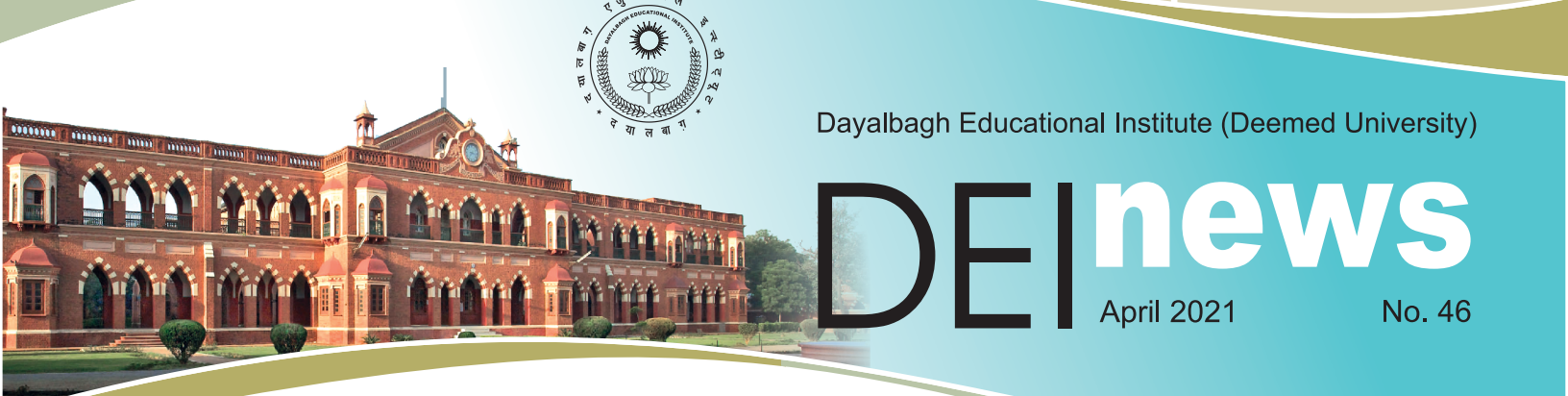


Revered Prof. P.S. Satsangi Sahab Felicitated as BHU's Distinguished Alumnus	1	DEI Signs MoU with the University of Birmingham, UK	5	Drama Festival-2021	6	Faculty News	10
Distinguished Lecture Series	2	DEI Contributes for UGC's Book on Quality Mandate	6	Design and Fabrication of Mobile Wi-Fi Antenna Mast	7	NSS Activities	12



Dayalbagh Educational Institute (Deemed University)

DEI news

April 2021

No. 46

Revered Prof. P.S. Satsangi Sahab Felicitated as BHU's Distinguished Alumnus

The Banaras Hindu University Alumni Cell was pleased to have the presence of Revered Prof. P.S. Satsangi Sahab, Chairman, Advisory Committee on Education, Dayalbagh Educational Institutions, for the International Alumni Virtual Meet of BHU, that was held on February 13-14, 2021. The BHU Alumni Cell takes immense pride in its alumni and acknowledges their selfless contributions in all walks of life and in this direction, the members of the Cell expressed abundant pleasure in acknowledging the significant contributions of Revered Prof. P.S. Satsangi Sahab as the Institute's distinguished alumnus in the field of Intelligent Systems Engineering, Quantum Theory, System Modelling and Applied Systems Research.

With a legacy of more than a hundred years, the Banaras Hindu University has proved its calibre in every sphere because of the sheer strength that has been generated by its dedicated alumni. The Alumni Cell at BHU strives to engage and encourage Alumni to stay connected to their alma mater, spread its vision and contribute to its success. The Alumni have added lustre to the University and have also given it a global face as many of them occupy key positions in various professional domains.

काशी हिन्दू विश्वविद्यालय
BANARAS HINDU UNIVERSITY

BANARAS HINDU UNIVERSITY VIRTUAL ALUMNI MEET - 2021
13-14 FEBRUARY 2021

PROF. PREM SARAN SATSANGI
DISTINGUISHED ALUMNUS

Prof. Prem Saran Satsangi is celebrated for his extensive scientific work in areas like Intelligent Systems Engineering, Quantum Theory, Systems Engineering, Systems Modelling, and Applied Systems Research. Son to Prof. Krishna Kumar, and Shrimati Bhakt Saheli, Prof. Satsangi is married to Shrimati P. Bn. Satyavati, and is father to daughters, Prem Pyari and Dayal Pyari. Graduating from electrical engineering at IIT (BHU) Varanasi in the year 1957, he pursued M.S. in Electrical engineering from Michigan State University (1961), and joined IIT Delhi as faculty member in 1964. Nominated for Canadian Commonwealth Research Fellowship, he became a doctoral scholar and later a post-doctoral fellow at the University of Waterloo.

Currently the eighth Revered Leader of the Radhasoami Faith based in Dayalbagh, Prof. Satsangi has been honoured with the National Systems Award, Jacob Gold Medal, IIT Roorkee Life Time Achievement Award, and IIT Delhi Distinguished Service Award.

Prof. Satsangi has brought great eminence to his alma mater through his contributions in the fields of applied systems, neurophysiology, cognitive psychology, and the theory of spiritual systems.

Banaras Hindu University takes immense pride in acknowledging Prof. Prem Saran Satsangi for his significant contribution to the field of dissemination of Mahamana's values and ideals. The University wishes him good health and a fulfilling life ahead.

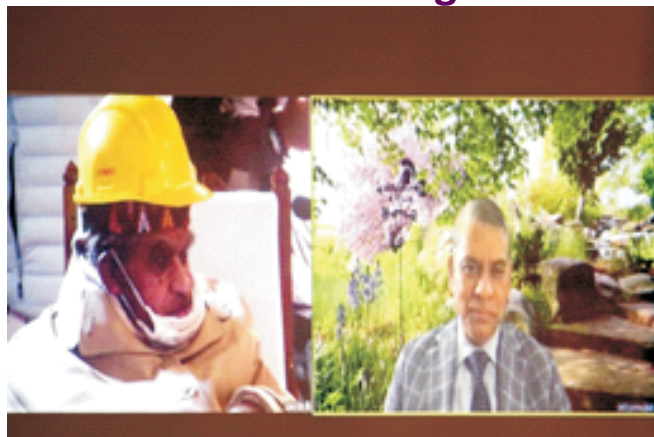
VARANASI
FEBRUARY 13, 2021

PROF. SUSHILA SINGH
CHAIRPERSON, BHU ALUMNI CELL

12



Distinguished Lecture Series Organized



Dayalbagh Educational Institute organized two distinguished lectures in February 2021, commemorating the fortieth year of acquiring the status of a Deemed to be University, being celebrated as DEI@40. The most prestigious institutional lecture series established in 1976-77 to commemorate the Diamond Jubilee of Education in Dayalbagh has now been rechristened as Distinguished Lecture Series of Dayalbagh Educational Institute (Deemed to be University) [Erstwhile Diamond Jubilee Memorial Lecture Series of REI].

The first lecture for this year under the series was organized on 6 February 2021 and was delivered by Prof. Kalyanmoy Deb, Herman E. and Ruth J. Koenig Endowed Chair Professor in the Department of Electrical and Computer Engineering at Michigan State University, USA. Prof. Deb's research interests are in evolutionary optimization and their application in multi-criterion optimization, modeling, and machine learning. He has been a visiting professor at various universities across the world and was awarded Institute of Electrical and Electronics Engineers (IEEE) Evolutionary Computation Pioneer Award for his sustained work in EMO*, Infosys Prize, The World Academy of Sciences (TWAS) Prize in Engineering Sciences, CajAstur Mamdani Prize, Distinguished Alumni Award from Indian Institute of Technology (IIT) Kharagpur, Edgeworth-Pareto Award, Bhatnagar Prize in Engineering Sciences, and Bessel Research Award from Germany. He is fellow of IEEE, The American Society of Mechanical Engineers (ASME), and three Indian science and engineering academies. He is renowned worldwide for his research that includes over 552 research papers with citations exceeding 152,000 and an h-index of 124.

Prior to the lecture, an email communication between Revered Prof. P.S. Satsangi Sahab, Chairman, Advisory Committee on Education, Dayalbagh Educational Institutions and Prof. Kalyanmoy Deb was presented before the audience. In his response, Prof. Deb had noted the following:

I am so happy to receive the message from Prof. Satsangi. I still remember meeting him in DEI for another occasion about 15 years ago. I am aware of his association with MSU and my chair position from Mr. Roger Koenig connects directly with Prof. Satsangi with his work with Prof. Herman Koenig at MSU.

I hope to visit DEI and meet him and others when the travel restriction is lifted. I am also indebted to DEI for this opportunity to deliver the Diamond Jubilee Memorial Lecture today. I am looking forward to it. Kindly convey my deepest respect and appreciation to Prof. Satsangi for his many years' ground-breaking work both spiritually and technically.

In his lecture entitled “Quest for Knowledge: Explaining How Certain AI Systems Work”, Prof. Deb focused on fundamental questions such as what is the source of all knowledge? How do we find it and distill it? Prof. Deb provided a historical perspective on the problem of knowledge distillation, and how it relates to

*** Evolutionary Multi-objective Optimization**



today's fast-growing AI-human symbiosis. Prof. Deb then went on to expand the development of optimization methods – the process of systematically reducing the complexity of the problem to arrive at adequate or optimal solutions that maximize the competing parameters of interest. The impact of Prof. Deb's research has had far reaching implications – from sustainable forest management, knowledge discovery in the automobile, to effective gameplay strategies for cricket and Tic-Tac-Toe! In the last part of his talk, Prof. Deb turned his focus to perhaps one of the most challenging issues facing today's Artificial Intelligence (AI) revolution. It is now well known that complex AI systems, in particular deep neural networks (DNNs), can be trained to solve challenging problems while employing several million hidden parameters. Given their complexity, they are however akin to large 'black-boxes' that are capable of solving difficult problems but cannot describe why or how they arrive at those particular solutions. As AI systems start being employed on a large-scale, this lack of an explanation at inference poses a real challenge. With the eventual goal of creating explainable AI systems, Prof. Deb has employed his optimization methods, in particular a non-linear decision tree (NLDT) approach, in the service of obtaining robust solutions to several complicated problems but without sacrificing human-interpretability. Critically, for each of these problems the NLDT approach outperformed the multi-parameter DNN computational model. In sum, Prof. Deb's curiosity-driven approach to knowledge distillation using optimization methods inspired and captured the imagination of the audience.

During the interaction following the lecture, Most Revered Prof. PS Satsangi Sahab was pleased to shower Ambrosial Blessings with an Exhortation towards integration between human qualities and values & innovation. The brain apertures activated through the practice of Ultra-transcendental Meditation were diagrammatically Presented and Explained. In the brain, we have the frontal cortex and then the parietal cortex. On the other hand, right opposite the frontal cortex is the temporal cortex and from there then deeper into the head is a "supranatural cortex" that is from the temporal to the occipital lobe. Most Revered Prof. Satsangi also Graciously Advised to rise beyond the mundane level of industrial practice and worldly issues so that it opens the door to everlasting peace and eternal harmony.

The lecture was delivered through videoconferencing where Prof. Kalyanmoy Deb was joined by representatives of the alumni and friends of DEI at his residence near Michigan State University. The group also presented a memento to Prof. Deb as a token of appreciation on behalf of the Institute. The programme for the first lecture concluded with a brief cultural show followed by the National Anthem.

The second lecture under the series was organized on 9 February 2021 and was delivered by Dr. Manu Prakash, Department of Bioengineering and Senior Fellow at Woods Institute for the Environment at Stanford University, USA. Dr. Manu Prakash is a recipient of the MIT Ideas Sustainability Prize, the prestigious MacArthur Fellowship (commonly referred to as the genius grant), Rotary International Humanitarian Award for Contributions in Science, Technology and Robotics and the Microbiology Society Unilever Colworth Prize among several other awards and honours. Dr. Prakash is dedicated towards inventing, building and scaling-up frugal science tools to democratize access to science such as Foldscope, diagnostics of deadly diseases like malaria and convening global citizen science communities to tackle planetary scale environmental challenges such as mosquito or plankton surveillance by citizen sailors mapping the ocean in the age of Anthropocene. He has also made notable contributions in response to the COVID-19 diagnostic challenges. In consideration of DEI's extensive outreach programmes and an indomitable will to reach out to the last, the least, the lowest and the lost, he has been a zealous collaborator and often interacts and inspires students at Rajaborari (M.P.) and other rural and tribal centres of DEI.



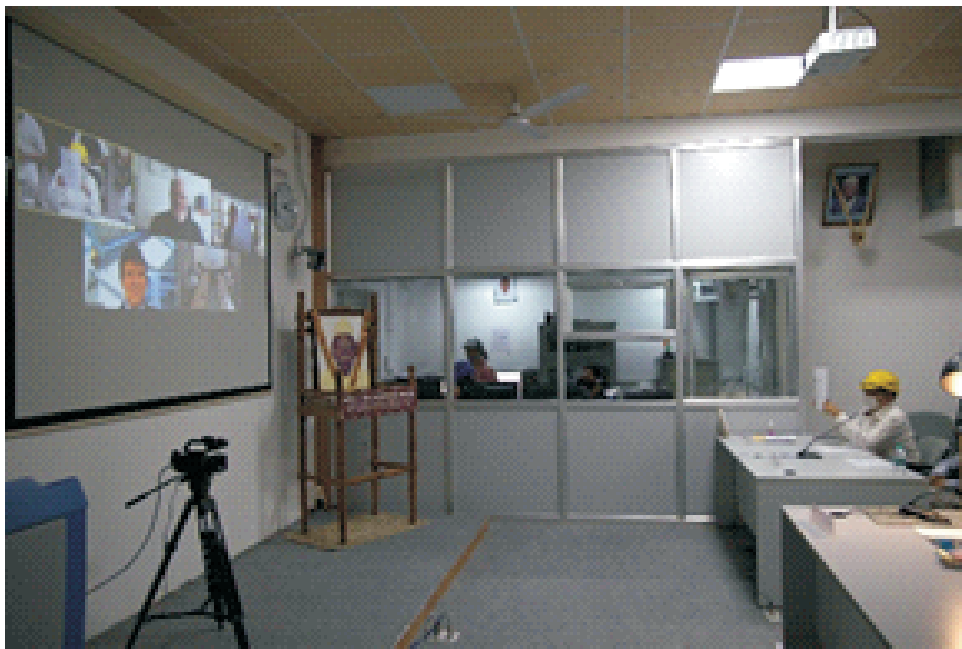
Prof. Prakash in his talk entitled “Frugal Innovation: Democratizing Curiosity-Driven Science” outlined his interpretation of sustainable frugal innovation, defining it as the process achieving the same or comparable performance as state-of-the-art devices, but at a fraction of the cost. He motivated this approach through the story of the invention of the bicycle and what it did for mobility in terms of access; his team aspires to do for the world's most pressing issues – healthcare and education. Despite the strides made over the last century, many parts of the world remain bereft of access to quality healthcare either because of lack of reliable sources of electricity, or sophisticated diagnostic equipment. With an ambitious goal of providing access to “healthcare under a tree”, the Prakash Lab designs solutions for extremely resource- constrained settings, ranging from field diagnostics to hand on science education. Some projects include Foldscope (low-cost microscope), Oscan (scanning oral cavity for cancer), Punchcard microfluidics (chemistry kit), VectorChip and Abuzz (detecting and identifying mosquito species), Paperfuge (low-cost centrifuge), MalariaScope (diagnostics), PlanktonScope (capturing the ocean's diversity) and a recent rapid and accurate low-cost saliva test for COVID-19.

Traditionally, high-quality education has been associated with high cost of delivery which exacerbates the economic disparity between aspiring learners. The lab's work has been instrumental in bridging this gap by using Science and nurturing curiosity through the thrill of discovery available at a very affordable cost. One of the most widely known innovations from the Prakash Lab is a paper origami microscope (foldscope) that has been used by DEI school students not only in Dayalbagh but also in the deep rural areas of Murar(Bihar) and the tribal hinterlands of Rajaborari(Madhya Pradesh), providing frequent opportunities for interaction with Stanford University students and faculty. Children at these schools, being able to practise hands-on science with their own scientific instrumentation, become more sensitive to issues such as hygiene and sanitation and the use of scientific method in agriculture and dairying. The young students also serve as ambassadors of science in their families and communities. Dr. Prakash concluded the lecture with posing a challenge to the young students to come up with the next landmark frugal innovation.

The lecture was delivered through videoconferencing where Dr. Manu Prakash was joined by representatives of the alumni and friends of DEI at Stanford University. The group also presented a memento to Dr. Prakash as a token of appreciation on behalf of the Institute. A short programme was presented following the lecture, showcasing the talent and culture at Dayalbagh Educational Institute and concluded with the National Anthem.

Both the distinguished lectures were transmitted globally through the Dayalbagh cascade network and had participation of thousands of live audience.

DEI Signs Memorandum of Understanding (MoU) with the University of Birmingham, UK



A ceremony to mark the momentous occasion of signing of a Memorandum of Understanding (MoU) between Dayalbagh Educational Institute and the University of Birmingham, UK was organized on 30 March 2021 through videoconferencing, with participation of senior members of the administration and faculty from both sides. Through the agreement, both Universities have agreed to consider opportunities for knowledge exchange, exchange of staff and students, joint educational cooperation and any other form of engagement that might be amenable to both parties. Over a short span of time, several collaborative projects are already being developed between DEI and The Edward Cadbury Centre for the Public Understanding of Religion at the University of Birmingham and it is expected that the agreement will expand the partnership to other areas of mutual interest between the Universities.

The University of Birmingham was established by Queen Victoria by Royal Charter in 1900 and was the UK's first civic or 'redbrick' university and has significant similarities with philosophy of Education at the Dayalbagh Educational Institute. Since its inception, the University of Birmingham represented a new model for higher education, where students from all religions and backgrounds were accepted on an equal basis. In resonance with the pervasive spirit of “Why Not?” at the Dayalbagh Educational Institute, the University of Birmingham has continued to be a university unafraid to do things a little differently, and in response to the challenges of the day. Both Universities have been challenging and developing great minds through decades, characterized by a tradition of innovation. The Universities have broken new ground, pushed forward the boundaries of knowledge and made an impact on people's lives.

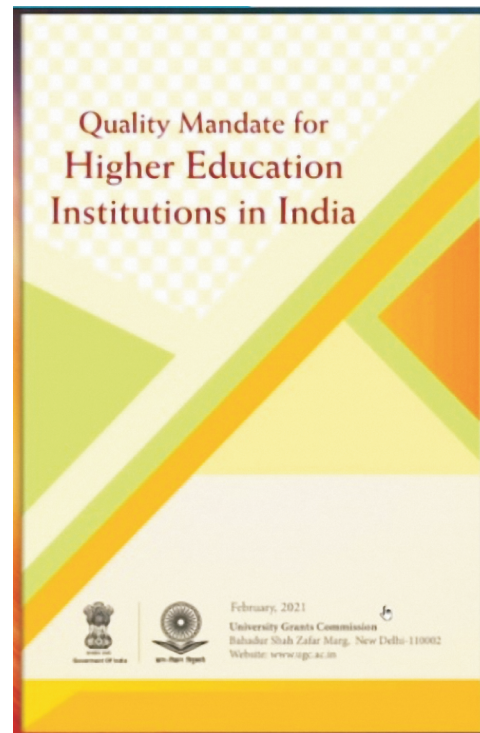
Most Revered Prof. P. S. Satsangi Sahab, Chairman, Advisory Committee on Education, Dayalbagh Educational Institutions conveyed His “best wishes and congratulations for the grand success of the proposed collaborative MoU signing”.



DEI Contributes for UGC's Book on Quality Mandate for Higher Education Institutions in India

On the auspicious day of Basant Panchami (16 February, 2021), UGC launched a book entitled *Quality Mandate for Higher Education Institutions in India*. The book was released by Shri. Rajeev Kumar, Vice Chairman of Niti Aayog, Government of India. The book contains fifteen chapters. One of the chapters entitled, 'Systems Approach to Skilling and Vocational Education in India' was contributed by Dayalbagh Educational Institute. This chapter, which was highly lauded by the experts of different fields, has been penned by Prof. P.K. Kalra, Dr. Mugdha Sharma, Prof. K. Soami Daya and Prof. J.K. Verma.

On the occasion of the Book Launch, Prof. Kalra expressed that the 1975 Education Policy of DEI is like a conclusive document for all sorts of educational reforms. Many years back, this policy proposed the concept of compulsory Core Courses in the curriculum from Pre-Nursery level upto Graduation. This concept had garnered considerable praises during the time of 1986 National Education Policy and a proposal on similar lines has been firmly included in the New Education Policy as well. Prof. Kalra also stated that the inclusion of the Core Courses in the education provided at DEI helps the students to evolve themselves as responsible and alert human beings, having social sensibility, as well as it also fulfills the purpose of imparting value and quality-based education that cultivates



all round development. He stressed the fact that skill-development has been a vital segment of Education Policy of DEI from the very beginning and then provided an impressive overview of all the dimensions of DEI's holistic model of education.

The gathering during this event included Prof. D.P. Singh, Chairman UGC, along with the other UGC officials, Vice Chancellors of different Universities, the writers of different chapters of the launched book and many other officials of the Government of India.

Annual Drama Festival-2021



The Annual Drama Festival was organized by the English, Hindi and Sanskrit departments, Faculty of Arts, DEI from 17-19 March, 2021. Even the hovering threat of Corona Virus could not dissuade the drama lovers from participating in this thrilling cultural and theatrical bonanza. All the precautions as per the pandemic protocol were duly followed during the organization of this much awaited event. Total seventeen plays were performed in this competition, where, four plays were performed in English, eight in Hindi and remaining five were performed in the Sanskrit language. In addition to this, a special short dramatic act was presented by the students of DEI, dramatizing the famous conversation between the two Nobel Laureates, Scientist Albert Einstein and Poet Rabindra Nath Tagore in the year 1930 at Berlin, Germany, where they discussed about the Superhuman Reality in terms of Science and

Religion. Two schools, two colleges and six faculties of Agra, including DEI took part in this festival. The participating students displayed commendable acting prowess in different segments of dramatic performance and also showcased great coordination and managerial skills through the stage representations. The audience enjoyed plays in all three languages and encouraged the participants by their presence in large number. Dr. Priyam Ankit, Associate Professor (English), Agra College, Mr. Yash Uprati, a reputed theatre artist and Mr. Durga Prasad Rao, an expert of Sanskrit language and drama were the judges.

DEI Prem Vidyalaya won the Best Production Award at the school level for the Hindi play '*Dhruvswamini*'. At the college level, Faculty of Engineering won the Best Production Award for the Hindi play '*Natsamrat*', Faculty of Education won the Best Production Award for its Sanskrit play '*Swarn- Marjari*' and the Best Production Award for English play was taken by Engineering Faculty for its play '*The Illuminated Night*'.

The highlight of this year's Drama Festival was the August Presence of Most Revered Prof. P.S. Satsangi Sahab, Chairman, Advisory Committee on Education, DEI and Most Respected Mrs. Satsangi through virtual mode on all three days which provided the much- needed impetus for the success of the event.

Design and Fabrication of Mobile Wi-Fi Antenna Mast

BACKGROUND :

Since the beginning of daily satsang and other linked activities being transmitted directly from fields, in order to receive a wi-fi signal for this transmission it became necessary to install a wi-fi dish antenna mounted on a mast of adequate height to receive the signal from the base tower located at the DEI campus.

Initially a sectional pipe mast of total assembled height of about 30-35 ft, mounted on a heavy flat base plate was used to connect and receive the wi-fi signal from the base tower. This antenna mast required an on-ground installation and necessary rigging (fig 1), to mount the antenna dish at every location where community work was planned to be held both in the mornings and evenings.

As this mast rigging was a cumbersome process requiring substantial time, physical effort and man-power, it was necessary that the rigging of this mast and signal strength adjustments be done well in advance at each constantly changing community work location, to ensure smooth and flawless transmission. This necessitated to rig the antenna in the night at the next day morning khet location, resulting in antenna security and tampering challenges when left unattended overnight in remote locations. This was identified as a security along with transmission quality and reliability risk.

In order to reasonably mitigate this risk, a need was felt to redesign the antenna mast arrangement.

DESIGN SPIRAL :

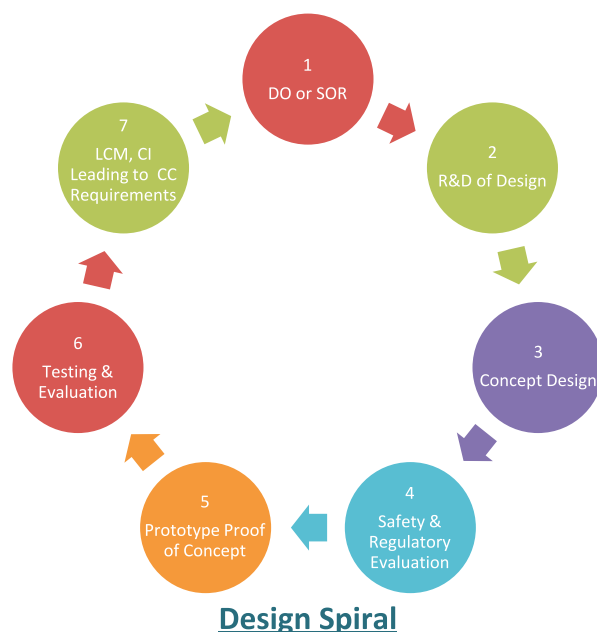
1. Determining Design Objectives (DO) or Statement of Requirements (SOR)*

Based on the existing antenna configuration, following design requirements were established:

- The antenna mast system must be mobile and capable of being towed with a hitch★
- The height of the antenna mast when rigged must not be less than 35ft above ground level.
- The mast must have the capability of being rotated 360 deg along its vertical axis to adjust the azimuth angle of the dish antenna in rigged condition.
- The total mast rigging time must be less than 60 min.

*Soar is also Pronounced as SOR; meaning, rise higher and higher.

★To Fasten something to something else. (Wikipedia.org)



Design Spiral



Fig. 1.
Original on-ground
installation antenna mast



Fig. 2.
Old used bare trailer.



Fig. 3.
Trailer mast with flanged
pipe connection trial at
work location



Fig. 4.
Trailer with mast system
installed

2. Research and develop design alternatives to meet the objectives or requirements:

Various existing mast designs were reviewed and based on the available ideas and constraints a combination of some unique concepts was considered which could meet the SOR.

3. Develop concept design and identify systems and components, including procurement plan:

- a) Based on the research a concept design was prepared. Which included the design of—
 - i. The mast components
 - ii. Mast lifting and lowering arrangements
 - iii. Secure stowage of mast components during transportation
 - iv. Mast trailer towing and hitch arrangements
 - v. Mast trailer jack-up arrangements
 - vi. On site mast rigging arrangements

- b) Based on above identified systems, material data sheets were established.

4. End product safety and regulatory compliance evaluation:

Safety lights were provided on the rear end of the mast during transportation.

5. Prototype Proof of Concept and structural fabrication. (1st iteration)

- a) It was decided to mount the entire mast system on a mobile trailer platform. A suitable used trailer was identified for the purpose.
- b) As no new material could be procured all available scrap material was scavenged at various locations and salvaged for use. Old damaged and bent mast pipes were reworked and reused and so were the holding and securing pipes for the main mast pipe.
- c) As mast lifting winch could not be procured initially therefore a suitable counterweight arrangement was employed, enabling to lift the mast physically with minimal effort.
- d) Finally, a hinged mast was completed with two removable extension pipe inserts making a total height of 37 ft above ground level when assembled. The lifting of the assembled mast pipes was done by pushing down the counter-weight at the hinged end of the mast holding pipe.
- e) For mast pipe rotation in assembled condition to adjust the azimuth, a set of steel balls were placed under the mast pipe inside the holding pipe, for easy rotation and also a suitable locking arrangement was provided to jam the pipe in desired position.
- f) Suitable stowage arrangements for the mast pipe section lengths were fabricated on the trailer for securely stowing these pipes during transportation.

6. Product testing and evaluation

- a) After initial trials at the workplace, the antenna mast trailer was towed to actual field location at

Sikanderpur Pulia no.1. and tested with satisfactory results.

- b) However similar test trial at Pulia No. 2 which had been a challenge in the past was again noted to be less than satisfactory. It was considered necessary to increase the height of mast to around 50ft to clear the line of sight in order to get the desired signal strength.

7. Life Cycle Management (LCM), Continuous Improvement (CI) and Configuration Changes (CC)

Configuration Changes (2nd Iteration)

- a) Mast main lifting pipe was replaced with a stronger schedule 40 steel pipe and second length was replaced with a stronger structural steel tube. These two pipes made the mast height about 42ft in height.
- b) Pipe insertions were replaced by more rigid flanged connections.
- c) Mast pipe lifting winch was installed.
- d) To avoid large cantilever effect causing large bending moment on the base pipes during lifting,



Fig. 5.
Trailer mast with extended
telescopic length 55ft at
Sikandarpur Pulia No.2



Fig. 6.
Fabricated Towing Hitch
on Scorpio



Fig. 7.
Towing Bracket fabricated
on the trailer

it was decided to have the last outer length of pipe to be made telescopic and be extended out only once the mast base pipes are lifted in upright position.

- e) This arrangement worked well, enabling the total mast height of 55ft.
- f) The last pipe length being telescopic, suitable arrangement was made so that it can still rotate as desired to adjust the antenna azimuth angle.
- g) The mast pipe stowage and securing were improved to quick clamping arrangements.

RESULT :

After few trials at the work location the trailer mast with additional telescopic section (total 55ft) was again tested at Sikanderpur Pulia no. 2 with very satisfactory results. The total antenna rigging time was noted less than 40 min which is expected to improve with practice and improved coordination on subsequent installations. It was possible to rotate the mast freely to adjust dish azimuth angle with no restrictions and the trailer with installed mast system was capable of being safely towed to location, hitched behind the Scorpio.

MAJOR CONSTRAINTS :

1. No availability of materials and components due to lockdown leading to lot of Jugaad improvi-sations. Ex. Trailer stepless lifting jacks were fabricated out of automotive scissor jacks.
2. Timely and consistent availability of skilled labour.
3. Limitations on the availability of workshop facilities due to lock-down.

FUTURE WORK & IMPROVEMENTS :

1. Remote adjustment of the dish antenna elevation: Some work was done by using a 12-volt motor but a more refined and light weight solution may be looked into.
2. Azimuth rotation of mast can be improved by employing a suitable manually driven gear or chain drive.
3. Mast be made fully telescopic.
4. A maintenance plan for Scorpio and the trailer/mast system to be prepared, executed and monitored.



Faculty News

Faculty of Arts

FDP on Photography

Department of Drawing & Painting organised a five-day Online Faculty Development Programme on Photography from 9 - 13 February 2021. This programme was also sponsored by ATAL Academy, AICTE (All India Council for Technical Education) and co - ordinated at DEI by Mr. Amit Kumar Johri. Learned subject experts namely Padamshri Anup Sah, Prof. Shivji Joshi, Shri Anil Risal Singh, Dr. Bhupesh Chandra Little, Dr. Avinash Chandra Little and Shri Atul Hundoo shared their views and expertise through excellent presentations of their creative genius reflected in terrific Photography done by them. Various aspects of the field of Photography like, Compositional Pictorialism, Smart Phone Photography, Elements of Composition, Exposure and Light, Travel and Creative Photography, Macro Photography, Nature and Culture Photography were delved into in the workshop. Total 194 participants across India registered in this online FDP.

FDP in Photography and Media Communication

Department of English, Faculty of Arts, DEI and AICTE Training and Learning (ATAL) Academy jointly organized a five-day Faculty Development Programme (Online) on Photography and Media Communication (Arts & Craft) from 23-27 February 2021. The Subject Experts were Prof. Bhupesh C. Little, Associate Professor, Dept. of Photography & Applied Arts, Jamia Milia Islamia, New Delhi, Dr. Madhu Bala Julka, Director and Media Management Expert, M.B. Institute of Communication and Electronic Media, New Delhi, Mr. Atul Hundoo, Senior Photojournalist and Smartphone Photography Mentor, Lucknow, UP and Mr. Udit Kulshrestha, a Freelance Photographer based in New Delhi. A large number of faculty members and students of different institutes of India registered for this programme.

A special session on 'Stress Management through Yoga' by Dr. Kalpana Gupta, Asst. Professor, Faculty of Education, DEI was immensely enjoyed and appreciated by the participants.

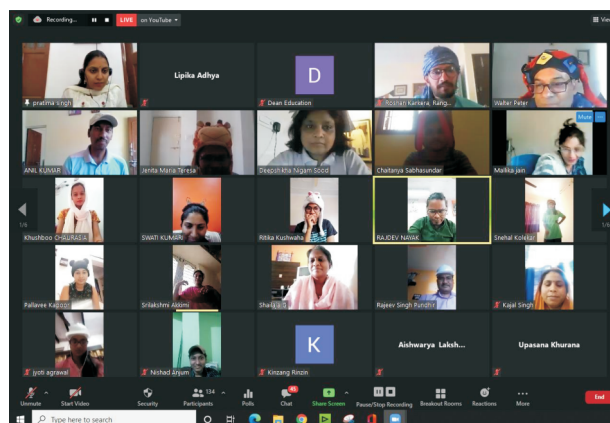


Education Faculty

WORKSHOPS ORGANISED

Four workshops namely, 'Integration of Artificial Intelligence in Schools', 'Learning to Programme with Python', 'Python to Control the World' and 'Electronics Primer in Education' were organized by Centre for Artificial Intelligence (CAIE), School of Education between March 16-23, 2021. Nearly 230 students and teachers got benefitted.

● A 'One- Day National Online Workshop on Integration of Drama and Theatre in Education' was organized by Centre for Knowledge Acquisition, Retention and Transformation (C-KART), School of Education, on 23 March 2021 under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNTT), MoE, Govt. of India. Mr. Walter Peter, Founder – Laa Polaa TIE India, a Theatre Artist was the resource person in the workshop. The objective of the workshop was to orient the participants with the use of drama and theatre in Education and to enable them to apply different drama techniques in



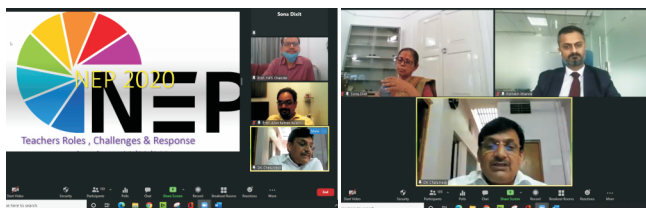
classroom teaching/ learning. A total of 161 participants from all over the nation enthusiastically participated in this workshop.

• A **One- Day Workshop on 'Design Thinking and Problem solving in Education'** was organized by Centre for Artificial Intelligence in Education (CAIE), School of Education, on 24 March, 2021 under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNTT), MoE, Govt. of India. Prof. N.K.Mishra, Head of Department MCA, Hindustan Institute of Management & Computers and Mr. Mohit Singh, Director - Ninepages Tech solutions Private Limited, Agra were the resource persons in the workshop.



Webinar on 'NEP2020-Teacher Role, Challenges and Response'

A One- Day Webinar on 'NEP2020-Teacher Role, Challenges and Response' was organized by Centre for Knowledge Acquisition, Retention and Transformation (C-KART), School of Education, on 30 March, 2021 under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNTT), MoE, Govt. of India. Dr Vijay Kumar, Associate Professor, Pondicherry University delivered a talk on 'Role of NEP 2020 in Teacher Education: Plan of Action', in which he discussed NCTE's plan of action for Teacher Education Institutions. Mr. D K Chaturvedi, Administrative Secretary, NCTE, New Delhi; Under Secretary (GOI) delivered a talk on- 'National Professional Standards for Teachers (NPST)'. He elaborately discussed the future roles and expectations from teachers and how NCTE would phase out the Teacher Education programme throughout the country. In the next session, a talk on 'NEP 2020 in Global Perspectives' was delivered by Mr. Rishabh Khanna, Cognitive Scientist, CEO Global LT India and PT, Dubai. He spoke about how the NEP2020 could transform the Teacher Education Programme in India and lead to a global demand for Teachers from India in the coming decade. In the concluding session, a panel discussion was moderated by Prof Nandita Satsangee, co-ordinator, SoE. The Panelists were, Dr Vijay Kumar, Mr. DK Chaturvedi and Mr. Rishabh Khanna. Participants' queries were resolved during the panel discussion. 167 participants participated from all over the country and abroad.



Faculty of Science

Staff News:

A team of students, named MACH AUTOMATE, comprising Ujjwal Gupta (B.Tech. Mechanical), Ritik Sharma (B.Tech. Mechanical), Vijay (B.Tech. Mechanical), Sachin Sharma (B.Tech. Mechanical), Shantanu Saraswat (B.Tech. Mechanical) and Deepshikha Bahal (B.Tech. Electrical), led by Mr. Hardik Chadda (Guest Faculty, Dept. of Physics and Computer Science, Faculty of Science) stood winner in the Smart India Hackathon Hardware Edition 2020 (SIH 2020) for the problem statement given by Autodesk, an American multinational corporation that makes products and services for the architecture, engineering, construction, manufacturing, media, education, and entertainment industries.

Student's Achievement:

T. Harsh Vardhan Rao from M.Sc. Computer Science won the 1st prize of Rs 35,000 in Ethical Hacking Hackathon Challenge hosted by Internshala. The Hackathon problem was to find vulnerabilities in a provided website. The expected number of vulnerabilities by the host was 36 in which he found more than expected, 47 vulnerabilities.



NSS Activities

Free Medical and Assistance Camp

Upon relaxation from nation-wide lockdown imposed by the Government of India in March 2020, DEI-NSS Cell organized 7 (Seven) Free Medical Camps from 21st February 2021 till 11th April 2021 after a gap of nearly one year. Free Medical and Assistance Camps are organized every Sunday by the DEI-NSS Cell in collaboration with Saran Ashram Hospital Dayalbagh for the health benefits and holistic development of local community especially rural populace of old, young and children.

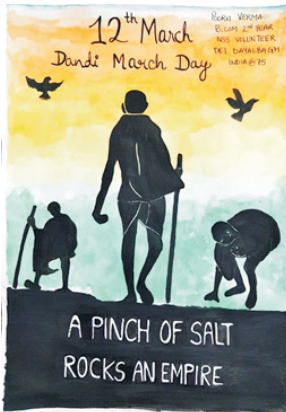
International Women's Day

DEI-NSS Cell observed International Women's Day on 8th March 2021 to celebrate the social, economic, cultural and political achievement of women from every walk of life. The theme for this year's celebration was 'Choose to Challenge'. On this occasion, various literary and cultural programs were organized by NSS volunteers of the Institute at DEI Open Theatre. Students participated in 'Folk-Song', 'Self-composed Poetry Recitation', 'Kavya-Natika' and 'Nukkad-Natak' in large number keeping all precautions of Covid 19 SOP. Nukkad-Natak 'Saat Saheliyan' depicted how to overcome challenges and social stigma faced by women in the society. Expert talks were delivered by Chief Guests Ms. Saroj Rani Gaurihar, Nagri Pracharini Sabha Agra and Shri Rajiv Kumar Pal, Regional Commissioner Provident Fund Agra Region. Event was coordinator by Dr. Brijraj Singh, Program Officer NSS.



Dandi-March Day

DEI-NSS Cell observed Dandi-March Day on 12th March 2021 in virtual mode. Various competitions like Essay-Writing, Poster-Making, Slogan-Writing and Video-Message were organized by the cell to celebrate the focal theme on 'Dandi-March – First Step towards Self-sustained India'. The 91st anniversary of the Dandi-March was organized under the aegis of celebration of '75th Years of Independence'.



Editorial Board

Patron : Prof. P. K. Kalra
Chief Editor : Prof. J.K.Verma
Editors : Dr. Sona Dixit
 Dr. Sonal Singh
 : Dr. Akshay Kumar Satsangi

Members : Dr. Charu Swami, Prof. Praveen Saxena,
 Dr. Neha Jain, Prof. V. Soami Das,
 Dr. Soumya Sinha, Dr. Rohit Rajwanshi,
 Shri R.R. Singh, Dr. Bhawna Johri.
Advisor : Prof. S.K. Chauhan