



# **SYMBIOSIS INSTITUTE OF COMPUTER STUDIES AND RESEARCH**

## **SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)**

Established under section 3 of the UGC Act 1956,

**Re- accredited by NAAC with 'A' Grade**

Founder: Prof. Dr. S. B. Mujumdar, M.Sc., Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)

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### **Workshops Conducted Research, Innovation and Skill Development**

**June 2021- May 2022**

<b>S. N.</b>	<b>Academic year</b>	<b>Name of the workshop/ seminar</b>	<b>Number of participants</b>	<b>From date</b>	<b>To date</b>
1	2021-2022	Unblocking the block in Blockchain	<b>28</b>	12/6/2021	12/6/2021
2	2021-2022	Importance of intellectual property rights (IPR) for academics	23	23/06/2021	23/06/2021
3	2021-2022	Education 4.0-role of educational technologies	<b>219</b>	15/7/2022	17/07/2022
4	2021-2022	Automation and data management	<b>51</b>	28/08/2021	28/08/2021
5	2021-2022	Eminent speaker program : how to write a good research paper and workshop : opportunities and challenges for research	<b>68</b>	4/09/2021	4/09/2021
6	2021-2022	2021 IEEE second international conference on technology, engineering, management for societal impact using marketing, entrepreneurship, and talent 1-3, December 2021	<b>69</b>	2/12/2021	3/12/2021
7	2021-2022	Learning Resources for Research Innovation and Extension	<b>15</b>	30/04/2022	30/04/2022



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### **EVENT REPORT -UNBLOCKING THE BLOCK IN BLOCKCHAIN**

- 1. Topic/Title of the Event : UNBLOCKING THE BLOCK IN BLOCKCHAIN**
- 2. Type of the Event : VIRTUAL WORKSHOP**
- 3. Date(s) of the Event : 12<sup>th</sup> JUNE 2021**
- 4. Time/Duration/Period : 11:30 AM- 1:30 PM**
- 5. Venue : MICROSOFT TEAMS**
- 6. No. of Participants : 28**

Team SICSR ACM Student Chapters organized a virtual workshop on the topic “**Unlocking the blocks in BLOCKCHAIN**”. The workshop started at 11:30 am with the anchors (Ayushi and Rohit) along with Mrs. Tejaswini Apte, welcoming the participants and introducing the speaker Rahul Johari. The speaker started the workshop by introducing the topic and its importance in our lives which helped grab the attention of students. He went on explaining the government’s initiative in blockchain technology, and how MAAGI companies have been involved in this tech. He covered the main purpose of blockchain i.e. protecting private data, which is becoming extremely important with the advancement of IT sector. He also made sure that students get to know about the people who have contributed in IT and blockchain, especially award winners and Satoshi Nakamoto who we believe mined the first block in the world of blockchain. The attendees were involved throughout the workshop by sharing the links of websites that were used during the explanation and were given exercises in a simulated environment to construct a pseudo code for a smart contract. Overall, it was an informative session covering prerequisites, java codes, application, videos and experiments on blockchain technology.

It ended with a Q&A session for the students, Mr. Rahul shared his e-mail with students who would like to know more on the topic. This was followed by a vote of thanks from our anchors and teacher and a picture to mark the end of a successful event.



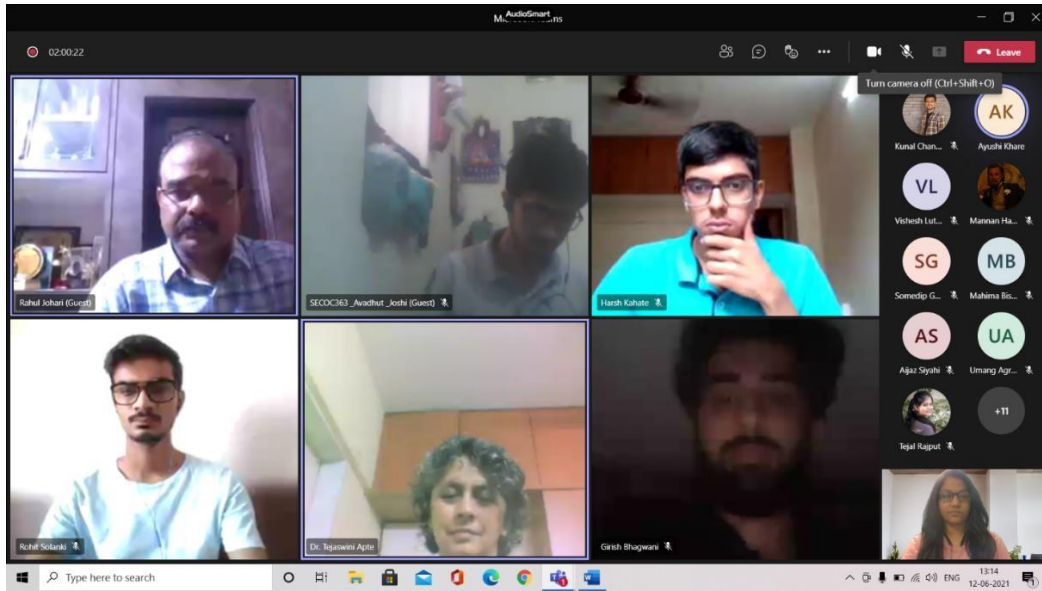
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## **EVENT REPORT- Importance of Intellectual Property Rights (IPR) for Academics**

- 1) **Topic/Title of the Event** : Webinar on Topic: "Importance of Intellectual Property Rights (IPR) for Academics"
- 2) **Type of the Event** : Webinar (Virtual Mode using Microsoft teams)
- 3) **Date(s) of the Event** : 23/06/2021
- 4) **Time/Duration/Period** : 1 Hour
- 5) **Venue** : Symbiosis Institute of Computer Studies and Research
- 6) **Date of Submission of Report** : 24/06/2021
- 7) **Name of Event Co-coordinator(s) and Team Member(s)** : Dr.Sarika Sharma and Ms.Kumari Deepika
- 8) **Name(s) of Organization(s) & Brief Profile(s) of Guest(s)/Speaker(s)/Resource Person(s)** :  
Ms. Pooja Kumar
- 9) **No. of Participants** : 23
- 10) **Associates/Sponsors/Partners (ACM/IEEE/SIU/WiMLDS/etc.):** N.A
- 11) **Details (remarks, beneficiaries, etc.):**  
Academics and Intellectual Property Right are to be synchronized together to promote patents and IPR, therefore Symbiosis Institute of Computer Studies and Research organized a webinar on this topic. The webinar was conducted by Ms. Pooja Kumar, Founder Director of Innove Intellects LLP. The speaker provided informative insights on patents, startups, and innovations and engaged audiences in question answer session after the webinar.
- 12) **Submitted By:** Dr.Sarika Sharma
- 13) **Check List (as applicable and to be attached with email, preferably in pdf format)**  
**E-mail Communication**  
**Attendance Sheet of Participants (with their signature)**  
**Photos with caption**  
**Profile of the speaker**





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Dr.Sarika Sharma <sarika.sharma@sicsr.ac.in>

### Invitation to conduct a session on " Importance of Intellectual Property Rights (IPR) in academics"

3 messages

Dr.Sarika Sharma <sarika.sharma@sicsr.ac.in>

Mon, Jun 21, 2021 at 2:32 PM

To: pooja@innoveintellects.com

Cc: Kumari Deepika <kumari.deepika@sicsr.ac.in>

Dear Madam Pooja Kumar,

Greetings,

As per our telephonic discussion you are cordially invited to conduct a session at Symbiosis Institute of Computer Studies and Research, Pune in Virtual Mode:

Topic: "Importance of Intellectual Property Rights (IPR) for Academics"

Day and Date: Wednesday, 23/6/2021

Time: 11:00 AM to 12:00 PM

Kindly send your acknowledgement and brief profile.

I will be sharing the meeting link tomorrow.

Warm Regards

Dr. Sarika Sharma, MCA, MBA, Ph.D

Professor & Programme-Head (MBA-IT)

Symbiosis Institute of Computer Studies and Research

Symbiosis International (Deemed University)

First Floor, Atur Centre, Gokhale Cross Road

Model Colony, Pune, India - 411016.

Ph:+91-9823106076

e-mail: [sarika.sharma@sicsr.ac.in](mailto:sarika.sharma@sicsr.ac.in)

Personal Profile: <http://faculty.sicsr.ac.in/~sarika.sharma/>



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Dr.Sarika Sharma <sarika.sharma@sicsr.ac.in>

### Webinar on topic: "Importance of Intellectual Property Rights (IPR) for Academics"

2 messages

Kumari Deepika <kumari.deepika@sicsr.ac.in>  
To: staffsicsr@sicsr.ac.in  
Cc: "Dr.Sarika Sharma" <sarika.sharma@sicsr.ac.in>

Tue, Jun 22, 2021 at 11:54 AM

Dear All,

You are invited to attend a webinar on:

Topic: "Importance of Intellectual Property Rights (IPR) for Academics"  
Speaker: Ms. Pooja Kumar (profile attached)  
Day and Date: Wednesday, 23/6/2021  
Time: 11:00 AM to 12:00 PM  
Virtual Mode: Microsoft teams

Link to join:

<https://teams.microsoft.com/join/19%3aca8e8d9de57d4ba396cc5efe913d2bef%40thread.skype/1624269207378?context=%7b%22Tid%22%3a%225585330f-9739-4fc3-9558-6526f2590536%22%2c%22Oid%22%3a%220673c8a3-f72f-4db7-b0a5-3f2305509e56%22%7d>

## Microsoft Teams meeting

**Join on your computer or mobile app**

Click here to join the meeting

[Learn More](#) | Meeting options

Warm Regards  
Kumari Deepika  
Assistant Professor  
Symbiosis Institute of Computer Studies and Research  
Symbiosis International (Deemed University)  
First Floor, Atur Centre, Gokhale Cross Road  
Model Colony, Pune, India - 411016



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### **MRS. POOJA KUMAR**

**Registered Patent Agent (Govt. of India), Startup Facilitator, Mentor, Women Entrepreneur**

**Founder; Director : Innove Intellects LLP**

**pooja@innoveintellects.com**

#### **CAREER SUMMARY**

Mrs. Pooja Kumar is Founder and Director of Innove Intellects LLP established in 2017. She is also a Registered Patent Agent and Start-up facilitator of Govt. of India. She holds more than 13 years experience in Intellectual Property Rights Field. She has won gold medal in Masters' degree in Microbial & Food Technology from Punjabi University Patiala. Besides that, she had also qualified Gate exam in 2008 and Indian Patent Agent Exam in 2010. She is certified Patent Agent. Recently in 2020, She is recognized as top women consultants in their IP work. She had received so many awards and certification in their professional journey. Beside that she opened IPR cell to many universities and She is also Mentor and startup facilitator for IIM Kashipur helping startup in filing

#### **Recognition**

- She has filed more than 500 Patents 100 designs and 100 copyrights related to Intellectual Property Rights.
- She has opened various IPR CELL in different universities like Subharti university Meerut, MIET, and Swami Rama Himalayan university Dehradun.
- Received a various appreciation Certificate for Overview on Intellectual property rights, its forms and relevance & registration process for startups/innovators/academic institutions' organized by Extension Centre – Rajkot, MSME TDC (PPDC) - Agra, Ministry of MSME, Govt. of India Organization on 04th March 2021



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Patents. She is working with So many colleges and universities for Filing Patent work. She has delivered more than 100 webinars in their past Journey. She is recently empanelled with Gujrat council for IPR work.

#### **OUR CLIENTS**

- NIT
- MANIPAL UNIVERSITY JAIPUR
- SHUBHARTI UNIVERSITY MEERUT
- Meerut Institute of Engineering and Technology
- Swami Rama university Dehradun
- Mangalayatan university
- Axix College Kanpur
- Abes Engineering Ghaziabad
- Gits Engineering college Udaipur



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Webinar on “Importance of Intellectual Property Rights (IPR) in Academics” on 23/6/2021



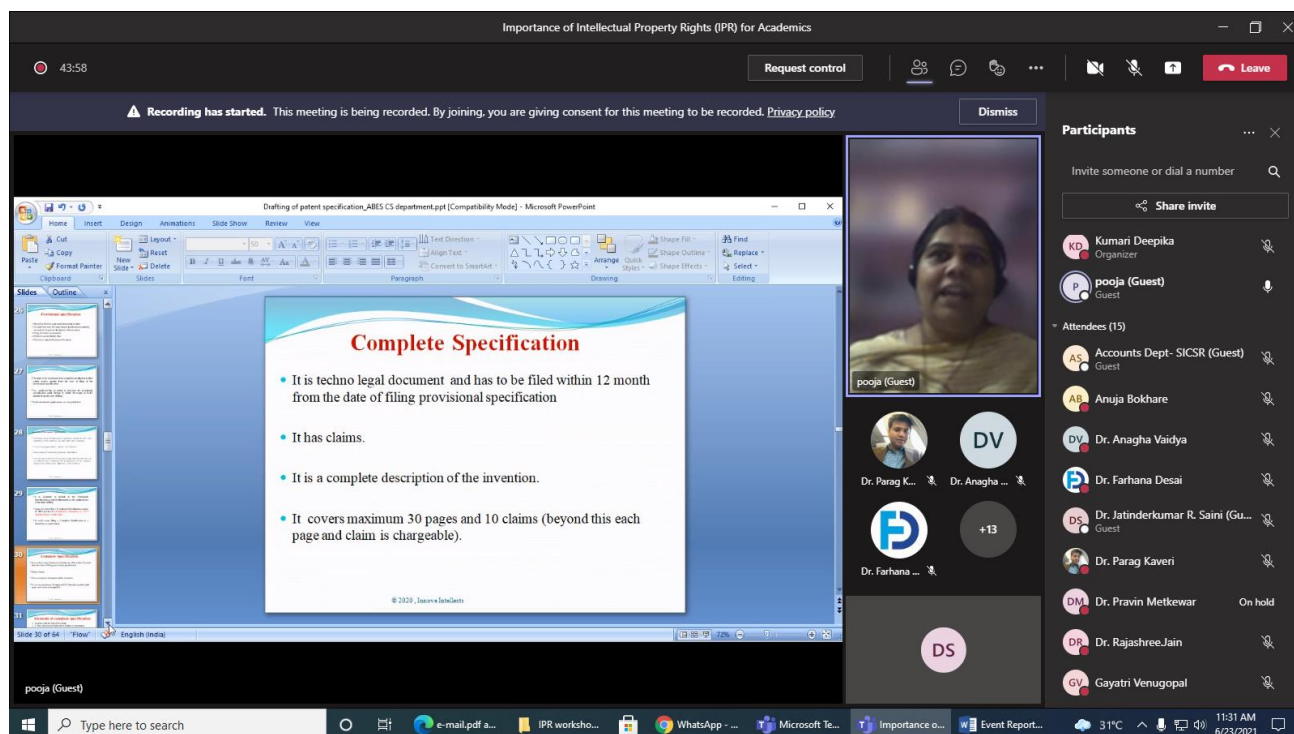
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Webinar on “Importance of Intellectual Property Rights (IPR) in Academics” on 23/6/2021

### Attendance

Date:		6/23/2021	
S.No.	Full Name	Email	Role
1	Ms. Pooja Kumar	pooja@innoveintellects.com	Presenter
2	Neeta Ghumatkar	neeta.ghumatkar@sicsr.c.in	Attendee
3	Amruta Walimbe	amruta.walimbe@sicsr.ac.in	Attendee
4	Dr. Anuja Bokhare	anuja.bokhare@sicsr.ac.in	Attendee
5	Dr. Anagha Vaidya	anagha.vaidya@sicsr.ac.in	Attendee
6	Dr. Farhana Desai	farhana.desai@sicsr.ac.in	Attendee
7	Dr. Jatinderkumar R. Saini		Attendee
8	Dr. Parag Kaveri	parag.kaveri@sicsr.ac.in	Attendee



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9	Dr. Pravin Metkewar	pravin.metkewar@sicsr.ac.in	Attendee
10	Dr. Rajashree.Jain	rajashree.jain@sicsr.ac.in	Attendee
11	Dr. Sarika Sharma	sarika.sharma@sicsr.ac.in	Presenter
12	Dr. Tejaswini Apte	tejaswini.apte@sicsr.ac.in	Attendee
13	Gayatri Venugopal	gayatri.venugopal@sicsr.ac.in	Attendee
14	Hema Gaikwad	hema.gaikwad@sicsr.ac.in	Attendee
15	Kumari Deepika	kumari.deepika@sicsr.ac.in	Organizer
16	Prafulla Bafna	prafulla.bafna@sicsr.ac.in	Attendee
17	Priya Rajan (Guest)		Attendee
18	Priyanka Suryavanshi	priyanka.suryavanshi@sicsr.ac.in	Attendee
19	Sanket Kurdukar	sanket.kurdukar@sicsr.ac.in	Attendee
20	Shilpa Mujumdar	shilpa.mujumdar@sicsr.ac.in	Attendee
21	Shirish Joshi	shirish.joshi@sicsr.ac.in	Attendee
22	Shrikant Mapari	shrikant.mapari@sicsr.ac.in	Attendee
23	Shubhashri Waghmare	shubhashri@sicsr.ac.in	Attendee
24	Sneha Gokhale		Attendee





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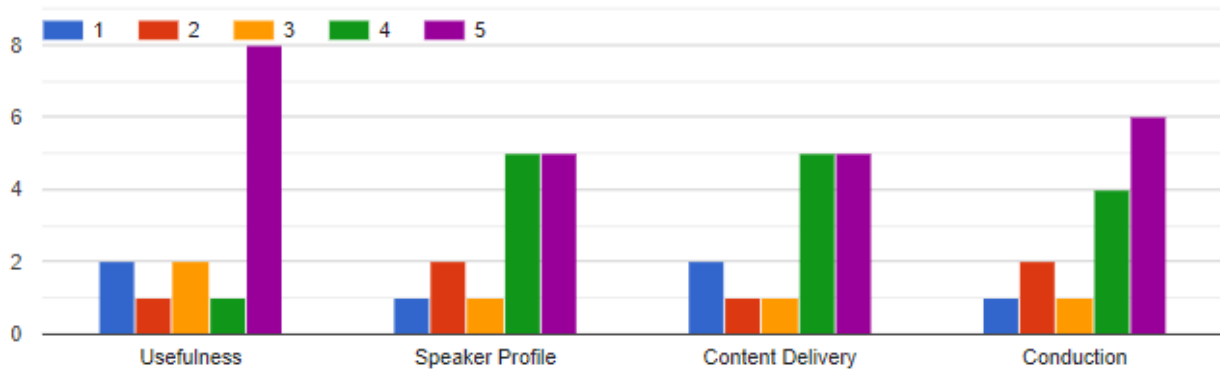
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### Feedback:

Kindly rate the webinar on the following parameters:



Where:

- 5: Excellent
- 4: Very Good
- 3: Good
- 2: Fair
- 1: Poor





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### **EVENT REPORT- How to Write a research paper**

1. **Topic/Title of the Event :** How to write a good research paper
2. **Type of the Event :** VIRTUAL WORKSHOP
3. **Date(s) of the Event :** 4<sup>th</sup> September 2021
4. **Time/Duration/Period :** 11:30 AM- 1:30 PM
5. **Venue :** MICROSOFT TEAMS
6. **No. of Participants :** 58
7. **Speakers:** Dr. Venkateshwaran and Dr. Shilpa Bhalerao

Team SICSIR ACM Student Chapter organized an Eminent Speaker Program and virtual workshop on the topic "How to write a good research paper".

Dr. Tejaswini Apte, welcomed the participants and introduced ACM, SICSIR, ACM-W and the first speaker, Dr. Venkateswaran. He is responsible for the strategy and operations of the Enterprise Information Systems with a focus to enable the transformation and growth of the business, he joined Persistent Systems in 2002 and has undertaken various roles over the years.

Dr. Venkateswaran started the webinar by covering the basic questions like 'why write a research paper?', which motivated the students who originally did not plan to write a paper to also try and write one. Then he moved to picking the research topic, process of writing, what is a good research paper?, title of the paper, writing the abstract, writing the introduction and main part of the paper. The attendees learnt how to make their papers more captivating and informative within the word limit. Following this, questions were entertained and then we moved to the next part i.e. the workshop.



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Dr. Shilpa Bhalerao, a Computer Science professor at Acropolis Institute of Technology and Research, Indore with experience of 22 years in academics and 16 years in research was introduced by Vishesh. This being a workshop was naturally more interactive with the audience.

Dr. Shilpa posed some questions and took the answers on [www.menti.com](https://www.menti.com) from the students first and then worked her way around the understanding of the students. She focused more on the challenges faced while writing a paper and how to overcome them without getting demotivated. After this, she took questions from the students and answered them with great enthusiasm.

At the end the anchors gave a vote of thanks to both the speakers and shared a feedback form with the attendees.

The participants were told about a research poster competition by the ACM-W team, to be held in the near future and interested students can register. CURSOR 5.0 | VOLUME 4 ISSUE 1, JANUARY 2022



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**EMINENT SPEAKER PROGRAM ON**

**HOW TO WRITE A GOOD RESEARCH PAPER**

**AND WORKSHOP ON**

**OPPORTUNITIES AND CHALLENGES FOR RESEARCH**



**Our Speaker in Eminent Speaker Program**  
**Dr. Venkateswaran (M.Tech. PhD in CS )**  
**Discussion Topic : How to write a good research paper**  
**Time - 11:00 am - 12:00 pm**

**Our Speaker in discussing Opportunities and Challenges**  
**Dr. Shilpa Bhalerao (MCA .PhD in CS)**  
**Discussion Topic : Opportunities and Challenges for research**  
**Time - 12:00 pm - 1:00 pm**





Scan code to register <https://sicsr.acm.org>

 **4 Sept, 2021**  
 **11 am - 1 pm**



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(A picture was taken to mark the end of an informative and motivating event.)



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(Dr. Venkateshwaran guiding the students)

## **One Week International Workshop on Automation and Data Management [ADM] [23-August-2021 to 28-August-2021]**

### **Report**

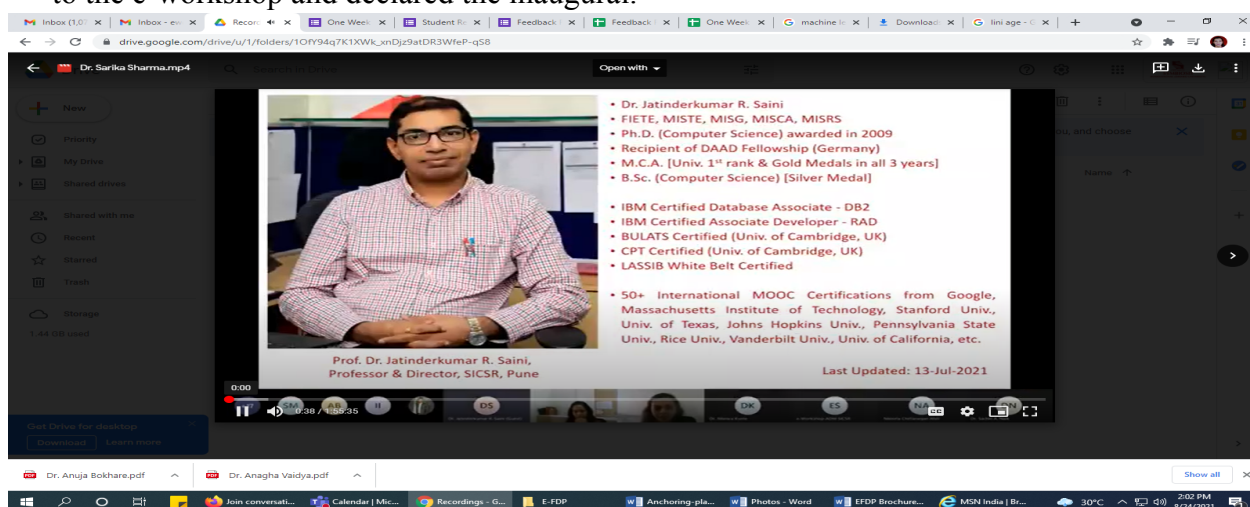
One Week International e-Workshop on Automation and Data Management [ADM] was organized by Symbiosis Institute of Computer Studies and Research (SICSR), Pune during 23-August-2021 to 28-August-2021

- A total of 51 participants registered for the eFDP from different institutions across the India.
- Among the participants 56 % were Ph. D completed and 24 % participants were perusing Ph.D. The rest of participants were PG students. Professors, Assoc. Professors as well as Asst. Professors comprised the participants from teaching fraternity.
- All the resource persons were industry experts form industries like target, L & T infotech to name a few.

- The e-workshop comprised of Inaugural, technical and valedictory sessions.

Inauguration of the workshop was carried out by SICSR Director, Prof. Dr. Jatinderkumar R. Saini.

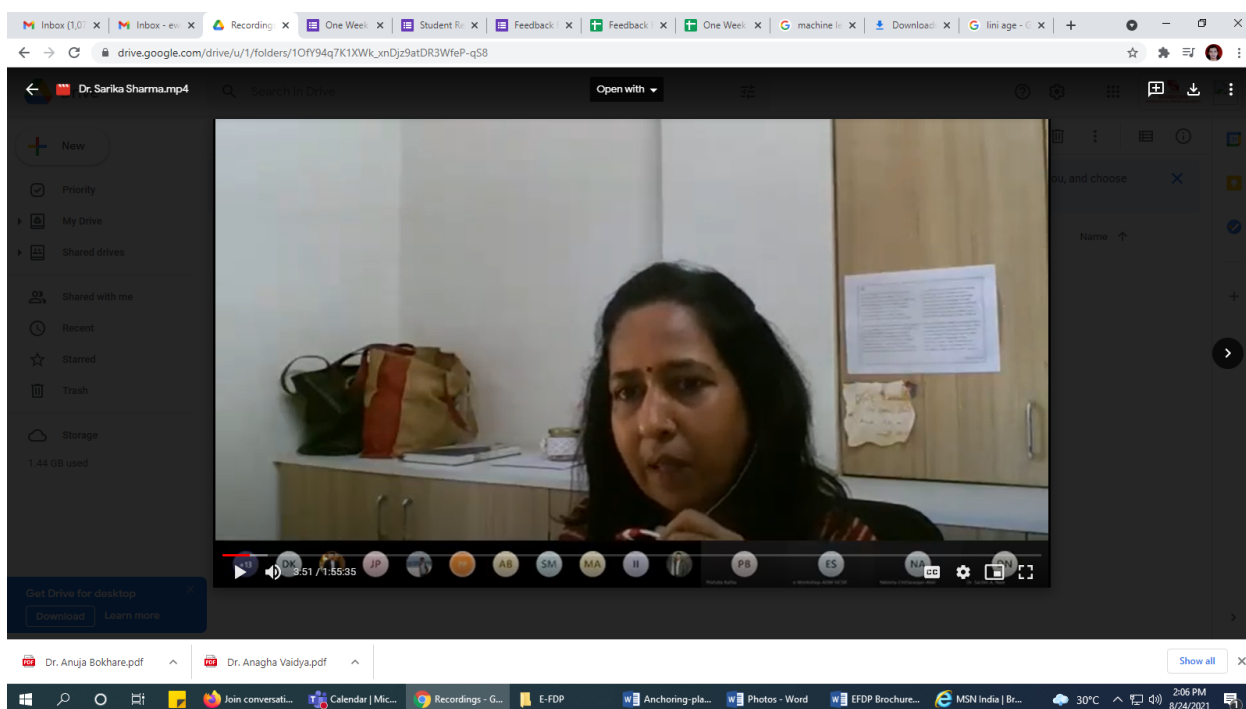
He declared that this first international e-workshop organised by SICSR and also stated that it will be definitely useful to students and faculties for their research. He expressed his best wishes to the e-workshop and declared the inaugural.



Inauguration by Director: SICSR, Prof. Dr. Jatinderkumar R. Saini

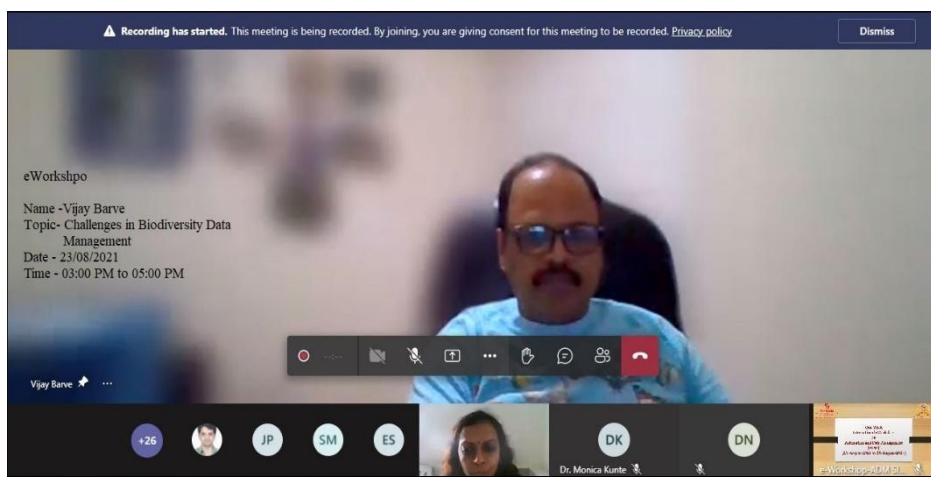


The first session was conducted by Dr. Sarika Sharma on data management using SPSS. The speaker introduced the audience to the importance of data management. She explained utilities the data management and their tactical proficiencies. She explained the different statistical parameter and provided hand on SPSS



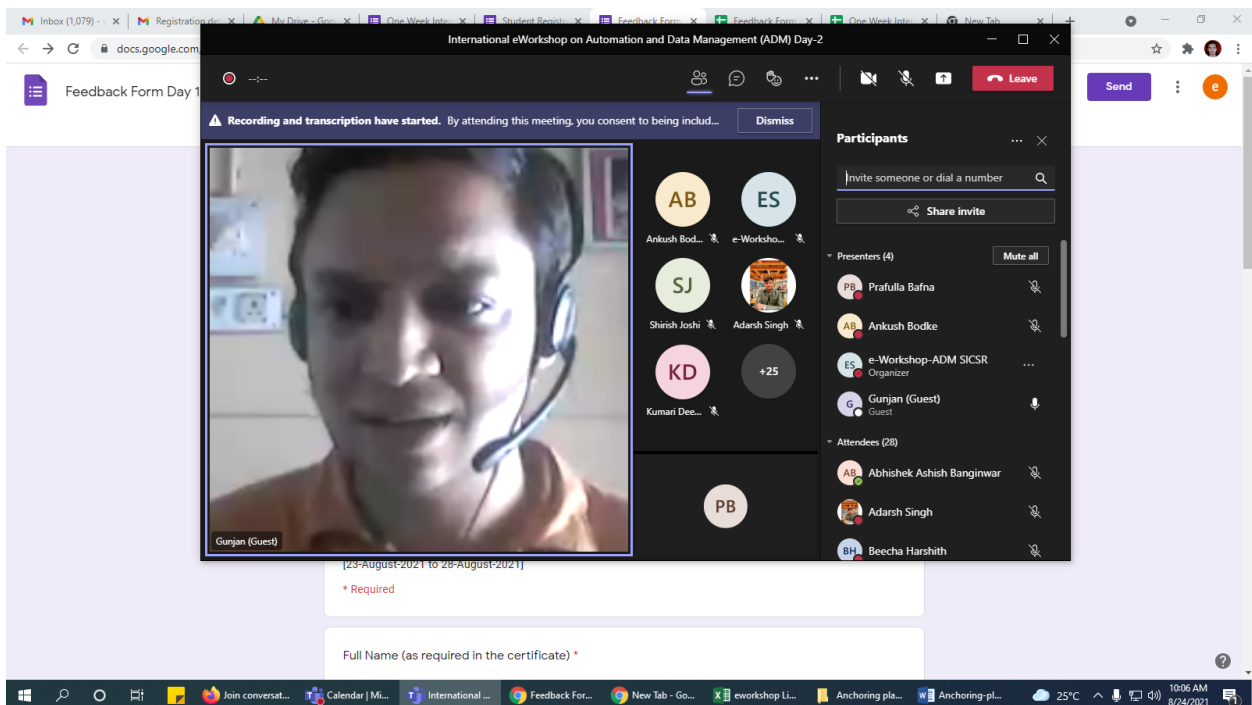
Technical Session of Dr. Sarika Sharma in progress @ 10 am 23-8-2021

The second session was conducted by Dr. Vijay Barve on biodiversity data management. The speaker explained about different aspects of biodiversity data. How preprocessing and data management is done in biodiversity field was stated with the examples. Participants got an unique approach where statistical analysis could be applied even to plants and animals along with locational data varying from desert to sea. He explained research topics in a biotech data management.



Session by Dr. Vijay Barve on biodiversity data management- 23/8/2021 on @ 3 pm

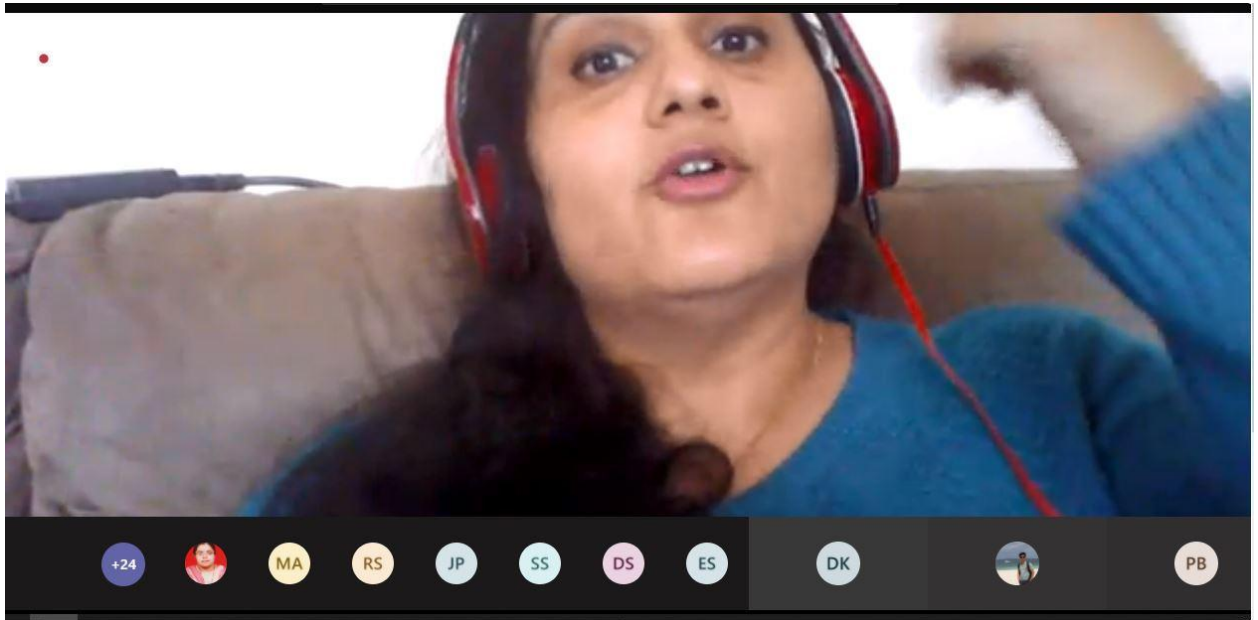
The speaker explained that feature stores are used to manage data, particularly for machine learning operations (MLOps). Data is stored in a server somewhere. Analysts access the data when it was needed for analysis. Also he stated about the experts who writes query to display data. He explained about the difference between traditional and modern approach of feature processing. . It was interactive session and audience equipped with importance of features stores and how it is unique and easy using APIs.



*Session by Dr.Gunjan Narulkar 27/8/2021 on feature stores from @ 10.00 am*

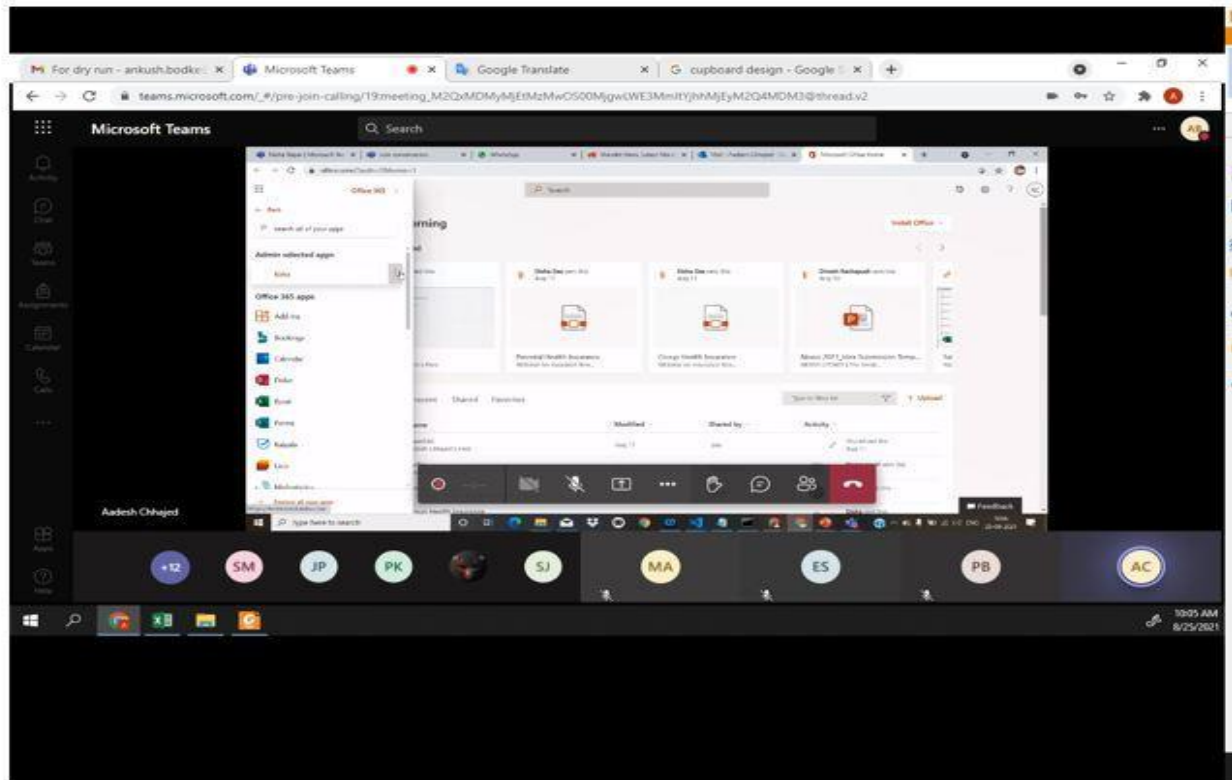
The speaker explained about aws services and authenticity and other facilities like alarms, unique file uploading about it. Also importance of Machine learning, in the construction of AI systems was presented. She explained a different kind of use case of cloud computing to transform and combine and create a standard feature set to serve a model.





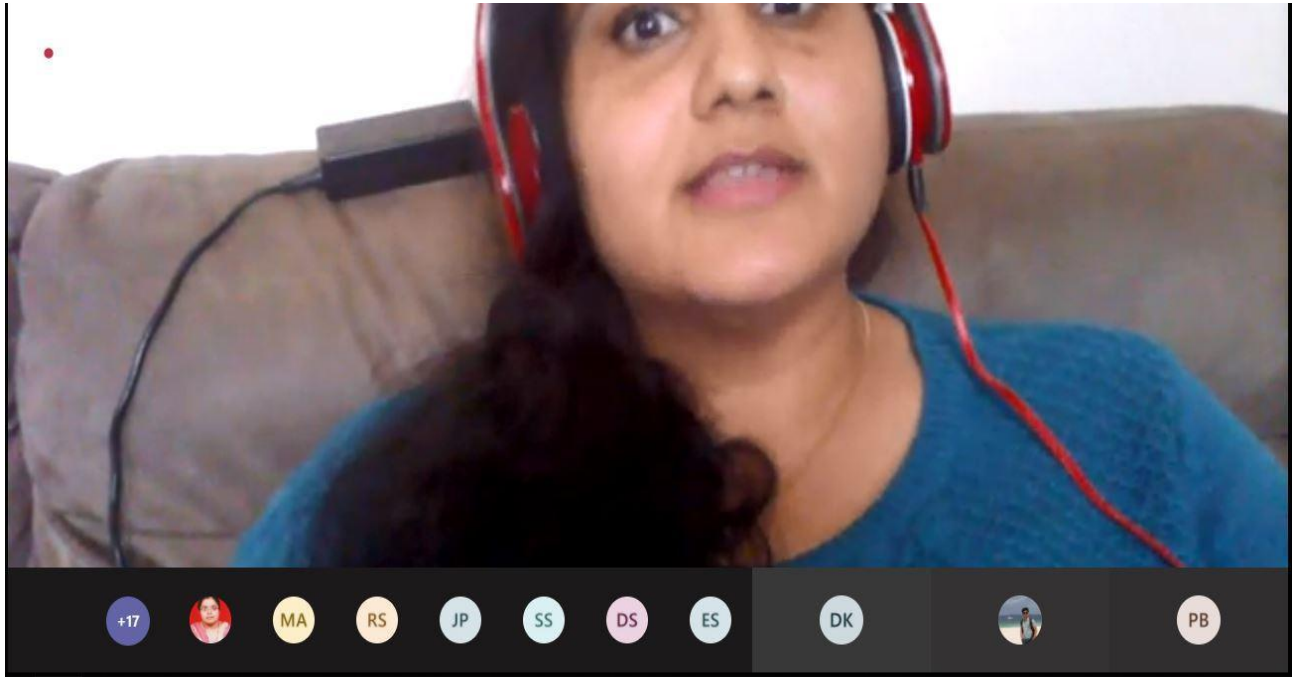
*Session by Ms. Pinnal Pathak 24/8/2021 on Feature Stores & Cloud Computing @ 03.00 pm*

The speaker explained Microsoft 365 services to create a secure and productive file collaboration environment for users. He explained two sided administrator and user along with setting up a collaboration environment. He briefed about how SharePoint relates to other collaboration services in Microsoft 365, including OneDrive, Microsoft 365 Groups, and Teams. He demonstrated to create an productive collaboration environment for your users. Also briefed about How you can protect your organization's data by managing access through permissions, data classifications, governance rules, and monitoring.



Session by Mr. Aadesh Chajed on *Data Collaboration using SharePoint* 25/8/2021 @ 10.00 am

The example In retail domain was explained and power of ML was presented for decision making. Technologies powered by cloud and ML were explained. The use of data to personalize the shopping experience in real time was briefed along with the algorithms which discover similarities and differences in customer data. How to make faster transaction was justified along with optimized task flow.



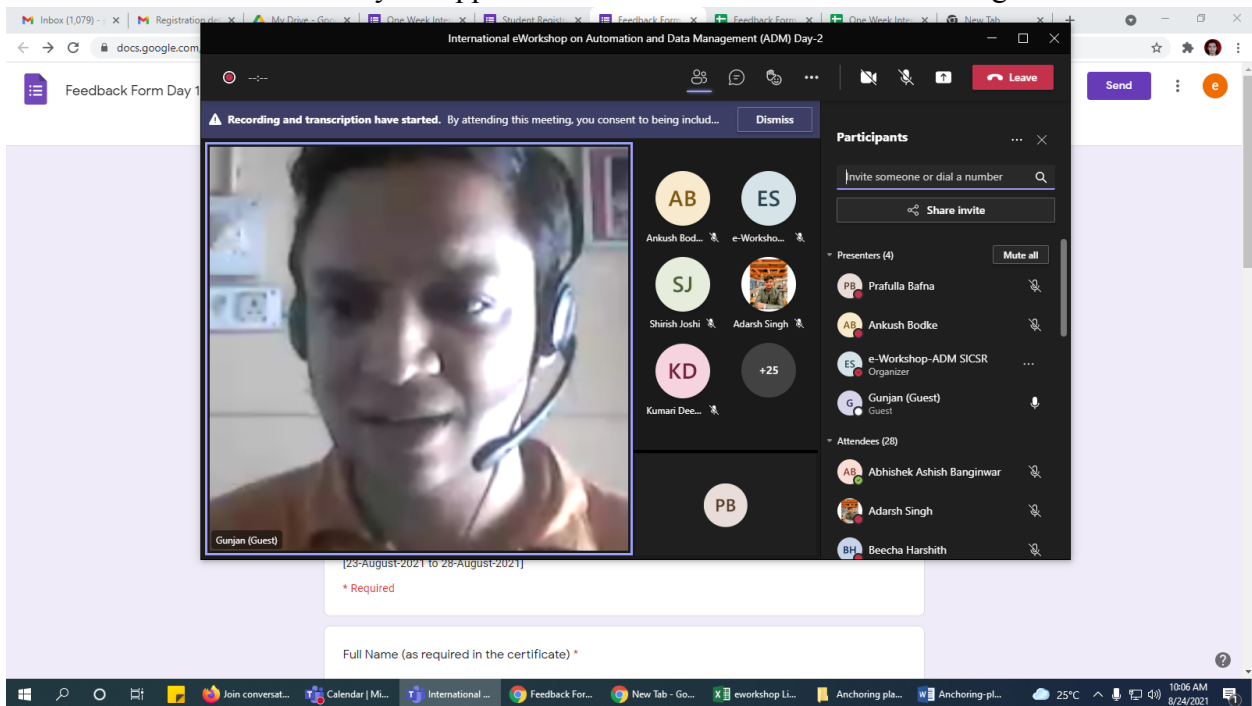
Session by Ms. Pinal Pathak 25/8/2021 on Machine Learning & Data Automation @ 03.00 pm

The speaker explained the case studies related to Microsoft 365 services to create a secure and productive file collaboration environment for users. He explained two sided administrator for the case study and user along with setting up a collaboration environment. He briefed about how SharePoint relates to other collaboration services in Microsoft 365, including OneDrive, Microsoft 365 Groups, and Teams. He demonstrated to create an productive collaboration environment for your users. Also briefed about How you can protect your organization's data by managing access through permissions, data classifications, governance rules, and monitoring.



Session by Mr. Budh Ram Gurung, 26/8/2021 on Getting Started into DevOps world with Docker (BRG) @10:00 am and 3 pm

The speaker introduced about various applications running in virtual machines. He explained how containers can help to package all the objects . He explained the container engine using diagrams and activities of container engine. The lifecycle of containers was briefed and the important difference between processes running inside the containers and the native processes on the host was discussed. The reusability of applications libraries was demostarted using hands on



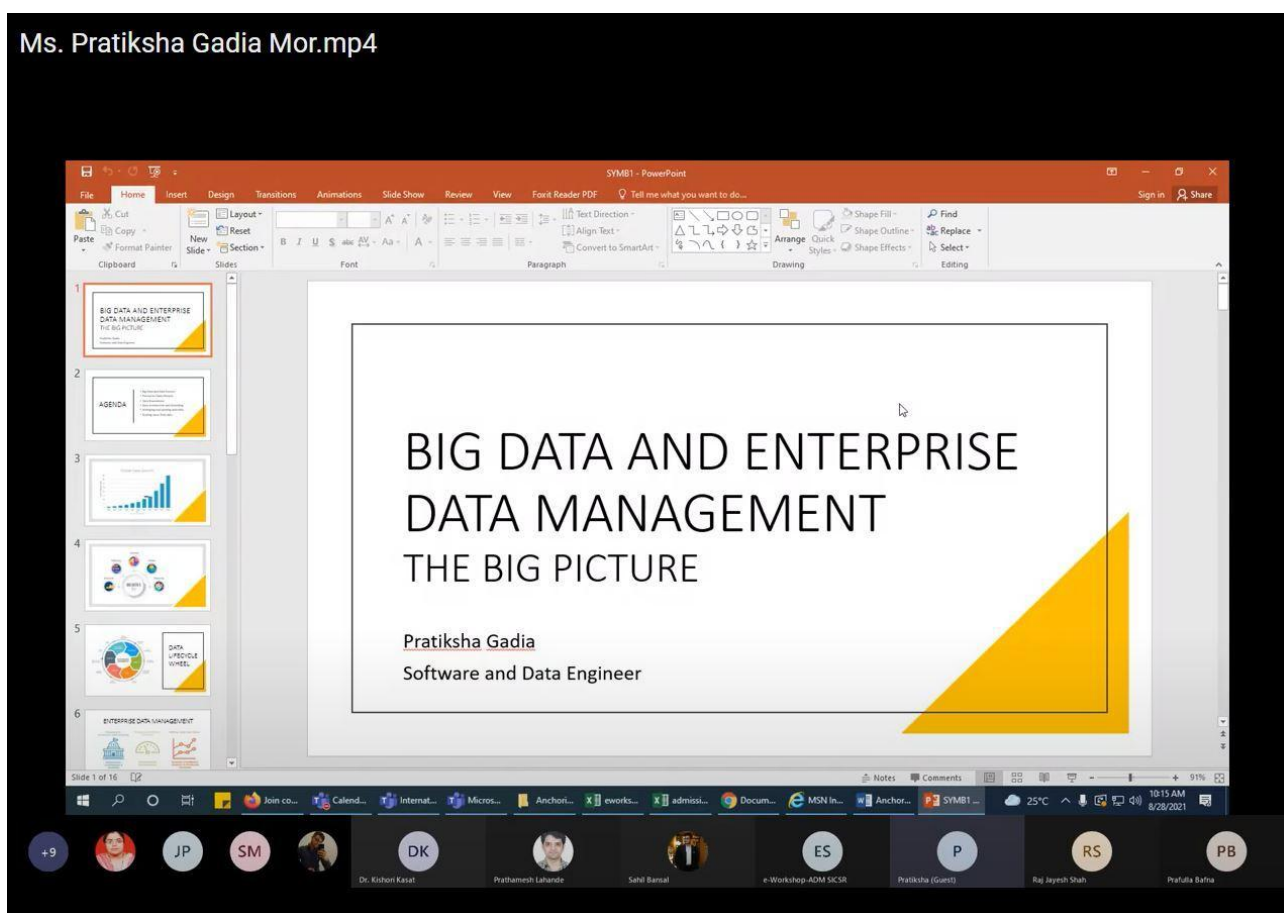
*Session by Mr. Gunjan Narulkar 27/8/2021 on feature stores from @ 10.00 am*

The speaker explained about how oracle based data management helps in collecting, keeping, and using data securely, efficiently, and cost-effectively. The goal of data management was explained in accordance with people, organizations, and connected things optimize the use of data within the bounds of policy and regulation so that they can make decisions and take actions that maximize the benefit to the organization. A robust data management strategy was briefed as it is becoming more important than ever as organizations increasingly rely on intangible assets to create value.



Session by Mr. Pratik Gadia 27/8/2021 Data Management using oracle based software 28/8/2021 @ 03:00 pm

Speaker explained data utility components which work together and deliver the data. The management capabilities of an organization depends upon the analytics and algorithms that use the data originated by data pipe lines. Although current tools help database administrators (DBAs) to automate many of real time tasks. Dash board is required because of the size and complexity of most database deployments. Real time dashboards monitors the processes. Reducing the need for manual data management is a key objective of a new data management technology, the autonomous database.



Session by Ms. Pratiksha on Building nalytical Datasets @ 10:00and 3 pm

- The e-workshop was successful in knowledge sharing as well as creating a much needed research environment in the area of Machine learning. Based on the request of participants, recordings of the sessions were shared.
- The e-workshop concluded on 25<sup>th</sup> Sep. 2021 with vote of thanks by Dr. Prafulla B. Bafna. All the participants highly appreciated the timely beginning and ending of all the sessions



for the entire week. The average feedback score based on all the sessions was 4.6/5. Students appreciated the e-workshop and started connecting offline with the guest speakers.



**SYMBIOSIS INSTITUTE OF COMPUTER STUDIES AND RESEARCH**  
**SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)**

Established under section 3 of the UGC Act 1956,

**Re- accredited by NAAC with 'A' Grade**

Founder: Prof. Dr. S. B. Mujumdar, M.Sc., Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)

**IEEE SICSR Pune Student Branch STB 11434**

**Capacity Building Workshop**

**Education 4.0 - Eruptive Technologies and Automation of Teaching & Learning, Academic  
Administration and Research- Role of Educational Technologies**

Sponsored By IEEE Educational Activities Committee and IEEE Pune Section

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## 2021 Region-10 Call for Capacity Building Workshop under Educational Activity

*Before completing this proposal, please read all the Terms and References at*

*<https://ea.ieeer10.org/>*

Workshop Title from theme mentioned below:  1. Education Policy, 2. Curriculum Development, Accreditations, 3. Disruptive Technologies, 4. Education 4.0 5. Any other	<b>Education 4.0 -</b>  <b>Eruptive Technologies and Automation of Teaching &amp; Learning, Academic Administration and Research- Role of Educational Technologies.</b>
IEEE Organizational Unit (branch code/Section name/ subsection )	<b>IEEE SICSR Pune Student Branch, STB 11434</b>
Name of IEEE Organizational Unit Chair	<b>Ms. Meghna Das</b>
IEEE Organizational Unit Counsellor (for Student Branch only)	<b>Dr.Rajashree Jain</b>
Name of collaborating IEEE Organizational Unit 1 Chair (Name, IEEE No. & Email)	<b>IEEE Educational Activities, IEEE Pune Section</b>  <b>Mr. Girish Khilari, SM 92533680</b>  <b>girish@elliotsystems.com</b>



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Name of collaborating IEEE Organizational Unit 2 Chair (Name, IEEE No. & Email)	<b>Education Society, IEEE Pune Section</b> <b>Mr. Virendra Shethe, SM 91182438;</b> <b>Virendra.shete@mituniversity.edu.in</b>
Name of collaborating IEEE Organizational Unit 3 Chair (Name, IEEE No. & Email)	<b>IEEE Educational Activities, IEEE Madras Section and IEEE India Council, Dr.Devraj,</b> <b>SM 90395621</b> <b>deva230@yahoo.com</b>
Name of collaborating IEEE Organizational Unit 4 Chair (Name, IEEE No. & Email)	<b>IEEE Educational Activities, IEEE Delhi Section, Dr.Pruna Gaur, SM 41359245</b> <b>prunagaur@yahoo.com</b>
<b>Project Leader / Educational Activity Chair of OU hosting this workshop Details</b>	
Full Name	<b>Dr.Rajashree Jain</b>
Email	<b>rajsahreejain@ieee.org</b>
Contact Number with country code	<b>+91 9423038848</b>
IEEE Membership Number	<b>90384280</b>
<b>Executive Summary (maximum 300 words)</b>	



*J.K. Saini*

## Education 4.0

### Eruptive Technologies and Automation of Teaching & Learning, Academic Administration and Research- Role of Educational Technologies.

Technology has touched upon every dimension of our life and hence education is no different for it. The impact the technology can bring to education is humongous. With the advent and access of technology with many people in the world, it is essential to reach those who still can unlock the capabilities of technology in the education domain.

With more than 63% of the population residing in the urban places and cities getting developed as smart cities, the number of internet users worldwide has increased. More than 4.6 % billion users use the internet[1, 2], which means about 61% of the population of the world today has access to one or other form of digital technology.

Studies also reflect that effective use of digital learning tools in classrooms can increase student engagement, help teachers administer better teaching methods and facilitate personalized learning. This in turn helps build 21st century skills amongst our future generation. [3]

The present proposal therefore aims in imparting the knowledge to use technology tools for the benefits of teaching fraternity. Teachers are the architects of tomorrow.

The panels and workshops planned during the three days will provide insights in creating a complete value chain and develop Education 4.0 skills amongst the attendees.

The focus is to provide comprehensive information of available technical tools in the areas of Teaching & Learning, Academic administration or Learning evaluation and building research skills from IEEE and other free and open source domains.

#### Collaborations

1. IEEE Educational Activities, IEEE Pune Section
2. Education Society, IEEE Pune Section
3. IEEE Educational Activities, IEEE Madras Section and
4. IEEE Educational Activities, IEEE India Council
5. IEEE Educational Activities, IEEE Delhi Section

#### Introduction and Description of Program (including expenses)

The event is planned to be organized as a three day conglomerate of facilitators and delegates.

Days	Details
Day 1	<ul style="list-style-type: none"><li>• About IEEE Learning Networks and IEEE Try Engineering</li><li>• Power of open source resources:<ul style="list-style-type: none"><li>- Open Source LMS</li></ul></li></ul>



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	<ul style="list-style-type: none"> <li>- Content Management Systems</li> <li>- use of LMS platforms like MOODLE</li> <li>- Creating lesson plans</li> <li>- Assignments based on Bloom's taxonomy</li> <li>- Enable active learning through course wiki creation, Forum and other tools.</li> </ul>
Day 2	<ul style="list-style-type: none"> <li>• IEEE Project based learning initiatives.</li> <li>• IEEE Blended Learning Platform</li> <li>• Tracking of Teaching and its impact on Learning evaluation</li> <li>• Attainment of course objectives.</li> </ul>
Day 3	<ul style="list-style-type: none"> <li>• IEEE Dataport and Collbratec</li> <li>• Learning Analytic</li> </ul>

**Event Duration: Three Days, July 2021**

**Proposed budget:**

No.	Items	Expense description in RS	Proposed Budget (\$USD)
-----	-------	---------------------------	-------------------------



*J.K. Soni*

1.	Speaker kits for hands on training (9*2000)	18000	250
2.	Working committee kits and Snacks(25*1000)	25000	270
3.	Promotion material (Flyer/banner) design and printing for local promotion of event	4000	50
	Total		570

#### Alignment with IEEE Goals and Effective Use of IEEE Resources

##### Benefits:

- 1) Creating an awareness of education technologies
- 2) Creating awareness of IEEE Learning networks and resources like IEEE collaboratec platforms. .
- 2) Building capacity among the participants with required skills for the purpose of teaching, learning and academic administration
- 3)Enable the participants to understand the power of data in the era of digital technologies.
- 4) Provide information on designing research around digital technologies and technology enabling education delivery and measurement.
- 5) Collaborate for future teaching learning and research.

#### Measurement or Assessment of the Educational Outcomes

##### Expected Outcome:

Number of participants in the event and 360 degrees feedback

Use of IEEE resources.

IEEE membership development

Impact of the program to the participants and community (outreach of program/ platform used/ joint event with other OU/ Target audience



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**Take Away for participants:**

1. Customize online teaching learning resources to suit our requirements
2. Know how of different technical tools
3. Network and collaborate with diverse groups for future activities

**Take Away for Joint organising units:**

1. Build high impact programs to suit audience with diverse thoughts
2. Reach locals through multiple OU collaborations.
3. Increase awareness of IEEE resources among the local communities

**Innovativeness aspect of the program**

Considering the current pandemic situation every educational institute is striving hard to keep their students engaged and connected in an online mode. The workshop is at the right time for the right people (teachers) to create awareness and help teach the fraternity to use technology for the benefits of self and students .

The other innovation of the proposal is to encourage collaboration amongst the stakeholders to use data and come up with scalable and replicable teaching learning models in future using technology enabled learning analytics.

**Prepared by Project Leader:**

Date: 30/04/2021

**Endorsed by Council/Section/Subsection Chair  
with the commitment of providing the matching  
grant**

Name: Mr. Girish Khilari

IEEE Membership No: **SM 92533680**

Signature (e-signature is allowed):

Date 30/04/2021



## Reference URLs

1] <https://theirworld.org/explainers/technology-and-education#:~:text=Technology%20can%20deliver%20new%20educational,and%20the%20internet%20is%20growing.&text=6.8%20billion%20people%20have%20access%20to%20mobile%20phones>

2] <https://edtechmagazine.com/k12/article/2017/09/classroom-tech-use-rise-infographic>

3] <https://datareportal.com/global-digital-overview#:~:text=The%20number%20of%20internet%20users,users%20in%20the%20world%20today.>

## Acceptance Letter



# Proposal Acceptance

June, 2021

To,  
Dr. Rajashree Jain,

Symbiosis Institute of Computer Studies and Research, STB11434, Pune,  
IEEE India Section

**Subject:** Regarding approval of \$250 for the proposal submitted under 2021 Region-10 Call for Capacity Building Workshop under Educational Activity

Dear Dr. Rajashree Jain,

This is to convey the sanction of the fund of \$250 for the conduct of a proposal titled as “**Education 4.0 – Eruptive Technologies and Automation of Teaching & Learning, Academic Administration and Research- Role of Educational Technologies** (Proposal ID:139)” to **IEEE India Section** under IEEE R-10 Capacity Building Workshop Under Educational Activity.

This fund will be released as per guidelines mentioned in the Call for proposal.  
(Guidelines given on following link: <https://ea.ieeer10.org/2021-announcement/> )



The coordinator for the proposed event/activity(ies) will be Dr. Rajashree Jain and shall comply with the

deadlines & other documentation post conduct of proposed event/activity(ies).

This is only sanction communication and should not be treated as assurance to get the grant-which shall be transferred to the respective OU as per IEEE R-10 norms only after complying with the conditions and submission of documents required for the reimbursement within timelines.

In case there is change in coordinator/theme, you are requested to inform the EAC in advance via email at [region10eab@gmail.com](mailto:region10eab@gmail.com)

Copy forwarded for information and necessary action:

1. Dr.Rajashree Jain, IEEE India Section
2. Chair, India Chair, IEEE R-10
3. Chair, IEEE R-10

Regards,

**Dr. Preeti Bajaj**

2021-22 R10 Educational Activities Committee Chair



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## Mail Communication

### IEEE R-10 EA IEEE R-10 Capacity Building Workshop Under Educational Activity Acceptance Letter (Proposal ID: 139)

7 messages



Rajashree Jain <rajashreejain@ieee.org>

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**noreply@ieee.org** <noreply@ieee.org>  
Reply-To: noreply@ieee.org  
To: rajashreejain@ieee.org  
Cc: preetibajaj@ieee.org, region10eab@gmail.com  
Jun 11, 2021 at 10:35 PM

Fri,

Dear Dr.Rajashree Jain,  
On behalf of Dr.Preeti Bajaj, IEEE R10 Educational Activities Committee Chair (2021-22),  
This is to convey the sanction of the fund of \$250 for the conduct of a proposal titled as "Education 4.0 – Eruptive Technologies and Automation of Teaching & Learning, Academic Administration and Research- Role of Educational Technologies (Proposal ID: 139)" to India under IEEE R-10 Capacity Building Workshop Under Educational Activity.  
Please find attached herewith Acceptance Letter.  
You are requested to share this attached letter with your respective OU and section's chair.

Regards,  
IEEE R-10 EAC (2021-22)  
Note: Do not reply to this mail, this is system generated mail. For any query mail it to [region10eab@gmail.com](mailto:region10eab@gmail.com)

---

 **139 IEEE R-10 EA Acceptance Letter Dr.Rajashree Jain India.pdf**  
254K

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**Rajashree Jain** <rajashreejain@ieee.org>  
To: Preeti Bajaj <preetibajaj@ieee.org>, region10eab@gmail.com  
Jun 12, 2021 at 12:45 PM

Sat,





Dear Madam,

Greetings of the day

This is regarding the Workshop planned by SICS R, Pune, Delhi, Madras EAC, under Capacity Building.

1. IEEE SICS R Pune Student Branch in association with IEEE Pune Section, IEEE Madras section and IEEE Delhi Section is organizing " Education 4.0 ".

Thank you for considering our proposal and providing this opportunity.

2. As per guidelines shared by EAB R10 team, we were supposed to complete the event by 15 July. But, due to some technical issues, we are exploring the option of hosting it on 15th, 16th and complete by 17th July. We will be able to complete the rest of the formalities like reporting and accounting as per the deadlines.

Request your approval for the same.

3. We are looking forward to your presence on the day of inauguration, request to block your calendar.

A separate Email invite will be shared soon.

4. As shared in the last meeting cum training programme, we would be happy to coordinate with a mentor from R10 EAB for this activity.

So that some of our requests we can discuss with him/her. For Ex: We are looking for a resource person who can elaborate on IEEE Learning networks, IEEE Data port.

Request to connect with him/her.

Thank you madam, Hoping to get an approval on the dates requested,

Warm Regards and please do take care,

[Quoted text hidden]

--

[Quoted text hidden]

**Rajashree Jain** <rajashreejain@ieee.org>

To: region10eab@gmail.com

Cc: Preeti Bajaj <preetibajaj@ieee.org>, Amoli Belsare <amolibelsare@gmail.com>, Girish Khilari

<girish@elliotsystems.com>, Rachana Garg <rachana16100@yahoo.co.in>, prena gaur <prernagaur@yahoo.com>, D

Durairaj <deva230@yahoo.com>

Fri, Aug 6, 2021 at 12

Dear Team,

Greetings !

Please find the event completion report of Education 4.0.

I was unable to submit the report on the portal.

Regret the delay in submission. Request to consider for further processing.

The report is in the required format suggested by R10 EAC.

We have shared drive links or online links wherever required.

Kindly acknowledge the receipt of the same and feel free to revert back for any clarifications.

Encl:


1.Education 4.0 R10 EA report

2. Speaker and Volunteer invoices

3. Drive Link for all documents: <https://drive.google.com/drive/folders/1QFLK7zT97GliFKVQwrq0G2sIRnVWLfyB?usp=sharing>

[Quoted text hidden]

**3 attachments**

 **Education 4.0 R10-EA-Post Event Report.pdf**  
2096K

 **Speakers & Volunteer Invoices.pdf**  
2109K



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## Workshop Creatives/ Posters







**Symbiosis Institute of Computer Studies and Research**

IEEE SICSR Pune Student Branch,  
Educational Activities and Education Society of IEEE Pune Section  
*in association with*  
Educational Activity Committees' of  
IEEE Delhi, IEEE Madras Sections;  
IEEE Nagpur Subsection & supported IEEE India Council  
*Presents*

**IEEE R10 EA Sponsored Capacity Building Workshop**  
**Education 4.0**  
**Role of Educational Technologies**

15<sup>th</sup>-17<sup>th</sup> July 2021  
2:00 pm to 5:00 pm (IST)














**IEEE R10 EA Sponsored Capacity Building Workshop**  
**Education 4.0**  
**Role of Educational Technologies**  
**Inauguration Ceremony**

					
Mr. Girish Khilari Chairman, IEEE Pune Section	Prof. Jatinderkumar R. Saini Director, SICSR	Mr. Deepak Mathur IEEE R10 Director	Dr. Preeti Bajaj EAC Chair, IEEE R10	Dr. Suresh Nair Chairman IEEE India Council	Dr. Rachna Garg Chair, IEEE Delhi Section
					
Dr. Rajashree Jain Professor, SICSR Secretary, IEEE India Council	Dr. Virendra Shete Education Society, IEEE Pune Section	Dr. Purna Gaur EAC Chair, IEEE Delhi, Director, NSUT, East Campus	Dr.D.Devraj Secretary, IEEE Madras Section & Vice Chair, EA, IEEE IC	Dr. Amoli Belsare EAC Chair, IEEE Nagpur Subsection	Dr. Sachin Naik Deputy Director, SICSR
					
Dr. Neha Sharma Secretary, IEEE Pune Section					








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IEEE R10 EA Sponsored Capacity Building Workshop

Education 4.0

Role of Educational Technologies

Day 1



**Dr. Debarshi Mukherjee**  
Associate Professor  
HOD of Business Management  
Tripura University (A Central University)



**Ms. Gayatri Venugopal**  
Assistant Professor  
Symbiosis Institute of Computer  
Studies and Research, Pune

15th July 2021, Thursday  
2:00 pm to 5:00 pm (IST)

IEEE R10 EA Sponsored Capacity Building Workshop

Education 4.0

Role of Educational Technologies

Day 2



**Dr. Supavadee Aramvith**  
Head, Multimedia Data Analytics  
and Processing Research Unit,  
Chulalongkorn University



**Mr. Dhanukumar Pattanshetty**  
Senior IEEE Client  
Services/University  
Partnership Program Manager



**Ms. Amoli Belsare**  
Member at IEEE R10 EAC



**Dr. Nita Rehpade**  
Department of ETC,  
VCCE, Nagpur

16th July 2021, Friday  
2:00 pm to 5:00 pm (IST)

# IEEE R10 EA Sponsored Capacity Building Workshop

## Education 4.0

### Role of Educational Technologies

Day 3



**Mr. Binu A Rajagiri**  
Assistant Professor at  
Rajagiri School of  
Engineering & Technology



**Mr. John Day**  
IEEE Senior Member  
Director, Member  
Products & Programs



**Ms. Lorena Garcia**  
Senior IEEE Client Services /University  
Partnership Program Manager  
IEEE Try Engineering



**Mr. Radeep Krishna**  
Assistant Professor at  
Kalasalingam Academy of  
Research and Higher  
Education, Srivilliputhur



**Mr. Anurag Sahay**  
Global Business Unit  
Head-AI and Data Science  
at Nagarro

17th July 2021, Saturday  
5:30 pm to 8:30 pm (IST)

# IEEE R10 EA Sponsored Capacity Building Workshop

## Education 4.0

### Role of Educational Technologies

#### Organising Committee



**Mr. Girish Khilari**  
Chair,  
IEEE Pune Section



**Prof. Jatinderkumar R. Saini**  
Director,  
Symbiosis Institute of  
Computer Studies and Research



**Dr. Rachana Garg**  
Chair,  
IEEE Delhi Section



**Dr. N. Kumarappan**  
Chair, IEEE  
Madras Section



**Dr. Abhay Gandhi**  
Chair, IEEE  
Nagpur  
Subsection



**Dr. Rajashree Jain**  
Professor, SICSR  
Secretary, IEEE  
India Council



**Dr. Purna Gaur**  
EAC Chair, IEEE Delhi,  
Director, NSUT, East  
Campus



**Dr. D. Devaraj**  
EAC Chair, IEEE  
Madras Section



**Dr. Amoli Belsare**  
EAC Chair, IEEE  
Nagpur Subsection



**Dr. Virendra Shete**  
Education Society,  
IEEE Pune Section



**Mr. Ramneek Kalra**  
IEEE Impact Creator,  
Outreach Publicity Advisor



**Dr. Neha Sharma**  
Secretary, IEEE  
Pune Section



**Dr. Amar Buchade**  
Treasurer,  
IEEE Pune Section



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## Workshop Report

### Name of the event:

IEEE R10 EA Sponsored Capacity Building Workshop: **Education 4.0 - Role of Educational Technologies** was hosted by IEEE SICSR Pune Student Branch - STB 11434, Educational Activities and Education Society of IEEE Pune Section in association with Educational Activity Committees' of IEEE Delhi, IEEE Madras Sections, IEEE Nagpur Subsection & supported by India Council

The aim of the workshop was to provide comprehensive information on available technical tools in the areas of teaching and learning and academic administration and research from Open and IEEE resources. The three - day workshop will have demonstrations, expert sessions and informative sessions on Open and IEEE Resources available for making Education 4.0 a reality. The topics covered included various concepts, tools, techniques needed for teaching-learning, academic administration and research. Some Benefits:

- 1) Creating an awareness of education technologies
- 2) Creating awareness of IEEE Learning networks and resources like IEEE collabratedc platforms. .
- 3) Building capacity among the participants with required skills for the purpose of teaching, learning and academic administration
- 4) Enable the participants to understand the power of data in the era of digital technologies.
- 5) Provide information on designing research around digital technologies and technology enabling education delivery and measurement.
- 6) Collaborate for future teaching learning and research



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**Dates and time for Conduction of the Activities:**

Day	Date	Time
Day 1 - Thursday	15 <sup>th</sup> July 2021	2:00 PM to 5:00 PM (IST)
Day 2 - Friday	16 <sup>th</sup> July 2021	2:00 PM to 5:00 PM (IST)
Day 3 - Saturday	17 <sup>th</sup> July 2021	5:30 PM to 8:30 PM (IST)

**Mode of Conduction (Online/Offline/Hybrid):**

Online on the platform [Cisco Webex Events](#)

**Description:****Day 1 - 15<sup>th</sup> July 2021, Thursday****Inauguration Ceremony**

IEEE Region 10 EA Sponsored Capacity Building Workshop, Education 4.0 - Role of Educational Technologies was hosted by IEEE SICSR Pune Student Branch, Educational Activities and IEEE Education Society of IEEE Pune Section in association with Educational Committees of IEEE Delhi, IEEE Madras Sections and IEEE Nagpur Subsection, and is supported by the EAC IEEE India Council from 15th - 17th July 2021. The three-day workshop was conducted virtually and witnessed a range of esteemed guest speakers who shared their insights on various topics revolving around the theme, "Role of Educational Technologies". The esteemed panel for the inauguration ceremony welcomed all the participants and speakers to the three-day workshop and extended their best wishes for the same.

**Topic: Education 4.0 in the Realm of Learning Continuity**

**Speaker:** Dr. Debarshi Mukherjee (Associate Professor, HOD of Business Management, Tripura University)

Dr. Debarshi Mukherjee discussed the evolution of learning in the digital arena, learning domains, experiential deliberation, and the learning matrix, all of which are increasingly widespread in today's world. He wrapped up by exploring the merits of personalisation in Education 4.0.

Following that, a question-and-answer session was held, during which the speaker addressed the participants' concerns. As a show of appreciation, Dr. Debarshi Mukherjee was given a virtual memento.

**Topic: Moodle**

**Speaker:** Ms. Gayatri Venugopal (Assistant Professor, Symbiosis Institute of Computer Studies and Research)



*J.K. Saini*

Ms. Gayatri Venugopal addressed the concept of Education 4.0 and discussed Learning Management Systems. She then conducted a demonstration on Moodle cloud to the attendees, explaining numerous components of Moodle LMS and how to use it. A session for question and answer was then conducted where the speaker solved the doubts of the participants. Ms. Gayatri Venugopal was then presented with a virtual memento as a token of appreciation.

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## DAY 2 - 16<sup>th</sup> July 2021, Friday

**Topic: IEEE Educational Resources**

**Speaker:** Dr. Supavadee Aramvith (Chair, IEEE EAB Section Education Outreach Committee and Member of IEEE Educational Activities Board (EAB))

Dr. Supavadee Aramvith gave an overview of human capital and then discussed IEEE Educational Activity methods, including IEEE Try Engineering, STEM programmes, Continuing Professional Education, and IEEE Collabratec and Dataport.

Following then, a question-and-answer session was held, and Dr. Supavadee Aramvith was given a virtual memento as a sign of appreciation.

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**Topic: IEEE Research: How to Shape your Future in the Fourth Industrial Revolution?**

**Speaker:** Dr. Dhanukumar Pattanashetti (Senior Client Services Manager at IEEE)

Dr. Dhanukumar Pattanashetti enlightened the attendees to a number of IEEE resources, including the IEEE Xplore Digital Library, which allows teachers and students to quickly access a variety of research and academic papers on a variety of themes.

The event came to a close with a round of questions and answers, during which the speaker clarified the participants' uncertainties. Mr. Dhanukumar Pattanashetti was then given a virtual souvenir as a sign of appreciation.

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**Topic: Learning Management System – Google Classroom**

**Speakers:** Dr. Amoli Belsare (Member at IEEE R10 EA) and Dr. Nita Rehpade (Department of ETC, YCCE, Nagpur)

Dr. Amoli Belsare gave a presentation on different consoles and how to get started with Google Workplace. She then went through issues like Google Classrooms registration, sign-in, and organisational unit and group settings. The faculty console was then introduced, as well as how to use it. Dr. Nita Rehpade then demonstrated how to use Google Classroom in a hands-on session.

Following that, a question-and-answer session was held. Finally, as a token of thanks, Dr. Amoli Belsare and Dr. Nita Rehpade were given a virtual memento.

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## DAY 3 - 17<sup>th</sup> July 2021, Saturday



*J.K. S.* Page 17 of 23



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**Topic: Content Development and Archiving Tools for Research**

**Speakers:** Mr. Binu A. (Assistant Professor, Rajagiri School of Engineering and Technology)  
Binu A introduced the notion of the Research Cycle and then offered a demonstration of Mendeley, Overleaf, Typeset, and Creately to the audience.

Following that, a question-and-answer session was held. As a show of appreciation, Mr. Binu A was given a virtual memento.

---

**Topic: IEEE TryEngineering**

**Speakers:** Ms. Lorena Garcia (Senior IEEE Client Service/ University Partnership Program Manager, IEEE Try Engineering)

Ms. Lorena Garcia gave an overview of IEEE Try Engineering's vision and objectives, as well as educational activities such as the Pre-University Education Coordinating Committee and IEEE TryEngineering Brands (TryEngineering Summer Institute, TryEngineering.org and TryEngineering Together). She next moved on to the stem portal's learning programmes.

The session concluded with a round of questions and answers where the doubts of the participants were cleared by the speaker. A virtual memento was then presented to Ms. Lorena Garcia as a token of gratitude.

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**Topic: IEEE Collabratec: Uniting the IEEE Global Technical Community**

**Speakers:** Mr. John Day (IEEE Senior Member, Director, Member Products and Programs)

Mr. John Day spoke on IEEE's fundamental value of "People and their Collective Collaborations," as well as IEEE Collabratec and its premium experience, providing the audience a full summary of its characteristics.

The session came to a close with a quick overview of IEEE and IEEE Collabratec. Following that, a question-and-answer session was held, and Mr. John Day was given a virtual memento as a token of appreciation.

---

**Topic: Digital Pedagogy**

**Speakers:** Mr. Radeep Krishna (Assistant Professor, Kalasalingam Academy of Research and Higher Education, Tamil Nadu)

Mr. Radeep Krishna discussed the concept of digital pedagogy and how to create it with technologies like Doodly, Open-Board, and Davinci Resolve.

Following the presentation, a question and answer session was held, and Mr. Radeep Krishna was given a virtual memento as a sign of appreciation.

---

**Topic: AI in Education**

**Speakers:** Mr. Anurag Sahay (Global Business Unit Head - AI and Data Science at Nagarro)

Mr. Anurag Sahay discussed student diversity and simple technological goals, emphasising the big "AI in Education" premise of "Observe the learner, measure, and adapt" through case studies. Following the presentation, a question-and-answer session was held. Mr. Anurag Sahay was given a virtual memento as a token of appreciation.

---

**Valedictory Session**

In the valedictory session, all the speakers addressed the gathering and extended a heartfelt gratitude to everyone for joining the workshop. The efforts put forward by the Education 4.0 team in the grand success of the workshop were also highly appreciated, a video having an amalgamation of experience shared by the volunteers of different sections was shared and some participants were also invited to share their experience. The three-day workshop was concluded by proposing a vote of thanks.

### Concluding Remarks

Overall, the three-day workshop provided opportunities for participants on various dimensions of Education 4.0 . Sessions covered conceptual framework on Education 4.0 to possible implementation of Artificial Intelligence aspects.

Indeed, the speakers delivered excellent insights on these topics. The workshop also gave an exposure to the large canvas of IEEE educational and research resources like IEEEExplore, IEEE OpenScience – Learning Network, Data Port, TechArchive etc. apart from popular platforms for STEM education like TyEngineering. IEEE Collabratec was also shared with the participants.

Other open resources were also discussed and demonstrated to make most of the academic processes automated using technology. This was more essential considering the current pandemic situation and need of the hour for educationists to adapt to technology and blended teaching-learning processes. In this connection, our speakers could demonstrate various tools on Learning management systems like Moodle, Google Classroom, essential techniques for Digital Pedagogy like Doodly, Open-Board and Davinci Resolve , Mendeley Desktop etc were discussed.

#### Number of Attendees:

	Attendees		
Date and Day	IEEE Members	Non-IEEE Members	Total Per Day
15 <sup>th</sup> July 2021, Thursday	116	103	219
16 <sup>th</sup> July 2021, Friday	103	96	199
17 <sup>th</sup> July 2021, Saturday	96	84	180
<b>Total Members</b>	<b>315</b>	<b>283</b>	

**Total Attendees inclusive of all three days (IEEE and Non-IEEE Members): 598**



*T.K. Saini*

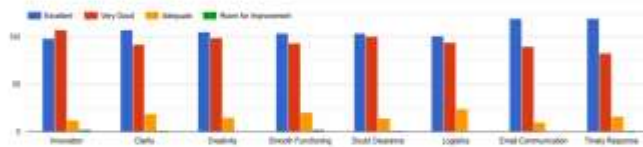
## ATTENDEE feedback

### Feedback Summary:

Day 1

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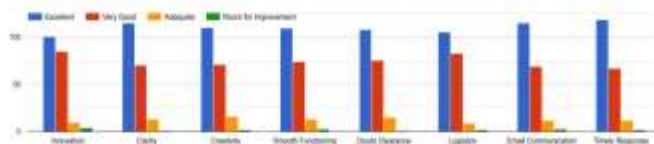
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Day 2

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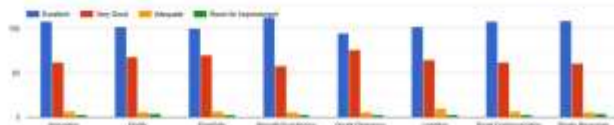
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Day 3

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Please rate our overall performance.



J.K. Sami

## Event Budget

Expenditure Details along with Proofs Annexure 1	Sr.no	Expenditure Head	Total Actual expenditure incurred (INR)	Total Actual expenditure incurred (USD)	Proposed as in Budget(USD)
	1	Speaker Kits/ Vouchers (11 speakers- each *INR 1000 worth = )	11000	148.64	250
	2	Volunteer kits (38 volunteers * INR 600 each=- each	22800	308	270
	3	Promotion material (Flyer/banner) design and printing for local promotion of event	0	0	50
		<b>Total</b>	<b>33800</b>	<b>456.64</b>	<b>570</b>

## Speaker List

### Names and brief profile of Chief Guest, Guests of honor and Speakers:

- Chief Guest**

Dr. Preeti Bajaj	(Educational Activities Committee Chair, IEEE R10)
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- Guests of Honor**

Mr. Deepak Mathur	(Director, IEEE R10 Asia-Pacific)
-------------------	-----------------------------------

Dr. Suresh Nair	(Chair, IEEE India Council)
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- Speakers**

Dr. Debarshi Mukherjee	(Associate Professor, HOD of Business Management, Tripura University)
Ms. Gayatri Venugopal	(Assistant Professor, Symbiosis Institute of Computer Studies and Research)
Dr. Supavadee Aramvith	(Chair, IEEE EAB Section Education Outreach Committee and Member of IEEE Educational Activities Board (EAB))
Dr. Dhanukumar Pattanashetti	(Senior Client Services Manager at IEEE)
Dr. Amoli Belsare	(Member at IEEE R10 EA)
Dr. Nita Rehpade	(Department of ETC, YCCE, Nagpur)
Mr. Binu A.	(Assistant Professor, Rajagiri School of Engineering and Technology)
Ms. Lorena Garcia	(Senior IEEE Client Service/ University Partnership Program Manager, IEEE Try Engineering)
Mr. John Day	(IEEE Senior Member, Director, Member Products and Programs)
Mr. Radeep Krishna	(Assistant Professor, Kalasalingam Academy of Research and Higher Education, Tamil Nadu)
Mr. Anurag Sahay	(Global Business Unit Head- AI and Data Science at Nagarro)



*J.K. Saini*

## Names and brief profile of Organizing Committee:

### • Professional Volunteers

Mr. Girish khilari	(Chair, IEEE Pune Section)
Prof. Dr. Jatinderkumar R.Saini	(Director, SICSR)
Dr. Rajashree Jain	(Professor, SICSR and Secretary, IEEE India Council)
Dr. Rachna Garg	(Chair, IEEE Delhi Section)
Dr. Prerna Gaur	(EAC Chair, IEEE Delhi Section and Director, NSUT, East Campus)
Dr. N. Kumarappan	(Chair, IEEE Madras Section)
Dr. D. Devaraj	(Secretary, IEEE Madras Section and Vice Chair, EA IEEE IC)
Dr. Abhay Gandhi	(Chair, IEEE Nagpur Subsection)
Dr. Amoli Belare	(EAC Chair, IEEE Nagpur Subsection)
Mr. Ramneek Kalra	(IEEE Impact Creator and Outreach Publicity Advisor)
Dr. Neha Sharma	(Secretary, IEEE Pune Section)
Dr. Sachin Naik	(Deputy Director SICSR)
Dr. Amar Bichade	(Treasurer, IEEE Pune Section)
Dr. Virendra Shete	(Education Society, IEEE Pune Section)
Dr. Josephine Selle	(Assistant Professor, Kalasalingam University)
Ms. Deepali Suryavanshi	(AAO, SICSR)
Mr. Sanket Kurdukar	( Placement Officer, SICSR)
Mr. Amol Diddi	(IT and system support, SICSR)

## Student Volunteers

Meghna Das	(Chair, IEEE SICSR Pune SB)
Simeen Khan Ayyub	(Vice Chair and Secretary, IEEE SICSR Pune SB)
Chhavi Trivedi	(Webmaster, IEEE SICSR Pune SB)
Diya Suthiv	(Treasurer, IEEE SICSR Pune SB)
Shritama Sengupta	(IEEE SIGHT Secretary, IEEE SICSR Pune SB)
Aditi Kanojia	(IEEE WIE Secretary, IEEE SICSR Pune SB)
Vaikunth Goyal	(Student Member, IEEE SICSR Pune SB)
Sourav Kumar	(Student Member, IEEE SICSR Pune SB)
Shatakshi Vishwakarma	(Student Member, IEEE SICSR Pune SB)
Raibata Basu	(Student Member, IEEE SICSR Pune SB)
Ayushi Khare	(Student Member, IEEE SICSR Pune SB)
Ayush Sachdeva	(Student Member, IEEE SICSR Pune SB)
Sahil Lakhani	(Student Member, IEEE SICSR Pune SB)
Adarsh Khandakar	(IEEE Bombay Section, IEEE Nagpur Section)
Gondrala Tarun Srinivasulu	(IEEE Madras Section)
Shreyash Bhoyar	(IEEE Bombay Section, IEEE Nagpur Section)
Samiksha Mulik	(IEEE Pune Section)
Shivraj Dhairyasheel Patil	(IEEE Pune Section)
Dnyaneshwari Yelne	(IEEE Bombay Section, IEEE Nagpur Section)
Tanu Gupta	(IEEE Bombay Section, IEEE Nagpur Section)



*J.K. Saini*

**Sponsors:**

- IEEE R10 EAC
- IEEE Pune Section

The host section as well as the organizing committee would like to note on record the support received from the sponsors.



J.K. Saini





**2021 IEEE SECOND INTERNATIONAL CONFERENCE ON TECHNOLOGY,  
ENGINEERING, MANAGEMENT FOR SOCIETAL IMPACT USING MARKETING,  
ENTREPRENEURSHIP, AND TALENT  
1-3, December 2021**

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## Executive Summary

IEEE Technology Engineering Management Society (TEMS) in association with Symbiosis Institute of Computer Studies and Research (SICSR), Symbiosis International (Deemed University), Pune co-hosted “The 2021 IEEE Second International Conference on Technology, Engineering, and Management for Societal Impact using Marketing, Entrepreneurship, and Talent (TEMSMET) “. The conference was held in a virtual mode on 2<sup>nd</sup> and 3<sup>rd</sup> December 2021 with pre conference tutorials planned on 1st December 2021.

With a theme “Advancement of Technology for Impact on Humanity”, the Second IEEE TEMSMET 2021 presented an open forum for scientists, researchers, engineers and students to exchange the latest innovations and research advancements in the areas of next-generation electronics, technology, engineering, management, entrepreneurship and innovation. It was indeed a unique platform offering deliberations on multiple dimensions of Innovation, Technology, Management and Humanity.

The conference was promoted using website. IEEE E -Notice services were extensively used for connecting to conference delegates, speakers and sponsors. The team also utilized the power of E Mails, social media for reaching out to prospective audiences. (<https://temsmet2021.sicrs.ac.in/>)

The conference brought eminent speakers and experts from different domains on a single platform. It included 5 keynotes sessions, 3 pre-conference tutorials, and a number of invited talks from eminent researchers on the state-of-the-art methods in related areas and two special tracks. It was indeed an unique multidisciplinary as well as cross-disciplinary opportunity for authors to contribute original research, listen to experts and make connections. Original contributions based on the results of research and development were solicited. A total of 39 authors presented their papers in the following tracks.

The conference Program was rich in content with exclusively selected paper presentations (with an acceptance of less than 20% ), Three Conference Tutorials, Five Keynote sessions, Two special Tracks, a number of parallel paper presentation sessions apart from the presence of luminaries and who’s who of Symbiosis, IEEE, Industry and Academia. The conference inauguration has the presence of luminaries like.

## Inauguration

1. Dr. S. B. Mujumdar, Chancellor, Symbiosis International (Deemed University), Pune
2. Dr. Vidya Yeravdekar, Pro-Chancellor, Symbiosis International (Deemed University), Pune
3. Dr. Yogesh Kulkarni, Executive Director, Vigyan Ashram, Pabal, Pune
4. Mr Andy Chen, President, IEEE TEMS
5. Dr. Sudeendra Koushik, Vice President, Conferences- Global, IEEE TEMS
6. Mr. Girish Khilari, Chairman, IEEE Pune section.
7. Prof. Dr. Dhanya Pramod, Dean, Faculty of Computer Studies, Symbiosis International (Deemed University)
8. Dr. Jatinderkumar R. Saini, General, Chair, IEEE TEMSMET 2021, Director, SICSR, Symbiosis International (Deemed University), Pune
9. Dr. Shrikant Tangde, General Chair, IEEE TEMSMET 2021

## Pre-TEMSMET Tutorials

Conference organized the following Pre-TEMSEMET Tutorials on 1st December 2021.

1. Dr. Chitra Dhawale, Professor, Department of Computer Engineering, P.R.Pote College of Engineering and Management, Amravati Topic: - Convolution Neural Network in Deep Learning Using Python
2. Dr. Mayuri Mehta, Professor, Department of Computer Engineering, Sarvajanic College of Engineering & Technology, Surat: - Explainable AI in Healthcare: Current Trends and Future Scope
3. Dr. Mandaar B. Pande, Professor at Symbiosis Centre for Information Technology (SCIT), Pune: - Quantum Computing and its Overarching Impact on Various Research and Industry Domains

## List of Keynotes

Five keynotes were organized on 2nd and 3rd December 2021:

1. Dr. Asta Pundziene, Kaunas University of Technology, Lithuania. The University of California, Berkeley, Haas School of Business, Topic- Value Impedance and Dynamic Capabilities: The Case of MedTech Incumbent-born Digital Healthcare Platform
2. Dr. Sudip Misra, Professor, IEEE Fellow, Department of Computer Science and Engineering, IIT Kharagpur, WB, India, Topic- Internet of Things: Present and Future.
3. Mr. Ravikiran Annaswamy, CEO and Co-Founder at Numocity Technologies, Bengaluru.
4. Dr. Valentina Balas, University of Arad, Romania, Topic- Process Optimization.
5. Dr. Ketan Kotecha, Director, Symbiosis Institute of Technology, Pune, Topic- Research directions in deep learning

## Special Tracks

The two special tracks were packed with excellent topics and speakers.

1. “Ideate, Innovate, and Start-Up” in association with Symbiosis Centre for Entrepreneurship and Innovation, Pune, JCAME (Joint Chapter on Antennas, Microwave Theory & Techniques, EMI, IEEE Pune Section) and TEMS Pune with a Focus on Problem Solving, Business Model, Start-up ecosystem.

The track provided a platform to introduce to the audience the journey of an idea to market and various stages of start-up and new venture creation.

2. “Industry Forum” associated with Industry Relations, IEEE Pune Section, and IEEE TEMS Pune Section. With a Focus: Leadership, Talent and Technology, Research and Development.

The track provided an opportunity to Industry experts to introduce to the audience the journey of an idea to market and various stages of start-up and new venture creation.

## Conference Paper submission, review and acceptance of articles for publication

A conference management system from Microsoft Research was used for author communication, paper submission, and review process. (<https://cmt3.research.microsoft.com/TEMSMET2021/>). The first call for paper was announce from June 1, 2021. The last date for submission of paper was September 30, 2021. Best paper and honourable mention awards were announced for each track. Also Best paper and honourable mention awards were announced for the conference.

Table 1 lists the number of papers received track wise.

Table 1: TEMSMET 2021 Conference Paper Details

Track No.	No. of Papers Received	Track No.	No. of Papers Received
Track 1	128	Track 4	55
Track 2	19	Withdrawn	39
Track 3	13	Total Papers	254

A three-phase review process was adopted for the quality review process. Initial conference scope, similarity checks were done in phase 1. In the second phase papers were assigned to reviewers and a minimum of two reviews were ensured for each paper. These reviews were further augmented in the third phase by meta reviews representing both IEEE TEMS and SICSr TPC team. A total of 200 reviewers were communicated for the process. 90 plus reviewers actively participated in the review process.

Out of the total 260 papers, 50 were accepted. The details are as follows

- Total Papers Submitted - 254
- Withdrawn Papers - 39
- Total Accepted - 47
- Total Registered for conference - 39
- Ratio of paper received to accepted - 19%

Authors belonging to India, China, Bangladesh, Sri Lanka and Thailand presented their papers. Also the selected authors represented their organizations like, academia (IITs, Symbiosis, BITS, VIT, etc), Industries (Nvidia, IBM etc) and Government organizations (CSIR).

### **Conference Sponsors**

IEEE Technology Engineering Management Society (TEMS) and Symbiosis Institute of Computer Studies and Research (SICSr), Symbiosis International (Deemed University), Pune co-hosted the conference. The following entities partnered us in various capacities .

- Technical and Marketing Sponsor- IEEE Pune Section and IEEE TEMS Chapter IEEE Pune Section.
- Special Track 1-Ideate Innovate, Start-up - IEEE TEMS Pune, Joint Chapter on Antennas, Microwave Theory & Techniques, EMI (ICAME), IEEE Pune Section and Symbiosis Centre for Entrepreneurship and Innovation, Pune
- Special Track 2-Industry Forum- IEEE TEMS Pune and IEEE Pune Industry Relations
- Best paper Award Trophies- Rubiscape Pvt.Ltd., Pune

### **Conference Attendance and Feedback**

The conference has presence of 77 registered delegates. The conference Tutorials and special tracks were of importance to students and professionals. Based on the interest the students, IEEE Members from section and TEMS joined in making use of the virtual platform and take benefit. Day wise/ session wise attendees were captured using meeting link platform. Table 2 describes the number of attendees who took the benefit of three days of the conference.

Table 2 - Number of attendees Day wise

	Day -1	Day-2				Day-3		
	Tutorial	Inauguration	Special Track 1	Paper Presentation (Pre Lunch)	Paper Presentation (Post Lunch)	Special Track2	Paper Presentation (Pre Lunch)	Paper Presentation (Pre Lunch)
Count	211	281	93	29	50	117	38	30

Conference attendees found the sessions useful. A sample feedback as shown in Figure below.

Please rate on the given Keynote Speakers

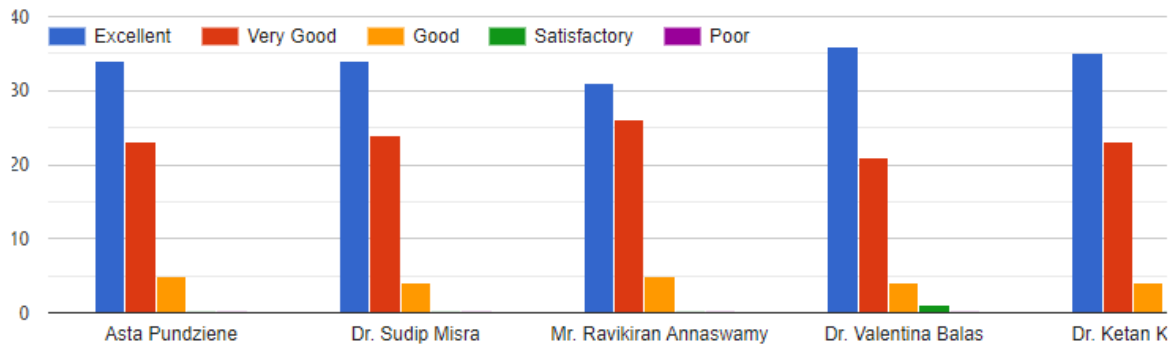


Figure 1: Keynote Speakers

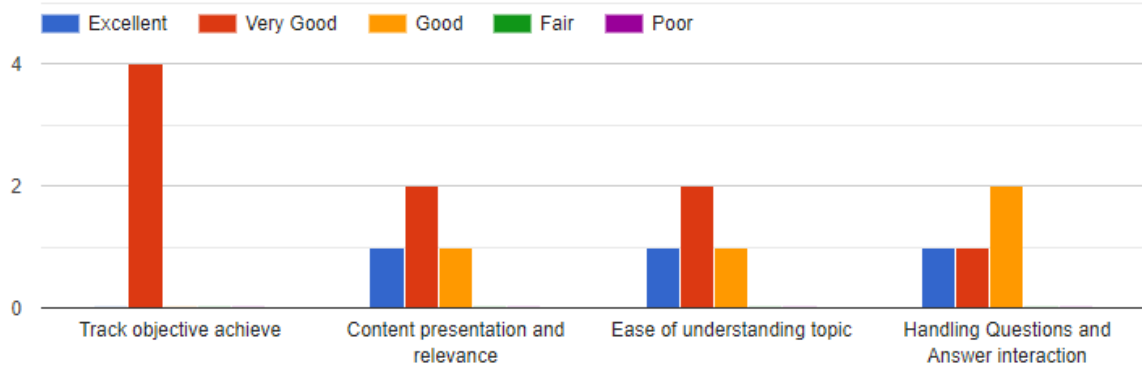


Figure 2: Speakers under Special Track

## Acknowledgements

The conference committee would like to put on record the support received from both IEEE TEMS, SICSr teams and would like thank all the committee members, IEEE professional and student volunteers for their **unconditional support. Heartfelt thanks to all of them.**

## Report on Day 1 - PRE-TEMSMET Tutorials

Day, Date and Time: Wednesday, December 1, 2021 (9:00 AM (IST) - 6:30 PM (IST))

Session Title: PRE-TEMSMET Tutorials

The PRE-TEMSMET Tutorials were conducted in collaboration with IEEE Technology and Engineering Management Society (TEMS) and IEEE Pune Section. The proceedings were held in a Virtual mode. There were 3 tutorials in total. The sessions were conducted by the following speakers.

1. Dr. Chitra Dhawale, Professor, Department of Computer Engineering, P.R.Pote College of Engineering and Management, Amravati: - Convolution Neural Network in Deep Learning Using Python
2. Dr. Mayuri Mehta, Professor, Department of Computer Engineering, Sarvajani College of Engineering & Technology, Surat: - Explainable AI in Healthcare: Current Trends and Future Scope
3. Dr. Mandaar B. Pande, Professor at Symbiosis Centre for Information Technology (SCIT), Pune: - Quantum Computing and its Overarching Impact on Various Research and Industry Domains

Number of Attendees: - 211

Following are brief deliberations of all the sessions.

Dr. Chitra Dhawale starts with the biological Neural Network where she gives knowledge to us about the dendrites and informs us about the artificial neural network. She explained about Perception which is an Artificial Neuron Model. She informed us about single layer and multi-layer ANN Models. We went through the differences between Artificial learning, Machine learning and deep learning. She then briefed us about Convolution Neural Network (CNN) and its solution. A CNN is a neural network with some convolution layers. Finally, she taught us about Convolutional Layers and Convolutional neural network layers.

Dr. Mayuri Mehta started her session by giving a brief overview of Artificial Intelligence, Machine Learning, and Deep Learning along with real-life examples. She discussed AI and IOT in healthcare and its application. We then went to AI techniques that are used to analyze clinical data that reduces time and cost and uses resources efficiently. She then showed us her team's research work on AI in healthcare. The first case study was based on computer-aided dry eye disease detection using deep learning. The Second Case was based on leukemia detection and classification. The next topic of the session was the threats of AI in healthcare

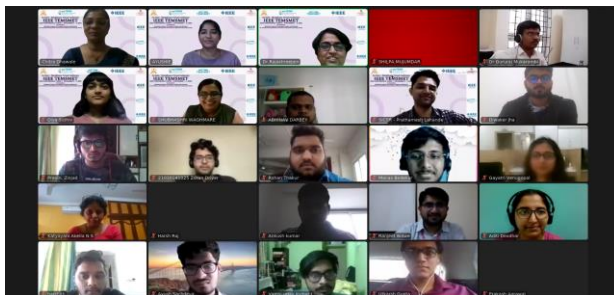


such as errors and injuries, data availability, privacy concerns, bias, and inequality. She ended with briefing about the challenges and future opportunities of AI.

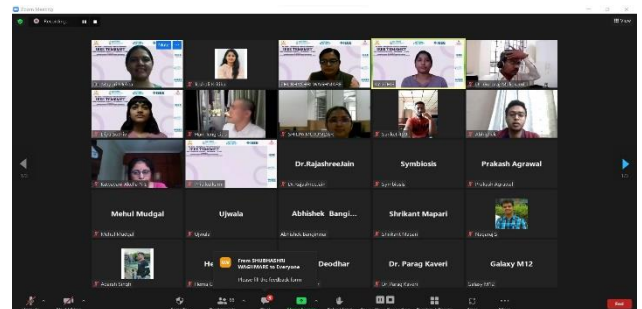
Dr. Mandaar B. Pande started with quantum technology 1.0 and 2.0 and how it revolutionizes the technological field and helps to solve the world's challenges. He further questions about digital communication to the audience and the types that could be talked about in relevance to internet communication and also narrates a story of the space shuttle named challenger. He also talks about problems and how quantum computing enables us to question everything so far. He also briefs about the NISQ (Noisy Intermediate Scale Quantum) Era. He explains Moore's Law using a graphical representation that predicts that the transistors will double every 24 months to build up the foundation of the audience. He finally shows Anaconda Jupyter software to show Qiskit modules and packages.

Every Tutorial Speaker was given a Virtual Memento as a token of gratitude for their wonderful speeches.

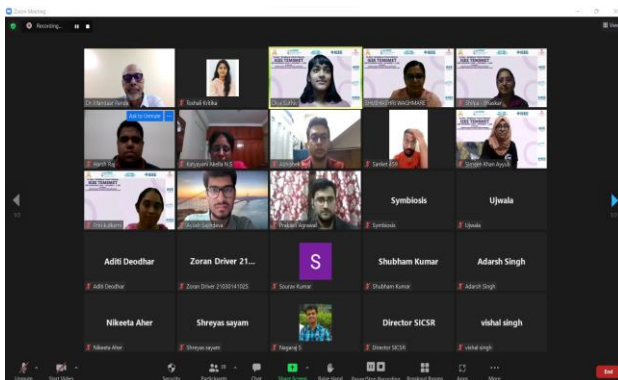
### Gallery - PRE-TEMSMET Tutorials Screenshots



Tutorial 1

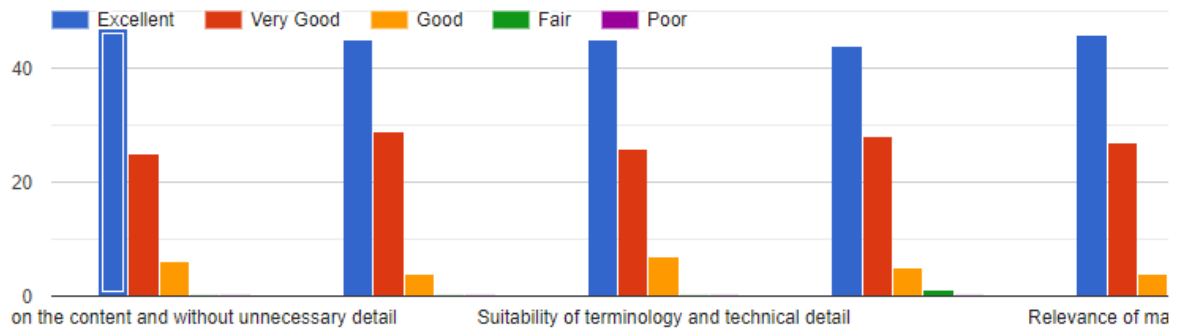


Tutorial 2



Tutorial 3

Please rate on the given parameters



### Sample Feedback – Tutorial 1

## Report on Day 2 - Inauguration

**Day and Date: Thursday, December 2, 2021**

**Time: 09:30 AM - 11:30 AM (IST)**

### Session Title: Inaugural Session

The inaugural session was held on December 2, 2021. The anchor for the event, Ms. Gayatri Venugopal, Assistant Professor, Symbiosis Institute of Computer Studies and Research, Symbiosis International (Deemed University), welcomed the participants and esteemed dignitaries. This was followed by a virtual lamp lighting ceremony.

Prof. Dr. Jatinder Kumar R. Saini, General Chair, 2021 IEEE Second International Conference on TEMSMET spoke about the conference and also about IEEE as being the largest technology-oriented organization, and how Pune city has grown as an IT hub. Dr. Saini also mentioned that Symbiosis Institute of Computer Studies and Research completed 37 years since its foundation.

Prof. Dr. Dhanya Pramod, Dean, Faculty of Computer Studies, Symbiosis International (Deemed University), spoke about the latest trends in technology. Dr. Pramod also spoke about TEMSMET and how the conference would help in strengthening the connection between entrepreneurship and technology.

Mr. Girish Khilari, Chair, IEEE Pune section, spoke about the social impact of TEMSMET, and how TEMS will bring all these areas together. Mr. Khilari spoke about the establishment of the IEEE Pune Section and the various activities carried as part of this initiative.

Honourable Dr. Vidya Yeravdekar, Pro-Chancellor, Symbiosis International (Deemed University), spoke about the impact of technology on humanity. She emphasised on the importance of the societal application of concepts taught to students. She also spoke about keeping this aspect in mind while designing the curriculum.

Dr. Sudeendra Joushik, Vice President IEEE TEMS Conference-Global, mentioned that the engineering R&D work is increasing globally. He spoke about the benefits of technology, and invited all the attendees to volunteer with IEEE TEMS.

Mr. Andy Chen, President-Global IEEE TEMS, 2020-2021, emphasised the need for new-age marketing and engagement to connect global customers, and to promote innovation and creativity. Mr. Chen spoke about IEEE TEMS and its global impact through various activities.

Dr. Shrikant Tangade, General Chair, 2021 IEEE Second International Conference on TEMSMET, mentioned that the conference received 260 papers, which was 100 more than the papers received by the first edition of the conference. He mentioned that out of these, 50 papers were accepted.

Honourable Dr. S.B. Mujumdar, Chancellor, Symbiosis International (Deemed University), stated that he was delighted that Symbiosis Institute of Computer Studies and Research was hosting this conference. Dr. Mujumdar congratulated Dr. Saini and Mr. Girish Khilari for the collaboration with IEEE, and shared his thoughts that aligned with the concept of the world being one family.

Chief guest, Dr. Yogesh Kulkarni, Executive Director, Vigyan Ashram, spoke about his village, Pabal, his institute Vigyanashram, which is a school that trains students and helps them

become entrepreneurs. He explained various activities held at the institute that promote societal impact.

IEEE TEMS India has instituted the prestigious award “Engineering Manager of the Year” **Engineer Manager of The Year (EMOTY)2021 Awards** were bestowed

**Award Winner: Dr Vinod Karar**, Chief Scientist at CSIR-Central Scientific Instruments Organisation, Chandigarh.

**Award Runner: Mr. Ishant Jain**, Head, NPD and Analytics, Raychem innovation center, Raychem RPG Pvt Ltd.

The awarded were felicitated with a plaque, citation during TEMSMET 2021 Inauguration. Dr.Sudeendra Koushik did the honours as IEEE TEMS India Chair.

Prof. Dr. Rajashree Jain, General Co-Chair, 2021 IEEE Second International Conference on TEMSMET, concluded the inaugural ceremony and delivered the vote of thanks. Dr. Jain expressed her gratitude to the esteemed dignitaries who graced the occasion with their presence. She also thanked all the committee members, authors and participants for making this conference a success.

### Gallery of the Inaugural Ceremony



Dr. S.B. Mujumdar



Dr. Yogesh Kulkarni



Dr. Vidya Yerawdekar





Dr. Jatinderkumar R. Saini



Mr. Girish Khilari



Dr. Rajashree Ja



Mr. Andy Chen



Dr. Sundindhra Kaushik



Dr. Dhanya Pramod



## Report on Day 2 – Special Track 1 - IDEATE, INNOVATE, START UP

Type: - Conference Special Track

Name of Track: - IDEATE, INNOVATE, START UP

Day and Date: - Thursday, December 2, 2021,

Time: - 2.00PM-5.00PM (IST)

The Conference special Track was conducted in collaboration with IEEE Technology and Engineering Management Society (TEMS) , IEEE Pune section , Symbiosis Centre for Entrepreneurship and Innovation, Pune and Joint Chapter on Antennas, Microwave Theory & Techniques, EMI, IEEE Pune Section. The proceedings of the track were held in a Virtual mode. The focus of the track was on Problem Solving, Business Model and Startup Ecosystem.

The session chairs for the track were,

Session Chair -Dr. Rajashree Jain, Professor, Symbiosis Institute of Computer Studies and Research, Pune and

Session Chair - Mr. Shrini Kulkarni, Vice Chair, IEEE TEMS Pune, Partner, Atomium Consulting, Pune

The session began with welcome and goal setting for the three hours by Dr. Rajashree Jain. It was then followed by sessions on the three focus areas by the following speakers.

### Problem Solving

Problem solving and value creation

Mr. Shrini Kulkarni, Vice Chair, IEEE TEMS Pune, Partner, Atomium Consulting, Pune

### Innovation By Design

Dr. Sudeendra Koushik, Innovation Director & Head of CampX Volvo Group, Bengaluru  
Design Thinking : -

Mr. Ismail Akbani, Head, Innovations and Linkages, Symbiosis Centre for Entrepreneurship and Innovation, Pune

### Business Model

Idea to Market : -

Dr. K. P. Ray, Professor, Defense Institute of Advanced Technology, Pune

### Business Model

Mr. Ayan Kumar Bandyopadhyay, Engagement Director - Academics & Quality at Talentedge Academy, Mumbai

Intellectual Property Creation: Why, What, and How?

Dr. Amit Kumar Tiwari, Professor and Head - Intellectual Property, Symbiosis International (Deemed University), Pune

Start Up Ecosystem

Incubators and Accelerators

Dr. Arvind Shaligram, CEO, Savitribai Phule Pune University Research Park, Pune

Startup Ecosystem

Dr. Yogesh Brahmarkar, CEO, Symbiosis Technology Business Incubator (SCEI), Pune

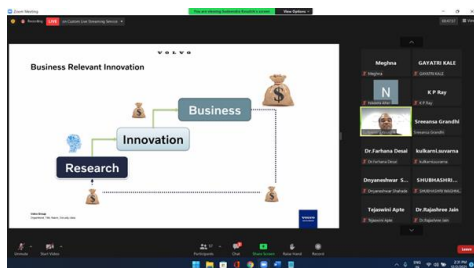
Number of Attendees: - 93

Following are brief deliberations of all the sessions



Mr. Shrini Kulkarni

Mr. Shrini Kulkarni starts the session by talking about the Life Cycle of Ideation to Market. He talks about Problem Solving, Challenging the problem, how we can eliminate the problem that can become irrelevant, and the Challenge in Problem Solving. How to craft the solution- new technology- solution when scaled up will deliver value. The concerns of Stakeholders

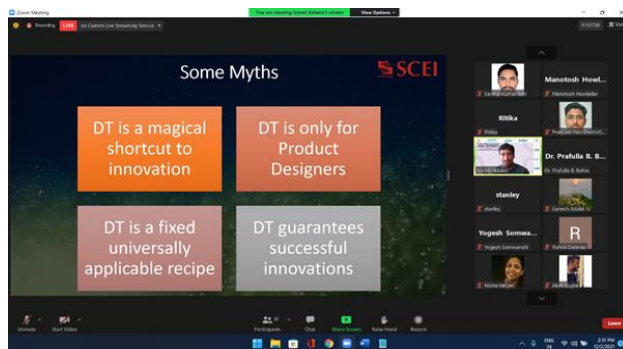


Dr. Sudeendra Koushik



Dr. Sudeendra Koushik talks about converting money into knowledge. Innovation Converts Knowledge into Money. He questions whether problems in the present are valuable problems or not. Context of the problem is necessary. He says that technology isn't innovation. The uses of Technology can be called innovation. He talks about Innovation as not right or wrong. He ends with the point being that Customers buy emotionally, not rationally.

Mr. Ismail Akbani spoke on the topic Satellite View of Design Thinking. "Data may be the new oil but human beings aren't". He busted some misconceptions of design thinking. He shared double diamond method of design thinking- The process should be Ideate ----> Prototype -----> Test. He also mentions, innovators should fall in love with problems, not solutions.



Dr. Amit Tiwari

Dr. Amit Tiwari spoke about He talked about a fascinating topic, intellectual property. Intellectual property is mapping, but a creation of mind ideas, what you are getting in your mind and you're converting those ideas into a product or a process. That is nothing but intellectual property. He shared important aspects of IPs and their impact on or socio-economic development. IPRs encourages creativity. IPRs attract royalties. They give you a monopoly on certain parts of specific processes.

Why Patinformatics... Why Patent Analytics.... Why Patent Intel

- ✓ Patent landscaping : State-of-the-art searches
- ✓ Patent Trends and technology analysis
- ✓ Competitive Intelligence and Due Diligence
- ✓ Technology and Patent Mapping
- ✓ Technology Alerts and Patent Updates
- ✓ Gap Analysis or White Space Analysis
- ✓ Inventor, Applicant, Technology Tracking
- ✓ New Product / Process Identification
- ✓ Patent Portfolio Management and Human Resource Management in Research & Development
- ✓ Patent Valuation, Patent Licensing and Venture Evaluation
- ✓ Potential Business Acquisition / Merger etc.

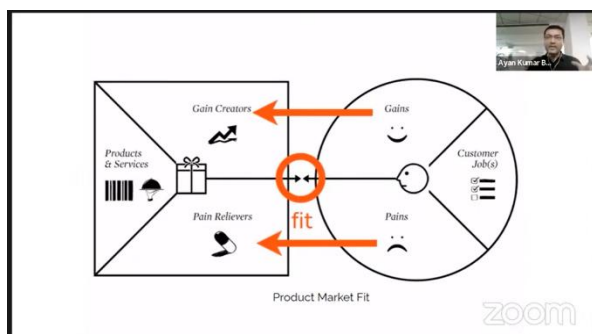
Thursday, December 3, 2021

zoom

Mr. Ayan Kumar Bandyopadhyay

Mr. Ayan Kumar Bandyopadhyay the engagement director- Academics & Quality at Talent edge Academy, Mumbai spoke about Business Model, A tool for Customer Inspired. Innovation Design, Test, Build and Manage great Customer Experiences. He gave insights on 9 blocks of Business Canvas the key partner, Key Activity, Value Proposition, Customer Relationships, Customer Segments, Key Resources, Channels, Cost Structure, Revenue Streams. The Value Proposition is the fundamental of Business Canvas.

Dr. K. P. Ray, Professor, Defense Institute of Advanced Technology, Pune. He shared the journey and challenges, how they brought ATULYA a high power Microwave based System to neutralize COVID-19 in a short time as concept to commercialization. He also shared the impact in sharing the design knowledge transfer to private players in the areas and success story of public and private partnerships.



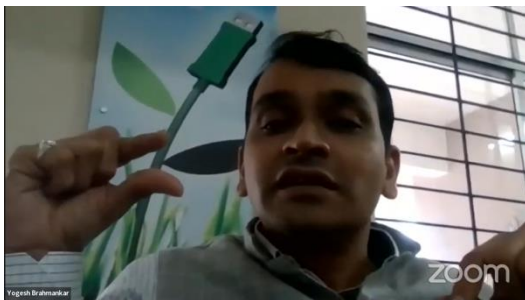
Dr. K. P. Ray



Dr. Arvind Shaligram, CEO, Savitribai Phule Pune University Research Park, Pune shared his expertise with the delegates, on the topic, regarding Incubators and Accelerators.



Dr. Arvind Shaligram



Mr. Yogesh Brahmkar

Mr. Yogesh Brahmkar, CEO, Symbiosis Technology Business Incubator (SCEI), Pune Spoke on Startup Ecosystem. Collaborations, E cells on campus, combination of innovation and technology, creating intrapreneurial mind set are need to encourage start up ecosystem. Third collaboration with Micro, Small, and Medium Enterprises because of this is to e-sail students they go and do the internships they learn. They do internships in startups or small and medium enterprises, and with big industries, they might give you problems statements. He concluded with this.

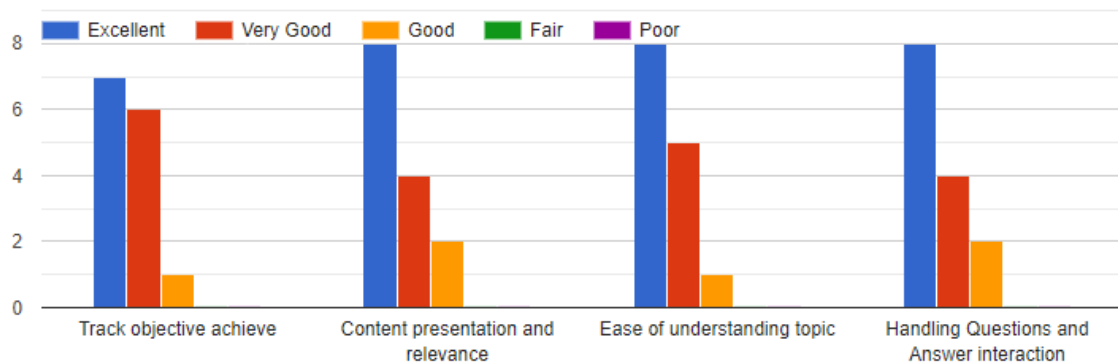
In the end, Mr. Srini Kulkarni answered some participants' questions, appreciated speakers for their valuable speeches, and thanked everyone for participating in this auspicious event. Dr. Rajashree Jain appreciated the speakers for their valuable speeches and thanked everyone for participating in the track deliberations.

Feedback: -



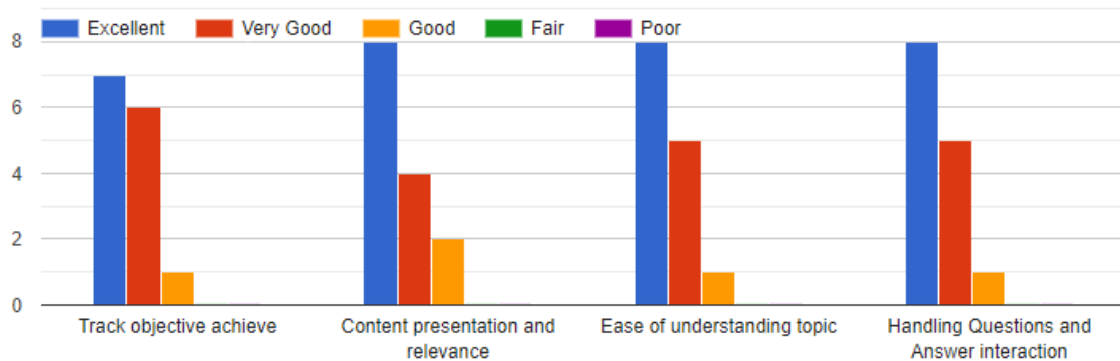
Feedback: Conference special track: Ideate, Innovate, and Start-up

Innovation By Design by Dr. Sudheendra Kaushik



Dr. Sudheendra Kaushik

### Startup Ecosystem by Dr. Yogesh Brahmkar



Dr. Yogesh Brahmkar

### Report on Keynote Sessions

Day, Date and Time:

Thursday, December 2, 2021 (11:00 AM - 12:00 noon IST)

Friday, December 3, 2021 (11:30 AM - 12:30 PM IST and 2:30 PM - 3:15 PM IST )

Session Title: Keynote Sessions

The Keynote Sessions were conducted in collaboration with IEEE Technology and Engineering Management Society (TEMS) and IEEE Pune Section. The proceedings were held in a Virtual mode. The 5 Keynotes were spread over 2 days with 2 happening on the 2nd of December and the rest on the 3rd of December. All the Keynotes were anchored by Mr. Prathamesh Lahande. It was then followed by sessions by the following speakers.

Ms. Asta Pundziene, Kaunas University of Technology, Lithuania, University of California, Berkeley, Haas School of Business: - Value Impedance and Dynamic Capabilities: The Case of MedTech Incumbent-born Digital Healthcare Platform

Dr. Sudip Misra, Professor, Department of Computer Science and Engineering, IIT Kharagpur, WB, India: - Internet of Things: Present and Future

Mr. Ravikiran Annaswamy, CEO and Co-Founder at Numocity Technologies, Bengaluru : - Technology Product Management

Dr. Valentina Balas, University of Arad, Romania: - Process Optimization

Dr. Ketan Kotecha, Director, Symbiosis Institute of Technology, Pune: - Research directions in deep learning

Number of Attendees: -281 (Keynote 1 and 2) and 117 (Keynote 3, 4 and 5)

Following are brief deliberations of all the sessions.

Ms. Asta Pundziene started speaking about Digital Platforms which she said is a generalized topic. Digital Platforms are infrastructures that provide a combination of design and governance rules to facilitate interactions between multiple users. She also explained her research aim and research gap. She briefed us about incumbent companies i.e. those companies that operated in the industry before disruptive companies came into play. She went on to give a brief about Value Impedance.

Dr. Sudip Mishra began by telling that IoT is pervasive and popular in terms of tech and research. The potential is such that after more than a decade and a half of IoT research, there is a lot of research left. IoT is a technology that has been pervasive in our digital lives. Smart cities were identified. He then began talking about smart cities. IoT is everything that defines smart. For the last couple of years, Mr. Mishra has researched IoT and has had a lot of success. He then talked about IEEE Industry 4.0 and Industry 5.0. The way we are transforming ourselves defines our success. If we are going for anything, we are experiencing IoT.

Mr. Ravikiran Annaswamy introduced himself by saying two words which he often uses, Technology and Product Management, as a topic of interest in India and that Technology Product Management also has a courier at which everybody is looking at it. For being an entrepreneur, he says you must be an idea champion, know how to handle profit and losses, and manage relationships with your partners in your business with enough capability to make the supply chain non-stoppable. He says a product should be a budget product which means an affordable one so that everybody could use it and it would expand your profit from customer dependence later in the market.

Dr. Valentina Balas began her talk by saying that money can be earned through using marketing, entrepreneurship, and talent. She said that she has observed that in India people are money-oriented. She explained generalities and optimization. She defined what optimization is characterized as and the activities involved to find the best. Linear programming, quadratic programming, nonlinear programming. She talked about Renewable Energy and the Greenhouse that we imagine and model. We optimize all parameters. She showed images where a specific red line was having an external temperature in the House. Cyber greenhouse effect on the top of the mountain can be seen.

Dr. Ketan Kotecha starts the session on the topic Research direction in deep learning. Opportunity in Artificial Intelligence. He talks about various challenges: To combine various

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## Keynote Sessions : Day 2



## Keynote Speakers Sessions : Day 2

## Report on Day 3 -Special Track2- Industry Forum

**Type: - Conference Special Track**

**Name of Track: - Industry Forum**

**Day and Date: - Friday, December 3, 2021**

**Time: - 9:00 AM - 1:00 PM (IST)**

The Conference special Track was conducted in collaboration with IEEE Technology and Engineering Management Society (TEMS), IEEE TEMS Pune Section and Industry Relations IEEE Pune Section. The proceedings of the track were held in a Virtual mode. The focus of the track was on Leadership, Talent and Technology, and Research and Development.

The session chairs for the track were:

Dr. Neha Sharma, Secretary, IEEE Pune Section

Mr. Prashant Joshi, Founder director, Leap n Scale, Pune

We began the sessions with the following speakers enlightening us with their speeches.

Mr. Prashant Joshi, Founder director, Leap n Scale, Pune: - Opening Remarks & TEMS Objectives

Thomas Coughlin, President Coughlin Associates, California: - Future Workforce

Eduardo Ahumada-Tello, Professor, Researcher at Universidad Autónoma de Baja California, California: - Subjective well-being and competitiveness in knowledge-based firms

Biswajit Mohapatra, Partner- IBM, Pune: - Leadership

Dr. Prashant Pansare, CEO, Intelliment, Pune: - Emerging technologies are the need of the hour

Dr. Simone Paymaster, Head, Corporate HR, Talent Management, (Transformation), Tata Consultancy Services, Mumbai: - Industrial Talent Management

There was even a Panel Discussion on Importance and Impact of Diversity in Industry. The Panel Moderator was Mrs. Sudheshna Choudhury, TCS Kolkata. The Panelists were: -

Savita Kulkarni, Tata Consultancy Services, Pune

Sujata Chandran, Tata Consultancy Services, Pune

Girish Khilari, Chairman, IEEE Pune Section

Jitendra Tanna, Founder and President, Eternus Solutions Pvt. Ltd., Pune

Number of Attendees: - 117

Following are brief deliberations of all the sessions.

Mr. Prashant Joshi talked about IEEE and how it aided in exchanging ideas globally, being a global organization. TEMS additionally helped in providing a focus on Management and Leadership. The speaker then further discussed the need and importance of collaboration which led to social networking, connection, and exchanging ideas. The importance of transformation was also highlighted, making sure that the young minds can take their career forward.

Mr. Thomas Coughlin talked about the Future Workforce with the help of global research and surveys that collected data and helped understand the mindset of a working individual. There were mentions of changes like Digital Transformation, which was the need in this scenario, and how people from different parts of the world were adapting to work from home trends. The demand and supply chains were also highlighted, along with climate issues like global warming and the impact on healthcare systems in the current scenario.

Prof. Eduardo Ahumada-Tello elaborated on the parameters of happiness and subjective well-being in an organization. The talk emphasized the evolution of manufacturing in today's generation and the digital and industrial trends in the 21st century, like Automation, the Internet of Things, 3D Printing, Cloud data storage, and renewable energy. How machines and AI helped in manufacturing was also discussed, and the importance of soft skills like critical thinking, management, creativity in today's industrial scenario was discussed.

Mr. Biswajit Mohapatra talked about the importance of cloud and digital technologies from a business perspective. The importance of cloud data storage was discussed along with an emphasis on data security as well. The talk extensively covered the digital trends in current scenarios and the need to adapt to them. Parameters like employee empowerment, personalized experience, business continuity were explored, and sustainable growth and its importance in society.

Dr. Prahsant Pansare highlighted the importance of leveraging data analytics in today's digital scenario. Essential techniques to build Machine Learning models for prediction, forecasting, and text mining of data were elaborated. Highly secure and scalable solutions were extensively discussed, and concepts like Recommendation engine, cross-sells, and up-sells were explained using these new software algorithms. The importance of cloud and Artificial Intelligence was also discussed.

Dr. Simone Paymaster discussed global talent management and its importance in an organization. New trends like flexible work schedule, hybrid workplace, remote working were elaborated upon, along with the importance given to Innovation, Digital Transformation, and training. Parameters like mental health and stress on employees were also discussed and how

necessary motivation and mindset are essential in today's scenario. Mentoring and coaching were also considered necessary for talent management.

After this, the Panel Discussion took place which began with Mrs. Savita Kulkarni talking about Diversity and its impact on gender expression. She said that we should not talk about only males and females. Studies show that 70% shows perceived effect when it is homogenous. Senior members bring stability and it really benefits the organization. She also spoke about Control to empower, Transparency in communication and having a positive mindset.

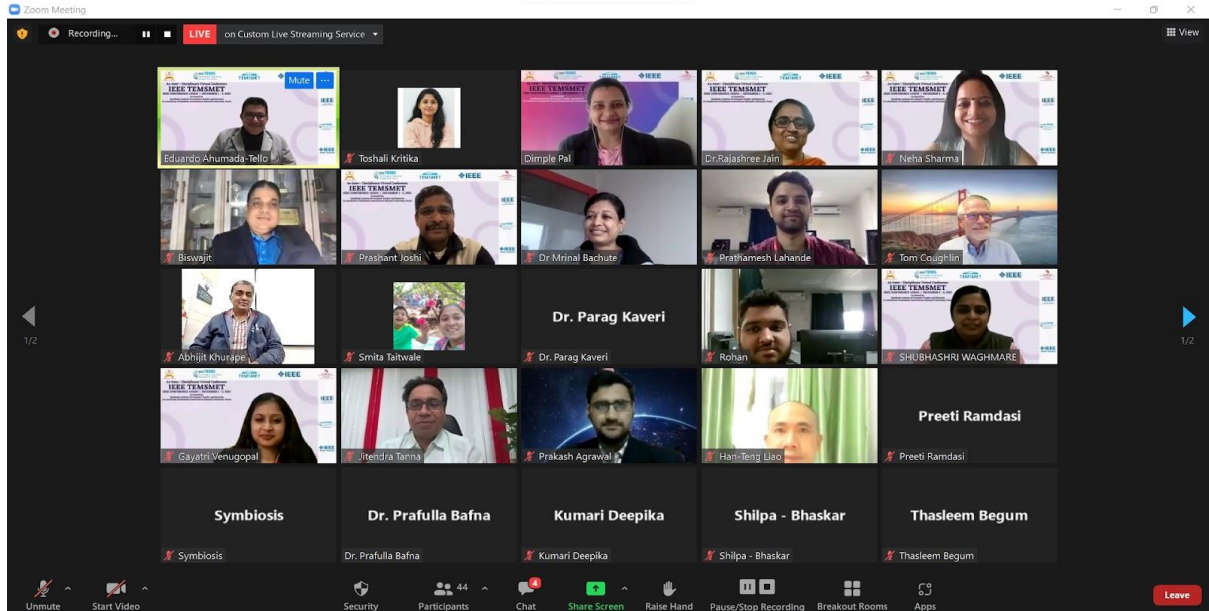
Mr. Jitendra Tanna spoke about Diversity and inclusivity, considering everyone equal. According to the data of June 2021, out of 500 fortune companies, 8% of CEOs are female, including a lot of people from different regions. He said that there is a sense of belongingness within the work culture including all at the authority level. Mr. Girish Khilari spoke about how Science technology is a fundamental unit, how technology is advancing towards humanity. He briefed that IEEE has no tolerance for discrimination, racism. It sticks to provide a secure environment. Its companies look for world-class products.

Mrs. Sujata Chandran asks us How do outcomes change when we move towards better progress? She talks about how Inclusivity becomes a positive impact. She said that TCS becomes the first organization to include same-sex partners. She also mentioned the Network of diversified communities where everybody interacts with each other and creates a good workplace environment. Mrs. Sudeshna Choudhury talks about how women were doing in the science industry 75 years back. In past years, the percentage of girls included in education was very low and now it is high.

Mrs. Laxmi Subramanian shared the six traits of an inclusive leader which are Element of curiosity, Cognizance of bias, Cultural intelligence, Collaboration across the globe, Commitment toward the goal of the organization, The courage to take action. She also shared three perspectives which are Real problems, Real numbers you are trying for & Real consequences. She also said that we should create a culture of inclusion, identify the makeup of your own organization and look at diversifying source channels. Diversity and inclusion can only become successful when leaders begin it.

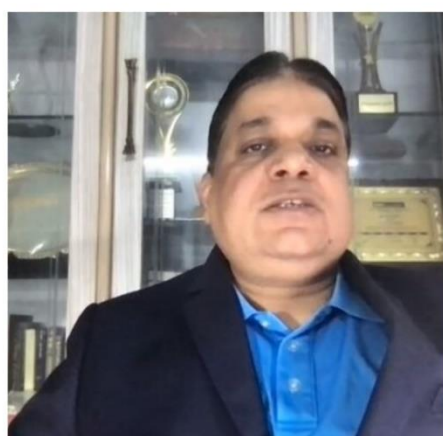
Every speaker was given a Virtual Memento at the end, as a token of gratitude for their wonderful speeches.

## Gallery - Industry Forum



Screenshot during the conference

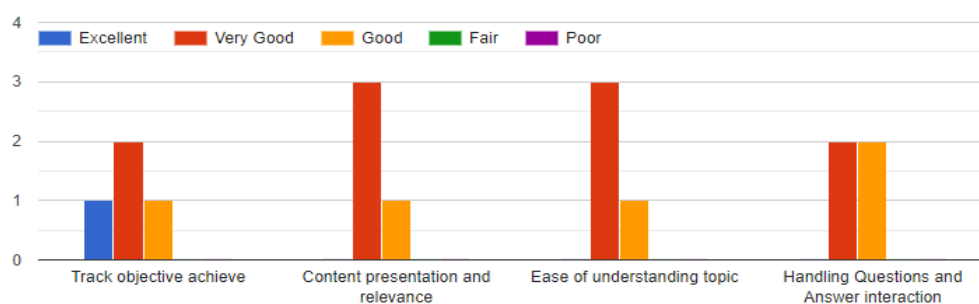




Keynote Speakers : Day 3

## Feedback: -

Subjective well-being and competitiveness in knowledge based firms by Eduardo Ahumada-Tello



## Paper Presentations (Sessions: 06, Total paper presented: 39)

**Day 2: Thursday, 2<sup>nd</sup> December 2021**

**Paper Presentations: 12:00 PM (IST) - 1:30 PM (IST)**

Session – I- Number of paper presented: 07 Session – II- Number of paper presented: 06

Time (IST)	Details	Presented by: Author(s)
Session – I (12:00 PM - 1:30 PM) (Parallel Session)	<b>Track 1:</b> Applications of Technology and Engineering <b>Session Chairs:</b> Dr. Devanathan M., Reva University, Bengaluru Dr. Sachin Naik, Symbiosis Institute of Computer Studies and Research, Pune	
12:00 PM - 12:15 PM	<b>ID 138-T1:</b> Predictive Analysis for calculation of crop yield using Datamining and Machine Learning Abhishek Madiwale, Sahil Tekale, Ramkrishn Vadali	Abhishek Madiwale
12:15 PM - 12:30 PM	<b>ID 154-T1:</b> Reviewing System using Exploratory Data Analysis and Ensemble Machine Learning Algorithms Ayan Banerjee, Tapan Chowdhury	Ayan Banerjee
12:30 PM - 12:45 PM	<b>ID 156-T1:</b> Masked Deep Face Recognition using ArcFace and Ensemble Learning Arun Kumar R., V. Anoosh Solayappan, Sree Sharmila T., Ram Prasad K.	Arun Kumar R., V. Anoosh Solayappan
12:45 PM - 1:00 PM	<b>ID 162-T1:</b> Expert System for Dengue Fever Prediction (ESDFP) Arpita Nath Boruah, Saroj Kr. Biswas, Pranjal Baishya, Dileep Chowdary Ealapollu	Arpita Nath Boruah
1:00 PM - 1:15 PM	<b>ID 165-T1:</b> Speech Enhancement Using Hybrid Model with Cochleagram Speech Feature Samba Raju Chiluveru, Manoj Tripathy	Samba Raju Chiluveru
1:15 PM - 1:30 PM	<b>ID 252-T1:</b> Correlative Analysis of Combined Machine Learning Classifiers on Anomaly-based Intrusion Detection Systems Vamsi Udayakumar J., Siddhartha Roy, Prasad B. Honnavali	Vamsi Udayakumar J., Siddhartha Roy
1:30 PM – 1:45 PM	<b>ID 184-T1:</b> Multi-objective optimal siting and location of multiple DGs in distribution network using Biogeography Based Optimization (BBO) Madhu Valavala	Madhu Valavala
Session – II (12:00 PM - 1:30 PM)	<b>Track 1:</b> Applications of Technology and Engineering <b>Session Chairs:</b> Dr. Rakesh Deore, Dr P R Ghogrey Science College, NMU, Dhule (India)	<b>Presented by: Author(s)</b>



(Parallel Session)	Dr. Parag Kaveri, Symbiosis Institute of Computer Studies and Research, Pune	
12:00 PM - 12:15 PM	<b>ID 55-T1:</b> IoT-based Control System for Home Automation A. Sai Abhishek, Megha Bhasker, Abraham Sudharson Ponraj	A. Sai Abhishek
12:15 PM - 12:30 PM	<b>ID 114-T1:</b> XipCOIN: A Proposal for Decentralized Offline Payments using Ethereum. Arun Tanksali	Arun Tanksali
12:30 PM - 12:45 PM	<b>ID 142-T1:</b> Solar Energy System for Indoor Plant Applications using SunFlower Technology M.Arun kumar, Nagarjuna Telagam, Sricharan M. Chavala, Krishna Prasad	Nagarjuna Telagam
12:45 PM - 1:00 PM	<b>ID 197-T1:</b> Optimization of the Energy Generation of Distributed Energy Sources Using Energy Management of Smart PV Inverters Kushan Tharuka Lulbadda, Udayanga Hemapala	Kushan Tharuka Lulbadda
1:00 PM - 1:15 PM	<b>ID 245-T1:</b> Quality of Service based and Energy Efficient Routing Algorithm in Wireless Sensor Networks Sachin B. Takale, Shashikant D. Lokhande	Sachin B. Takale
1:15 PM - 1:30 PM	<b>ID 139-T1:</b> Design and PCR calculation of Triangular Ring Resonator (TRR) metamaterial for wide range of applications Smrity Dwivedi	Smrity Dwivedi

## Day 2: Thursday, 2<sup>nd</sup> December 2021

**Paper Presentations:** 2:30 PM (IST) – 4:00 PM (IST)

Session – III- Number of paper presented: 06

Session-IV - Number of paper presented:

07

Time (IST)	Details	
Session – III (2:30 PM - 4:00 PM) (Parallel Session)	<b>Track 4:</b> Special Track for Women in Engineering (5 papers) and <b>Track 1:</b> Applications of Technology and Engineering (2 Papers) <b>Session Chairs:</b> Dr. Amar Buchade, Pune Institute of Computer Technology, Pune Dr. Sarika Sharma, Symbiosis Institute of Computer Studies and Research, Pune	<b>Presented by: Author(s)</b>
2:30 PM - 2:45 PM	<b>ID 144-T4:</b> Performance Analysis of Hyperledger Fabric based Blockchain for Traceability in Food Supply Chain Ayushi Srivastava, Yash Desai, Kavya Dashora	Ayushi Srivastava
2:45 PM - 3:00 PM	<b>ID 172-T4:</b> Speaker Identification in Vehicular Environment using GMM and BiLSTM Indu S., Indu Subramanian, Aishwarya Ponni P., Akilandeshwari R., Kaavya S., P. Vijayalakshmi	Indu Subramanian
3:00 PM - 3:15 PM	<b>ID 170-T4:</b> Use of quantum cryptography environment for authentication in online banking transactions security Uma Pratap Madje, Mandaar B. Pande	Uma Pratap Madje
3:15 PM - 3:30 PM	<b>ID 20-T4:</b> Bearing Health Condition Monitoring using Time-Domain Acoustic Signal Features Taruv Harshita Priya, Brijeshkumar J. Shah, Sadanand S. Kulkarni, V.P.S. Naidu	Taruv Harshita Priya
3:30 PM - 3:45 PM	<b>ID 24-T4:</b> Multi source device policy management Anjali Tibrewal, Monica Singh	Anjali Tibrewal, Monica Singh
3:45 PM - 4:00 PM	<b>ID 118-T4:</b> From the Word-of-mouth to Social Impact: A Bibliometric Retrospection of Social Media Marketing Hui Liu, Han-Teng Liao	Hui Liu, Han-Teng Liao
Session - IV (2:30 PM - 4:00 PM) (Parallel Session)	<b>Track 1:</b> Applications of Technology and Engineering <b>Session Chairs:</b> Dr. Gururaj Mukarambi, Central University of Karnataka Dr. Priti Kulkarni, Symbiosis Institute of Computer Studies and Research, Pune	<b>Presented by: Author(s)</b>
2:30 PM - 2:45 PM	<b>ID 106-T1:</b> Context-based Email Ranking System for Enterprise Manas Bedekar, Aditi Deodhar, Kaustubh Sakhare	Manas Bedekar, Aditi Deodhar
2:45 PM - 3:00 PM	<b>ID 143-T1:</b> Utilizing an Integrated Feature Selection Technique in Ovarian Cancer to Solve Classification Problem Abdullah Al-Murad, Md. Foisal Hossain	Abdullah Al-Murad

3:00 PM - 3:15 PM	<b>ID 183-T1:</b> Real Time Health Monitoring and Oxygen Distribution System for COVID-19 patients using IoT. Aayush Gavande, Chinmay Mahagaonkar, Soham Pingat, Dr. Harmeet Kaur Khanuja	Aayush Gavande, Chinmay Mahagaonkar, Soham Pingat
3:15 PM - 3:30 PM	<b>ID 187-T1:</b> Pl-aaS: An Experimental Study of Computer Vision based Platooning as a Service Sanket Salvi, Pramod Jain, Sumeet Kumar, Sumeet Kumar S, Nithin D Jacob, Suhas M V, Shubham S, Harshitha T K	Sanket Salvi
3:30 PM - 3:45 PM	<b>ID 195-T1:</b> A Look into Entropy, Time Arrow, Black Hole, Universe, and Vedas: Conceptual Mathematical Models for Estimation of Entropy of the Present and Past Yugas (Ages, Epochs) Rai Sachindra Prasad	Rai Sachindra Prasad
3:45 PM - 4:00 PM	<b>ID 255-T1:</b> Multivariate Regression Analysis of Investments by Banks in Fossil Fuel Sectors to Predict Climate Change Consequences Khaleel Khan, Gokul Bisen, Prithwis Kumar De, Neha Sharma	Khaleel Khan
4:00 PM – 4:15 PM	<b>ID 262 T1:</b> Spatial Decision Support System for Impact Analysis of Soil Characteristics on Crop Production Using Geo-Spatial Technologies. Shoaib Patel, Nilesh Shinolikar, Vidya Patkar, T.P. Singh	Shoaib Patel

### Day 3: Friday, 3<sup>rd</sup> December 2021

**Paper Presentations:** 12:00 PM (IST) – 1:30 PM (IST)

Session – III- Number of paper presented: 06

Session-IV - Number of paper presented:

07

Time (IST)	Details	Presented by: Author(s)
Session - V (12:00 PM - 1:30 PM) (Parallel Session)	<b>Track 4: Special Track for Women in Engineering</b> <b>Session Chairs:</b> Dr. Jasleen Kaur, P P Savani University, Surat Dr. Shrikant Mapari, Symbiosis Institute of Computer Studies and Research, Pune	
12:00 PM - 12:15 PM	<b>ID 4-T4:</b> Predicting Service Availability in SOA-Based Systems: Service Dependency Tree (SDT) Swati Goel, Shakeel Ahama, Ratneshwer	Swati Goel
12:15 PM - 12:30 PM	<b>ID 104-T4:</b> Twitter Sentiment Analysis towards COVID-19 Vaccines: A Case Study in New York City Kotcharat Kitchat, Kitt Limjumroonrat, Thattapon Surasak	Kotcharat Kitchat
12:30 PM - 12:45 PM	<b>ID 132-T4:</b> A Novel Application of Neuromarketing for Designing User Interface Mockups to Enhance User Experience in Software Development Ivy Baroi, Suman De	Ivy Baroi
12:45 PM - 1:00 PM	<b>ID 163-T4:</b> Raga Classification Based On MFCC And Variants Vibhavari Rajadnya, Kalyani Joshi	Vibhavari Rajadnya
1:00 PM - 1:15 PM	<b>ID 169-T4:</b> Utilising data from social media in modelling vector-borne diseases Katyayani Akella N. S., Dr Mandaar B. Pande	Katyayani Akella N. S.
1:15 PM - 1:30 PM	<b>ID 206-T4:</b> Exploring Customer Comments using Biterm Topic Model Rashmi Batra, Dhanya Pramod	Rashmi Batra
Session - VI (12:00 PM - 1:30 PM) (Parallel Session)	<b>Track 1:</b> Applications of Technology and Engineering (3 papers) and <b>Track 2:</b> Entrepreneurship and Innovation (4 papers) <b>Session Chairs:</b> Dr. Ajit Ghodke, International Faculty, Guangdong, China Dr. Prafulla Bafna, Symbiosis Institute of Computer Studies and Research, Pune	<b>Presented by: Author(s)</b>
12:00 PM - 12:15 PM	<b>ID 207-T1:</b> Surface Potential and Mobile Charge Carrier Based Modeling of 4H-21 DNNT and Structure Analysis Shubham Dadhich, Garima Mathur, Arun Dev Dhar Dwivedi	Shubham Dadhich

12:15 PM - 12:30 PM	<b>ID 242-T1:</b> Running a Single Instruction Execution Stream to a Massively Parallelized Computational Operations Nisha Agrawal, Abhishek Das, Rishi Pathak, Manish Modani	Nisha Agrawal
12:30 PM - 12:45 PM	<b>ID 113-T1:</b> A review on Student Performance Prediction using Educational Data mining and Artificial Intelligence Poonam S Pawar, Rajashree Jain	Poonam S Pawar
12:45 PM - 1:00 PM	<b>ID 175-T2:</b> INQB8R: A Cloud-based Web Application for Incubator Recommendation Mridula Goel, Priyesh Srivastava, Anshuman Singh, Mayank Mathur, Kushal Rathi	Priyesh Srivastava
1:00 PM - 1:15 PM	<b>ID 115-T2:</b> The Role of Resilience and Human Rights in the Green and Digital Transformation of Supply Chain Chung-Lien Pan, Han-Teng Liao	Chung-Lien Pan
1:15 PM - 1:30 PM	<b>ID 212-T2:</b> A Research and Education Agenda Based on a Bibliometric Analysis of CSR and ESG Reporting Han-Teng Liao, Wen-Yen Huang, Xiumei Zhou, Chung-Lien Pan, Yuan Zhang, Hui Liu	Chung-Lien Pan
1:30 PM - 1:45 PM	<b>ID 62-T2:</b> Anti-Abduction Device For Women, Children, And Elderly Arjun Sharma, Chaitanya Kumar A., Sai Abhishek, S. Mithulesh Krishnaan, Sanjeeve Raveenthiran, Krishna Prakash, Augusta Sophy Beulet	Sanjeeve Raveenthiran

### Best Paper Awards (Track-wise)

Track 1: Applications of Technology and Engineering

Total paper presented: 23

Track 1: Best Paper	<b>ID 242-T1:</b> Running a Single Instruction Execution Stream to a Massively Parallelized Computational Operations, Nisha Agrawal, Abhishek Das, Rishi Pathak, Manish Modani
Track 1: Hon. Mention 1	<b>ID 245-T1:</b> Quality of Service based and Energy Efficient Routing Algorithm in Wireless Sensor Networks, Sachin B. Takale, Shashikant D. Lokhande
Track 1: Hon Mention 2	<b>ID 207-T1:</b> Surface Potential and Mobile Charge Carrier Based Modeling of 4H-21 DNTT and Structure Analysis, Shubham

	Dadhich, Garima Mathur, Arun Dev Dhar Dwivedi
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## Track 2: Entrepreneurship and Innovation

Total paper presented: 4

Track 2: Best Paper	ID 175-T2: INQB8R: A Cloud-based Web Application for Incubator Recommendation, Mridula Goel, Priyesh Srivastava, Anshuman Singh, Mayank Mathur, Kushal Rathi
Track 2: Hon. Mention	ID 212-T2: A Research and Education Agenda Based on a Bibliometric Analysis of CSR and ESG Reporting, Han-Teng Liao, Wen-Yen Huang, Xiumei Zhou, Chung-Lien Pan, Yuan Zhang, Hui Liu

## Track 3: Marketing and talent management

Total paper presented: 0

## Track 4: Special Track for Women in Engineering

Total paper presented: 12

Track 4: Best Paper	<b>ID 144-T4:</b> Performance Analysis of Hyperledger Fabric based Blockchain for Traceability in Food Supply Chain, Ayushi Srivastava, Yash Desai, Kavya Dashora
Track 4: Hon. Mention	<b>ID 20-T4:</b> Bearing Health Condition Monitoring using Time-Domain Acoustic Signal Features, Taruv Harshita Priya, Brijeshkumar J. Shah, Sadanand S. Kulkarni, V.P.S. Naidu

Conference Best papers (Overall):

Conference-Best Paper	<b>ID 183-T1:</b> Real Time Health Monitoring and Oxygen Distribution System for COVID-19 patients using IoT, Aayush Gavande, Chinmay Mahagaonkar, Soham Pingat, Dr. Harmeet Kaur Khanuja
Conference- Hon. Mention	<b>ID 114-T1:</b> XipCOIN: A Proposal for Decentralized Offline Payments using Ethereum, Arun Tanksali



## Valedictory Session

**Day 3: Friday, 3<sup>rd</sup> December 2021**

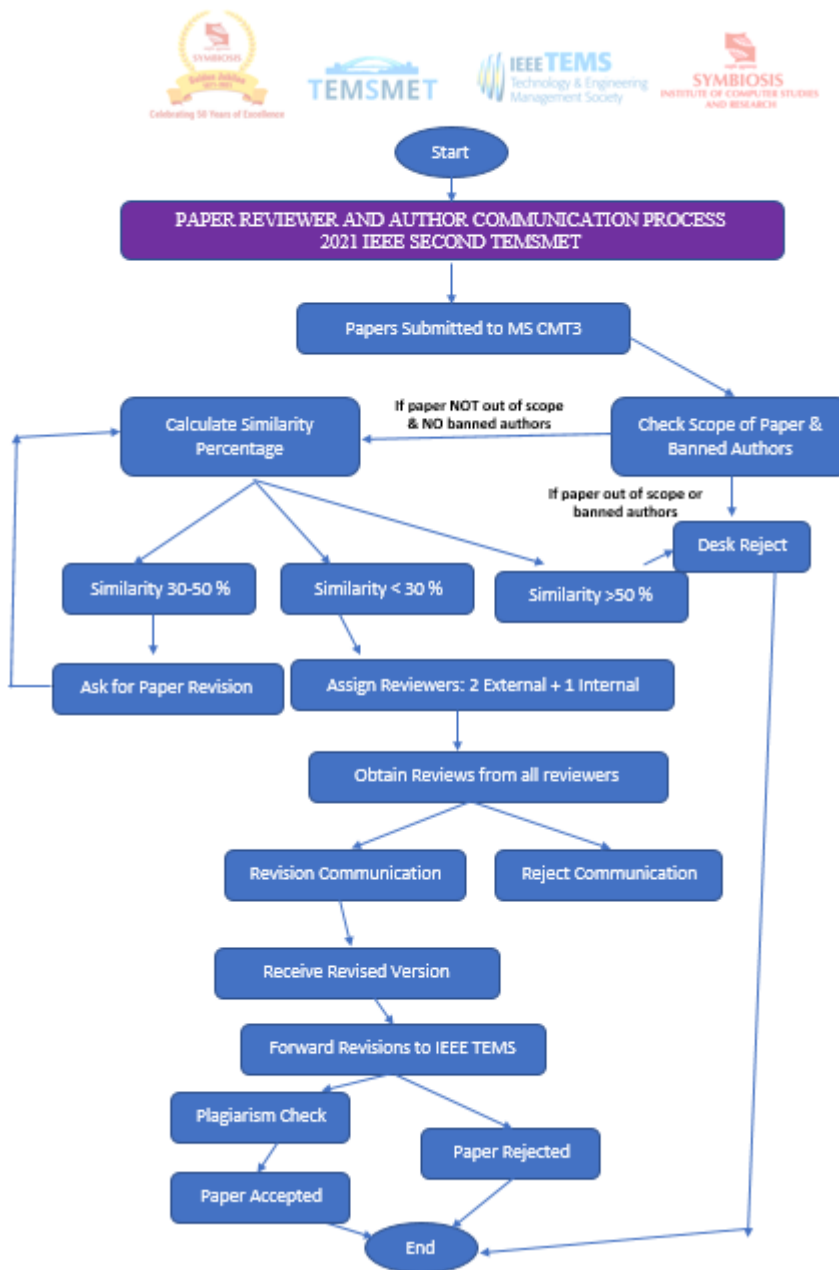
**Valedictory: 3:15 PM (IST) - 4:05 PM (IST)**

Time (IST)	Details
3:15 PM – 3:20 PM	Welcome Address by Dr. Sarika Sharma, Program Chair, IEEE TEMSMET2021
3:20 PM – 3:25 PM	Conference Report By Dr. Rajashree Jain, General Co-Chair, IEEE TEMSMET 2021
3:25 PM – 3:30 PM	Inauguration of SICSR IEEE TEMS Student Chapter, By. Mr. Arun Tankasali
3:30 PM – 3:35 PM	About Best Paper awards - Dr. Parag Kaveri, TPC Chair, IEEE TEMSMET 2021
3:35 PM – 3:40 PM	Announcement of Best Paper Awards- Track 1 by Mr. Arun Tankasali, TEMS India Chair, 2022
3:40 PM – 3:45 PM	Announcement of Best Paper Awards- Track 2 - Dr.Sachin Naik, Deputy Director, SICSR, Pune
3:45 PM – 3:50 PM	Announcement of Best Paper Awards- Track 4 – Ms. Shubhashri Waghmare, Assistant Professor, SICSR
3:50 PM – 3:55 PM	Authors /Delegate experience sharing
3:55 PM - 4:00 PM	Announcement of Conference Best Paper Awards by Mr.Prashant Pansare, Rubiscape
4:00 PM – 4:05 PM	Vote of Thanks- Deepali Suryavanshi, AO, SICSR

**Details:** The valedictory session was started with welcome address for the valedictory session of 2021 IEEE TEMSMET virtual conference after its successful execution of all the tracks and keynotes. The conference focused on original research, innovative ideas, and papers on interdisciplinary approaches, methods, frameworks, theories and standards in the scope of conference theme - "Advancement of Technology for Humanity" and has given an international platform to people around the globe to interact with each other. Inauguration of SICSR IEEE TEMS Student Chapter, By. Mr. Arun Tankasali. 8 best paper awards were given in the session. It concluded with vote of thanks.

## Report from Technical Programme Committee (TPC)

### TECHNICAL PROCESS COMMITTEE FOR PAPER ACCEPTANCE



### TRACK WISE PAPER DETAILS

Track No.	No. of Papers Received	Desk reject	Reject	Accept
Track 1	129	9	90	32
Track 2	19	0	14	5
Track 3	13	0	13	0
Track 4	55	0	42	13
Withdrawn Paper	44			
	260			
Total Rejected	166		Total Accepted	50
			Total Registered	39

#### 1. Author Participation

- Bangladesh - 1
- China - 3
- Sri Lanka - 1
- India - 33
- Thailand – 1

#### Author Universities

1. JNU New Delhi
2. VIT Chennai
3. Pune Institute of Computer Technology
4. SIBM Nagpur
5. Pimpri Chinchwad College of Engineering Pune
6. GITAM University
7. Khulna University of Engineering and Technology
8. Indian Institute of Technology Delhi
9. Sri Sivasubramaniya Nadar College of Engineering
10. National Institute of Technology Silchar
11. Modern College Of Engineering Pune.
12. Indian Institute of Technology Roorkee
13. SSN College of Engineering
14. Marathwada Mitra Mandal College of Engineering
15. Nitte Meenakshi Institute of Technology
16. DSITM College
17. University of Moratuwa

18. MIT School of Engineering
19. Visvesvaraya National Institute of Technology Nagpur
20. IIT BHU
21. Poornima University
22. BITS Pilani GOA
23. Nanfang College Guangzhou
24. Symbiosis Institute of Geoinformatics Symbiosis International Deemed University Pune
25. Symbiosis Institute Of Computer Studies and Research
26. Vellore Institute of Technology Chennai Campus

**Author from Industry**

1. CSIR National Aerospace Laboratories
2. IBM
3. NVIDIA
4. Nearex Technologies
5. Target
6. E Bronco Company Limited
7. Techno Main Salt Lake

**REVIEWER DETAILS**

Total Invitation Send – 208

Total reviewers Accepted - 97

Active reviewers – 78

**TPC Members**

**Technical Programme Committee Chair(s)**

1. Dr. Parag Kaveri, Assistant Professor, Symbiosis Institute of Computer Studies and Research, Pune
2. Dr. Prabhat Kumar Panda, Volunteer, IEEE TEMS
3. Dr. Neha Sharma, Secretary, IEEE Pune Section
4. Dr. Farhana Desai, Assistant Professor, Symbiosis Institute of Computer Studies and Research, Pune
5. Dr. Anuja Bokhare, Assistant Professor, Symbiosis Institute of Computer Studies and Research, Pune

## Registration Committee Report

### Summary of registrations--

The IEEE International conference on Technology, Engineering, and Management for Societal impact using Marketing, Entrepreneurship and Talent was organized virtually on 01 Dec 2021 to 3 Dec 2021. Author Category wise Analysis, Conference Alert Analysis, Author affiliation country wise, State wise and University wise are presented for 39 authors.

### Author Category wise Analysis-

Fig 1 shows the Author wise category. Graph shows that the highest 15% participation is from Non IEEE student members.

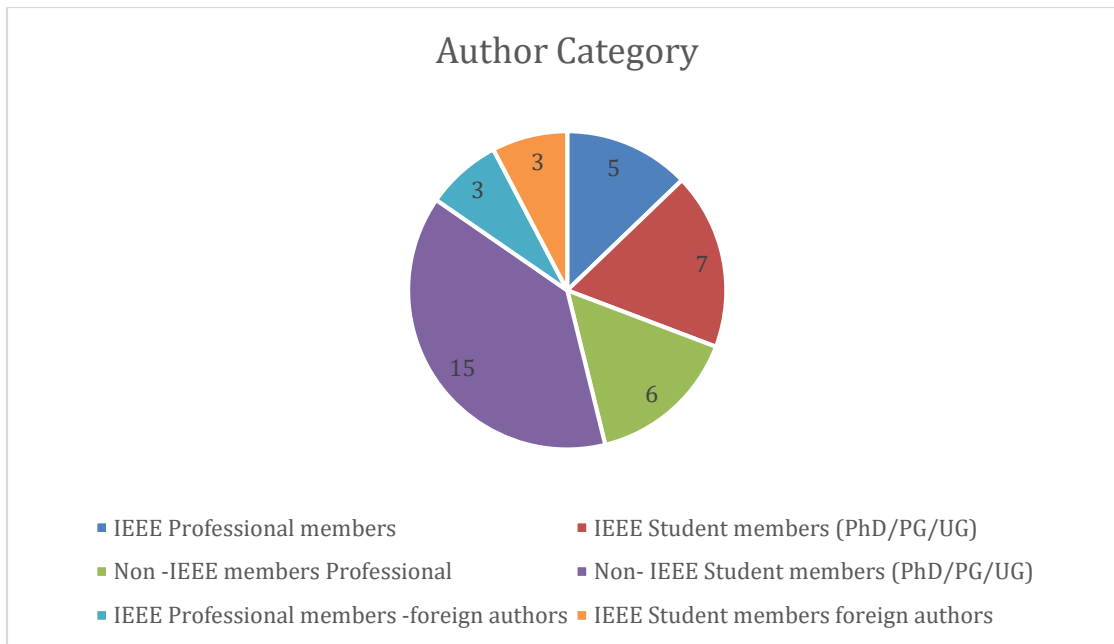


Fig 1 Author Category Analysis

## Conference Alert Analysis-

Fig 2 shows the conference Hearing category. Most of the people heard the conference information through Universities and Institute only.

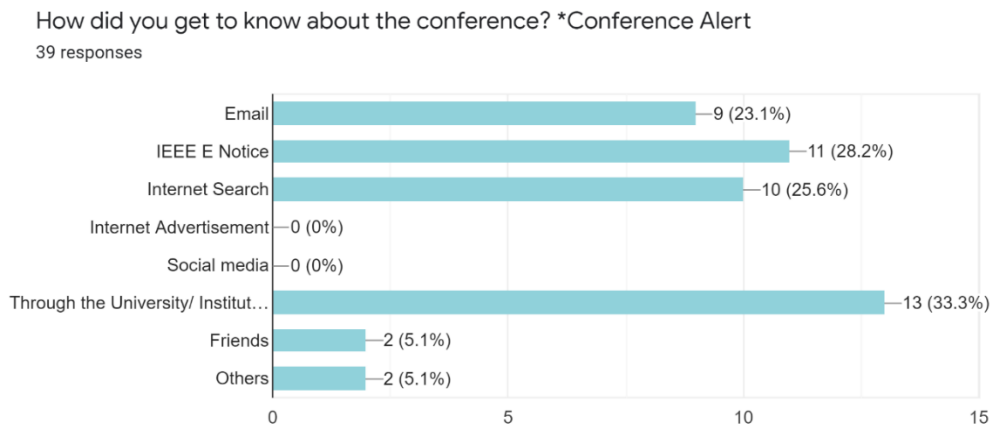


Fig 2 Conference Alert Analysis

Author affiliation country wise, State wise and University wise-

Table 3 Country wise, State wise Affiliation

Author s	Indian		Internation al	Total
	Maharashtra	Out of Maharasht ra		
Count	21	12	6	39

Indian authors belongs to Assam, Delhi, Goa, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal. Foreign authors belongs to different countries like Bangladesh, China, Srilanka and Thailand.

Amongst all 39 authors more than 85 % authors were outside symbiosis International (Deemed University). Like VIT Chennai, Visvesvaraya National Institute of Technology, Khulna University of Engineering and Technology to name a few.



SICSR QIC Conducted

Half Day Workshop on

Learning Resources for Research Innovation and  
Extension

Date-30 April 2022 Time-11AM to 2PM

Prof. Dr. Jatinderkumar R. Saini  
Director SICSR, QIC Chairperson

Ms. Hema Gaikwad  
NAAC & QIC Coordinator



Hema Gaikwad <hema.gaikwad@sicsr.ac.in>

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## Tomorrow's Workshop Schedule

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Hema Gaikwad <hema.gaikwad@sicsr.ac.in>

Fri, Apr 29, 2022 at 2:14 PM

To: staffsicsr <staffsicsr@sicsr.ac.in>

Cc: "Prof. Dr. Jatinderkumar R. Saini" <director@sicsr.ac.in>, Dy Director <dy.director@sicsr.ac.in>, Deepali Suryavanshi <ao@sicsr.ac.in>

Dear All

Greetings for the Day.

This is for your information that Tomorrow workshops (organized by SICSR QIC ) schedule is as follows--

Workshop 1

**Title-Learning Resources for Research Innovation and Extension**

Date-30 April 2022

Time-11 AM to 2PM

Room-303 Class Room

The session will be delivered by NAAC criterion III and NAAC criterion IV team members.

Workshop 2

**Title-Institutional Values & Best Practices with Good Corporate Governance and Leadership**

Date-30 April 2022

Time-2.30PM to 5.30PM

Room-303 Class Room

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Regards,

Hema Gaikwad

Assistant Professor

Symbiosis Institute of Computer Studies and Research (SICSR)

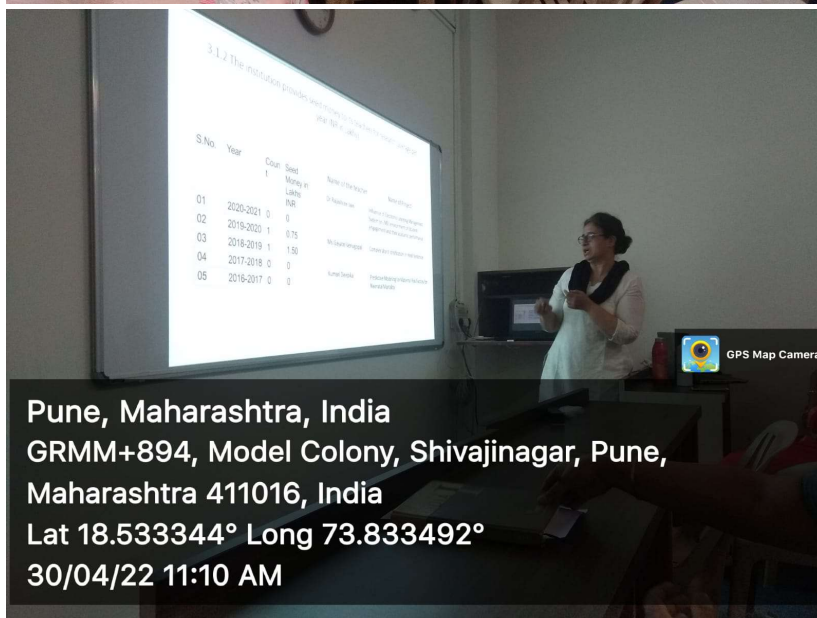
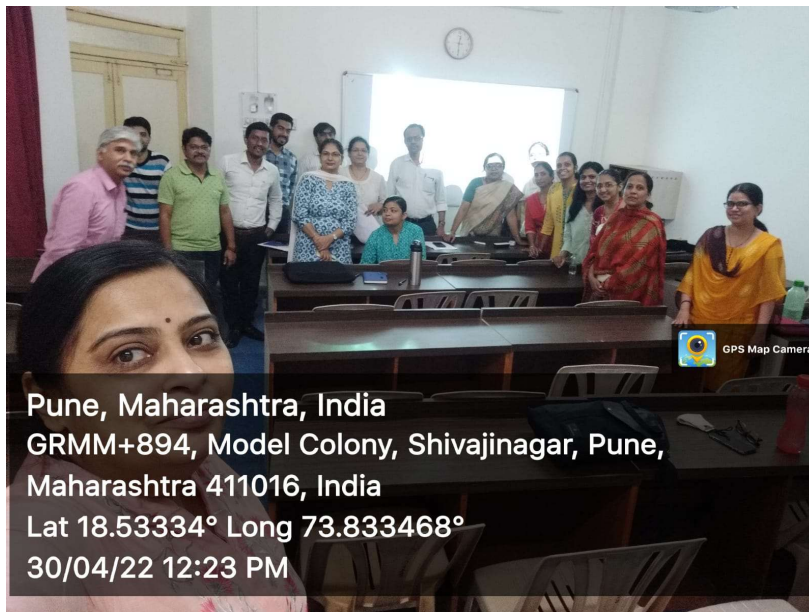
"Winners don't do different things. They do things differently."

# Symbiosis Institute of Computer Studies & Research, Pune

## Workshop on

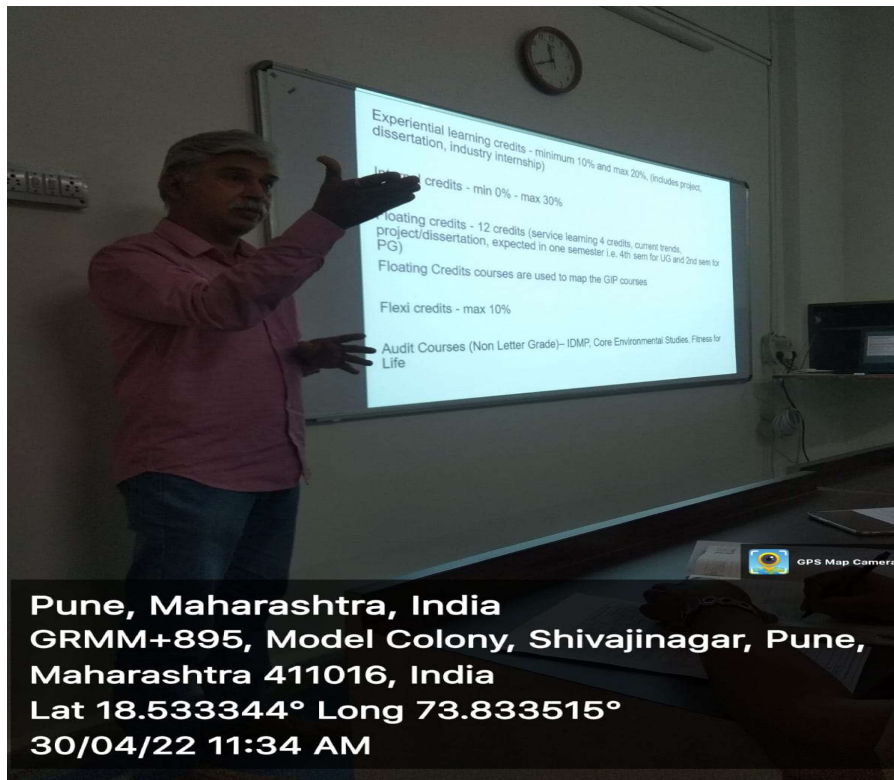
### “Learning Resources for Research innovation and Extension”

#### Geotag Photos---









# **Symbiosis Institute of Computer Studies & Research (SICSR), Pune**

## **QIC Workshop Report**

### **Learning Resources for Research Innovation & Extension**

SICSR Quality Improvement Cell (QIC), Pune organized Half day workshop on Learning Resources for Research Innovation and Extension. The session was delivered by three speakers Dr. Anagha Vaidya, Dr. Pravin Metkewar and Mr. Shirish Joshi.

Dr. Anagha talked about Research activities, Institute Research Cell (IRC), Research publication and various extension activities. She showed all Research publication statistics in the workshop.

Dr. Pravin is the criterion in charge of CR IV. During the workshop he focuses on Infrastructure and Institute library as learning resource.



# Symbiosis Institute of Computer Studies & Research (SICSR), Pune

## QIC Workshop Report

### Learning Resources for Research Innovation & Extension

**Date-30 April 2022**

SICSR Quality Improvement Cell (QIC), Pune organized Half day workshop on Learning Resources for Research Innovation and Extension. The session was delivered by three speakers Dr. Anagha Vaidya, Dr. Pravin Metkewar and Mr. Shirish Joshi.

Dr. Anagha talked about Research activities, Institute Research Cell (IRC), Research publication and various extension activities. She showed all Research publication statistics in the workshop.

Dr. Pravin is the criterion in charge of CR IV. During the workshop he focuses on Infrastructure and Institute library as learning resource. He talked about the Koha software, No. of books, Magazines etc. He shared the total count of class room, Labs, Servers, Laptops etc.

Mr. Shirish discussed about experiential learning, flexi credits, floating credits for UG and PG courses. He also explained the Global Immersion Program (GIP).

At last QIC coordinator Ms. Hema summarizes all the above points and followed the question and answer round.



A handwritten signature in black ink, appearing to read 'Jaini', written over a light blue grid background.

Prof. Dr. Jatinderkumar R. Saini

Director SICSR, Pune

