Programs Promote Energy Efficiency and Clean Energy Awareness

Manipal University Jaipur has initiated outreach programs aimed specifically at engaging local communities. These initiatives include workshops, seminars, and informational sessions designed to educate residents on energy-efficient practices, renewable energy technologies, and available government incentives. The university is also deeply involved in research focused on energy efficiency and clean energy solutions, often extending its findings to the local community. Collaborations with municipalities, businesses, and residents facilitate the implementation of innovative energy-saving technologies.

Manipal University Jaipur is making significant investments in renewable energy infrastructure on its campus. These installations not only exemplify clean energy solutions but also provide community members with opportunities to gain firsthand experience in renewable energy generation. The university offers degree programs and certificate courses related to energy efficiency and clean energy, equipping community members with the necessary knowledge and skills to pursue careers in the renewable energy sector or to adopt energy-saving practices in their homes and businesses. Manipal University Jaipur is increasingly integrating sustainable practices into its operations, which include energy-efficient building designs, recycling initiatives, and green transportation options. These efforts serve as a model for the local community, promoting sustainable behaviors.

Beyond being a mere educational institution, Manipal University Jaipur acts as a catalyst for change within the community. Through its energy efficiency and clean energy initiatives, the university empowers local residents and businesses to make informed decisions that positively impact both the environment and the economy.

MANIPAL UNIVERSITY
JAIPUR

FACULTY OF ENGINEERING

SCHOOL OF ELECTRICAL, ELECTRONICS & COMMUNICATION ENGINEERING

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

International Conference on Intelligent Computing Techniques for Smart Energy Systems (ICTSES-2023)

Date of Event (14 December 2023- 15 December 2023)

Dept. of E & C Engineering
School of Engineering
Manipal University, JAIPUR

Content of Report

1. Introduction of the Event
2. Objective of the Event
3. Beneficiaries of the Event
4. Details of the Guests
5. Brief Description of the event
6. Geo-tagged Photographs
7. Brochure or creative of the event
8. Schedule of the Event
9. Attendance of the Event
10. Feedback of the Event
12. Link of MUJ website

1. Introduction of the Event

First International Conference on "Intelligent Computing Techniques for Smart Energy Systems (ICTSES2018)" was successfully organized in the year 2018 at Manipal University Jaipur in physical mode. The second version "ICTSES-2021" was organized in online mode in September 2021, at Manipal University Jaipur in collaboration with NIT Jaipur and NIT Uttarakhand. The proceedings of both the conferences are published in the Scopus Indexed Lecture Notes on Electrical Engineering, Springer. Moving forward, the third version of "ICTSES-2023" will be organized on December 14 -15 2023, at Manipal University Jaipur. The conference is proposed to be organized in collaboration with NIT, Uttarakhand, Malaviya National Institute of Technology, Jaipur & Indian Institute of Information Technology, Ranchi.

2. Objective of the Event

- Interact with researchers and academicians in different fields
- Panel discussion with industry experts and academicians

3. Beneficiaries of the Event

The event was useful to students and faculty from MUJ and other institutes to interact with each other, make connections and present papers which will be published in indexed proceedings..

4. Details of the Guests

1. **Dr. Rajeev Ahuja** (Director IIT Ropar and Officiating Director IIT Guwahati)
2. **Prof. B. L. Ahuja (**Emeritus-Scientist-CSIR and Director of Institute of Engineering and Technology)
3. **Dr. Anshuman Tripathi (**Senior Programme Director, Future Mobility Solutions (AVs & Electro-mobility), Advanced Power Electronics, Energy Research Institute @ NTU (ERI@N))
4. **Dr Umesh Chand** (Senior scientist and team lead at the A*STAR Institute of Microelectronics (IME), Singapore)
5. **Dr. Komal Bapna** (Scientist CSIR- National Physical Laboratory)

5. Brief Description of the event

Distinguished speakers in keynote sessions share their expertise, cutting-edge research, and industry trends, enriching the conference experience for attendees. Eminent speakers including **Dr. Rajeev Ahuja** (Director IIT Ropar and Officiating Director IIT Guwahati), **Prof. B. L. Ahuja** (Emeritus-Scientist-CSIR and Director of Institute of Engineering and Technology), **Dr. Anshuman Tripathi** (Senior Programme Director,

Future Mobility Solutions (AVs & Electro-mobility), Advanced Power Electronics, Energy Research Institute @ NTU (ERI@N)), and **Dr Umesh Chand** (Senior scientist and team lead at the A*STAR Institute of Microelectronics (IME), Singapore) will share a foundation of knowledge that will facilitate the exchange of ideas and guide participants to connect with the forefront of developments in their field.

The conference registered a total of 51 papers out of 175 received from all over the world which are presented in 4 tracks and 8 presentation schedule. The conveners **Dr Amit Soni, Dr Shilpi Birla, Dr Neha Singh and Mr Samarendra Pratap Singh** welcome all the dignitaries and participants to the conference. Also, a heartfelt thanks to all committee members for their extended support to make this conference a success.

The interaction and paper presentations during the conference were based intelligent computing techniques targeted to achieve sustainable development for clean energy, smart cities, electric vehicles etc.

6. Photographs

3 to 5 geotagged photographs of the event or screenshots of the event (if online) with captions

Panel Discussion at the conference

Dignitaries arriving at the conference

Unveiling of the conference Souvenir

Session in progress

7. Brochure or creative of the event (insert in the document only)

8. Schedule of the event

Program & Paper Session Schedule			
September 1st, 2021 (Day-1)			
Time	**Activity**		
9:30 AM - 10:15 AM	**Inauguration** (Chief guest: Prof. Udaykumar Yaragatti, Director MNIT, Jaipur)		
10:15 AM - 11:00 AM	**Tea Break**		
11:00 AM - 12:00 PM	**Keynote-1: Dr Anshuman Tripathi (Program Director, Energy Research Institute, Nanyang Technological University, Singapore)**		
12:00 PM - 1:00 PM	**Keynote-2: Prof K. R. Niazi (Professor, Malaviya National Institute of Technology, Jaipur, Rajasthan, India)**		
1:00 PM – 2:00 PM	**LUNCH**		
02:00 PM – 02:45 PM	**Keynote-3: Rajesh Nemare (Secure meters, Udaipur, Rajasthan, India)**		
03:00 PM – 05:00 PM	**Session-1** **Track 1: Electrical Engineering** (Paper-ID: 02, 08, 10, 11, 27, 31, 33)	**Session-2** **Track 2: Electronics Engineering** (Paper-ID: 12, 24, 32, 35, 37, 62, 68)	
September 2nd, 2021 (Day-2)			
10:00 AM - 10:45 AM	**Keynote-4: Dr Surya Prakash (Associate Professor, IIT Indore)**		
10:45 AM - 11:00 AM	**Tea Break**		
11:00 AM - 01:00 PM	**Session-3** **Track 1: Electrical Engineering** (Paper-ID: 45, 58, 65, 70, 90, 96, 97)	**Session-4** **Track 2: Electronics Engineering** (Paper-ID: 74, 77, 84, 91, 122, 140, 144)	**Session-5** **Track 3: Communication Technologies** (Paper-ID: 09, 56, 93, 130, 134, 170, 183)
01:00 PM – 02:00 PM	**LUNCH**		
02:00 PM – 02:45 PM	**Keynote-5: Prof Bhagavatula L V Prasad (Director, Centre for Nano and Soft Matter Sciences, Bengaluru)**		
03:00 PM – 5:00 PM	**Session-6** **Track 1: Electrical Engineering** (Paper-ID: 111, 115, 118, 127, 138, 152, 161)	**Session-7** **Track 2: Electronics Engineering** (Paper-ID: 148, 166, 169, 172, 177, 184, 185)	**Session-8** **Track 4: Computing Techniques** (Paper-ID: 23, 26, 30, 42, 47, 87, 101)
September 3rd, 2021 (Day-3)			
10:00 AM - 10:45 AM	**Keynote-6: Dr Anand Nayyar (Duy Tan University, Danang, Vietnam)**		

10:45 AM - 11:00 AM	**Tea Break**	
11:00 AM - 01:00 PM	**Session-9** **Track 1: Electrical Engineering** (Paper-ID: 100, 143, 160, 165, 171, 176, 180)	**Session-10** **Track 4: Computing Techniques** (Paper-ID: 110, 116, 135, 145, 146, 168, 175)

List of Papers **(MUJ Papers Highlighted)**

14 December 2023 (Day 1)

Session-1 (12 PM – 1 PM)

Paper ID	Paper Title	Authors Name
43	Exploring the Potential and Avenues of Renewable Integrated Energy Resources through Virtual Power Plant	Anubhav Kumar Pandey, Vinay Kumar Jadoun, Jayalakshmi N. S.
44	A Prospective Study on Reliability Analysis of Electrical Network with Electric Vehicle Integration	Nandini K. K, Jayalakshmi N. S., Vinay Kumar Jadoun
85	**Optimal scheduling of solar PV generators and network assets in Distribution Network**	**Samarendra Pratap, Neeraj Kanwar, Amit Saraswat**
91	Investigation of Battery Temperature Impact on High Voltage Cable of Electric Vehicles	Mahipal Bukya, Rajesh Kumar, Akhilesh Ma thur
99	A Single Stage Non Isolated Charger Approach for Electric Vehicle Charging	Geetanjali, A Shrivastava, A Soni
Session-2 (12 PM – 1 PM)		
19	**SMOTE-based Sampling for Addressing Class Imbalance**	**Shweta Chaudhary, Jyoti Parashar, Nisar Ahmad Malik, Shalbbya Ali, Kamal Upreti, Prashant Vats**
21	**DLN-PD: Deep Learning Network for Parkinson's Disease Detection over Voice Signals**	**Akash Shedage, Raghav Agal, Amber Agarwal, Rishikesh Bhupendra Trivedi, Somya Rakesh Goyal**
37	**VedNNet - Vedic Mathematics-Based Neural Network Design for Fast Processing**	**Rohit Ranjan Lal, Dharmendra Kumar Yadav, Somya Rakesh Goyal**
72	**Classification and Prediction of Knee Osteoarthritis by deep learning approach**	**Amit Saraswat, Tanya Tooley**

74	**Predicting stock price and market direction using statistical and LSTM Model**	**Yogesh Gupta, Amit Saraswat**
Session-3 (2:30 PM – 4:00 PM)		
17	A Review on Power System Congestion Management	Jivesh Mahawar, Praveen Kumar Agrawal, Dheeraj Verma
22	**GA Optimized Algorithms for Scheduling the Load of Household Appliances to Charge Electric Vehicles**	**Madhavi Nerkar, Aniruddha Mukherjee, Bhanu Pratap Soni, Amit Soni**
49	**Investigation of optoelectronic properties of Rb_2TlAsX_6 (X = Cl, Br) halide double perovskites materials**	**Kanchan Rawat, Amit Soni, Jagrati Sahariya**
50	**Alkali metal-based halide double perovskites: emerging materials for photovoltaic and solar cell applications**	**Kailash Rangar, Amit Soni, Jagrati Sahariya**
53	Analysis of Fault and Current Limiting Methods in Power System	Ashish Sharma, Rinku Garg, Surabhi Shanker, Arti Badhoutiya, Yashwant Singh Bisht, Ahmed Alkhayyat
56	Approximation in the weighted Lipschitz class by (C, a, Q)(E, q) mean of its Fourier series	Diksha Dumka, Dr. Kusum Sharma
69	Optimization Based Cost Analysis for Energy Management System in Microgrids	Anu Prakash, Amit Saraswat, Jayalakshmi N.S., Ashish Shrivastava[3]
97	Mitigating Harmonics in Integrated Photovoltaic Grids with Plug-in Hybrid Electric Vehicles	Kishore MP, Ashish Shrivastava, Amit Soni
Session-4 (2:30 PM – 4 PM)		
15	Temperature Reliability Analysis of Ge Source Based Heterogate Tunnel FET	Sukanta Kumar Swain , Abhishek Raj , Rishu Kumar and Shashi Kant sharma
16	Wide Band Gap Devices: Enabling Technologies for Power Electronics-Based System	Rajesh Singh Shekhawat, Satyendra Kumar Maurya, Sumitra Singh, Dheerendra Singh
18	A Review on Inverter Topologies used to Minimize Leakage Current	Rupam Kumari, Dheeraj Verma, Praveen Agrawal K.R.Niazi, Rajvir Kaur
26	Impact of Gate Oxide and Dielectric Pocket on Performance Enhancement of Hetero Gate Oxide TFETs	Prasenjit Mahato, Kavindra Kumar Kavi, Sukanta Kumar Swain, Abhishek Raj, Shashi Kant Sharma

38	Impact of Drain Doping on the Performance of L-Shaped TFET	Rishu Kumar, Abhishek Raj, Sukanta Kumar Swain, Shashi Kant Sharma
47	An Analysis of Surface Potential and Drain Current of a Split-gate Junctionless Transistor using 3-D TCAD	
48	Design of 7nm FinFET with High-k Dielectric Oxide Materials (HK) and GaAs as Metal Gate (MG) using Ashby's Material Selection Approach	Mohammed Abdul Muqeet, Tummala Ranga Babu[2]
82	**Optimal Design of Nano Scale Voltage Amplifier Using Evolutionary Techniques for DG-MOSFET**	**Dibyendu Chowdhury, Suddhendu DasMahapatra, Bishnu Prasad De, Rajib Kar,**
15 December 2023 (Day 2)		
Paper ID	Paper Title	Authors Name
Session-5 (11:30 PM – 1 PM)		
39	**A comparative analysis of PeerTrust and LFTM security mechanisms for wireless sensor networks**	**Rohit Mathur, Ravi Krishan Pandey, Shobhit Mani Tiwari**
52	**Design and Analysis of Reconfigurable Reflecting array for Ka- band**	**Monisha Selvaran, Ramya Vijay, Madhuri Sahal**
78	Transactive Energy Management for Microgrids: Peer-to-Peer Trading Using Stackelberg Game Approach	Amit Kumar, Prerna Jain, Abhishek Harit, Ashish Prajesh
81	Unlocking IoT Security: Enabling the Future with Lightweight Cryptographic Ciphers	Srishti Priya Chaturvedi, Rahul Mukherjee, Ashok Kumar, Ajay Yadav
95	**Rectangular Shape Patch Antenna with Defected Ground Plane for 5G Sub 6GHz Wireless Communication Systems**	**Jetendra Jakhar, Tejpal Jhajharia, Bharat Gupta**
102	**A design of nested photonic crystal fiber for OAM mode propagation**	**Sushma punia, Ankur Saharia, Yaseera Ismail, Francesco Petruccione, Anton V. Bourdine, Vladimir V. Demidov, Oleg G. Morozov, Juan Yin, Ghanshyam Singh Manish Tiwari**
Session-6 (11:30 PM A6– 1 PM)		
25	**Comparative Study of Genetic Algorithm and Particle Swarm Optimization for Load Scheduling and Cost Minimization in Energy Management of IoT-based Smart Homes**	**Ganesh Shirsat, Aniruddha Mukherjee, Amit Soni**

30	Sharenting: Navigating the Intersection of Parental Sharing and Child Cybersecurity	Anadi Trikha, Dr Kavya Saini
42	Automatıc Maıntenance System Usıng Wıreless Sensor Node For Productıve Aquaculture	G. Jegan, M.Masilamani Selvam , I.Rexiline Sheeba, Kavi Priya Prisha Varma.R, Praveen Selvam
51	**Plundervolt attack: Simulation based voltage glitching attack against robotics industry**	**Shaminder Kaur, Shilpi Birla, Neha Singh, Sandhya**
55	UDS for data communication in Temperature Monitoring	Prathima H S, Mallikarjun B C
75	Comprehensive Evaluation of Time Management with Balancing Resistors in Passive Cell Balancing using the 1RC Model	Kumari Sadhna, Aman Srivastava, Majid Jamil
83	Flower- Patterned with Elliptical Petals Multiband Microstrip Fractal Patch Antenna for Wireless Applications	Nairaj Jat, Manisha Gupta
90	Revolutionizing Biomedical Engineering with Microcontroller Applications: A Comprehensive Review	Chinmay Pawase, Sandra D'Souza
Session-7 (2:30 PM – 4:00 PM)		
14	Palladium Electrode Based Vertical Junctionless FET for High-Performance Hydrogen Gas Sensing	Abhishek Raj, Sukanta Kumar Swain[1], Rishu Kumar, Shashi Kant Sharma
35	**Novel sandwich-stacked heterojunction Junctionless TFET for low power applications**	**Neha Singh, Shilpi Birla, Shashi Kant Dargar, Neeraj Kumar Shukla**
41	A Coordinated Energy Management approach for Multi Carrier Energy Systems	Ankit Garg, K.R. Niazi
63	**First-principles study of the structural, optical and electronic properties of zinc blende GaN through PBEsol and TB-mBJ functionals**	**Apurva, Amit Kumar Singh, Chusen Duari**
Session-8 (2:30 PM – 4:00 PM)		
29	To propose a novel system for finding shortest path in a network Routing using GA.	Tejinder kaur, Jimmy Singla
40	Measuring Dimensions of Objects Using Camera with Deep Learning	T. Subha, R. Ranjana, Saikiran
46	Robust Fuzzy Chaotic Cuckoo Search boosted Relief Feature Selection for Dimensionality Reduction to improve Botnet Attack Detection in IoT	Veena Antony, Dr. N. Thangarasu

59	Demand Response and Load Profile Analysis in Modern Electricity Systems	Ajay Jatav, Gurpinder Singh, Anil Swarankar, Manini Swarnkar, Amit Soni, Khaleequr Rehman Niazi
77	PAWnnect: Pioneering IoT-ML Driven Pet Monitoring	Mrudula Rothe, Ritika Lath, Aryan Mundra, Priyank Bagad ,Esha Thakur, Amit Aylani
80	Unravelling the Mind's Emotions: A Review of EEG-Based Emotion Detection using Machine Learning and Deep Learning	Aishwarya Vishwakarma, Dr. Vikas Sakalle
93	**Deep Learning Technique for Computer Vision-Based Pose Estimation for Augmented Reality**	**J Palanimeera , K.Ponmozhi , Kanagaraj Jyothi, Shashi Kant Dargar , Shilpi Birla**

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9. Attendance of the Event
Total attendee-……42…..

Sr. No	Name of Institution	Place of Institution	Registration Number/Employee code	Name of Attendee	Name of Dept
1.	IIT Ropar	Ropar	NA	Rajeev Ahuja	Director
2.	Institute of Engineering and Technology	Udaipur	NA	Prof. B. L. Ahuja	Director
3.	Energy Research Institute @ NTU (ERI@N))	Singapore	NA	Dr. Anshuman Tripathi	Program Director
4.	A*STAR Institute of Microelectronics (IME)	Singapore	NA	Dr Umesh Chand	Senior scientist and team lead
5.	CSIR- National Physical Laboratory	Delhi	NA	Dr. Komal Bapna	Scientist
6.	MUJ	Jaipur	MUJ0546	Dr Shilpi Birla	ECE
7.	MUJ	Jaipur	MUJ0268	Dr Neha Singh	ECE
8.	MUJ	Jaipur	MUJ0401	Dr Rohit Mathur	ECE
9.	BML Munjal University,	Gurugram	NA	Yogesh Gupta	(Participant) BML Munjal University, G
10.	Manipal University Jaipur	Jaipur	NA	Akash Shedage	(Participant)
11.	Manipal University Jaipur	Jaipur	MUJ1036	Somya Rakesh Goyal	CCE
12.	Manipal University Jaipur	Jaipur	NA	Apurva	(Participant)

13.	Indian Institute of Information technology Ranchi	Jharkhand	NA	Abhishek Raj	(Participant)
14.	Indian Institute of Information technology Ranchi	Jharkhand	NA	Sukanta Kumar Swain	(Participant)
15.	Indian Institute of Information technology Ranchi	Jharkhand	NA	Rishu Kumar	(Participant)
16.	Indian Institute of Information technology Ranchi	Jharkhand	NA	Shashi Kant Sharma	(Participant)
17.	Manipal Institute of Technology, Manipal Academy of Higher Education,	Manipal	NA	NANDINI K. K. ANUBHAV KUMAR PANDEY	(Participant)
18.	Malaviya National Institute of Technology, Jaipur, India	Jaipur	NA	Amit Kumar	(Participant)
19.	Bennett University	Gurugram	NA	Dr. Ajay Yadav	(Participant)
20.	Manipal Institute of Technology Bengaluru, Manipal Academy of Higher Education, Manipal, India, 576104	Bengaluru	NA	Mahipal Bukya	(Participant)
21.	Manipal University Jaipur	Jaipur	MUJ0257	Dr. Madhuri Sahal	ECE
22.	Shri JJT University, Churela, Rajasthan, India.	Churela	NA	Jetendra Jakhar	(Participant)
23.	Malaviya National Institute of Technology Jaipur, India	Jaipur	NA	Khaleequr Rehman Niazi	(Participant)
24.	Malaviya National Institute of Technology	Jaipur	NA	Anil Swarankar	(Participant)
25.	Manipal University Jaipur	Jaipur	MUJ0410	Amit Soni	EE

26.	Manipal University Jaipur	Jaipur	MUJ1501	Dr. Prashant Vats	CCE
27.	Manipal University Jaipur	Jaipur	209210601	Sushma punia	ECE
28.	Manipal University Jaipur	Jaipur	MUJ0383	Amit Saraswat	EE
29.	Manipal University Jaipur	Jaipur	MUJ0140	Samarendra Pratap	EE
30.	Manipal University Jaipur	Jaipur	202303042	Geetanjali	EE
31.	Manipal University Jaipur	Jaipur	MUJ0258	Dr C. P. Gupta	ECE
32.	Manipal University Jaipur	Jaipur	MUJ0298	Dr Deepika Bansal	ECE
33.	Manipal University Jaipur	Jaipur	219251004	Ms Katyayani Chauhan	ECE
34.	Manipal University Jaipur	Jaipur	209202027	Aadarsh kumar	ECE
35.	Manipal University Jaipur	Jaipur	209202123	Siddhant	ECE
36.	Manipal University Jaipur	Jaipur	MUJ0261	Dr Suddhendu	ECE
37.	eInfochips	Ahmedabad	NA	Mr Sudhir Nayak	Industry
38.	SCL	Chandigarh	NA	Dr Manish Hooda	Industry
39.	MAHE, Karnataka	Karnataka	NA	Prof. N. N. Sharma	Guest
40.	MIT, Bengaluru	Bengaluru	NA	Prof. Jagan Nath Korody	Guest
41.	Synopsys	Noida	NA	Mr Rohit K Ohlayan	Guest
42.	NXP Noida	Noida	NA	Dr Satish Chandra Tiwari	Guest

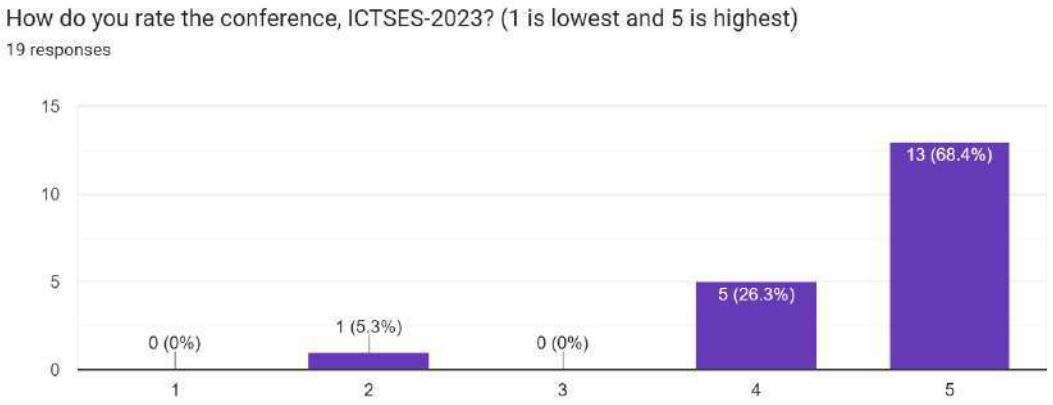
43. News Publication- News printed in newspaper or online links (if any) for news – insert images)

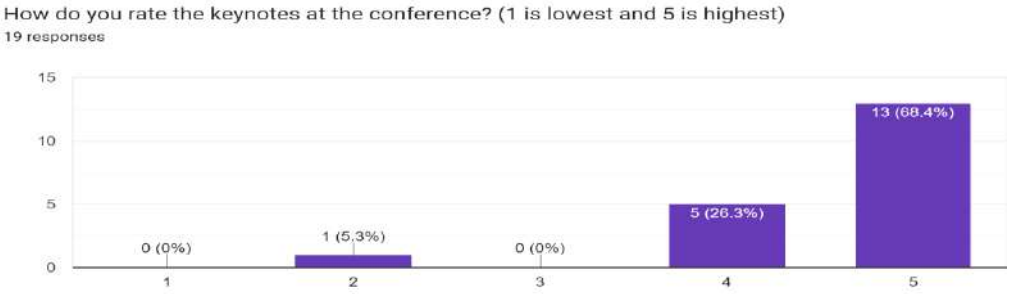
https://www.linkedin.com/feed/update/urn:li:activity:7085987793398579200?updateEntityUrn=urn%3Ali%3Afs_feedUpdate%3A%28V2%2Curn%3Ali%3Aactivity%3A7085987793398579200%29

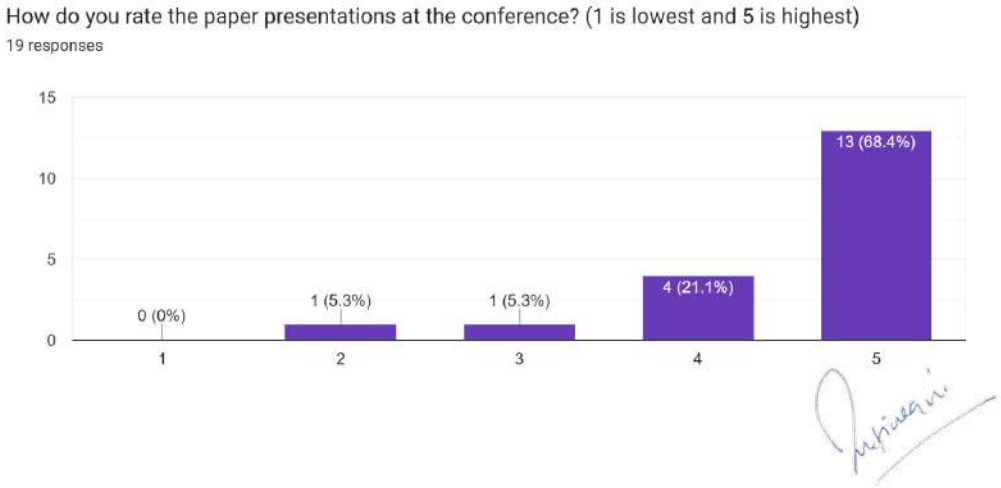
https://www.linkedin.com/feed/update/urn:li:activity:7139495822425055232?updateEntityUrn=urn%3Ali%3Afs_feedUpdate%3A%28V2%2Curn%3Ali%3Aactivity%3A7139495822425055232%29

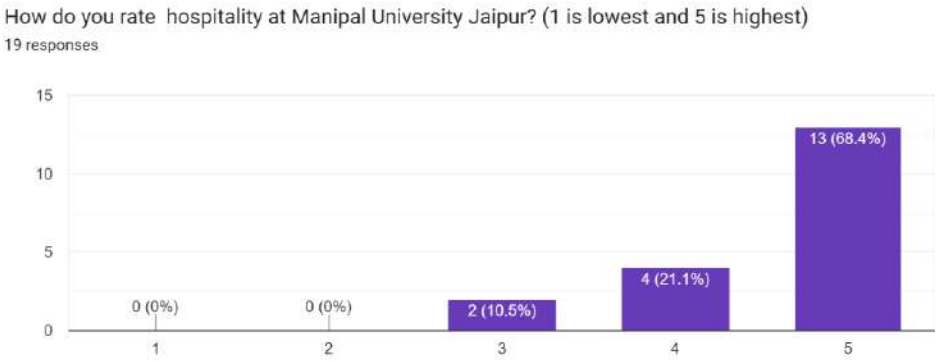
https://www.linkedin.com/feed/update/urn:li:activity:7142841909038800896?updateEntityUrn=urn%3Ali%3Afs_feedUpdate%3A%28V2%2Curn%3Ali%3Aactivity%3A7142841909038800896%29

44. Feedback report of the Event









45. Link of MUJ website stating the event is uploaded on website

https://jaipur.manipal.edu/muj/news-events/events-list/ICTSES-2023.html

Dept. of E & C Engineering
School of Engineering
Manipal University, JAIPUR

Seal and Signature of Head with date

MANIPAL UNIVERSITY
JAIPUR

MUJ/Q&C/021/F/1.01 Event Report Format

FACULTY OF DESIGN

SCHOOL OF DESIGN AND ART

DEPARTMENT OF INTERIOR DESIGN

Webinar on

"The Hafele LED lighting for furniture and rooms

HÄFELE

12th May 2023

Head, Department of Interior Design
SD&A, Faculty of Design
Manipal University Jaipur

Content of Report

1. Introduction of the Event
2. Objective of the Event
3. Beneficiaries of the Event
4. Details of the Guests
5. Brief Description of the event
6. Photographs
7. Brochure or creative of the event
8. Social Media Post
9. Attendance of the Event

1. Introduction of the Event

The Department of Interior Design organized an online technical awareness session on lighting for furniture and rooms for the students of Architecture and Interior Design.

2. Objective of the Event

The main objective of this session was to give knowledge about new lighting systems which is introduced in the market by Hafele. Moreover, the student will be able to effectively plan the lighting needs for their design projects.

3. Beneficiaries of the Event

The students were rejoiced by the authenticity and genuineness of the speakers. All the participants ended the webinar inspired and with a new perspective about 'lighting system for furniture and rooms'.

4. Details of the Guests

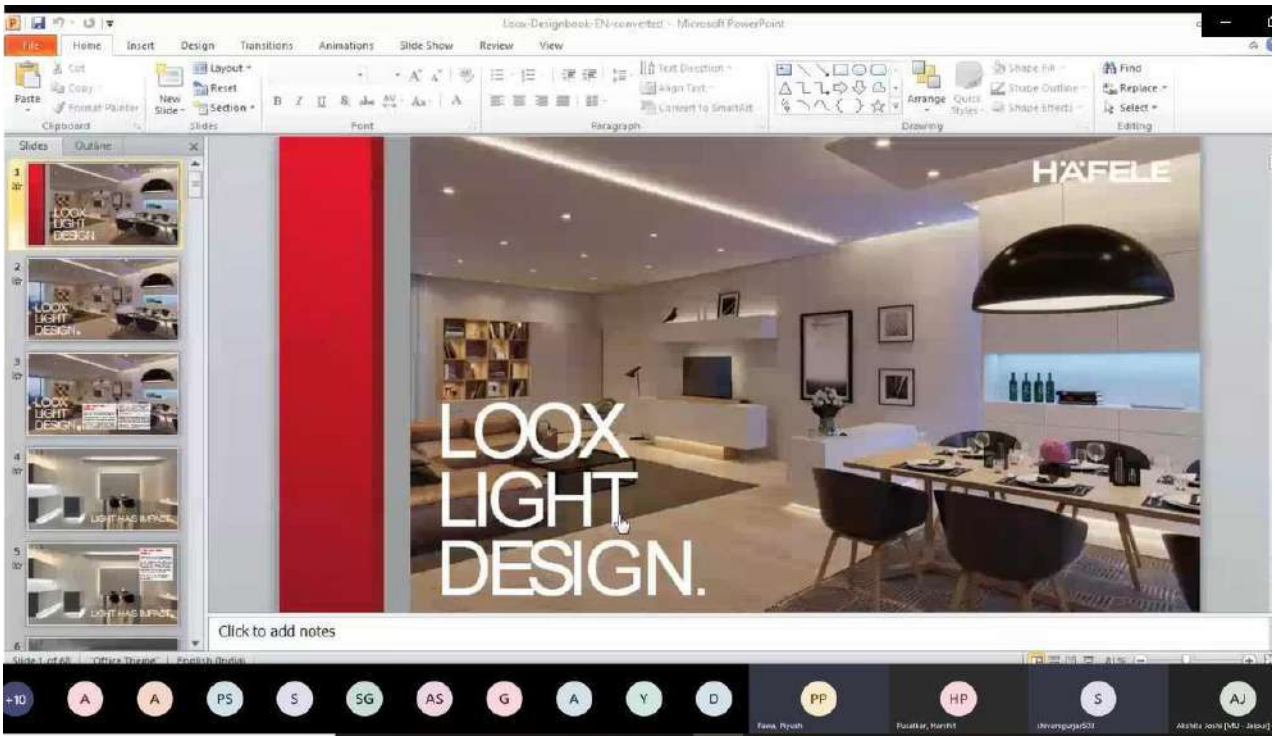
Mr. Harshit Pusalkar, Hafele India
Ar. Sneh Singh – HOD (department of interior design)

5. Brief Description of the event

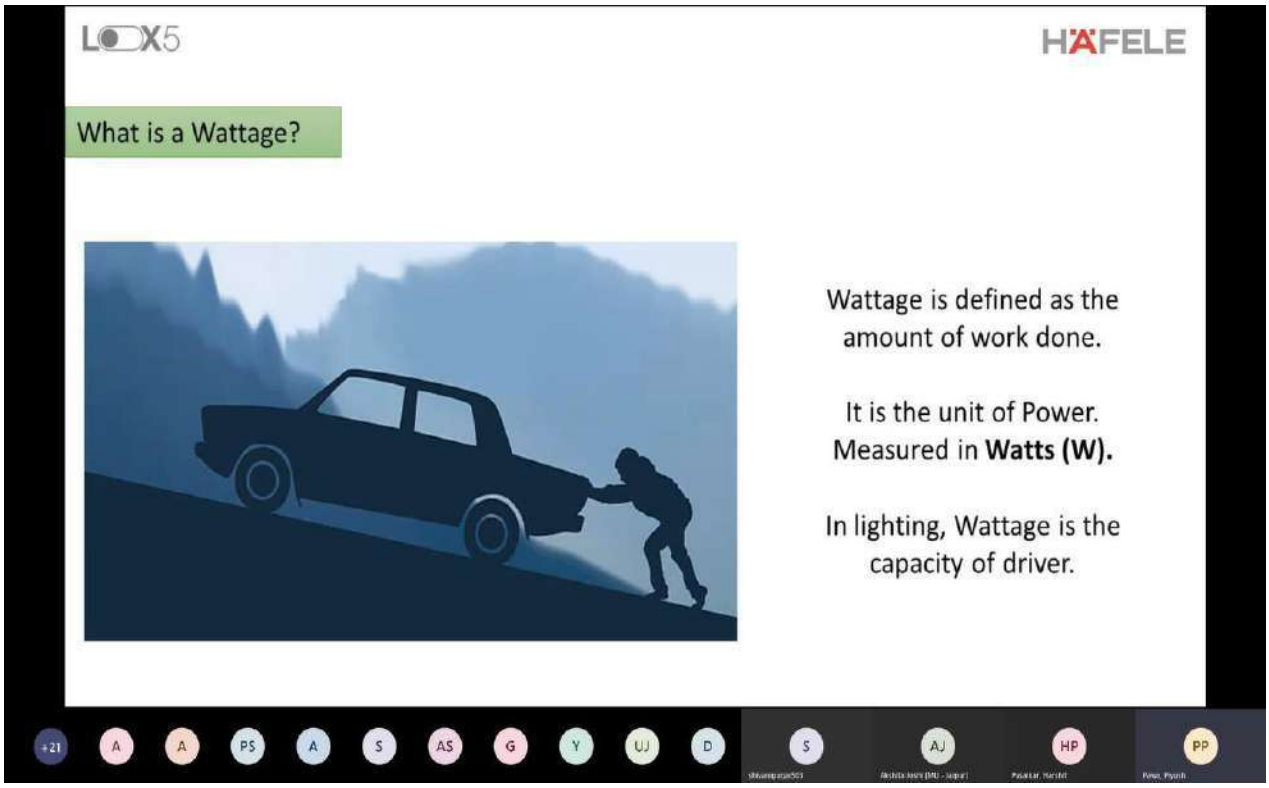
Through this informative session, team Häfele shared their knowledge and expertise in understanding the functionality of different types of lighting options and how they work effectively to enhance the interior spaces. The planning of light in furniture and furnishings puts a multitude of demands on architects, electricians, contractors, and finishers, and even developers and operators. The practical, aesthetic, and emotional aspects of lighting ensure that the proposed concepts contribute to unique and flexible room design; in residential, commercial, office and display settings as well as in hotels and serviced apartments. They at Häfele put this important element of light planning at the center of a comprehensive collection of ideas; it comes as no surprise, therefore, that they are the pioneers of 'furniture lighting' with the widest range of lighting solutions for furniture.

The students were rejoiced by the authenticity and genuineness of the speakers. All the participants ended the webinar inspired and with a new perspective about 'lighting system for furniture and rooms'.

6. Screenshots of the workshop



'Mr. Harshit Pusalkar describing the new launched lighting systems and technologies for furniture and rooms lighting.'



'Mr. Harshit Pusalkar describing the technical details of the products for better understating of the students. '

7. List of Attendees:

Interior Design, Faculty of Design, MUJ		
Sl.No	Registration No.	Name
1	200606003	Jagriti
2	210606021	Garima vijaycharan
3	200606005	Tresha Sharma
4	200606018	Anjali Kiran
5	200606024	Mahi agarwal
6	210606026	Krishangee
7	210606027	Madhu Tanwar
8	210606001	Garvit garg
9	210606041	Kashish Kriplani
10	200606022	Harnoor Kaur Dhillon
11	210606015	Manya Agarwal
12	210606045	Drishti Sharma
13	210606018	Hridyanshi Vyas
14	210606017	Paridhi Verma
15	210606028	Himanshi Sharma

16	210606020	Anisha Chopra
17	210606031	Esha giri
18	210606008	Kumari Anjali
19	210606038	Riddhi agarwal
20	200606016	Haripriya Gupta
21	210606010	Khushi bhargava
22	210606046	Devanshi
23	210606014	Himanshi yadav
24	210606011	Kartik Totla
25	210606016	Grishma Korjani
26	210501007	Akash Singh
27	210606047	Avinash Yadav
28	210606039	Diya ramchandani
29	210606035	Riya
30	200606017	Kanak patidar

Head, Department of Interior Design
SD&A, Faculty of Design
Manipal University Jaipur

NATIONAL INSTITUTE OF
TECHNICAL TEACHERS' TRAINING & RESEARCH
An ISO-9001:2000 Certified Institute
(Ministry of Education, Govt of India)
SECTOR 26, CHANDIGARH 160 019

Ref: NITTTR/2023-24 Dated : 18.09.2023

To
Honorable Vice Chancellor / Worthy Registrar
Manipal University, Jaipur

Subject: Short Term Programme on **"Energy efficient and innovative building construction practices"** from 09-13 October, 2023.

Dear Sir/Madam,

We are organizing the above cited STC for the faculty of Engineering Colleges and Polytechnics of all northern states of the country w.e.f. **09-13 October, 2023**. The above mentioned programme is being organized with the prime to acquaint the participants about the energy efficient innovative construction practices.

The importance of energy efficient and green buildings has assumed great urgency today. In light of fast depleting energy resources, energy scarcity and increasing environmental pollution, innovative ways to cut down energy consumption are necessary. The construction industry is one of the largest energy consuming sectors. In modern buildings significant amounts of energy are also consumed to keep the building environment comfortable. Estimates suggest that about 20-25 percent of the total energy demand is due to manufacturing materials required in the building sector, while another 15 percent goes into the running needs of the building like lighting, air-conditioning, room heating and ventilation etc.

In view of the global energy crisis and increasing energy demand is expected to continue and apart from possible end-use restrictions, energy efficiency and energy management is essentially required.

As Manipal University,Jaipur is a renowned university and Department of Architecture is one of the emerging department of the institute so, we want to conduct the above mentioned programme in collaboration of your organisation. We expect the following co-operation from your institution.

- Arrangement of one lecture hall equipped with facilities like LCD Projector, Computer and sound system for Video films show.
- Field study visit to nearby educational places or site. Charges /fuel charges to the institute bus from the institute for the field visit will be paid by NITTTR, Chandigarh
- Arrangement of few lecturers on the topics marked in the time table (send you in few days). Honorarium and TA to the experts will be paid by NITTTR, Chandigarh
- Arrangement of one guest house rooms for NITTTR faculty from **08-13 November, 2023** at your College/ Guest House.
- Stationary to the course participants for the programme will be provided by NITTTR, Chandigarh.
- As per the decision of the Institute, Rs.118/- (Rs. 100/- +18% GST) per participant will be charged from all participants.
- Honorarium of Rs. 2500/- to coordinator and Rs. 1500/- to supporting staff will be provided by NITTTR, Chandigarh
- No working lunch and tea will be provided to the participants by NITTTR, Chandigarh.

As it is a inter-disciplinary programme so we expect a minimum number of participants for the programme may be 30. The details of the programme will be shared on receiving letter of acceptance from your end through the coordinators.

We will highly appreciate your timely communication and approval for the above mentioned course.

(Dr. Amit Goyal)
Course Coordinator
9417569559

CC:
Dr. Sunanda Kapoor, Department of Architecture, Manipal University

MANIPAL UNIVERSITY
JAIPUR

FACULTY OF DESIGN
SCHOOL OF ARCHITECTURE AND DESIGN

Short Term Programme

on

Energy Efficient and Innovative Construction Practices

Hybrid Mode

16th to 20th October 2023

Index

1. Introduction

The importance of energy efficient and green buildings has assumed great urgency today. In light of fast depleting energy resources, energy scarcity and increasing environmental pollution, innovative ways to cut down energy consumption are necessary. The construction industry is one of the largest energy consuming sectors. In modern buildings significant amounts of energy are also consumed to keep the building environment comfortable. Estimates suggest that about 20-25 percent of the total energy demand is due to manufacturing materials required in the building sector, while another 15 percent goes into the running needs of the building like lighting, air-conditioning, room heating and ventilation etc. Increased development of housing and commercial buildings has imposed immense pressure on our dwindling energy sources. The availability of energy is limited and known resources of energy are exhausting fast. Therefore, energy efficiency is assuming importance in different sectors. In view of the global energy crisis and increasing energy demand is expected to continue and apart from possible end-use restrictions, energy efficiency and energy management is essentially required.

2. Objectives of the STP

The objective of STP was to discuss on the below mentioned aspects related to energy efficient and green buildings-

➢ Basic Knowledge of Energy Efficient Buildings

➢ Planning and Preparedness

➢ Solar Passive Architecture

➢ Vaastu Shastra Myths and Realities

➢ Innovative Practices/Research in Green Buildings

➢ Green Buildings-Design and Construction

➢ Energy efficiency in old traditional buildings

➢ Solar Devices and their Utilization

3. Beneficiaries of the Event

- Academicians
- Research Scholars
- PG Students (Architecture, Civil, Management and Allied Fields)

4. Details of the Guests

- Dr. Amit Goyal NITTTR, Chandigarh
- Dr. Sanjay Sharma NITTTR, Chandigarh
- Shashwat Singh, Energy Simulation Expert Northumbria University, UK
- Dr. J.M. Mathur, MNIT Jaipur
- Dileep Singh, BoG, ASHRAE

- Ar. Bibhu K. Nayak, Associate Professor, Manipal University Jaipur
- Dr. Madhura Yadav, Professor & Dean, Faculty of Design, Manipal University Jaipur
- Dr. Abhishek Sharma, Professor, Manipal University Jaipur

5. Brief Description of the Event

School of Architecture & Design, Manipal University Jaipur organized a five-day Short-Term Programme titled "Energy Efficient and Innovative Construction Practices" in association with NITTTR, Chandigarh. The STP aimed to introduce various Energy Efficient practices adopted in Building Construction. The Short-Term Programme was scheduled from 16th to 20th October 2023 in Hybrid mode. This event also helped to enhance the existing knowledge of various teachers and students to cater the new innovations in the field of architecture and design. The event received good feedback from faculty members and all the participants.

6. Brochure of the Event

ABOUT MANIPAL UNIVERSITY

Manipal University Jaipur (MUJ) has redefined academic excellence in the region and inspires students of all disciplines to learn and innovate through hands-on practical experience. Manipal University Jaipur (MUJ) was launched in 2011 on an invitation from the Government of Rajasthan, as a self-financed State University. MUJ has redefined academic excellence in the region, with the Manipal way of learning; one that inspires students of all disciplines to learn and innovate through hands on practical experience. Jaipur, being one of the fastest growing cities in India, has increasing demand for quality higher education in the region. Following an allotment of 122 Acres of land at Dehmi Kalan village near Jaipur, the permanent campus of the University has come up at a fast pace and is by far one of the best campuses in the region.The multi-disciplinary university offers career-oriented courses at all levels, i.e., UG, PG and doctoral and across diverse streams, including Engineering, Architecture, Planning, Fashion Design, Interior Design, Fine Arts, Hospitality, Humanities, Journalism and Mass Communication, Basic Sciences, Law, Commerce, Computer Applications, Management, etc. Some PG programmes are also available in the research mode.The university has been granted the ATAL Incubation Centre , funded by Niti Aayog, Government of India.

ORGANISING COMMITTEE

Coordinator
Prof. (Dr.) Sunanda Kapoor, Head , School of Architecture & Design, Manipal University Jaipur
Co-Coordinator
Dr. Ashutosh Saini, Assistant Professor, School of Architecture & Design, Manipal University Jaipur
Contact: ashutosh.saini@jaipur.manipal.edu

ABOUT NITTTR, CHANDIGARH

Since its inception in 1967, NITTTR (formerly TTTI) Chandigarh has made rapid strides in the areas of engineering and technology and emerging areas like computer, educational technology, entrepreneurship development, rural development, industry-institute interaction and educational management. Presently, the institute conducts more than 400 short-term training programmes annually for polytechnics and engineering colleges teachers, professionals and managers of industries. The institute also conducts a large number of AICTE sponsored Summer and Winter Schools every year. The institute offers six postgraduate programmes in engineering and engineering education through regular and modular modes. In addition to education and training programmes, the institute renders extension services to Polytechnics, undertakes research and development projects and develops print and non-print instructional material.

ABOUT SCHOOL OF ARCHITECTURE AND DESIGN, FACULTY of DESIGN, MUJ

School of Architecture & Design, Jaipur encapsulates the philosophy of creating innovators, empowered with the knowledge for the creation of a dynamic world, pulsating with intellectual acuity and striving for the utopia of a prosperous biosphere for all. The School strives to provide world-class architectural education by coupling state-of-art facilities with a dedicated and experienced faculty team and student-centric academic practices. Also, owing to the location, we have a vantage point in understanding the state of Rajasthan, which is one of the richest states in India in terms of its culture and heritage. The School intends to create an archive of heritage documentation for the state and become forerunners in the conservation of cultural landscape and heritage of the region.

ADDRESS FOR CORRESPONDENCE

Dr. Amit Goyal, Assistant Professor
Department of Civil Engineering
National Institute of Technical Teachers' Training and Research, Sector 26, Chandigarh 160 019
Tel: 0172- 2759656, Mobile No- 09417569559
Fax: (0172) 2793893, 2791366
E-mail: amitgoyalamit23@gmail.com, amitgoyalamit@rediffmail.com.

SHORT TERM PROGRAMME ON ENERGY EFFICIENT AND INNOVATIVE CONSTRUCTION PRACTICES

From- 16-20 October, 2023

ORGANISED BY

School of Architecture & Design
Faculty of Design
&
MUJ-TEC
Manipal University Jaipur
[University under Section 2(f) of UGC Act]
Dehmi Kalan, Off Jaipur-Ajmer Expressway,
Jaipur, Rajasthan

In Collaboration with

National Institute of
Technical Teachers' Training and Research
An ISO:9001-2000 Certified Institute
[Ministry of Human Resource Development, Govt of India]
Sector 26, Chandigarh 160 019

Venue- Manipal University Jaipur

INTRODUCTION AND OBJECTIVES

The importance of energy efficient and green buildings has assumed great urgency today. In light of fast depleting energy resources, energy scarcity and increasing environmental pollution, innovative ways to cut down energy consumption are necessary. The construction industry is one of the largest energy consuming sectors. In modern buildings significant amounts of energy are also consumed to keep the building environment comfortable. Estimates suggest that about 20-25 percent of the total energy demand is due to manufacturing materials required in the building sector, while another 15 percent goes into the running needs of the building like lighting, air-conditioning, room heating and ventilation etc. Increased development of housing and commercial buildings has imposed immense pressure on our dwindling energy sources. The availability of energy is limited and known resources of energy are exhausting fast. Therefore, energy efficiency is assuming importance in different sectors. In view of the global energy crisis and increasing energy demand is expected to continue and apart from possible end-use restrictions, energy efficiency and energy management is essentially required.

COURSE CONTENTS

- Basic Knowledge of Energy Efficient Buildings
- Planning and Preparedness
- Solar Passive Architecture
- Vastu Shatra Myths and Realities
- Innovative Practices/Research in Green Buildings
- Green buildings-Design and Construction
- Energy efficiency in old traditional buildings
- Solar Devices and their Utilization

COORDINATORS

Programme Coordinator : Dr. Amit Goyal, Assistant Professor, Department of Civil Engineering, NITTTR, Chandigarh
Dr. Sanjay Sharma, Professor, Department of Civil Engineering, NITTTR, Chandigarh

Local Coordinators :

Coordinator
Prof. (Dr.) Sunanda Kapoor, Head, School of Architecture & Design, Manipal University Jaipur
Contact: sunanda.kapoor@jaipur.manipal.edu

Co-Coordinator
Dr. Ashutosh Saini, Assistant Professor, School of Architecture & Design, Manipal University Jaipur
Contact: ashutosh.saini@jaipur.manipal.edu

METHODOLOGY

The one-weeks programme will be judiciously utilized by integrating theory classes, practicals, field visits, audio-visual presentations and educational video films shows. In order to make the programme participatory, group discussions and project formulations exercises will also be done. Besides the institute faculty, experts will be invited from research and development organizations, science and technology departments, working on green and energy efficient buildings.

TARGET GROUP

Faculty members of all Engineering Disciplines, Architectural, Management and Humanities streams working in an AICTE approved engineering college/institute can participate in this programme. These faculty members have to get themselves sponsored from the Principal/Head of Institution and register themselves on NITTTR Chandigarh Website at www.nitttrchd.ac.in
[Note: Seats are limited, please get your admission confirmed in advance].

LAST DATE

Last date of registration for participation in this training programme is 15 October, 2023.

REGISTRATION

Fee of Rs 118/- is chargeable from the participants engineering college teachers whose names are sponsored by the competent authority (Principal / Director). Click on the following link to register:
https://fdp.nitttrchd.ac.in/backingup/

After successful registration, email the registration form and payment receipt to amitgoyalamit23@gmail.com

TA/DA

3 tier AC train travel will be paid to the participants of Govt. Institutes by NITTTR, Chandigarh.

ACCOMMODATION

Accomodation to the participants shall be provided on payment basis.

VENUE

Room No. 201, Lecture Hall, Second Floor, School of Architecture and Design, Dome Building, Manipal University Jaipur.

SHORT TERM PROGRAMME

on

Energy Efficient and Innovative Construction Practices
at
Faculty of Design, Manipal University Jaipur

16-20 October, 2023

Name: _____

Age: _____ Sex: Male ☐ Female ☐

Qualification: _____

Designation: _____

Experience (Teaching/Industrial/Others): _____

Institution: _____

Address: _____

_____

_____

Phone No. with STD Code

E-Mail :

Whether Accommodation Needed: Yes ☐ No ☐

Signature of the Applicant

Recommendation of the Principal/Head of the Sponsoring Institute (Signature with seal)

[Last Date of Submission of Application is 15 October, 2023]

7. Photographs of the Event

Figure 1: Inauguration Ceremony

Figure 2: Lamp Lighting by Dr. Sunanda Kapoor

Figure 3: Registrations

Figure 4: Introduction to the STP

Figure 5: Expert Lecture by Dr. J.M. Mathur

Figure 9: Expert Lecture by Dr. Madhura Yadav

Figure 6: Introduction to STP by Dr. Madhura

Figure 10: Expert Talk by Ar. Sneh Singh

Figure 7: Expert Talk by Dr. Subhash Devrath

Figure 11: Expert Lecture by Dr. Abhishek

Figure 8: Felicitation of Dr. Amit Goyal

Figure 12: Group Photograph post STP

8. Schedule of the Event

Short Term Programme on 'Energy Efficient and Innovative Construction Practices'
From 16-20 October 2023 at **Manipal University Jaipur**

Day/Date	SESSION – I 10.00 am to 11.30 am	SESSION – II 11.30 am to 1.00 pm	1.00 to 2.30 pm	SESSION – III 2.30 pm to 4.00 pm
Monday 16.10.2023	Registration / Inauguration	Innovation in Clean Construction of Masonry Houses **Dr. Amit Goyal** **NITTTR, Chd**	LUNCH BREAK	Bioinspired building facade design **Shashwat Singh,** **Energy Simulation Expert** **Northumbria University. UK**
TUESDAY 17.10.2023	Design in Motion **Ar. Bibhu K. Nayak,** **Associate Professor, Manipal University Jaipur**	Energy Efficiency HVAC system Expert in efficient HVAC systems **Dileep Singh, BoG, The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)**		Sustainable Material for Net Zero **Arun Jain**, Energy expert in Efficient Building techniques **BoG The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)**
WEDNESDAY 18.10.2023	Building Materials for Green construction **Dr. Sanjay Sharma** **NITTTR, Chd**	New Innovation in Earthquake Resistant Clean Construction of Masonry Houses **Dr. Amit Goyal** **NITTTR, Chd**		Field Visit to Trimurty Aurum C-Scheme Jaipur, first gold rated green building by IGBC in Rajasthan **Dr. Amit Goyal** **NITTTR, Chd**
THRUSDAY 19.10.2023	Energy consumption in Residential Buildings **Dr. J.M. Mathur, MNIT Jaipur**	The Energy-Saving Potential of Bamboo-based Materials **Dr. Madhura Yadav, Professor & Dean, Faculty of Design, Manipal University Jaipur**		Passive Strategies in Architectural Design **Dr. Tarush Chandra,** Expert: Urban Planning **MNIT Jaipur**
FRIDAY 20.10.2023	Simplified metrics and workflows for microclimate responsive urban buildings design **Mr. Naga Vankata Sai Kumar,** **Expert: Energy Simulation Software, Environmental Performance and Design Lab (EPDL), Technion-Israel Institute of Technology**	Biochar as construction material for sustainable buildings: From Production to Application **Dr. Abhishek Sharma, Professor,** **Manipal University Jaipur**		Group Discussion Valedictory Session

9. Attendance of the Event

*Please see the annexure no. 1

10. Weblink

11. Event Coordinators

- Dr. Amit Goyal, NITTTR Chandigarh
- Prof. Sunanda Kapoor (Professor & Head, SA&D)
- Dr. Ashutosh Saini (Assistant Professor, SA&D)

Prof. (Dr). Sunanda Kapoor
Head, Architecture (SA&D, MUJ)

Dr. Ashutosh Saini
Assistant Professor

Annexure: 1

NITTTR CHANDIGARH
CIVIL ENGINEERING DEPARTMENT
STC ON "ENERGY EFFICIENT AND INNOVATIVE BUILDING CONSTRUCTION PRACTICES"
FROM 16th to 20th OCTOBER, 2023

Course Coordinator: Dr. Amit Goyal
Venue: MANIPAL UNIVERSITY JAIPUR

REGISTRATION & ATTENDANCE SHEET

Sr. No.	Name (in English & Hindi), Designation & Official Address with E-mail and Contact no.	Gender M/F	Category SC/ST/ OBC/GEN	Spon. Letter Yes/No	Govt./ Govt. Aided/ Self-financed	Signature: First Day	Second Day FN	Second Day AN	Third Day FN	Third Day AN	Fourth Day FN	Fourth Day AN	Fifth Day FN	Fifth Day AN
1.	Dr. Manish Sharma (Asst. Prof., NSUT, New Delhi) manish.sharma@nsut.ac.in. 94143-17189.	M	GEN	Yes.	Govt.									
2.	Dr. Sunanda Kapoor Professor. Manipal University Jaipur 9872663383	F	GEN	Yes	self financed									
3.	Dr. Ashutosh Saini Asst. Professor. Manipal University Jaipur, 7018150626	M	OBC	Yes	Self. Financed									
4.	Swasti Sharma Ph.D Scholar MNIT Jaipur 8219164070	F	GEN	Yes	Govt.									
5.	Ar. Siddhant Mehra MUS 9425790200	M	Gen	Yes	Self. financed									

Head. School of Architecture & Design
Faculty of Design
Manipal University Jaipur

6.	BINEET CHHABER ASSOCIATE PROFESSOR AAYOJAN SCHOOL OF ARCHITECTURE bic@aayojanedu.in 9929767309.	M	GEN	~~SEBF~~ YES.	SELF FINANCE								
7.	Saurabh Sharma Asst. Professor MUJ	M	Gen.	Yes	Self Finance								
8.	Ar. Neha Saxena Asso. Professor MUJ	F	Gen.	Yes	self Finance								
9.	Ar. Kingalk Chauhan Asst. Prof. MUJ	F	Gen.	Yes	self Finance								
10.	Srishti' Bhattacarjee M.Arch Student FOD	F	Gen	Yes	Self finance	S.B	S.B	S.B	S.B	S.B	S.B	S.B	S.B	S.B
11.	Apurva Ranjan M.Arch (Landscape) FOD	F	Gen	-	self finance								
12.	Sneh Sejly Associate Prof.	F	Gen	Yes	Self finance								
13.	Ar. Ayushi Sharma Asst. Prof (senior) SALD, FOD.	F	GEN	Yes	Self finance								

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Faculty of Design
Manipal University Jaipur

14.	Siddhant Walia Asst Prof 9549021111	M	GEN.	Yes	Self finance	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]
15.	AR. SANJEEV PAREEK ASSISTANT PROFESSOR SA&D, MUJ	M	Gen	YES	SELF FINA	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]
16.	AAMERA QUAZI MDES STUDENT	F	Gen	yes	self finance	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]
17.	Shivangi Chaurasiya M.Des. student 7524995595	F	OBC	yes	self finance	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]
18.	SANA SHAIKH M.DES STUDENT	F	GEN	YES	"	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]
19.	KANIKSHA MALE M.DES (Student)	F	Gen	y	Self	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]
20.	DR. Subhadu Chandra Devnath	M	Gen	Yes	Self	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]
21.	Raunak Prasad Asst. Professor SA&D MUJ	M	Gen	Yes	Self	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]	[signature]

Head, School of Architecture & Design
Faculty of Design
Manipal University Jaipur

22.	Shipra Goswami PH.D. MNIT Jaipur	F	ONLINE	~~P~~	P	P	P	P	P	P	P	P	P	P
23.	Rupendra Chaturvedi PH.D. MNIT Jaipur	M	ONLINE	P	P	P	P	P	P	P	P	P	P	P
24.	Yogesh Kumar Assistant Professor. PPSUD, Surat	M	ONLINE	P	P	P	P	P	P	P	P	P	P	P
25.	Vijay Lakshmi Bhatt Assistant Professor LPU	F	ONLINE	P	P	P	P	P	P	P	P	P	P	P
26.	Vishakha Santosh Kumar Assistant Professor. SSPA, Maharashtra	F	ONLINE	P	P	P	P	P	P	P	P	P	P	P
27.	Rakshandha Saini PH.D Scholar Sholini University, HP.	F	ONLINE	P	P	P	P	P	P	P	P	P	P	P
28.	Hemant Kumar PH.D Scholar IIT Kharagpur.	M	ONLINE	P	P	P	P	P	P	P	P	P	P	P
29.	Bansari Sharma PH.D. Scholar MNIT Jaipur.	F	ONLINE	P	P	P	P	P	P	P	P	P	P	P

Head, School of Architecture & Design
Faculty of Design
Manipal University Jaipur

30.	SArang Pramod Holey Associate Professor SIPNA School of Arch & Planning	M		ONLINE		P	P	P	P	P	P	P	P	P
31.	ABHINAM Bhowdwaj Ph.D scholar NIT Hamirpur	M		ONLINE		P.	P	P	P	P	P	P	P	P
32.	Ricuma Sharma Ph.D Scholar NIT Hamirpur.	F		ONLINE		P	P	P	P	P	P	P	P	P

Verified by:

(Dr. Sunanda K.)
Name & Signature of :
Head, School of Architecture & Design
Faculty of Design
Manipal University Jaipur
IQAC Coordinator

Event Report

by

Department of Electrical Engineering

on

Electrical System Awareness program

at

Oxford International High School, Begas

28/11/2023

Content of Report

1. Introduction of the Event:

This program is designed to provide important information on the potential electrical hazards in the workplace and how to stay safe when working with electrical equipment and circuits. During the program, we will cover a range of topics, including an overview of electrical hazards, safety procedures to follow when working with electricity, and emergency procedures to follow in case of an electrical incident. The program will also provide an opportunity for you to ask any questions or concerns you may have regarding electrical safety. Social activity programme organized in collaboration with Directorate of Student's Welfare (Society Connect) Manipal University Jaipur. Students prepared a short electrical awareness video to engage 10, 11, 12 class students.

2. Objective of the Event: Awareness program
3. Beneficiaries of the Event: School Students
4. Brief Description of the event:

1. Electrical Safety

Electricity can kill or severely injure people and cause damage to property. However, you can take simple precautions when working with or near electricity or electrical equipment to significantly reduce the risks of injury to you, your worker and others around you. This section provides a summary of those precautions.

2. Electrical Hazards

The major hazards associated with electricity are electrical shocks, fire and arc flash. Electrical shocks occurs when body becomes part of the electrical circuit, either when an individual comes in contact with both wires of an electrical circuit, one wire of an energized circuit and the ground, or a metallic part that has become energized by contact with an electrical conductor.

3. Electrical Earthing System

Earthing is a method of transmitting instant electrical discharge directly to the ground through low resistance wires or electrical cables. This is one of the significant features of electrical network. Because it builds the most eagerly and hazardous power source much secure to utilize.

Collaborating agency: NCC

The National Cadet Corps (NCC) is the youth wing of the Indian Armed Forces with its headquarters in New Delhi, India. It is open to school and college students on

voluntary basis as a Tri-Services Organization, comprising the Army, the Navy and the Air Wing, engaged in grooming the youth of the country into disciplined and patriotic citizens. The soldier youth foundation in India is a voluntary organization which recruits cadets from high schools, higher secondary, colleges and universities all over India.

Collaborating agency: NCC

The National Cadet Corps (NCC) is the youth wing of the Indian Armed Forces with its headquarters in New Delhi, India. It is open to school and college students on voluntary basis as a Tri-Services Organization, comprising the Army, the Navy and the Air Wing, engaged in grooming the youth of the country into disciplined and patriotic citizens. The soldier youth foundation in India is a voluntary organization which recruits cadets from high schools, higher secondary, colleges and universities all over India. The Cadets are given basic military training in small arms and drill.

5. Photographs

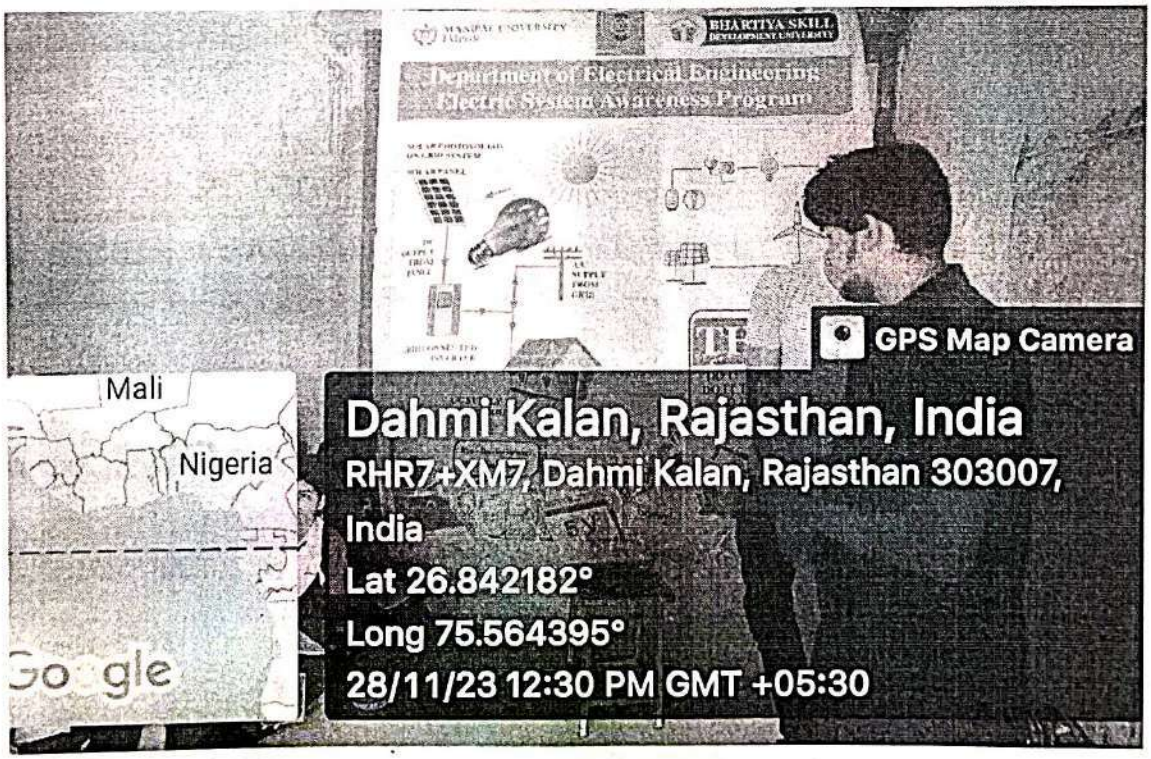


Fig. 1: MUJ Students interacting with students.

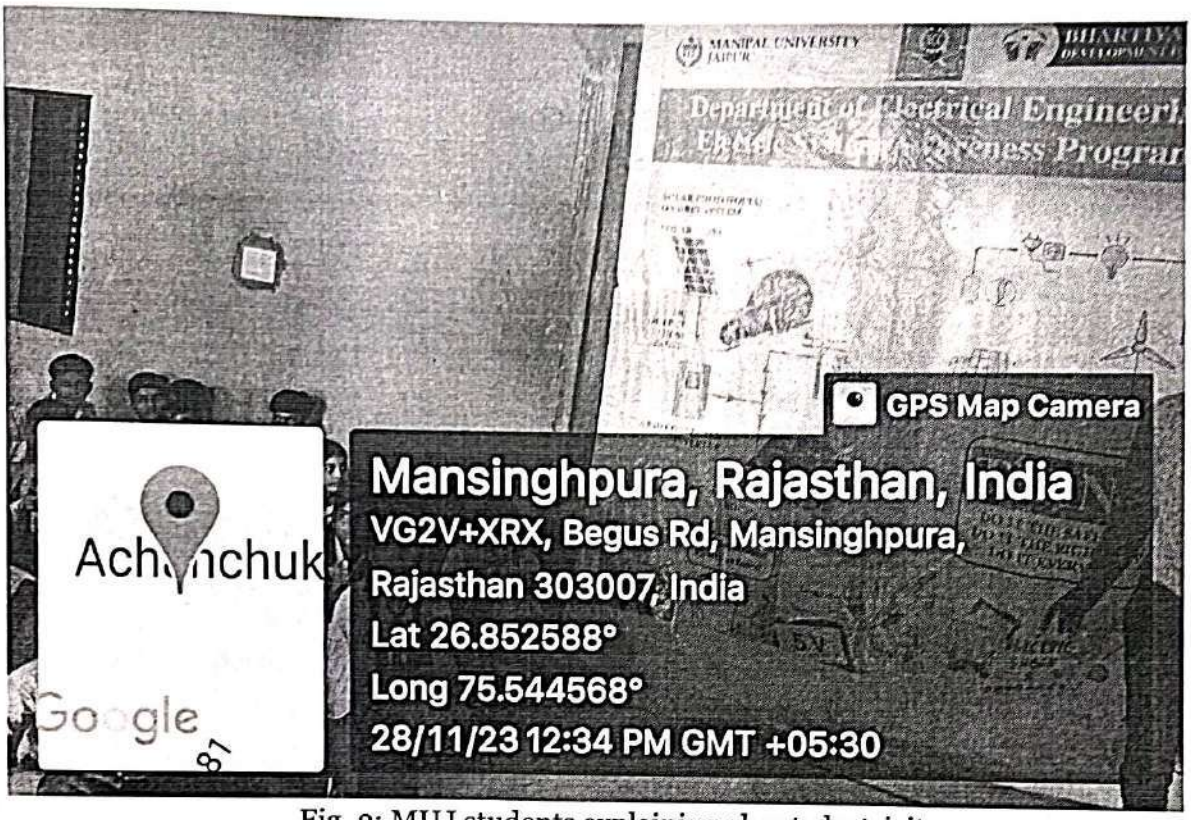
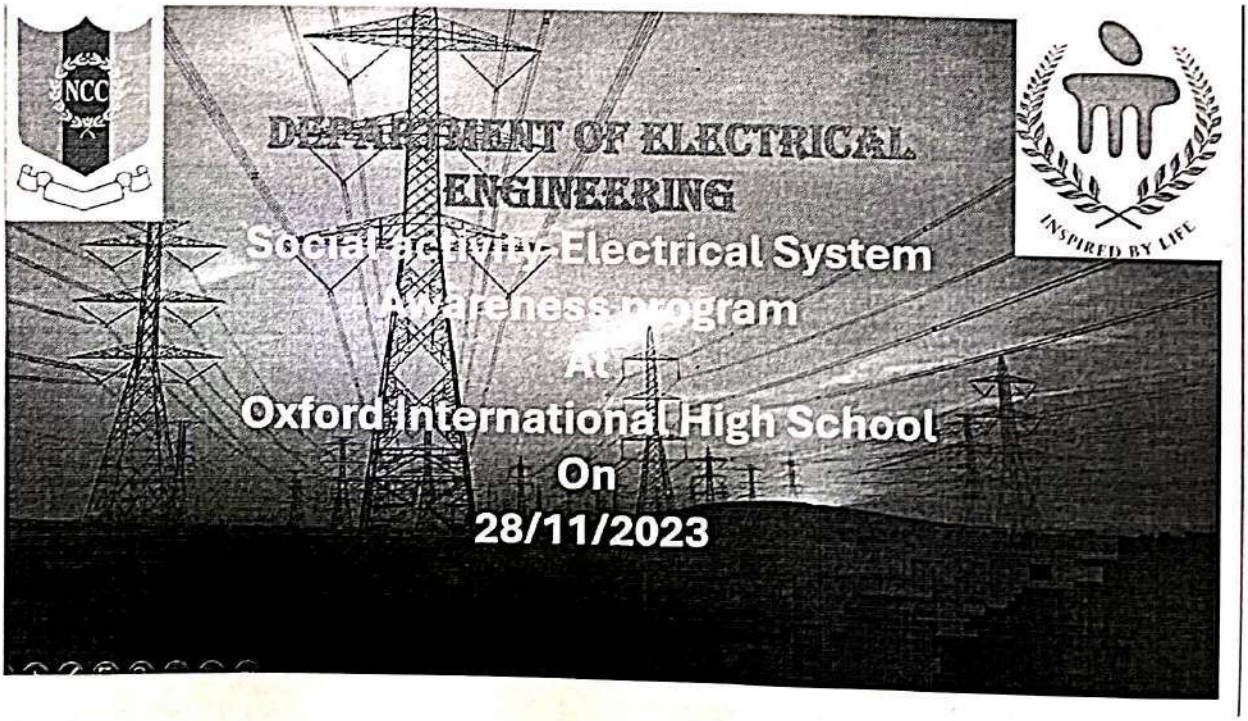


Fig. 2: MUJ students explaining about electricity.

6. Brochure or creative of the event:



7. Schedule of the Event

The following personnel of EE Department has conducted social activity in **"Oxford International High School, Begas on 28/11 2023.**

S.NO	NAME OF THE ACTIVITY	NATURE OF THE ACTIVITY
1.	ELECTRICAL SAFETY	INTERACTIVE TALK
2.	ELECTRICAL HAZARDS	INTERACTIVE TALK
3.	ELECTRICAL EARTHING SYSTEM	INTERACTIVE TALK

Program coordinator

1. Mr. Vikash Kumar Boradak
   Contact No. +918619866321

Student participants

S. No	Registration No.	Student Name
1	219209028	SHRISH BARTAKKE
2	219209019	MAYANK BAIRAGI
3	219209028	SHRISH BARTAKKE
4	219205003	RAKESH MAIWAL
5	219205016	KUNAL GUPTA
6	219205007	KM NITIKA
7	219205012	ARYAN RAI
8	219205018	ANKIT KUMAR JHA
9	219209021	MANASI RAJ
10	219209010	FAIZ SAIFI
11	219209029	VIBHANSHU JAIN
12	219209024	UDAYAN
13	219209011	MOHD.WASIF SAIFI
14	219209018	VINEET YADAV

29/11/2023

HOD
Department of Electrical Engineering
School of Electrical,
Electronics & Communication (SEEC)
Manipal University Jaipur

Event Report

by

Department of Electrical Engineering

on

Electrical System Awareness program

at

Oxford International High School, Begas

28/11/2023

Content of Report

1. Introduction of the Event:

This program is designed to provide important information on the potential electrical hazards in the workplace and how to stay safe when working with electrical equipment and circuits. During the program, we will cover a range of topics, including an overview of electrical hazards, safety procedures to follow when working with electricity, and emergency procedures to follow in case of an electrical incident. The program will also provide an opportunity for you to ask any questions or concerns you may have regarding electrical safety. Social activity programme organized in collaboration with Directorate of Student's Welfare (Society Connect) Manipal University Jaipur. Students prepared a short electrical awareness video to engage 10, 11, 12 class students.

2. Objective of the Event: Awareness program
3. Beneficiaries of the Event: School Students
4. Brief Description of the event:

1. Electrical Safety

Electricity can kill or severely injure people and cause damage to property. However, you can take simple precautions when working with or near electricity or electrical equipment to significantly reduce the risks of injury to you, your worker and others around you. This section provides a summary of those precautions.

2. Electrical Hazards

The major hazards associated with electricity are electrical shocks, fire and arc flash. Electrical shocks occurs when body becomes part of the electrical circuit, either when an individual comes in contact with both wires of an electrical circuit, one wire of an energized circuit and the ground, or a metallic part that has become energized by contact with an electrical conductor.

3. Electrical Earthing System

Earthing is a method of transmitting instant electrical discharge directly to the ground through low resistance wires or electrical cables. This is one of the significant features of electrical network. Because it builds the most eagerly and hazardous power source much secure to utilize.

Collaborating agency: NCC

The National Cadet Corps (NCC) is the youth wing of the Indian Armed Forces with its headquarters in New Delhi, India. It is open to school and college students on

voluntary basis as a Tri-Services Organization, comprising the Army, the Navy and the Air Wing, engaged in grooming the youth of the country into disciplined and patriotic citizens. The soldier youth foundation in India is a voluntary organization which recruits cadets from high schools, higher secondary, colleges and universities all over India.

Collaborating agency: NCC

The National Cadet Corps (NCC) is the youth wing of the Indian Armed Forces with its headquarters in New Delhi, India. It is open to school and college students on voluntary basis as a Tri-Services Organization, comprising the Army, the Navy and the Air Wing, engaged in grooming the youth of the country into disciplined and patriotic citizens. The soldier youth foundation in India is a voluntary organization which recruits cadets from high schools, higher secondary, colleges and universities all over India. The Cadets are given basic military training in small arms and drill.

5. Photographs

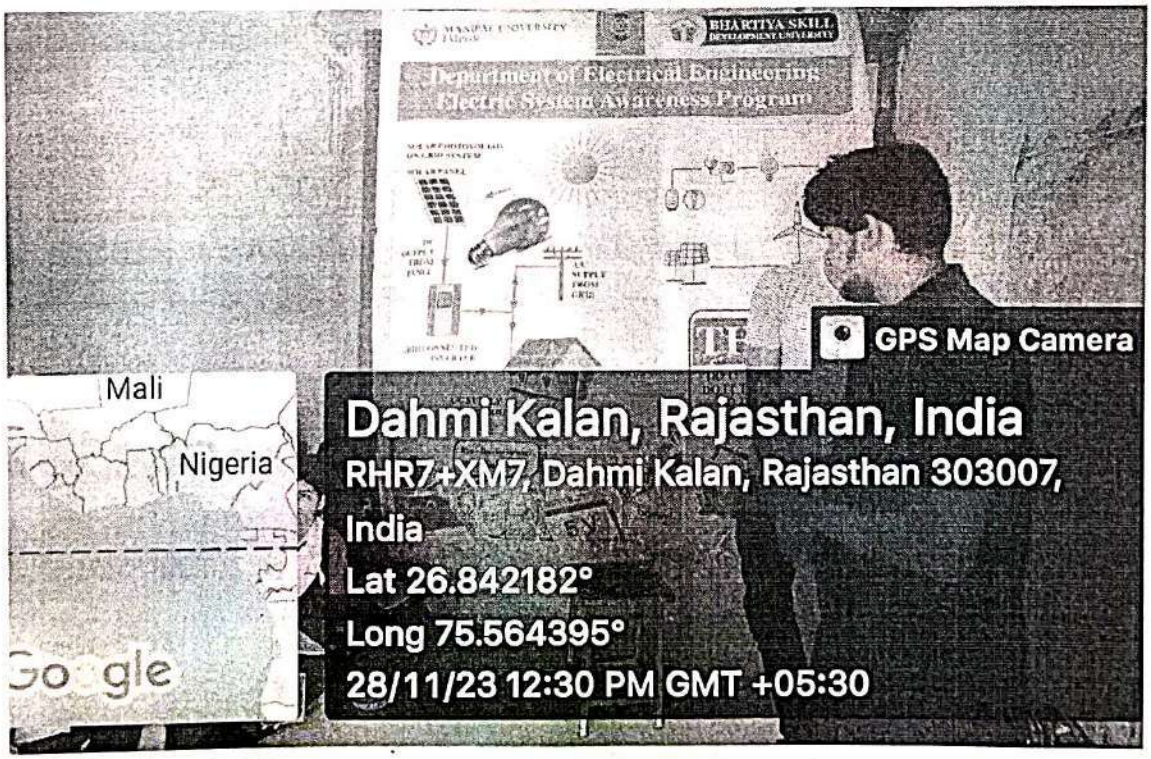


Fig. 1: MUJ Students interacting with students.

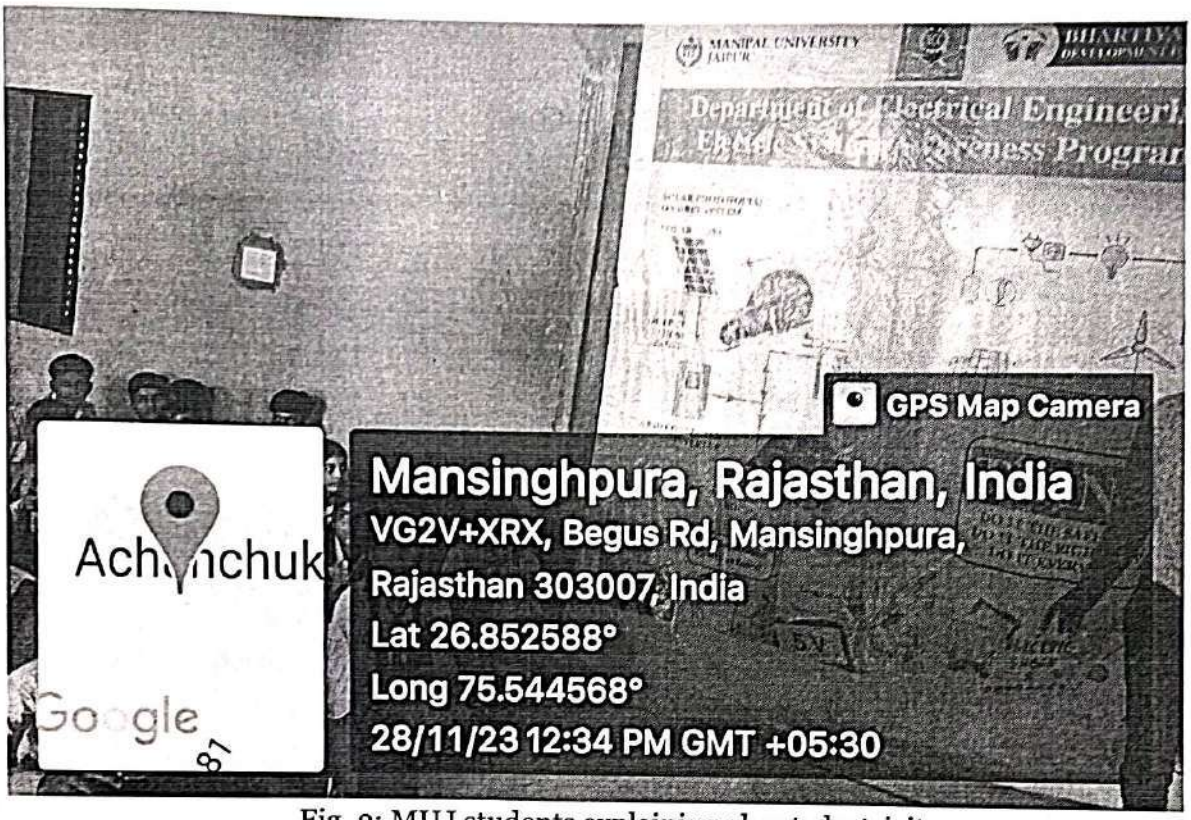
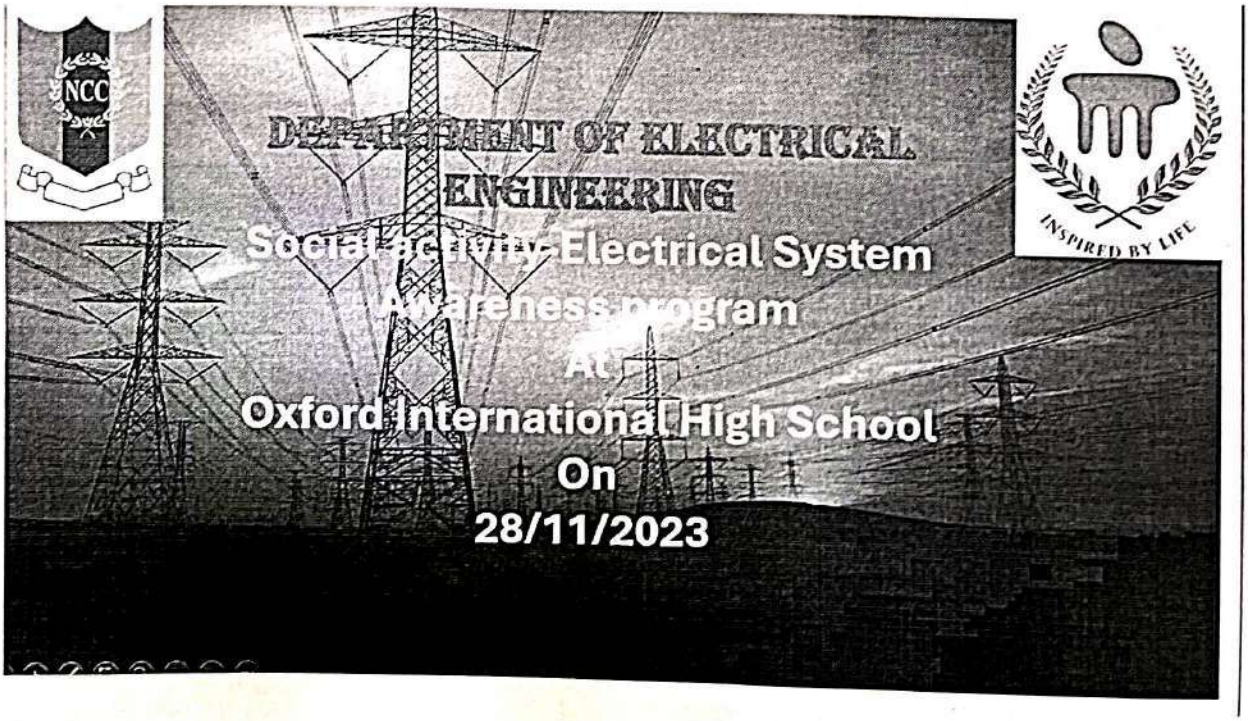


Fig. 2: MUJ students explaining about electricity.

6. Brochure or creative of the event:



7. Schedule of the Event

The following personnel of EE Department has conducted social activity in **"Oxford International High School, Begas on 28/11 2023.**

S.NO	NAME OF THE ACTIVITY	NATURE OF THE ACTIVITY
1.	ELECTRICAL SAFETY	INTERACTIVE TALK
2.	ELECTRICAL HAZARDS	INTERACTIVE TALK
3.	ELECTRICAL EARTHING SYSTEM	INTERACTIVE TALK

Program coordinator

1. Mr. Vikash Kumar Boradak
   Contact No. +918619866321

Student participants

S. No	Registration No.	Student Name
1	219209028	SHRISH BARTAKKE
2	219209019	MAYANK BAIRAGI
3	219209028	SHRISH BARTAKKE
4	219205003	RAKESH MAIWAL
5	219205016	KUNAL GUPTA
6	219205007	KM NITIKA
7	219205012	ARYAN RAI
8	219205018	ANKIT KUMAR JHA
9	219209021	MANASI RAJ
10	219209010	FAIZ SAIFI
11	219209029	VIBHANSHU JAIN
12	219209024	UDAYAN
13	219209011	MOHD.WASIF SAIFI
14	219209018	VINEET YADAV

29/11/2023

HOD
Department of Electrical Engineering
School of Electrical,
Electronics & Communication (SEEC)
Manipal University Jaipur

महाराष्ट्र MAHARASHTRA ◑ 2022 ◑ 09AA 565190

ज्या दस्तासाठी ज्यांनी मुद्रांक खरेदी केला त्यांनी त्याचा कारणासाठी मुद्रांक खरेदी केल्यापासून ६ महिन्यात वापरणे बंधनकारक आहे.

अनु.क्र. 6204 दि. 8 JUL 2022 रु. रक्कम- 100/-

दस्ताचा प्रकार- फक्त प्रतिज्ञापत्रासाठी

दस्त नोंदणी करणार आहेत का? होय/नाही.-

मिळकतीचे वर्णन-

मुद्रांक विकत घेणाऱ्याचे नांव व पत्ता- SootheEarth Nanded City Pune

दुसऱ्या पक्षकाराचे नांव-

हस्ते व्यक्तीचे नांव व पत्ता- Shrikant Singh

मुद्रांक विकत घेणाऱ्याची सही

मे. एन. के. राऊत
परवाना क्र.२२०११५४
बाणेरकलब, पुणे-४११०४५

पुणे

06 JUL 2022

प्रथम मुद्रांक लिपीक
कोषागार पुणे

Memorandum of Understanding

This **Memorandum of Understanding** Agreement ("**Agreement**") is entered in to on this the 8th July 2022 by and amongst:

For SootheEarth LLP

Designated Partner

SootheEarth LLP Pune

NMI INCUBATION FOUNDATION

1. **AIC – MUJ Incubation Foundation (U93090RJ2018NPL061558)**, registered under the provisions of the Companies Act 2013 and having its registered office at C/O Manipal University Jaipur, Dehmikalan, Jaipur Ajmer Expressway, Rajasthan - 303007 (herein after referred to as the "**Incubator**" which expression shall, unless it be repugnant to the subject or context thereof, include its successors and permitted assigns)

2. The persons set out in Schedule I hereto (hereinafter referred to as individually as a "**Founder**" and collectively as the "**Founders**", which expression shall, unless repugnant to the context or meaning thereof, include their respective heirs, executors, administrators and permitted assigns);

AND

3. **< SootheEarth LLP><AAW-4469>**, a company incorporated under the laws of India and having its registered office at <A7/101, Mangal Bhairav, Nanded City, Sinhgad Road, Pune - 411041> (hereinafter referred to as the "**Company**", which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns).

Each of the Founders, the Incubator and the Company shall hereinafter be referred to individually as a "**Party**" and collectively as the "**Parties**".

WHEREAS the Company, is seeking professional and infrastructural support and guidance more specifically enumerated in Schedule II (the "**Incubator Facilities**"). The Incubator has hereby committed to support and mentor the Company and the Founders for a period of twelve months from the **Effective Date**.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby expressly acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

1. Definitions& Interpretation:

1.1 Definitions:

Act shall mean the Companies Act, 1956 and the Companies Act, 2013, as may be applicable, together with the rules and regulations hereunder, as may be amended, modified, supplemented or re-enacted from time to time;

Board shall mean the board of directors of the Company;

Business shall mean the <Offering Banana Paper Products, 100% Tree Free and Chemical Free>.

Direct Competitor shall mean any Person engaged in the same or similar business as the Business;

Effective Date shall mean the date on which the Parties mutually agree on the Machine List and Timelines;

Law shall mean any statute, law, regulation, ordinance, rule, judgment, notification, rule of common law, order, decree, bye-law, Governmental Approval, directive, guideline, requirement or other governmental restriction, or any similar form of decision of, or determination by, or any interpretation, policy or administration, having the force of law of any of the foregoing, by any Governmental Authority having jurisdiction over the matter in question, whether in effect as of the date of this Agreement or thereafter;

Success Fee shall mean a claim by Incubator for a success fee or incentive fee calculated at the rate of 5% of total business or funds generated via connections or programs executed or facilitated by incubator. The funds could be generated by Sales, Paid Contracts, Grants received, Investor Capital Raised, etc.

1.2 **Interpretation:** Any capitalized term used but not defined herein shall have the meaning ascribed thereto in the Investment Agreement.

2. Consideration.

Further for business or funds generated via connections or programs executed or facilitated by AIC a success fees would be charged by the incubator and the same shall be payable within 30 (thirty) days of the contract.

3. **Relationship:** The Incubator shall be an independent contractor and nothing in this Agreement shall render the Incubator an employee, worker, agent or partner of the Company.

AIC - MUJ INCUBATION FOUNDATION

For SootheEarth LLP

Designated Partner

4. **Term & Termination:**

4.1 This Agreement shall come into effect on the Execution Date and shall remain valid and binding on the Parties until such time that it is terminated in accordance with Clause 4.2 below

4.2 Termination:

(i) This Agreement may be terminated at the option of the Incubatorif the Success Fee is not transferred in accordance with Clause 2.

(ii) This Agreement may be terminated at the option of the Incubator in the following circumstances:
(a) use of the Incubator Facilities by the Company for purposes other than for furtherance of its business;
(b) causing damage to the Incubator's property;
(c) Breach by the Company of the covenants set out in Schedule III hereto.

(iii) This Agreement may be terminated at the option of the Company or the Founders if (a) the Effective Date has not occurred within 3 months of the Execution Date or (b) there is a material deviation in the Machine List and Timelines.

(iv) This Agreement may be terminated at the option of the Company or the Founders in the event the Incubator fails to comply with its responsibilities under this Agreement or materially breaches the terms of this Agreement.

(v) This Agreement may be terminated at any time by the mutual agreement of the Founders and the Incubator.

4.3 In the event of termination by the Incubator for the reasons set out in (ii) above, the Incubator may require the Company to vacate the premises with 7 days' notice, subject to the Dispute Resolution procedure set out herein.

4.4 In the event of termination by the Company or the Founders for the reasons set out in (iii)(b) or (iv) above, 50% of the Success Fee must be transferred back to the respective Founders by the Incubator as soon as commercially possible, subject to the Dispute Resolution procedure set out herein.

4.5 The termination of this Agreement shall not relieve any Party of any obligation or liability accrued prior to the date of termination.

4.6 The clauses of this Agreement which by their nature should survive termination shall survive such termination.

5. **Limitation of Liability:**

5.1 In no event shall the Party be liable to any other Parties for any special, incidental, indirect or consequential damages arising out of or in connection with this Agreement.

5.2 In no event shall a Party or any of its partners, officers, employees, representatives or agents be liable for any liability whatsoever for any losses or expenses of any nature suffered by another Party arising directly or indirectly from any act or omission of such Party or its employees, agents or representatives hereunder.

6. **Tax Liability:** Any and all tax liability that may be incurred by a Party as a consequence of operation of Applicable Law shall be borne by the respective Party.

7. **Costs and Expenses:** Each Party will bear its own expenses incurred in connection with the preparation, negotiation and execution of this Agreement. In addition, all costs and expenses in relation to payment of any stamp duty, registration duty and service taxes on the Definitive Documents under applicable Law shall be borne equally by the Company and the Incubator.

8. **Indemnity:** Each Party hereby agree to protect, defend, indemnify and hold harmless the other Parties, their employees, officers, partners, agents or representatives from and against any and all liabilities, damages, fines, penalties and costs (including legal costs and disbursements), arising from or relating to any third party claims, demands, fines, penalties and other sanctions imposed by any authority for non-compliance with any applicable law pursuant to and by virtue of this Agreement; and/ or any losses, liabilities, expenses, damages and / or claims suffered or incurred by the Incubator (including reasonable legal fees) as a result of such Party's negligence, fraud or wilful default in relation to this Agreement.

For SootheEarth LLP

Designated Partner

Each Party shall also indemnify and keep indemnified the other Parties for any breach of the terms and conditions of this Agreement.

9. Intellectual Property:

9.1 "**Intellectual Property**" includes patents, inventions, know how, trade secrets, trade-marks, service marks, designs, tools, devices, models, methods, procedures, processes, systems, principles, algorithms, works of authorship, flowcharts, drawings, and other confidential and proprietary information, data, documents, instruction manuals, records, memoranda, notes, user guides, ideas, concepts, information, materials, discoveries, developments, and other copyrightable works, and techniques in either printed or machine-readable form, whether or not copyrightable or patentable

9.2 "**Intellectual Property Rights**" include: (i) all right, title, and interest under any statute or under common law including patent rights; copyrights including moral rights; and any similar rights in respect of Intellectual Property, anywhere in the world, whether negotiable or not; (ii) any licenses, permissions and grants in connection therewith; (iii) applications for any of the foregoing and the right to apply for them in any part of the world; (iv) right to obtain and hold appropriate registrations in Intellectual Property; (v) all extensions and renewals thereof; and (vi) causes of action in the past, present or future, related thereto including the rights to damages and profits, due or accrued, arising out of past, present or future infringements or violations thereof and the right to sue for and recover the same.

9.3 Except as set out in this Clause 11, each Party agrees that all Intellectual Property Rights, which are held by the other Party, shall remain in the sole and exclusive ownership of such other Party.

9.4 Any Intellectual Property and Intellectual Property Rights developed or conceived by the Company while receiving guidance or support as described in Schedule II shall vest absolutely and irrevocably with the Company.

10. Non-Disclosure:

10.1 All information and data belonging to the Company of confidential and proprietary nature be it specifically documented or not, shall be termed as confidential information ("**Confidential Information**"). This includes but is not limited to:

a. creative information, including symbols, photographs, animations, videos, models, techniques, experimental methods, designs, concepts, research, insights and other creations;
b. technical information, including research programs and methods, product development plans, functional and technical specifications, technology, inventions, ideas, concepts, drawings, designs, analysis, research, methods, techniques, processes, computer software, data, databases, flowcharts, patent applications, and other technical know-how and materials;
c. business information, including business plans, business strategies and/or data arising thereof, sales and marketing research, materials and plans, accounting and financial information, projections, performance results, cost data, customer information, personnel records and the like;
d. all proprietary information related to the Company; and
e. any other valuable information of the Company designated as confidential by the circumstances in which it is provided.

10.2 Confidential Information does not include such information or data that: (a) is or becomes generally known to the public without restriction through no fault of the Incubator, or (b) that the Incubator knew without restriction prior to its disclosure by Company.

10.3 The Incubator shall hold in confidence and not disclose or use any Confidential Information, except in connection with this Agreement or with the prior written permission of the Company. This Clause shall survive the termination of this Agreement.

10.4 Upon termination of this Agreement or as otherwise requested by the Company, the Incubator will promptly return to the Company all items and copies containing or embodying Confidential Information without retaining any copies (soft or hard copies)with himself

11. Dispute Resolution:

11.1 The Parties agree to negotiate in good faith to resolve any dispute between them regarding this Agreement. If the negotiations do not resolve the dispute to the reasonable satisfaction of the Parties, then the dispute shall be submitted to final and binding arbitration at the request the disputing Parties upon written notice to that effect to the other disputing Parties. In the event of such arbitration:

AIC MUJU INCUBATION FOUNDATION

For SootheEarth LLP

Designated Partner

11.1.1 The arbitration shall be conducted in accordance with the Indian Arbitration and Conciliation Act, 1996 (the "**Arbitration Act**") in force at the relevant time (which is deemed to be incorporated into this Agreement by reference);

11.1.2 All proceedings of the arbitration shall be in the English language. The venue and seat of arbitration shall be at Jaipur, India;

11.1.3 All proceedings shall be conducted before a panel of 3 (three) arbitrators wherein, one arbitrator will be appointed by the claimants, the second arbitrator will be appointed by the respondents and the third arbitrator will be appointed jointly by the other two arbitrators; and

11.1.4 Arbitration awards rendered shall be final, binding and shall not be subject to any form of appeal.

11.2 Nothing shall preclude a Party from seeking interim equitable or injunctive relief, or both. The pursuit of equitable or injunctive relief shall not be a waiver of the right of the Parties to pursue any other remedy or relief through the arbitration described in this Clause 11.

12. Miscellaneous:

12.1 ThisAgreement may be modified, amended or supplemented only by the mutual written agreement of the Parties. A waiver or any failure or delay by the Incubator to require the enforcement of the obligations, agreements, undertakings or covenants in this Agreement shall not be construed as a waiver by the Incubator of any of its rights, unless made in writing referring specifically to the relevant provisions of this Agreement and signed by a duly authorized representative of the Incubator. Any such waiver shall not affect in any way the validity of this Agreement or the right to enforce such obligation, agreement, undertaking or covenant at any other time. All rights and remedies existing under this Agreement, except as otherwise provided herein are cumulative to, and not exclusive of any rights or remedies otherwise available.

12.2 If for any reason whatsoever, any provision of this Agreement is or becomes, or is declared by a court of competent jurisdiction to be, invalid, illegal or unenforceable, then the Parties shall negotiate in good faith to agree on such provision to be substituted, which provisions shall, as nearly as practicable, leave the Parties in the same or nearly similar position to that which prevailed prior to such invalidity, illegality or unenforceability.

12.3 Except as may be otherwise provided herein, all notices, requests, waivers and other communications made pursuant to this Agreement shall be in writing and signed by or on behalf of the Party giving it. Such notice shall be served by delivering by hand, registered post, electronic mail or courier to the address set forth below. In each case it shall be marked for the attention of the relevant Party set forth below. Any notice so served shall be deemed to have been duly given (i) in case of delivery by hand, when hand delivered to the other Party; or (ii) when sent by registered post, where 7 (seven) Business Days have elapsed after deposit in the mail with certified mail receipt requested postage prepaid; or (iii) when delivered by courier on the 2nd (second) Business Day after deposit with an overnight delivery service, postage prepaid, with next Business Day delivery guaranteed, provided that the Party issuing the notice receives a confirmation of delivery from the delivery service provider; or (iv) for electronic mail notification, upon confirmation of such notification by any of the means as aforesaid.

To the Founders:
Attention: Shricant Singh Binny
Address: A7/101, Mangal Bhairav, Nanded City, Sinhgad Road, Pune - 411041
Email: ssbinny@sootheearth.com

To the Company:
Attention: Padmavti Shricant Singh
Address: A7/101, Mangal Bhairav, Nanded City, Sinhgad Road, Pune - 411041
Email: padma@sootheearth.com

To the Incubator:
Attention : CEO
Address : C/o Manipal University Jaipur, Dehmikalan, Bagru, Jaipur, Pin- 303007
Email :

12.4 No Party shall assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Parties.

12.6 The Agreement may be executed and delivered in counterparts, each of which shall be deemed an original.

12.7 Save and except as otherwise stated in this Agreement, in the event that a Party commits a default of the terms of this Agreement then, the non-defaulting Parties shall, in addition to any other rights and remedies available under this Agreement, be entitled to seek specific performance of this Agreement and such other remedies as may be permitted to it under applicable Law.

12.8 Each Party shall act in good faith in the performance of its respective responsibilities under this Agreement and will not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required by any other Party in order to perform its responsibilities.

IN WITNESS, WHEREOF the Parties have put their respective hands on the day and year first herein above written.

Signed and delivered by

For and on behalf of

1. **AIC – MUJ Incubation Foundation**

AIC - MUJ INCUBATION FOUNDATION

_____

Chief Executive Officer

2. **Founders**

For SootheEarth LLP

Designated Partner

Shricant Singh Binny

Founder Name

3. **Startup Name**

SootheEarth LLP Pune

SootheEarth LLP

Founder Name: Shricant Singh Binny
Director

For SootheEarth LLP

Designated Partner

SCHEDULE I

LIST OF FOUNDERS

1. Founder 1: Shricant Singh Binny
2. Founder 2: Padmavti Shricant Singh

AIC - MDJ INCUBATION FOUNDATION

For SootheEarth LLP

Designated Partner

SCHEDULE II

INCUBATOR FACILITIES

1. The Incubator shall provide the Incubator Facilities as listed below for a period of twelve months from the Effective Date ("**Incubation Period**"):

A. Physical Infrastructure:

- Developed office space approximately admeasuring <4>. with furniture and air-conditioning machines to occupy and use for Business Incubator activities.
- 24x7 high speed Internet Connectivity
- Access to Maker Space/Fab Lab.

Notwithstanding anything contained in this Agreement, AIC – MUJ Incubation Foundation shall have absolute right and ownership of the office space provided to locate the Company (the company to be promoted by the Promoters). The Estate Officer of the AIC – MUJ Incubation Foundation shall be deemed to be a competent authority under the Public Premises (Eviction of Unauthorised Occupants) Act, 1971 for necessary actions in connection with the office space so occupied by the Company.

B. Common Infrastructure:
The Incubator will provide following facilities to the Company, which will be shared by all Companies located in the Incubator:

- Laser Printer
- Photocopier
- Scanner
- Meeting/Conference room with projection equipment

The ownership of all assets so provided as a part of Incubator supports and services rests with Incubator AIC – MUJ Incubation Foundation as the case may be.

The support and services described in clauses A and B herein above shall be herein after referred to as "Incubator facilities".

C. Network of Mentors and Experts:
Incubator will facilitate liaison with mentors, professionals and experts in technology, legal, financial and related matters on such terms and conditions as may be stipulated by them.

D. Event and Meetings:
Incubator will organise events to facilitate the companies located in the BI in networking and to showcase their technologies. Incubator will also facilitate meetings with visitors of AIC – MUJ Incubation Foundation and its constituent Institutions such as alumni, venture capitalists, industry professionals.

E. Information Pool:
Incubator will maintain access to information and knowledge pool generally useful new enterprises. The Incubator will also facilitate access to departmental laboratories of AIC – MUJ Incubation Foundation Institutions by the Company (Promoters) for their product development purposes with approval of the concerned department.

F. Access to Markets & Talent

Incubator will provide help to incubatee, by providing assistance in marketing, get access to markets and access to desired talent.

2. In the event of a material deviation/delay in the Machine List and Timelines, the Company and the Founders shall have the right to demand that the Incubator extends the incubation period in accordance with such deviation/delay.

3. Further, at the end of the Incubation Period, the Incubator shall, at the Company's request, continue to make the Incubator Facilities listed in A and B above available to the Company upon payment by the Company of a fee to be decided upon by the incubator and the founder.

AIC MUJ INCUBATION FOUNDATION

For SootheEarth LLP

Designated Partner

SCHEDULE III

COVENANTS OF THE COMPANY

1. The Company shall keep Incubator facilities extended for their usage in good condition and shall not cause damage thereto.

2. The Company shall not cause any nuisance or annoyance to other companies or units working in the AIC – MUJ Incubation Foundation.

3. The Company shall not engage in any unlawful activities during its stay in the AIC – MUJ Incubation Foundation. The Company shall comply with provisions of the relevant Rules, Regulations and Acts applicable to it. The Company shall also ensure that its Promoters and its employees do not engage in any unlawful activities during their stay in the AIC – MUJ Incubation Foundation.

4. The Company shall comply with the terms of the AIC – MUJ Incubation Foundation Policy during its stay in the AIC – MUJ Incubation Foundation. Amendments or changes, from time to time, in the Policy shall be binding on the Company unless Incubator decides otherwise. The Company shall be responsible to update itself from time to time on amendments in the Policy. Incubator shall not be held liable for lack of communication and intimation to the Company on specific amendment in the Policy.

5. The Company shall submit information to Incubator about all material changes or development taken place in their companies from time to time such as (but not limited to) change in name of the company, change in project or product profile, change in directors, promoters or shareholders, acquisition of a new office, additional equity or debt investments. Prior concurrence of Incubator shall be obtained for effecting such changes and Incubator shall have a right to stipulate such additional conditions as Incubator in its absolute discretion deem fit for effecting any change as stated herein above.

6. The Company undertakes and agrees that the information to be submitted by it will be correct and Incubator shall not be responsible for verifying the correctness of the information to be submitted by the Company. In the event that any information submitted by the Company is found to be incorrect, Incubator will proceed to take appropriate actions for breach of the provision of this Agreement.

7. The Company shall disclose to Incubator, information on executive involvements of their promoters in other companies or Business Incubator entities. The Company shall also ensure that its promoters, employees or any other person connected to the Company or its promoters shall avoid all conflicting situations and that they shall not use their positions in multiple capacities to the benefit of the other roles. The Company shall disclose to Incubator, information or situation of conflict of interests involving its promoters, employees or any other person connected to the company or its promoters.

8. The performance of the Company shall be subject to the periodical assessment by Incubator. The Company will work with the Incubator to set milestonesfor the period of incubation.The Company shall submit with Incubator information on quarterly basis in a format as reasonably required by the Incubator. The Company will have to submit their annual reports within a period of 7 days from the date of its approval.

AIC MUJ INCUBATION FOUNDATION

For SootheEarth LLP

Designated Partner

తెలంగాణ तेलंगाना TELANGANA

AV 477518

Sl.No 49776 Date 17/10/2022 Rs. 100/- Rlo. Hyd.

Sold to D.A.G. Sai Revanth

S/o.W/o.D/o D. Raghavendra Rao

For Whom Weezy Innovations Pvt. Ltd

G. HARAGOPAL
LICENSED STAMP VENDOR
L.No. 15-26-001/1992 RL No. 15-26-009/2022
H.No. EWS-144, Kamala Nagar, Kapra,
ECIL (P) M.M.Dist-500 062 Cell: 9440094852

Memorandum of Understanding

This **Memorandum of Understanding** Agreement ("**Agreement**") is entered into on this the 08/09/2022 by and amongst:

1. **AIC – MUJ Incubation Foundation (U93090RJ2018NPL061558)**, registered under the provisions of the Companies Act 2013 and having its registered office at C/O Manipal University Jaipur, Dehmi kalan, Jaipur Ajmer Expressway, Rajasthan - 303007 (herein after referred to as the "**Incubator**" which expression shall, unless it be repugnant to the subject or context thereof, include its successors and permitted assigns)

1. The persons set out in Schedule I hereto (hereinafter referred to as individually as a "**Founder**" and collectively as the "**Founders**", which expression shall, unless repugnant to the context or meaning thereof, include their respective heirs, executors, administrators and permitted assigns);

AND

2. **Weezy Innovations Pvt. Ltd. (CIN: U74999KA2021PTC146646)**, a company incorporated under the laws of India and having its registered office at #71, 3rd Cross Road, Residency Road Opposite to Samsung Opera House Bangalore - 560025 (hereinafter referred to as the "**Company**", which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns).

Each of the Founders, the Incubator and the Company shall hereinafter be referred to individually as a "**Party**" and collectively as the "**Parties**".

WHEREAS the Company, is seeking professional and infrastructural support and guidance more specifically enumerated in Schedule II (the "**Incubator Facilities**"). The Incubator has hereby committed to support and mentor the Company and the Founders for a period of twelve months from the **Effective Date**.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and adequacy of which are hereby expressly acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

AIC - MUJ INCUBATION FOUNDATION

For WEEZY INNOVATIONS PVT. LTD.

DIRECTOR

1. Definitions & Interpretation:

1.1. Definitions:

Act shall mean the Companies Act, 1956 and the Companies Act, 2013, as may be applicable, together with the rules and regulations hereunder, as may be amended, modified, supplemented or re-enacted from time to time;

Board shall mean the board of directors of the Company;

Business shall mean the revolution of urban clothing & fashion all at once, through unique designs that cater to the ever changing style of Z-Generation.

Direct Competitor shall mean any Person engaged in the same or similar business as the Business;

Effective Date shall mean the date on which the Parties mutually agree on the Machine List and Timelines;

Law shall mean any statute, law, regulation, ordinance, rule, judgment, notification, rule of common law, order, decree, bye-law, Governmental Approval, directive, guideline, requirement or other governmental restriction, or any similar form of decision of, or determination by, or any interpretation, policy or administration, having the force of law of any of the foregoing, by any Governmental Authority having jurisdiction over the matter in question, whether in effect as of the date of this Agreement or thereafter;

Success Fee shall mean a claim by Incubator for a success fee or incentive fee calculated at the rate of 5% of total business or funds generated via connections or programs executed or facilitated by incubator. The funds could be generated by Sales, Paid Contracts, Grants received, Investor Capital Raised, etc.

1.2. **Interpretation:** Any capitalized term used but not defined herein shall have the meaning ascribed thereto in the Investment Agreement.

2. Consideration.

Further for business or funds generated via connections or programs executed or facilitated by AIC a success fees would be charged by the incubator and the same shall be payable within 30 (thirty) days of the contract.

3. Relationship: The Incubator shall be an independent contractor and nothing in this Agreement shall render the Incubator an employee, worker, agent or partner of the Company.

4. Term & Termination:

4.1. This Agreement shall come into effect on the Execution Date and shall remain valid and binding on the Parties until such time that it is terminated in accordance with Clause 4.2 below

4.2. Termination:

(i) This Agreement may be terminated at the option of the Incubator if the Success Fee is not transferred in accordance with Clause 2.

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For WEEZY INNOVATIONS PVT. LTD.

DIRECTOR

(ii) This Agreement may be terminated at the option of the Incubator in the following circumstances:
(a) use of the Incubator Facilities by the Company for purposes other than for furtherance of its business;
(b) causing damage to the Incubator's property;
(c) Breach by the Company of the covenants set out in Schedule III hereto.

(iii) This Agreement may be terminated at the option of the Company or the Founders if (a) the Effective Date has not occurred within 3 months of the Execution Date or (b) there is a material deviation in the Machine List and Timelines.

(iv) This Agreement may be terminated at the option of the Company or the Founders in the event the Incubator fails to comply with its responsibilities under this Agreement or materially breaches the terms of this Agreement.

(v) This Agreement may be terminated at any time by the mutual agreement of the Founders and the Incubator.

4.3 In the event of termination by the Incubator for the reasons set out in (ii) above, the Incubator may require the Company to vacate the premises with 7 days' notice, subject to the Dispute Resolution procedure set out herein.

4.4 In the event of termination by the Company or the Founders for the reasons set out in (iii)(b) or (iv) above, 50% of the Success Fee must be transferred back to the respective Founders by the Incubator as soon as commercially possible, subject to the Dispute Resolution procedure set out herein.

4.5 The termination of this Agreement shall not relieve any Party of any obligation or liability accrued prior to the date of termination.

4.6 The clauses of this Agreement which by their nature should survive termination shall survive such termination.

5. Limitation of Liability:

5.1 In no event shall the Party be liable to any other Parties for any special, incidental, indirect or consequential damages arising out of or in connection with this Agreement.

5.2 In no event shall a Party or any of its partners, officers, employees, representatives or agents be liable for any liability whatsoever for any losses or expenses of any nature suffered by another Party arising directly or indirectly from any act or omission of such Party or its employees, agents or representatives hereunder.

6. Tax Liability: Any and all tax liability that may be incurred by a Party as a consequence of operation of Applicable Law shall be borne by the respective Party.

7. Costs and Expenses: Each Party will bear its own expenses incurred in connection with the preparation, negotiation and execution of this Agreement. In addition, all costs and expenses in relation to payment of any stamp duty, registration duty and service taxes on the Definitive Documents under applicable Law shall be borne equally by the Company and the Incubator.

8. Indemnity: Each Party hereby agree to protect, defend, indemnify and hold harmless the other Parties, their employees, officers, partners, agents or representatives from and against any and all liabilities, damages, fines, penalties and costs (including legal costs and disbursements), arising from or relating to any third party claims, demands, fines, penalties and other sanctions imposed by any authority for non-compliance with any applicable law pursuant to and by virtue of this Agreement; and/ or any losses, liabilities, expenses, damages and / or claims suffered or incurred by the Incubator (including reasonable legal fees) as a result of such Party's negligence, fraud or wilful default in relation to this Agreement.

Each Party shall also indemnify and keep indemnified the other Parties for any breach of the terms and conditions of this Agreement.

MUJ INCUBATION FOUNDATION

For WEEZY INNOVATIONS PVT. LTD.

DIRECTOR

9. Intellectual Property:

9.1. "**Intellectual Property**" includes patents, inventions, know how, trade secrets, trade-marks, service marks, designs, tools, devices, models, methods, procedures, processes, systems, principles, algorithms, works of authorship, flowcharts, drawings, and other confidential and proprietary information, data, documents, instruction manuals, records, memoranda, notes, user guides, ideas, concepts, information, materials, discoveries, developments, and other copyrightable works, and techniques in either printed or machine-readable form, whether or not copyrightable or patentable

9.2. "**Intellectual Property Rights**" include: (i) all right, title, and interest under any statute or under common law including patent rights; copyrights including moral rights; and any similar rights in respect of Intellectual Property, anywhere in the world, whether negotiable or not; (ii) any licenses, permissions and grants in connection therewith; (iii) applications for any of the foregoing and the right to apply for them in any part of the world; (iv) right to obtain and hold appropriate registrations in Intellectual Property; (v) all extensions and renewals thereof; and (vi) causes of action in the past, present or future, related thereto including the rights to damages and profits, due or accrued, arising out of past, present or future infringements or violations thereof and the right to sue for and recover the same.

9.3. Except as set out in this Clause 11, each Party agrees that all Intellectual Property Rights, which are held by the other Party, shall remain in the sole and exclusive ownership of such other Party.

9.4. Any Intellectual Property and Intellectual Property Rights developed or conceived by the Company while receiving guidance or support as described in Schedule II shall vest absolutely and irrevocably with the Company.

10. Non-Disclosure:

10.1. All information and data belonging to the Company of confidential and proprietary nature be it specifically documented or not, shall be termed as confidential information ("**Confidential Information**"). This includes but is not limited to:

a. creative information, including symbols, photographs, animations, videos, models, techniques, experimental methods, designs, concepts, research, insights and other creations;
b. technical information, including research programs and methods, product development plans, functional and technical specifications, technology, inventions, ideas, concepts, drawings, designs, analysis, research, methods, techniques, processes, computer software, data, databases, flowcharts, patent applications, and other technical know-how and materials;
c. business information, including business plans, business strategies and/or data arising thereof, sales and marketing research, materials and plans, accounting and financial information, projections, performance results, cost data, customer information, personnel records and the like;
d. all proprietary information related to the Company; and
e. any other valuable information of the Company designated as confidential by the circumstances in which it is provided.

10.2 Confidential Information does not include such information or data that: (a) is or becomes generally known to the public without restriction through no fault of the Incubator, or (b) that the Incubator knew without restriction prior to its disclosure by Company.

10.3 The Incubator shall hold in confidence and not disclose or use any Confidential Information, except in connection with this Agreement or with the prior written permission of the Company. This Clause shall survive the termination of this Agreement.

10.4 Upon termination of this Agreement or as otherwise requested by the Company, the Incubator will promptly return to the Company all items and copies containing or embodying Confidential Information without retaining any copies (soft or hard copies) with himself

11. Dispute Resolution:

11.1 The Parties agree to negotiate in good faith to resolve any dispute between them regarding this Agreement. If the negotiations do not resolve the dispute to the reasonable satisfaction of the Parties, then the dispute shall be submitted to final and binding arbitration at the request the disputing Parties upon written notice to that effect to the other disputing Parties. In the event of such arbitration

MUJ INCUBATION FOUNDATION AIC

For WEEZY INNOVATIONS PVT. LTD.

11.1.1 The arbitration shall be conducted in accordance with the Indian Arbitration and Conciliation Act, 1996 (the "**Arbitration Act**") in force at the relevant time (which is deemed to be incorporated into this Agreement by reference);

11.1.2 All proceedings of the arbitration shall be in the English language. The venue and seat of arbitration shall be at Jaipur, India;

11.1.3 All proceedings shall be conducted before a panel of 3 (three) arbitrators wherein, one arbitrator will be appointed by the claimants, the second arbitrator will be appointed by the respondents and the third arbitrator will be appointed jointly by the other two arbitrators; and

11.1.4 Arbitration awards rendered shall be final, binding and shall not be subject to any form of appeal.

11.2 Nothing shall preclude a Party from seeking interim equitable or injunctive relief, or both. The pursuit of equitable or injunctive relief shall not be a waiver of the right of the Parties to pursue any other remedy or relief through the arbitration described in this Clause 13.

12 Miscellaneous:

12.1 This Agreement may be modified, amended or supplemented only by the mutual written agreement of the Parties. A waiver or any failure or delay by the Incubator to require the enforcement of the obligations, agreements, undertakings or covenants in this Agreement shall not be construed as a waiver by the Incubator of any of its rights, unless made in writing referring specifically to the relevant provisions of this Agreement and signed by a duly authorized representative of the Incubator. Any such waiver shall not affect in any way the validity of this Agreement or the right to enforce such obligation, agreement, undertaking or covenant at any other time. All rights and remedies existing under this Agreement, except as otherwise provided herein are cumulative to, and not exclusive of any rights or remedies otherwise available.

12.2 If for any reason whatsoever, any provision of this Agreement is or becomes, or is declared by a court of competent jurisdiction to be, invalid, illegal or unenforceable, then the Parties shall negotiate in good faith to agree on such provision to be substituted, which provisions shall, as nearly as practicable, leave the Parties in the same or nearly similar position to that which prevailed prior to such invalidity, illegality or unenforceability.

12.3 Except as may be otherwise provided herein, all notices, requests, waivers and other communications made pursuant to this Agreement shall be in writing and signed by or on behalf of the Party giving it. Such notice shall be served by delivering by hand, registered post, electronic mail or courier to the address set forth below. In each case it shall be marked for the attention of the relevant Party set forth below. Any notice so served shall be deemed to have been duly given (i) in case of delivery by hand, when hand delivered to the other Party; or (ii) when sent by registered post, where 7 (seven) Business Days have elapsed after deposit in the mail with certified mail receipt requested postage prepaid; or (iii) when delivered by courier on the 2nd (second) Business Day after deposit with an overnight delivery service, postage prepaid, with next Business Day delivery guaranteed, provided that the Party issuing the notice receives a confirmation of delivery from the delivery service provider; or (iv) for electronic mail notification, upon confirmation of such notification by any of the means as aforesaid.

To the Founders:
Attention: Gopal Krishna Panda
Address: B/36 Sriramsadhanana Apts, Gokula Mathikeri, Bangalore 54
Email : gopal@weezy.in

To the Company:
Attention: Gopal Krishna Panda
Address: B/36 Sriramsadhanana Apts, Gokula Mathikeri, Bangalore 54
Email: gopal@weezy.in

To the Incubator:
Attention : CEO
Address : C/o Manipal University Jaipur, Dehmikalan, Bagru, Jaipur, Pin- 303007
Email :

12.4 No Party shall assign this Agreement or any of its rights or obligations hereunder without the prior written consent of the other Parties.

For WEEZY INNOVATIONS PVT. LTD.

DIRECTOR

12.5 This Agreement supersedes all earlier agreements, arrangements, letters, correspondence, understandings etc. with respect to the subject matter of this Agreement. For the avoidance of doubt, it is clarified that this Agreement does not supersede the Investment Agreement.

12.6 The Agreement may be executed and delivered in counterparts, each of which shall be deemed an original.

12.7 Save and except as otherwise stated in this Agreement, in the event that a Party commits a default of the terms of this Agreement then, the non-defaulting Parties shall, in addition to any other rights and remedies available under this Agreement, be entitled to seek specific performance of this Agreement and such other remedies as may be permitted to it under applicable Law.

12.8 Each Party shall act in good faith in the performance of its respective responsibilities under this Agreement and will not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required by any other Party in order to perform its responsibilities.

IN WITNESS, WHEREOF the Parties have put their respective hands on the day and year first herein above written.

Signed and delivered by

For and on behalf of

1. **AIC – MUJ Incubation Foundation**

Chief Executive Officer

AIC - MUJ INCUBATION FOUNDATION

2. **Founders**

For WEEZY INNOVATIONS PVT. LTD.

Revanth Desai

DIRECTOR

3. **Weezy Innovations Private Limited**

For WEEZY INNOVATIONS PVT. LTD.

Revanth Desai
Co-Founder

DIRECTOR

SCHEDULE I

LIST OF FOUNDERS

1. Founder - Gopal Krishna Panda
2. Co Founders - Revanth Desai & Thomas Sharon

For WEEZY INNOVATIONS PVT. LTD.

DIRECTOR

SCHEDULE II

INCUBATOR FACILITIES

1. The Incubator shall provide the Incubator Facilities as listed below for a period of twelve months from the Effective Date ("**Incubation Period**"):

A. Physical Infrastructure:

- Developed office space approximately ad measuring <4>. with furniture and air-conditioning machines to occupy and use for Business Incubator activities.
- 24x7 high speed Internet Connectivity
- Access to Maker Space/Fab Lab.

Notwithstanding anything contained in this Agreement, AIC – MUJ Incubation Foundation shall have absolute right and ownership of the office space provided to locate the Company (the company to be promoted by the Promoters). The Estate Officer of the AIC – MUJ Incubation Foundation shall be deemed to be a competent authority under the Public Premises (Eviction of Unauthorised Occupants) Act, 1971 for necessary actions in connection with the office space so occupied by the Company.

B. Common Infrastructure:

The Incubator will provide following facilities to the Company, which will be shared by all Companies located in the Incubator:

- Laser Printer
- Photocopier
- Scanner
- Meeting/Conference room with projection equipment

The ownership of all assets so provided as a part of Incubator supports and services rests with Incubator AIC – MUJ Incubation Foundation as the case may be.

The support and services described in clauses A and B herein above shall be herein after referred to as "Incubator facilities".

C. Network of Mentors and Experts:

Incubator will facilitate liaison with mentors, professionals and experts in technology, legal, financial and related matters on such terms and conditions as may be stipulated by them.

D. Event and Meetings:

Incubator will organise events to facilitate the companies located in the BI in networking and to showcase their technologies. Incubator will also facilitate meetings with visitors of AIC – MUJ Incubation Foundation and its constituent Institutions such as alumni, venture capitalists, industry professionals.

E. Information Pool:

Incubator will maintain access to information and knowledge pool generally useful new enterprises. The Incubator will also facilitate access to departmental laboratories of AIC – MUJ Incubation Foundation Institutions by the Company (Promoters) for their product development purposes with approval of the concerned department.

F. Access to Markets & Talent

Incubator will provide help to incubatee, by providing assistance in marketing, get access to markets and access to desired talent.

2. In the event of a material deviation/delay in the Machine List and Timelines, the Company and the Founders shall have the right to demand that the Incubator extends the incubation period in accordance with such deviation/delay.

3. Further, at the end of the Incubation Period, the Incubator shall, at the Company's request, continue to make the Incubator Facilities listed in A and B above available to the Company upon payment by the Company of a fee to be decided upon by the incubator and the founder.

MUJ INCUBATION FOUNDATION - AIC

For WEEZY INNOVATIONS PVT. LTD.

DIRECTOR

SCHEDULE III

COVENANTS OF THE COMPANY

1. The Company shall keep Incubator facilities extended for their usage in good condition and shall not cause damage thereto.

2. The Company shall not cause any nuisance or annoyance to other companies or units working in the AIC – MUJ Incubation Foundation.

3. The Company shall not engage in any unlawful activities during its stay in the AIC – MUJ Incubation Foundation. The Company shall comply with provisions of the relevant Rules, Regulations and Acts applicable to it. The Company shall also ensure that its Promoters and its employees do not engage in any unlawful activities during their stay in the AIC – MUJ Incubation Foundation.

4. The Company shall comply with the terms of the AIC – MUJ Incubation Foundation Policy during its stay in the AIC – MUJ Incubation Foundation. Amendments or changes, from time to time, in the Policy shall be binding on the Company unless Incubator decides otherwise. The Company shall be responsible to update itself from time to time on amendments in the Policy. Incubator shall not be held liable for lack of communication and intimation to the Company on specific amendment in the Policy.

5. The Company shall submit information to Incubator about all material changes or development taken place in their companies from time to time such as (but not limited to) change in name of the company, change in project or product profile, change in directors, promoters or shareholders, acquisition of a new office, additional equity or debt investments. Prior concurrence of Incubator shall be obtained for effecting such changes and Incubator shall have a right to stipulate such additional conditions as Incubator in its absolute discretion deem fit for effecting any change as stated herein above.

6. The Company undertakes and agrees that the information to be submitted by it will be correct and Incubator shall not be responsible for verifying the correctness of the information to be submitted by the Company. In the event that any information submitted by the Company is found to be incorrect, Incubator will proceed to take appropriate actions for breach of the provision of this Agreement.

7. The Company shall disclose to Incubator, information on executive involvements of their promoters in other companies or Business Incubator entities. The Company shall also ensure that its promoters, employees or any other person connected to the Company or its promoters shall avoid all conflicting situations and that they shall not use their positions in multiple capacities to the benefit of the other roles. The Company shall disclose to Incubator, information or situation of conflict of interests involving its promoters, employees or any other person connected to the company or its promoters.

8. The performance of the Company shall be subject to the periodical assessment by Incubator. The Company will work with the Incubator to set mile stones for the period of incubation. The Company shall submit with Incubator information on quarterly basis in a format as reasonably required by the Incubator. The Company will have to submit their annual reports within a period of 7 days from the date of its approval.

MUJ INCUBATION FOUNDATION AIC

For WEEZY INNOVATIONS PVT. LTD.

DIRECTOR

MANIPAL UNIVERSITY
JAIPUR
(University under Section 2(f) of the UGC Act)

Name of Partnering Organizations:
Department of Electrical Engineering, Malaviya National Institute of Technology, Jaipur, India

Name of Participants:
P. Agrawal, N. Gupta, K. R. Niazi, A. Swarnkar

Name of the Activity:

Research Work on 'Distribution System Operation with Minimum Topological Variations'
(Book Chapter)

Distribution System Operation with Minimum Topological Variations

Praveen Agrawal, Neeraj Kanwar, Nikhil Gupta, K. R. Niazi, and Anil Swarnkar

Abstract Distribution network reconfiguration (DNR) is a well-established operational strategy for distribution systems to improve its performance. Also, several social and techno-economic objectives can also be effectively achieved in contemporary distribution systems by optimally placing distributed resources (DRs). However, with integration of DR, distribution system becomes active distribution systems and it has dynamically changing nature of load and generation. Therefore, it is important to reinvestigate the effectiveness of existing NR strategy. In this paper, a new NR strategy is suggested for power loss minimization where the network topology varied only once during a day. An investigation is carried about existing and proposed reconfiguration strategies while considering some realistic scenarios pertaining to contemporary distribution systems. The application results are shown on 33-bus test distribution system.

Keywords Distributed resources · Network reconfiguration · Smart grid

1 Introduction

In the present scenario, the distribution systems are taking new shapes by utilization of diverse distributed resources (DRs), automation in switching and other related control schemes, etc. On the other hand, the system performance is the biggest challenge in present competitive and deregulated environment. However, topological structure regulation of distribution networks can provide better electric power and more benefit to electric power companies [1]. This process is known as network reconfiguration (NR). However, the benefits of NR may be substantially reduced in the presence of optimally placed DRs as they can also effectively manage power

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