th to 11th December, 2020.

STTP Attended:

- ➢ **Mr. Arijit Sarkar** participated in One Week STTP on "**Skill Assessment in Laboratory and Guiding Students Project**" organized by NITTTR, Kolkata from 20th to 24th April, 2020.

- **Ms. Debasree Maity** participated in STTP through ICT Mode on "**Network Security**" organised by NITTTR, Kolkata. From 27th April to 1st May, 2020.

- **Dr. Amit Phadikar** participated One week STTP on "**Evaluating Students' Performance**" organized by NITTTR Kolkata from 26th to 30th May, 2020.

- **Ms. Debasree Maity** participated in STTP through ICT Mode on "**Machine Learning Using MATLAB**" organised by NITTTR, Kolkata from 15th to 19th June, 2020.

- **Mr. Arindam Das** participated in One Week STTP on "**MCDM (Multi Criteria Decision Making)**" organized by CREST Society for Research International, Krishnagiri, Tamil Nadu from 15th to 20th June, 2020.

- **Dr. Dipankar Ghosh** attended a Seven Days STTP on "**Data Science & Learning Systems for Engineering Research & Design**" organized by NIT Kurukshetra and Engineering College of Bikaner, Bikaner, during 24th to 30th June, 2020

- **Mr. Sachin Balo, Mr. Priyanath Mahanti** participated in AICTE-sponsored STTP on "**Cognitive Radio Wireless Sensor Networks: Applications, Challenges and Research Trends**" organized by Vivekanandha College of Engineering for Women (Autonomous) from 20th to 25th July, 2020.

- **Mr. Sachin Balo, Mr. Priyanath Mahanti** participated a STTP on "MATLAB and Mathmatica for Scientific Research" organized by Arul Anandar College (Autonomous) from 27th to 29th July, 2020.

- **Mr. Sachin Balo** participated AICTE Sponsored ne week online STTP on "**Tableau Data Visualization Tool for Researchers**" organized by Andhra Loyola Institute of Engineering & Technology from 08th August, 2020 to 14th August, 2020.

- **Dr. Amit Phadikar** participated AICTE sponsored STTP on "**Block chain Architecture Design and Use Cases (Phase-I)**" organized by Department of ECE, Gudlavalleru Engineering College, A.P from 10th to 15th August, 2020.

- **Ms. Sasmita S. Choudhury** attended STTP on "**Advanced Engineering Optimisation Through Intelligent Techniques (AEOTIT)**", organized by Sardar Vallabhbhai NIT, Surat during 1st to 5th September, 2020.

- **Ms. Soma Bandyopadhyay** and **Mr. Sumit Majumdar** attended AICTE Six Days Online STTP on "**Internet of Things (Everything) – Future**", organized by CSE Dept., B S Abdur Rahman Crescent Institute of Science and Technology, during 7th to 12th September, 2020.

- **Ms. Sasmita S. Choudhury** attended STTP on "**Internet of Things (IoT) Based Green Energy System**", organized by B.V Raju Institute of Technology, Telengana, during 14th to 19th September, 2020.

- **Mr. Nabankur Mandal** successfully completed the STTP on ''**Introduction to Welding Processes**'', organized by NITTTR, Kolkata, from 21st to 25th September, 2020.

- **Mr. Arindam Das** and **Mr. Anjan Goswami** participated six Days STTP (AICTE Sponsored) on "**Business Analytics**" organized by CSE Dept, MCKVIE, from 12th to 17th October, 2020.

- **Mr. Sachin Balo, Ms. Jayanti Mahata** participated AICTE sponsored Six Days STTP on '**Machine Learning, Pattern Recognition and their Applications**" organized by Dept of IT, St. Thomas College of Engineering & Technology from 2nd to 7th November, 2020.

- **Mr. Arijit Sarkar** participated STTP on "**Internet of Things: Architectures, Protocols, Applications and Security concerns**" organized by CSE Dept, IIEST, Shibpur from 14th December to 18th December, 2020.

- **Mr. Puspen Lahiri and Mr. Abhisek Saha** completed AICTE Sponsored Six Days Online STTP on "**Machine Learning, Pattern Recognition and their Applications**", organized by St. Thomas' College of Engineering & Technology, during 14th to 19th December, 2020.

Conference/Summit Attended:

- **Mr. Soutrik Bose** participated and presented a research paper in International Conference on Energy and Sustainable Development (ICESD 2020) on "**Optimization on Box-Behnken model of WEDM on Ti-TiB$_2$ hybrid composite developed by LENS process**" jointly organized by ME Dept., Jadavpur University and The Institution of Engineers, India, during 14th to 15th February 2020.

- **Ms. Mahua Nandy Pal** attended International Summit on "**Data Science and AI**", organized by IIT, Madras during 18th to 20th June, 2020.

- **Mr. Nabankur Mandal** participated International Virtual Conference on "**High-Performance Materials for Energy, Environment & Healthcare in the Digital Era**", organized by Centre for Materials Technology, School of Advanced Sciences, VIT, Vellore, dated on 30th June to 1st July, 2020.

- **Ms. Mahua Nandy Pal** attended and presented a paper in International Conference "**IEMIS 2020**" organized by IEM, Kolkata during 2nd to 4th July, 2020.

- **Ms. Mahua Nandy Pal and Ms. Sasmita S. Choudhury** attended International Conference on "**I3CIT 2020**", organized by Chennai Institute of Technology, Chennai, Tamil Nadu during 30th to 31st July, 2020.

- **Mr. Soutrik Bose** participated and presented a research paper in 2nd International Conference on Future Learning Aspects of Mechanical Engineering (FLAME 2020) on "**Parametric Optimization of WEDM on Hybrid Titanium Matrix Composite using Response Surface Methodology**" organized by Department of ME, Amity School of Engineering and Technology, Amity University, Uttar Pradesh, Noida, during 5th to 7th August, 2020.

- **Ms. Sharmistha Banerjee** attended Seminar on "**Virtual International Conference On Soft Computing And Optimization Techniques for Inventory Modeling**" organised by Techno India University during 10th to 11th October, 2020.

- **Dr. Indrajit De** attended ACM Compute 2020 Online Conference on "**Educational Technology and Assessment Methods**" from 9th to 12th December, 2020.

- **Mr. Arindam Das** participated in "**35th Indian Engineering Congress**"[organized by The Institute of Engineers (INDIA) from 18th to 20th December, 2020.

Workshop attended:

- **Ms. Shampa Sengupta** participated a Workshop on "**Exam Reforms**" organized by AICTE" from 22th to 25th April, 2020.

- **Mr. Abhijit Dutta** attended Five Days International Workshop on "**Recent Advances in Thermal Engineering (IWRATE 2020)**", organized by ME Dept., Birla Institute of Technology and Science, Pilani, Rajasthan, during 29th June to 3rd July, 2020.

- **Ms. Moumita Goswami** attended Ten days workshop on "**Data Analytics and Machine Learning with Python (Part 2)**", organized by Cyber Analytica during 2nd July to 3rd August, 2020.

- **Ms. Sasmita S. Choudhury** completed Ten days Online Workshop on "**Data Analytics and Machine Learning with R**", organized by Cypher Analytica during 9th to 31st July, 2020.

- **Dr. Dipankar Ghosh** participated a Two Days e-Workshop on "**Understanding OBS Studio and Streamyard for E-Content Creation and Live Streaming**" organized by Dr. M.G.R. Educational and Research Institute, during 10th to 11th July, 2020.

- **Ms. Moumita Goswami** attended Three Days Online Workshop on "**Deep Learning Applications**", organized by Cognitron Techademy during 22nd to 24th July, 2020.

- **Dr. Dipankar Ghosh** participated a Three Days Workshop on "**R-Programming**" organized by Malla Reddy Institute of Technology and Science, Hyderabad from 28th to 30th July, 2020.

- **Dr. Amit Phadikar** participated National Level One Week Online Workshop on "**Deep Learning using Python**" organized by IT Dept., MGIT, Hyderabad from 3rd to 7th August, 2020.

- ➤ **Mr. Mojammel Rahaman** participated a Five Days Workshop on "**Inculcating Universal Human Values in Technical Education**" organized by All India Council for Technical Education (AICTE), during 5th to 9th August, 2020.

- ➤ **Mr. Animesh Talapatra** attended workshop for "**ABAQUS basic training**" organized by EDS Technologies Pvt. Ltd. During 5th to 7th August, 2020.

- ➤ **Ms. Sushmita Dey** participated in Three Days workshop on "**Embedded System Design & IoT (Phase II)**" organized by Dept. of ECE, BPPIMT during 18th to 20th September,2020.

- ➤ **Dr. Dipankar Ghosh, Mr. Subir Gayen and Mr. Tushar Kanti De** had attended a Two Days Online Workshop on "**Effective Use of Google forms to carry-out Quizzes, Online Exams & Generating Certificates by Dr. V. Narayana**" organized by Department of Humanities & Sciences of Balaji Institute of Technology & Science, on 25th and 26th September, 2020.

- ➤ **Ms. Sushmita Dey** participated in Two Days international workshop on "**Michael Faraday IET International Summit-2020**" from 3rd to 4th October, 2020.

Webinar attended:

- ➤ **Dr. Dipankar Ghosh and Ms. Debanjali Chowdhury** participated a Three Days Webinar on "**Century of Quantum Mechanics and Still Going Strong**" organized by MSUB, GSA, IPA, IAPT-RC7, during 15th to 17th June, 2020.

- ➤ **Ms. Soma Bandyopadhyay and Mr. Sumit Majumdar** attended Two Days Webinar on "**Machine and Deep learning with MATLAB**", organized by Sister Nivedita University, Kolkata, West Bengal, India during 3rd to 4th July, 2020.

- ➤ **Dr. Dipankar Ghosh** participated in a Two Days Webinar on "**National Webinar on Energy and Environment**" organized by MSUB, GSA, IPA, IAPT-RC7, during 9th and 10th July, 2020.

- ➤ **Mr. Sachin Balo** participated Webinar on "**Virtualization and Impact on Telecom Operators and Network**" organized by The Oxford College of Engineering from 15th to 16th July, 2020.

- ➤ **Dr. Arun Kumar Jalan** had participated in a Two Days Webinar on "**Scope of Mathematical Modelling: Theory to Application**" organized by Department of Mathematics, Khalisani Mahavidyalaya, on 30th and 31st July, 2020.

- ➤ **Ms. Moumita Goswami** attended One week webinar on "**Medium Access Control in Vehicular ad hoc Networks: Current Issues, Research Ideas and Simulation using Network Simulator 2**", organized by ETmantra eLearning Solutions Pvt. Ltd. during 10th to 14th August, 2020.

- ➤ **Ms. Soma Bandyopadhyay** attended webinar on "**E-Resources for Teaching and Learning**", organized by Avanthi Group of Institutions, Hyderabad during 12th to 13th August, 2020.

- ➤ **Mr. Arindam Das** participated Two Days Webinar on "**IoT Security (WISE)**" organized by C-DAC Hyderabad & SETS, Chennai under ISEA Project from 28th to 29th August, 2020.

Online course/Training Attended:

- ➤ **Ms. Soma Bandyopadhyay and Mr. Surojit Bhattacharyya** completed Two weeks TEQIP Online certification (TEQIP3) course on "**Digital Transformation In Teaching Learning Process**", organised by NPIU Funded by MHRD, Govt. of India and conducted by IIT Bombay on SWAYAM during 14th February to 6th March, 2020.

- ➤ **Ms. Mahua Nandy Pal, Dr. Manik Ch. Das** completed Two weeks TEQIP Online certification (TEQIP3) course on "**Digital Transformation In Teaching Learning Process**", organised by NPIU Funded by MHRD, Govt. of India and conducted by IIT Bombay on SWAYAM during 6th to 22nd April, 2020.

- ➤ **Dr. Satadal Saha** participated in Four Days Online Course on "**Examination Reforms**" organized by AICTE from 22nd to 25th April, 2020.

- **Ms. Soma Bandyopadhyay, Mr. Sachin Balo, Mr. Priyanath Mahanti, Ms. Jayanti Pathak Rudra, Mr. Arijit Sarkar, Mr. Arindam Das, Mr. Nabankur Mandal** participated Four days Training on "**Cyber Safety and Security**" organized by Cyber Security Centre of Excellence, West Bengal under the aegis of the Department of Information technology and Electronics, Govt of west Bengal from 14th to 17th July, 2020.

- **Mr. Kajal Kumar Ghosh** attended online "**Microsoft tools for Education – 1 & 2**" organized by Microsoft Innovative Educator from 9th to 10th October, 2020.

- **Mr. Animesh Talapatra** attended Six Days TEQIP Sponsored Online Course on "**Micro and Nano-Mechanics of Solids: Fundamentals & Applications**" organized by IIT Indore from 14th to 19th December, 2020.

- **Mr. Animesh Talapatra** attended Five Days TEQIP Sponsored Online Course on "**Atomistic Modelling of Solids: Theory & Applications**" organized by IIT Indore from 21st to 25th December, 2020.

Activities of Training and Placement Cell

- Mr. Partha Sarkar from TCS Conducted a Workshop on Robot Dynamics and Non-Linear / Adaptive Control for the faculty members of MCKVIE on 28th January, 2020.

- Mr. Partha Sarkar from TCS Conducted a Workshop on "How to prepare for the Industry as an engineer of new age" for the students of MCKVIE on 27th February, 2020.

- Internshala conducted Seminar for all students of MCKVIE on 18th March, 2020.
- Mr. Victor Banerjee from Fifthforce Training Academy conducted 30 Hours Free Grooming classes for Campus drive preparation of 30 Hours for 2021 POB on 31st May, 2020.
- Ardent conducted online grooming class on TCS-CTS preparation for the eligible students of 2020 POB basis 60% throughout.
- BYJUs conducted Webinar for 2020 POB on 18th July, 2020.

- Alien Brains conducted Webinar for 2020 POB on 25th July, 2020.
- Placement Season conducted All India free online Mock Test for Capgemini on 9th August, 2020.
- Virtusa conducted an assessment named Neural Hack for B Tech (CSE, ECE, IT, EE) and MCA 2021 POB students.
- My Anatomy conducted assessment for Candidates with Cancelled/ Revoked / Dishonoured Internship & Employment Offers on 10th August, 2020 for 2019 & 2020 POB students.
- Capgemini conducted Webinar as Capgemini Exceller on 12th August, 2020 for CSE, ECE, IT EE & MCA 2021 POB students
- Mr. Partha Sarkar from TCS Conducted a Workshop on IOT & Machine Learning for faculties of MCKVIE on 13th August,2020.
- Mr. Partha Sarkar from TCS Conducted a Workshop on Python in Robotics for the students of MCKVIE on 18th August, 2020.
- Mr. Pranab Roy from Geogo Technologies conducted a Technical Session for ME, EE & AUE students of 2021 POB on FREE CATIA Training on Basic Part Design. Online Technical Session on Design Engineering on 5th September, 2020.
- SMART conducted Six Hours of free online Training on Capgemini Mock Test for all B. Tech and MCA 2021 POB on 12th September, 2020.
- Mr. Victor Banerjee from Fifthforce conducted a Mock Test for B Tech 2021 POB on 26th September, 2020.
- All Cognizants accredited colleges TPO met for a Webinar on 1st October, 2020.

- SMART conducted online grooming classes for 2021 POB on TCS and CTS Assessment pattern for Thirty Hours of free training on 6th October, 2020.
- SMART conducted Mock Test on 16th October, 2020 for 2021 POB students on Cognizant Test pattern
- Internshala conducted Webinar on 17th October, 2020 on virtual mode on Advancing in the virtual recruitment scenario which was attended by the entire Training & Placement Dept..
- Internshala conducted E Meet on 28th November, 2020 on the topic "How to rethink your Placement Strategy" which was attended by the entire Training & Placement Team.
- The Training & Placement Dept attended the virtual conference by Infocom titled "THE NEXT NORMAL" from 3rd to 5th December, 2020.
- Mr. Atanu Roy Chowdhury, an Industry personnel conducted a Webinar on "Emerging area of intelligence in the Internet of Things" for CSE, IT students of 2022 and 2023 POB on 21st December, 2020.
- Mr. Atanu Roy Chowdhury, an Industry personnel conducted a Webinar on 22nd December, 2020 for ECE, EE, ME and AUE students of 2022 and 2023 Passing out Batch on the topic "Emerging area of intelligence in the Internet of Things"

Activities of Students' Chapters

SAE

- Our college team "The Chariot" consisting of nine (09 nos) students has successfully participated in virtual **SAE** Efficycle 2020 Event held in online platform on 20th September, 2020. Evaluation criteria were based on design, analysis, business plan etc.

IET(UK)

- Dr. Tamal Roy organized four Days workshop on Basic Python organized by **IET(UK)** Kolkata Local Network from 1st to 2nd August, 2020 & 8th to 9th August, 2020.
- ECE Department organized Students' Techncical Article Competition: PRAYAS-2020 on 20th December, 2020 in association with **IET (UK)** Kolkata Local Network. Prof. (Dr.) Santanu Ghorai, Prof., Dept. of AEIE, Heritage Institute of Technology, Kolkata and Dr. Isita Sengupta, Asst. Prof., Dept. of Electronics, Govt. College of Engg. and Leather Technology acted as Honorable Judges in the program. Students from different engineering colleges participated in it and presented their research proposals.

CSI

- One Day Seminar on "Data Science " was held on 15th February, 2020 under **CSI** Student Chapter. The Speaker for the event was Prof. Dr.Goutam Bandyopadhyay, Senior Professor, Department of HSS, NIT Durgapur. Target Audience were 4th and 6th Semester students of CSE Department.
- Students have attended a Webinar on "Consent & Data " organised by **CSI**, Hyaderabad and Balaji Institute of Technology on 20th April, 2020.
- Students have attended a topic on " Near Duplicate Image Retrieval Computer Vision technique" organised by **CSI**, Hyaderabad and Balaji Institute of Technology on 29th April, 2020.

One Day Seminar on "Data Science "

Activities of SVCPT

➤ On 17th January, 2020, Birth Day Tithi Puja celebration of Swami Vivekananda was held followed by Discourse. 20 Faculty & staff Members of MCKVIE participated in the programme.

➤ On 24th February, 2020, 185th Birth Day Tithi Puja celebration of Ramakrishna was held followed by Discourse. 20 Faculty & staff Members of MCKVIE participated in the programme.

➤ On 20th December, 2020, Annual Programme on Value Education & 10 Years Celebration of SVCPT was held through online mode due to pandemic situation. Pravrajika Atmodipoprana Mataji from Sri Sarada Math, Ex-Justice & Ex-Governor, WB Mr. Shymal Kumar Sen, Mr. Suvankar Dasgupta from UAE, Mr.Lakahn Das Baul , Mrs.Nilufa Yasmin and few students of MCKVIE participated in the Programme. About 2K audiences participated in online mode and the Link of the programme is as follows: https://youtu.be/UrwIqCF31A8

Activities of Rotaract Club

➢ On 4th January, 2020, our students participated at *"Food Vegas"*, a Food Carnival at Rotary Sadan.

➢ 12th January, 2020, a Food Distribution drive in Howrah area was organised in collaboration with RCC named *"Annapurna"*.

➢ An Awareness Program about the Rotaract club was conducted namely "Club Training" on 20th February, 2020, at the MCKVIE college premises.

➢ On 23rd February, 2020, *"Photopedia"*- a photowalk session was initiated at Ahiritola near Sobhabazar Metro.

➢ A *"Sit and Draw"* competition was arranged at Chaubey Siksha Sadan on 28th February, 2020 to make the day special for underprivileged students.

➢ On 2nd March, 2020, a calligraphy cum Quote writing competition to extract the creativity was organised at the college campus named as *"Quote o Graphy"*.

➢ To help the people of Sundarban to prevent diseases, a *"Mosquito Net Donation Drive"* was arranged in collaboration with RCBC at Sundarban on 9th March, 2020.

➢ On 12th March, 2020, a cleanliness drive was initiated in and around MCKVIE campus namely *"Swachta"*.

Sit and Draw   **7 Day Challenge**

➢ An online competition was organised from 8th to 14th April, 2020, named as *"7 Day Challenge"* for meme making, debate, fancy dress, poetry writing and singing.

➢ The Mother's Day celebration namely, *"Ma"* was observed on 10th May 2020, on the online platform.

➢ A Comedy based competition, *"Comedy-Remedy"* was initiated on online mode from 21st to 23rd May, 2020.

➢ On 28th and 29th May, 2020, *"Ehsas"* an online poetry competition through WhatsApp was organised to celebrate Global Day of Parents through poetry.

➢ A creative art and craft online competition *"Regard before you Discard"* was arranged on 5th and 6th June, 2020.

➢ On 21st June, 2020 *"Quizzaire"*, an online Quiz Competition was conducted.

➢ *"Quarantine Memories"*, an online photography competition in lockdown period was organised by the students on 29th June, 2020.

➢ Rakshabandhan was celebrated on the online platform on 2nd August, 2020, with handmade Rakhis named as *"Bandhan"*.

- On 11th August, 2020, *"Janmasthami Utsav"* was observed by conducting an online competition on sweet dish making and doodling on Lord Krishna.
- In order to mark our Independence Day on 15th August, 2020, an online event- *"Azaadi"* was initiated by collecting entries through WhatsApp and showcase their talent through Webinar.
- 26th August, 2020, *"Aarambh"* the installation ceremony was organised at the MCKVIE campus.
- On 29th August, 2020, an online Quiz competition on Sports *"Quiz-o-Sports"* was organised to celebrate National Sports Day.
- From 11th to 29th August, 2020, *"Photography Challenge"* an online event was arranged to celebrate World Photography Day.

Aarambh installation ceremony

Celebration of Azaadi

Bhogdehi :Grocery Distribution Progarm

- A month-long program from 31st August to 30th September, 2020 *"Bhogdehi"* was initiated in the nearby area to help the under privileged with groceries during Covid-19 Situation.
- *"District Assemble"* an online Rotaract district training program was arranged from 2nd to 7th September, 2020.
- Online celebration of **Teacher's Da**y was undertaken on 5th September, 2020.
- A Webinar on Indian Armed Force – *"Introduction to Armed Force"* was conducted on 12th September, 2020 to have a knowhow about the career opportunities in IAF.
- From 10th to 14th September, 2020, *"Ankahi Batein"* – an online open mic event was arranged to celebrate Hindi Bhasa Diwas.
- From 19th to 30th September, 2020, an event was organised to make bird feeder and feed birds named *"Bird Feeder Making Challenge"*.
- *"Meet & Greet"* an online event to meet & greet the club members with whom the students' exchanged letterheads was initiated on 20th September, 2020.
- An online gaming event was conducted from 25th to 30th September, 2020 named *"Frolic"* to enhance the online gaming skill.
- From 1st to 18th October, 2020, *"Samanway: A Cultural Exchange"* was arranged to have a knowhow and exchange of each state's tradition and letterheads.
- To celebrate Gandhi Jayanti on 2nd October, 2020, a debate was organised on Democracy namely *"Discussions for Democracy"*.
- On 4th October, 2020, *"Hackoctober Fest"* an open-source data learning district event was initiated to learn Github and others.
- On 10th October, 2020, *"Webinar on Mental Health"* to celebrate the Mental Health Day was organised.
- Another event "**Good in Deed**" was arranged from 10th to 17th October, 2020 for doing something good for the society and post in social media.
- On 11th October, 2020, a district event on Career Counselling GATE was initiated to know about future career named "**Skilling IT** ".
- From 17th to 25th October, 2020, an awareness program was conducted on Goddess Durga named "**Nav Durga**".

Webinar on Mental Health

Awareness program was conducted on Goddess Durga

- From 20th to 25th October, 2020, a make-up competition on traditional as well as modern look during the Durga Puja was organised namely "**Saajh**".
- On 7th & 8th November, 2020, "**Club Training**" program was arranged to train each and every club member about Rotaract by well-known Rotaractor and Rotarian.
- From 7th to 8th November, 2020 various competitions namely Rangoli, Photography, Creative Writing and Poster Making and Webinar was organized on *"Banking Sector Related Career Opportunity"*
- A "**Rangoli Competition**" was organised to explore art in Diwali at home.

Activities of Startup Club

- The Startup Club of MCKVIE organised "**Meme-preneurship**" during 22nd to 24th July, 2020 in collaboration with "Rotaract Club,MCKVIE" to motivate our Students.
- The Startup Club of MCKVIE organised "**Pilot E-Session: Entrepreneurship 101**" on 29th July, 2020 in collaboration with "**Wadhwani Foundation and National Entrepreneurship Network**" for Students.
- The Startup Club of MCKVIE organised a brain storming session for students "**Pen-2-All**" during 22nd to 23rd August, 2020.
- The Startup Club of MCKVIE organised a brain storming session for students "**Movie Screening and Quiz Nigh**" on 6th September, 2020.

- The Startup Club of MCKVIE organised "Sunday Brainstorming Session (Topic- OYO CEO Ritesh Agarwal)" on 8th September, 2020 to motivate our students.

- The Startup Club of MCKVIE organised Sunday Brainstorming Session on **"Role of Indian Food Startups during COVID-19**" on 15th September, 2020 for our students.
- The Startup Club of MCKVIE organised "**An Evening with Fashionpreneurs**" on 20th September, 2020. The speakers were Ms. Harshita Suranaa, Mr. Sreenath Gupta, Ms. Raashi Gupta.
- The Startup Club of MCKVIE organised Sunday Brainstorming Session on **"Recycling plastic into a Start-up**" on 29th September, 2020 to motivate our students.
- The Startup Club of MCKVIE organised "**Tresure Hunt: With a Twist**" on 18th October, 2020 in collaboration with "Tresure Hunt: With a Twist" for our students.
- The Startup Club of MCKVIE organised Sunday Brainstorming Session on **"How Chinese Telecom and Mobile companies paved their way in Indian market?**" on 6th December, 2020 for our students.
- The Startup Club of MCKVIE organised Sunday Brainstorming Session on **"Agricultural StartUps: What's Your Idea to Disrupt the Market?**" on 13th December, 2020. Our students actively participated in the event.
- The Startup Club of MCKVIE organised Sunday Brainstorming Session on **"What will your Green StartUp be?**" on 20th December, 2020 for our students.

What others say.....

What our Alumni Says

After spending a decade in my professional life, when I look back to my college days, I feel proud to be a MCKVian. Not only I received a degree from here but learnt problem solving skill and how to analyse any subject from core. Thanks to all my teachers and Lab experts to whom I am still in debt.

Hindol Santra
IT Dept (2005-2009)

Parents Testimonial

We are happy that our son is a part of MCKVIE, where students are encouraged to be the best in every field. The institution gives many opportunities for the students to excel in their career. The faculty members are also very friendly, helpful and cooperative, which helps to develop the confidence in students. Our son and his friends are also placed in well-known organizations and we thank MCKVIE for that.

Mr. Atanu Dutta and Mrs. Basanti Dutta
Parents of Debaditya Dutta, ME Dept. (2018-2022)

I am Siddhartha Sankar Bhattacharya, father of Uddipana Bhattacharya. As a parent, from my experience, MCKV Institute of Engineering offers a wonderful environment for all round development of the students. Mainly, the educational system of this college is excellent as I heard from my daughter. Whenever I visited the college, I always received cordial welcome from the staff members. Moreover, I am very satisfied with the feeling that my daughter is receiving education under a secure and family-.

Mr. Siddhartha Sankar Bhattacharya
F/o Uddipana Bhattacharya, IT Dept. (2018-2022)

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ज्ञानम् अनन्तम्
(Knowledge is infinite)

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