

A Report on One Week National level FDP
on
*"Emerging Trends of Blockchain Technology
in Engineering"*

Jointly organized by Department of EEE & IT
in association with Centre for Energy-SVEC, Centre for Data Analytics-SVEC
Under IEEE Student Branch & ISTE Student chapter
(02-06 August 2021)

The One Week National level Faculty Development Program on **"Emerging Trends of Blockchain Technology in Engineering"** was jointly organized by the Department of Electrical & Electronics Engineering and Department of Information Technology, Sree Vidyanikethan Engineering College in association with Centre for Energy-SVEC, Centre for Data Analysis-SVEC under IEEE Student Branch and ISTE Student Chapter from 02 to 06 August 2021.

The FDP programme received an overwhelming response with 217 participants from in and around engineering colleges of the country.

The endeavour was successful in creating learning environment for the faculty members and also in providing hands-on experience in programming and modelling skills through Ethereum and python. The FDP has also provided a forum for interacting and sharing ideas among the faculty and opened the new avenues for academic collaborative activities.

The proceeding of the One week national level FDP was inaugurated by the eminent personalities on 14th June, 2021.

1. Dr. M. S. Sujatha, Professor & HOD EEE, Sree Vidyanikethan Engineering College.

2. Dr. K. Ramani, Professor & HOD IT, Sree Vidyanikethan Engineering College.
3. Mr. Randhir Kumar, Assistant Professor, CSE, Bennett University, Greater Noida.
4. Dr. D. Suresh Babu, Associate Professor, EEE and Convener of the Program.

Day 1: Inaugural session, 02-08-2021, 6:30 P.M to 7:00 P.M.

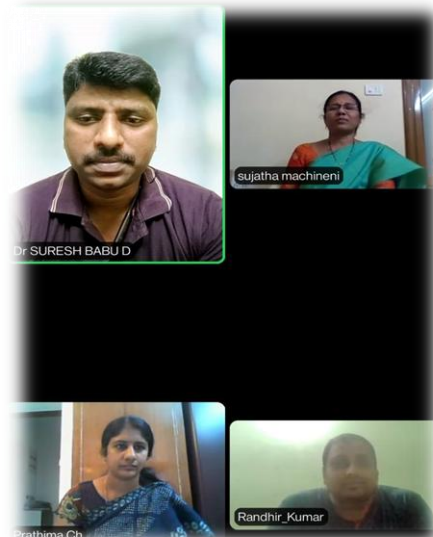
Ms. Ch. Prathima, Assistant Professor, IT & Co-convener of the program has welcomed all the dignitaries and participants in her opening address.

Dr. M.S. Sujatha, Professor & HOD EEE, Sree Vidyanikethan Engineering College in her welcome address, brought out the importance of these kinds of FDPs organized.

Dr. D. Suresh Babu, Convener has welcomed the participants and brought out the importance and objectives of the FDP and requested the participants to learn more and disseminate the knowledge gained among the students and peer group as well. He has also mentioned as it is the first time the department is organizing a hands-on session in online on Blockchain technology for one week. So, he requested all the participants to make use of the hands-on sessions to get some idea for their individual research problems.



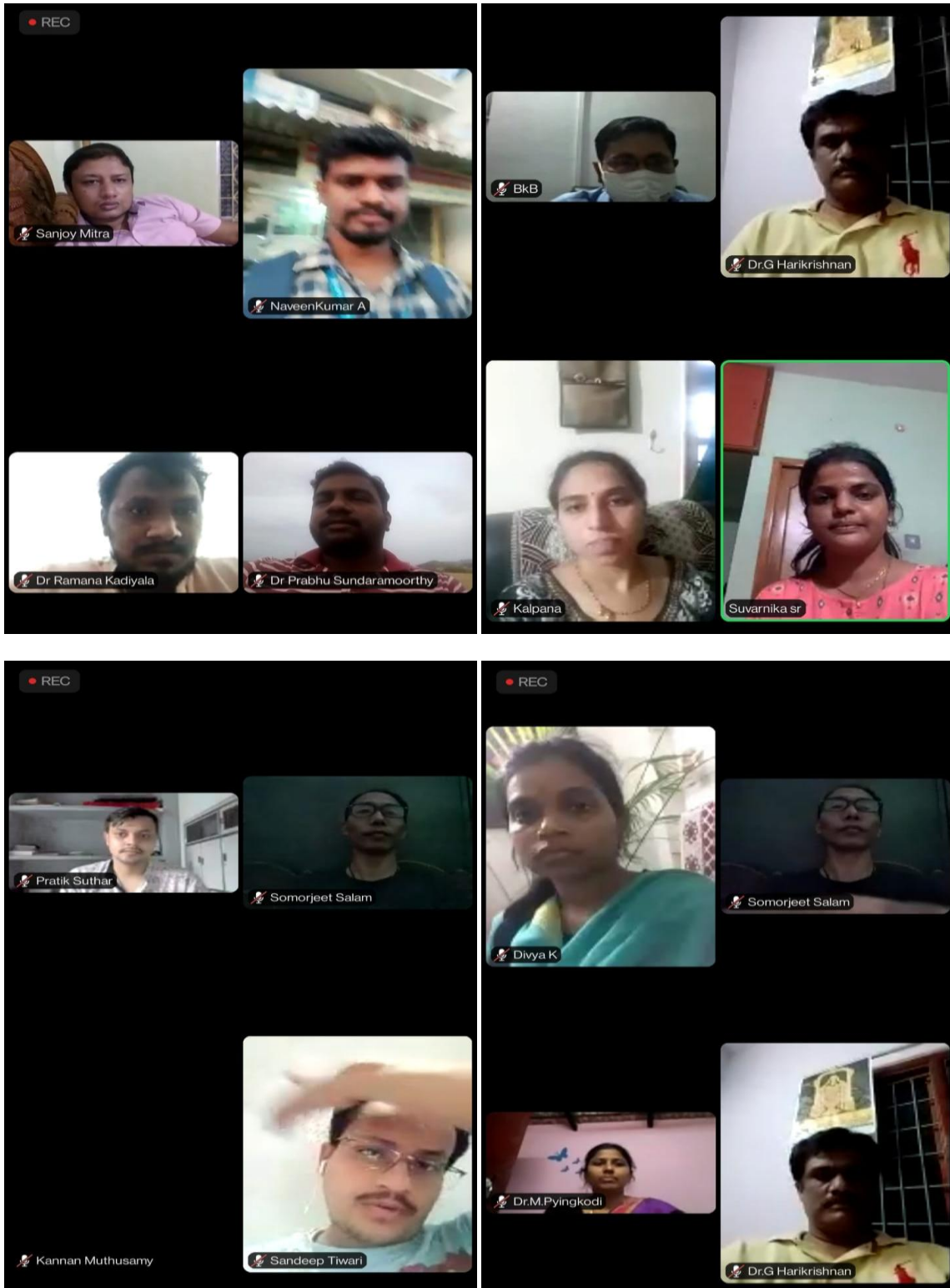
Dr. M. S. Sujatha, Professor & HOD EEE giving the welcome speech and congratulated the organizer to initiate the event and planned for hands-on sessions.



Dr. D. Suresh Babu, Convener of the program appreciating the participants to take part in the learning process of Blockchain technology.



Participants in the inaugural function



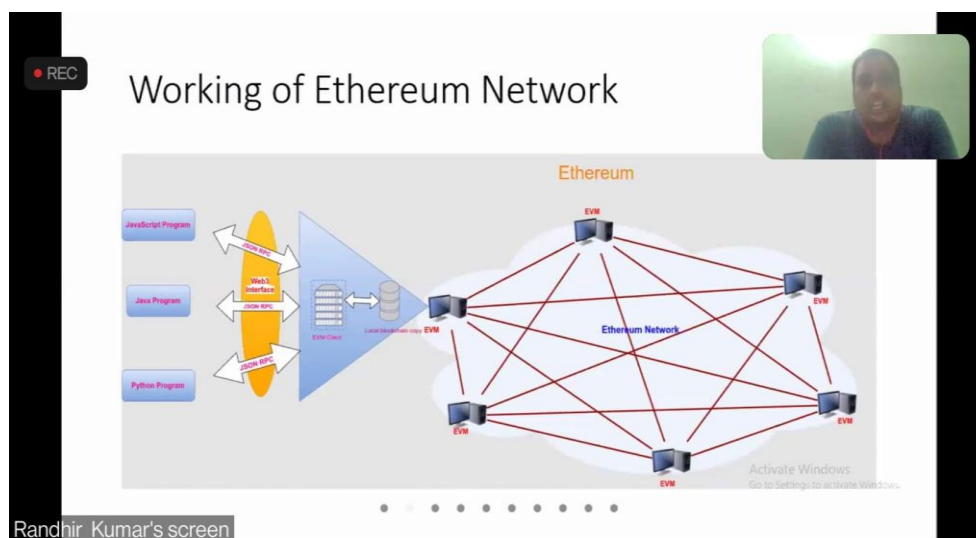
Participants in the inaugural function

Day 1: Technical Session: 02-08-2021, 6:30 P.M to 8:30 P.M.

Speaker: Mr. Randhir Kumar, Assistant Professor, Bennett University, Delhi

Introduction to Blockchain environment

The session was started with the introduction of the importance of Blockchain technology and various platforms used for implementing the technology. Various applications were made understand to different group of people for their research areas. The hands-on session was carried further for different algorithms to analyze data.



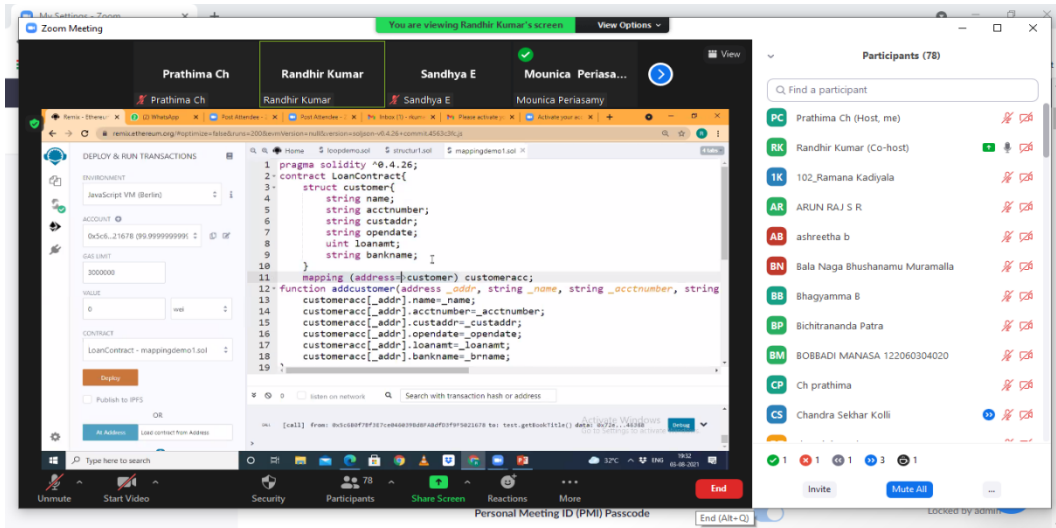
Mr Randhir Kumar, Explaining the working of Ethereum Network

Day 2: Technical Session: 03-08-2021, 6:30 P.M to 8:30 P.M.

Speaker: Mr. Randhir Kumar, Assistant Professor, Bennett University, Delhi

Mapping in Blockchain environment (Concepts and Hands-on)

The session was started with the introduction of the mapping in Blockchain technology. The introduction of Ethereum for various mapping techniques was explained. The hands-on session was carried further for different algorithms to analyze data.



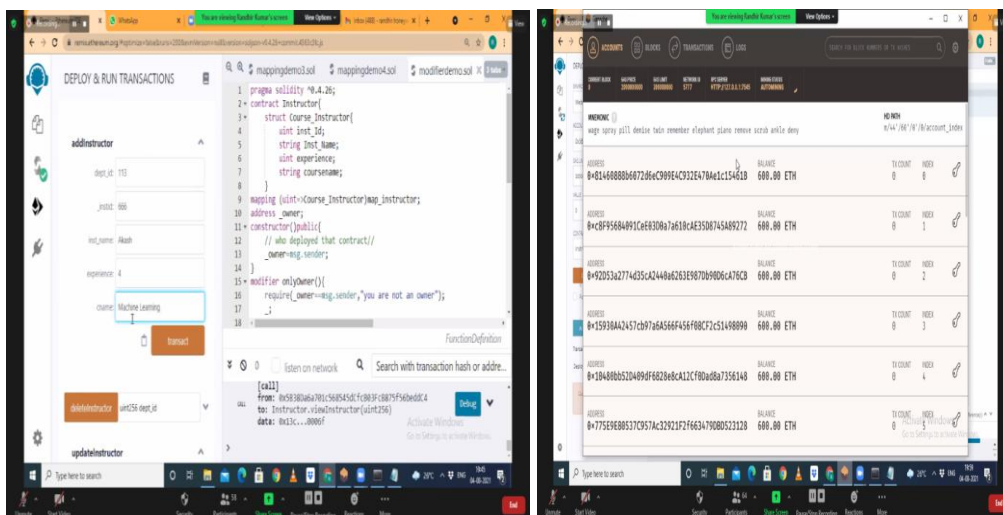
Mr Randhir Kumar, Explaining the working of Mapping in Ethereum Network

Day 3: Technical Session: 04-08-2021, 6:30 P.M to 8:30 P.M.

Speaker: Mr. Randhir Kumar, Assistant Professor, Bennett University, Delhi

Blockchain Technology, Applications and Challenges

The speaker has applied the Blockchain technology for various applications. He has also given introduction how to deploy and do the transaction in the Ethereum platform.



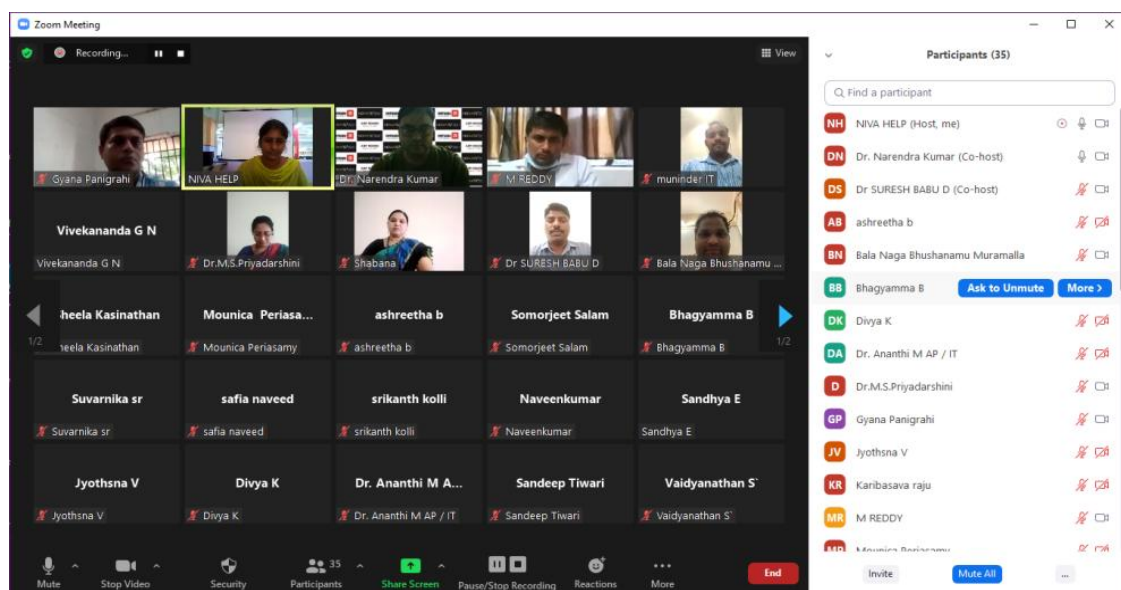
Mr Randhir Kumar, Explaining the working of Mapping in Ethereum Network

Day 4: Technical Session: 05-08-2021, 6:30 P.M to 8:30 P.M.

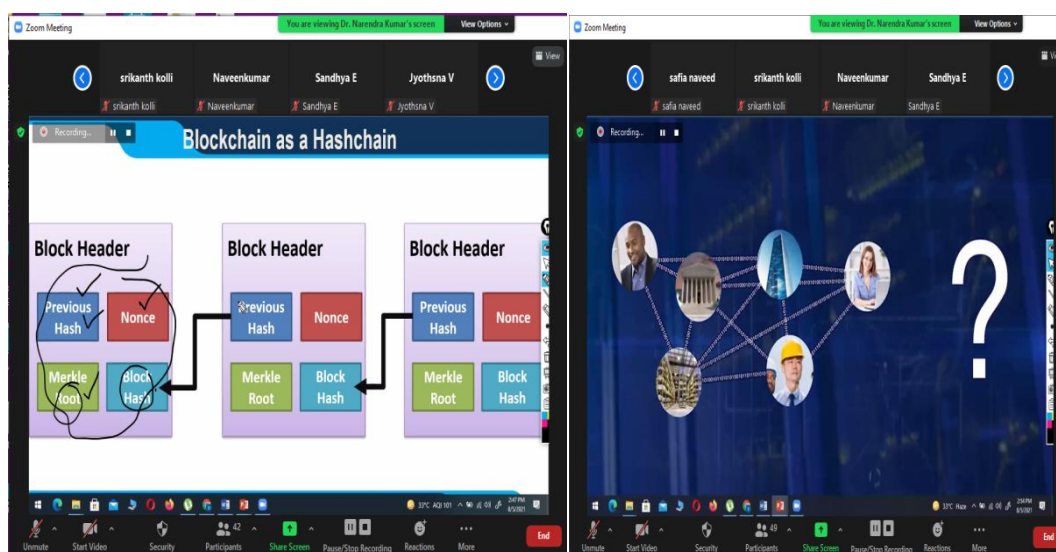
Speaker: Dr. Narendra Kumar, Associate Professor, Ajay Kumar Garg Engineering College, Ghaziabad

Smart Contract and Applications of Blockchain (Concepts and Hands-on)

The speaker has briefed about various smart contracts used in Blockchain technology and also discussed the applications of the smart contracts.



Dr. Narendra Kumar and the participants at day-4.



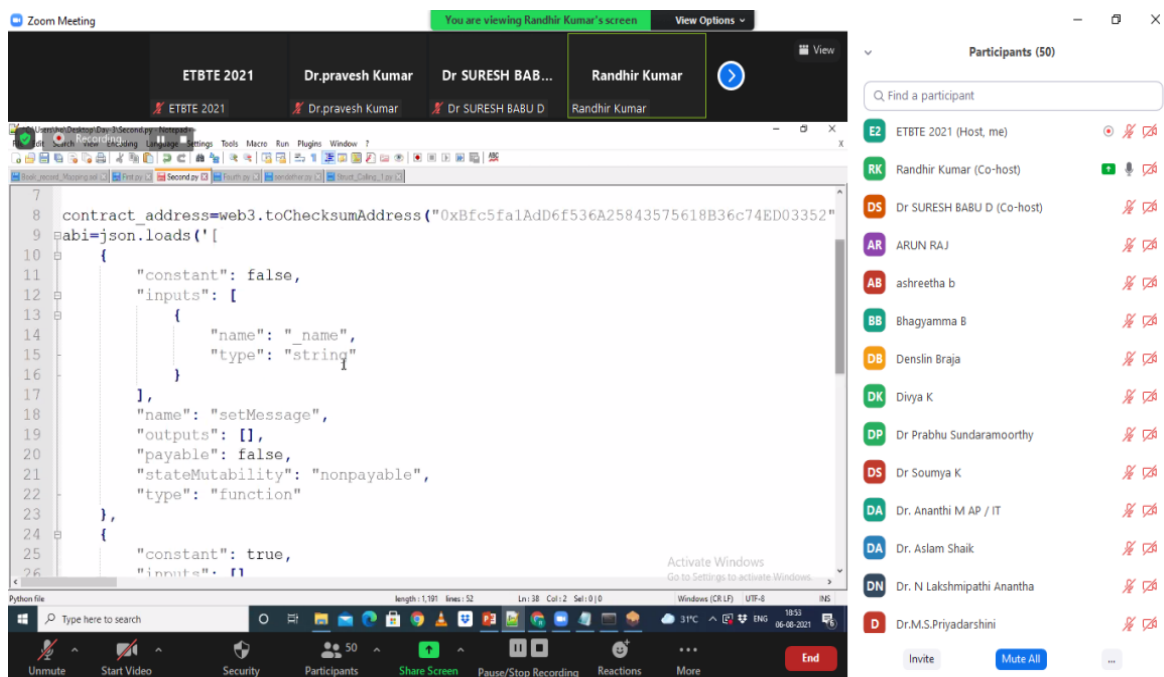
Dr. Narendra Kumar, explaining various smart contracts used in Blockchain technology

Day 5: Technical Session: 06-08-2021, 6:30 P.M to 8:30 P.M.

Speaker: Mr. Randhir Kumar, Assistant Professor, Bennett University, Delhi

Python based Connectivity in Blockchain (Concepts and Hands-on)

The speaker has given a brief introduction about the classification techniques used for various applications. He has considered few examples and made the participants understand how to connect the Blockchain can be connected in python software.



The screenshot displays a Zoom meeting interface. At the top, the meeting title is "Zoom Meeting" and the status is "You are viewing Randhir Kumar's screen". The meeting controls bar shows participants: ETBTE 2021, Dr.pravesh Kumar, Dr SURESH BABU D, and Randhir Kumar. The main content area shows a Python code editor with the following code:

```
7
8 contract_address=web3.toChecksumAddress("0xBfc5fa1AdD6f536A25843575618B36c74ED03352")
9 abi=json.loads('{
10
11     "constant": false,
12     "inputs": [
13         {
14             "name": "_name",
15             "type": "string"
16         }
17     ],
18     "name": "setMessage",
19     "outputs": [],
20     "payable": false,
21     "stateMutability": "nonpayable",
22     "type": "function"
23 },
24 {
25     "constant": true,
26     "inputs": []
```

On the right side, the "Participants (50)" list is visible, showing a search bar and a list of participants with their names and status icons. The bottom of the screen shows the Windows taskbar with the system tray displaying the time as 18:53 on 06-08-2021.

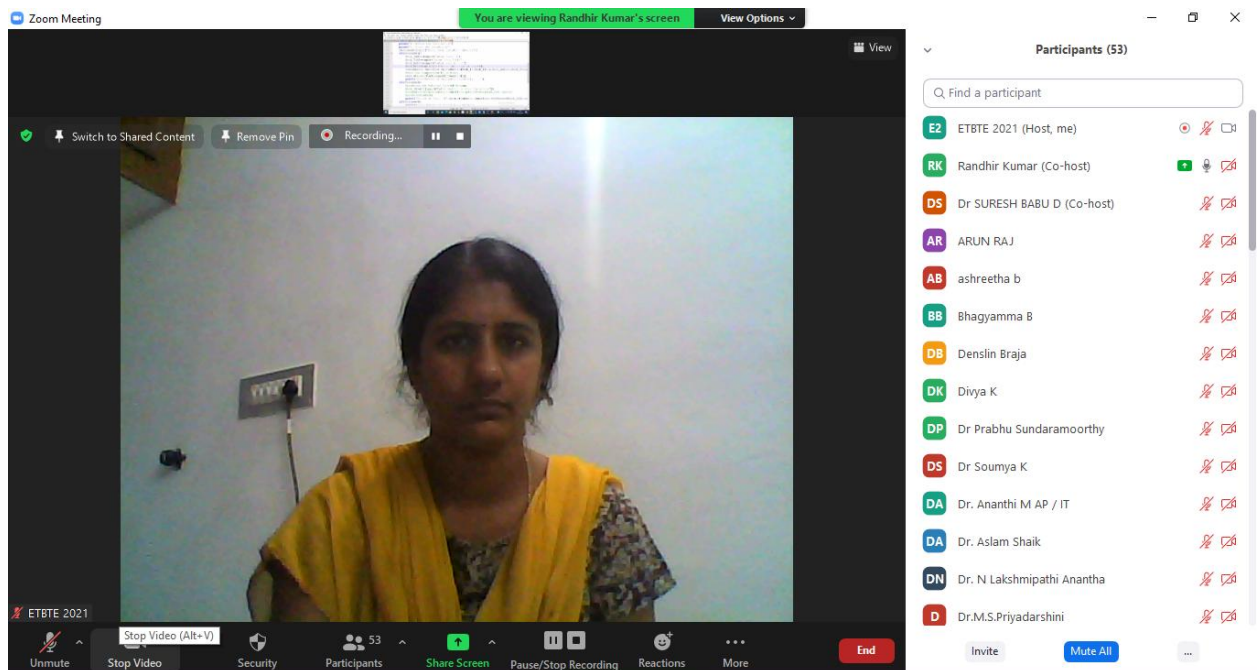
Mr Randhir Kumar, Explaining the working of Python connectivity in Blockchain

Day 5: Valedictory Function: 18-06-2021, 8:00 PM to 8:30 PM

The honourable dignitaries present in this occasion were

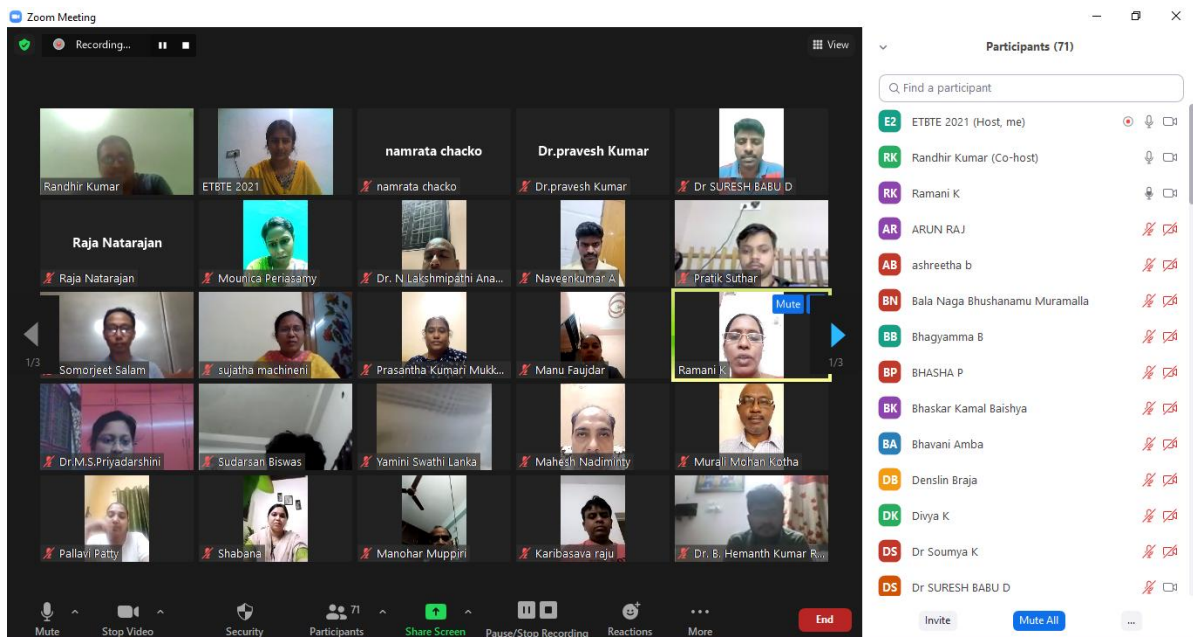
- 1) Dr. M. S. Sujatha, Head of the Department of EEE, Sree Vidyanikethan Engineering College.
- 2) Dr. K. Ramani, Head of the Department of IT, Sree Vidyanikethan Engineering College.
- 3) Mr. Randhir Kumar, Assistant Professor, Department of CSE, Bennett University, Delhi.
- 4) Dr. D. Suresh Babu, Associate Professor, EEE and Convener of the Program.

Mrs. Ch. Prathima, Co-convenor of the program has welcomed all the dignitaries and participants to the valedictory session.



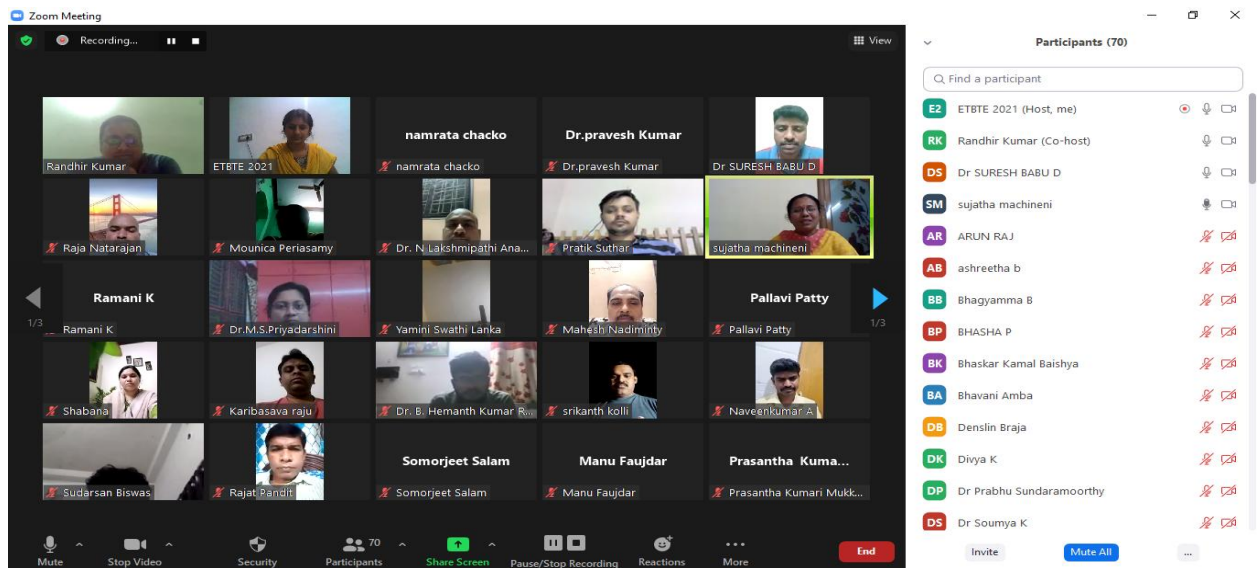
Mrs. Ch. Prathima, Co-Convenor, welcoming participants in the valedictory function

Dr. K. Ramani, Professor & HOD IT, Sree Vidyanikethan Engineering College congratulated the convener and co-convenor of the program for organizing this event and thanked the speaker for sharing the knowledge on Blockchain technology.



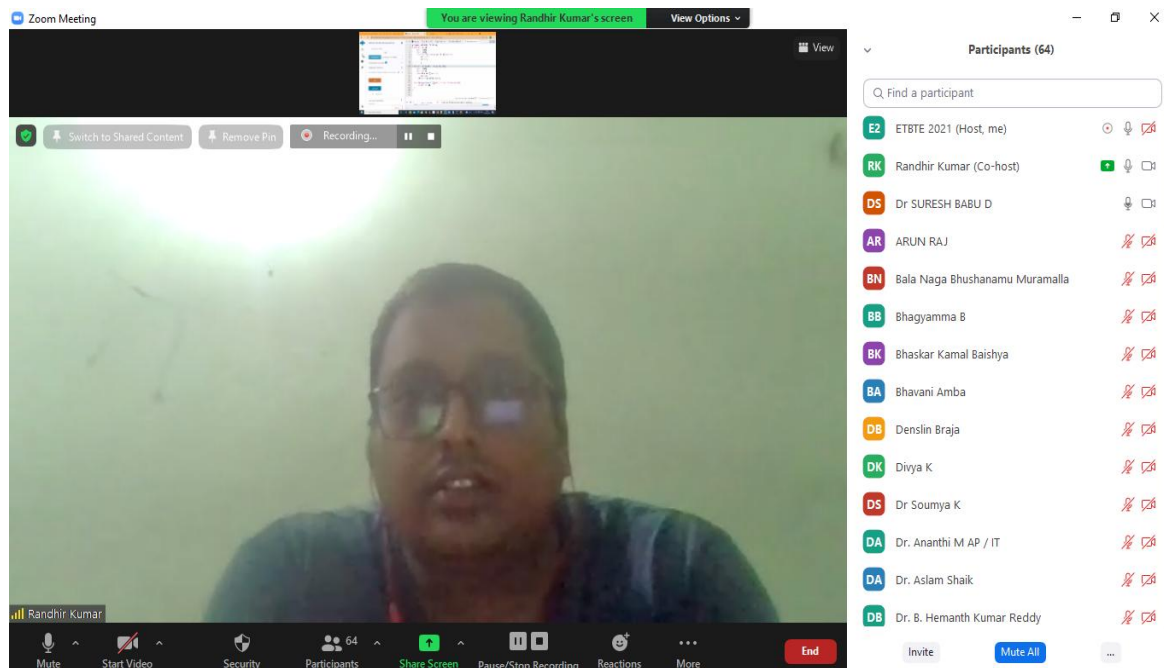
Dr. K. Ramani, HoD IT, congratulating the participants for attending the FDP

Dr. M. S. Sujatha, Professor & HOD EEE, Sree Vidyanikethan Engineering College congratulated the convener and co-convener of the program for organizing in a smooth manner.



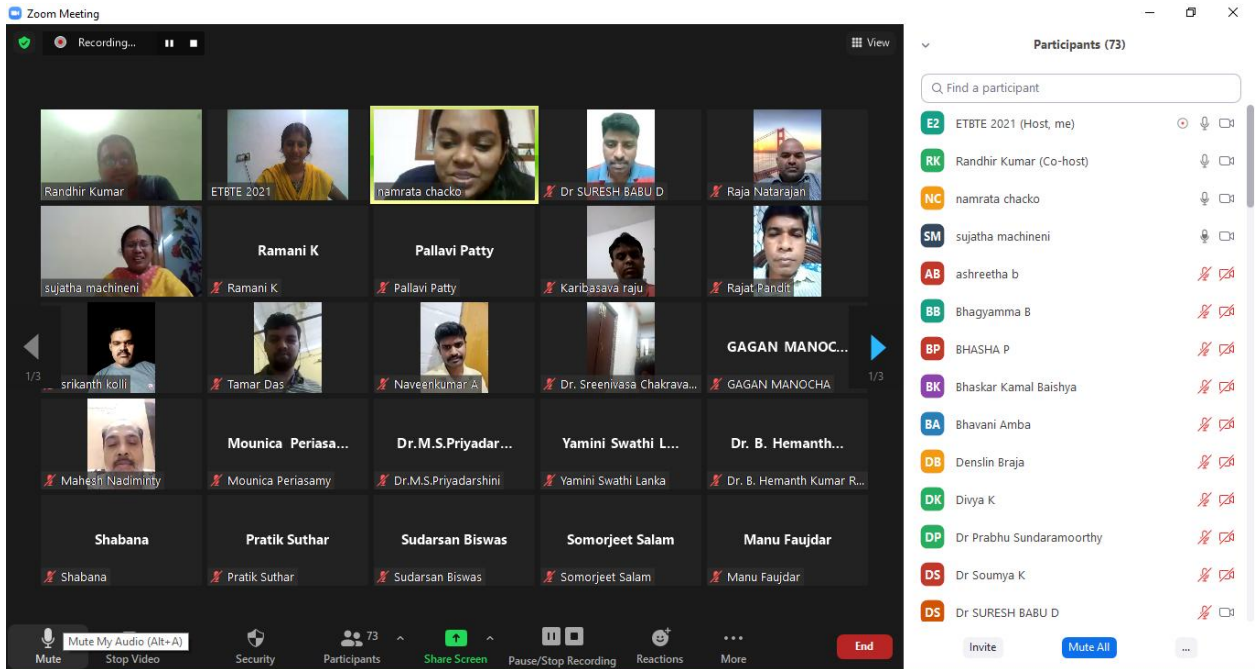
Dr. M.S. Sujatha, HoD EEE, congratulating the participants for attending the FDP

Mr. Randhir Kumar, Assistant Professor, Bennett University, Delhi has thanked the organizers for giving such an opportunity to share the knowledge in this platform. He appreciated the participants for actively involved in this learning process.

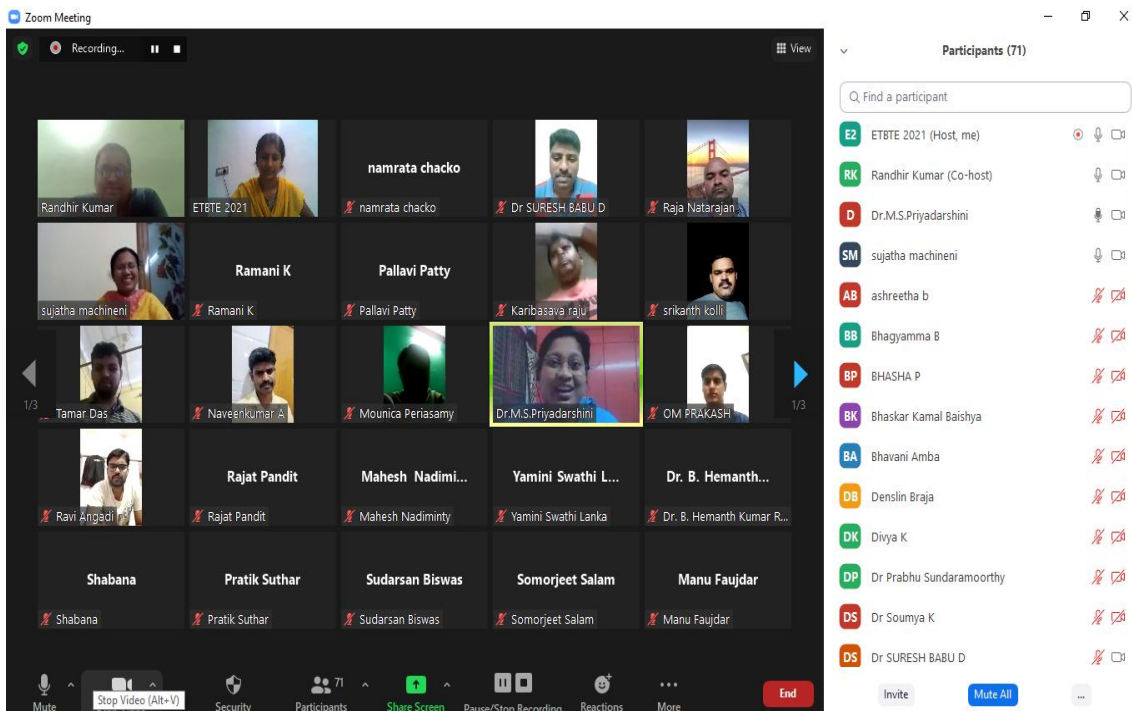


Mr. Randhir Kumar, resource person delivering in the valedictory function

The participants were asked to share their experience and learning of the whole program and they have shared their experiences of the workshop and expressed their gratitude to the organizers for providing content rich sessions in the feedback session.

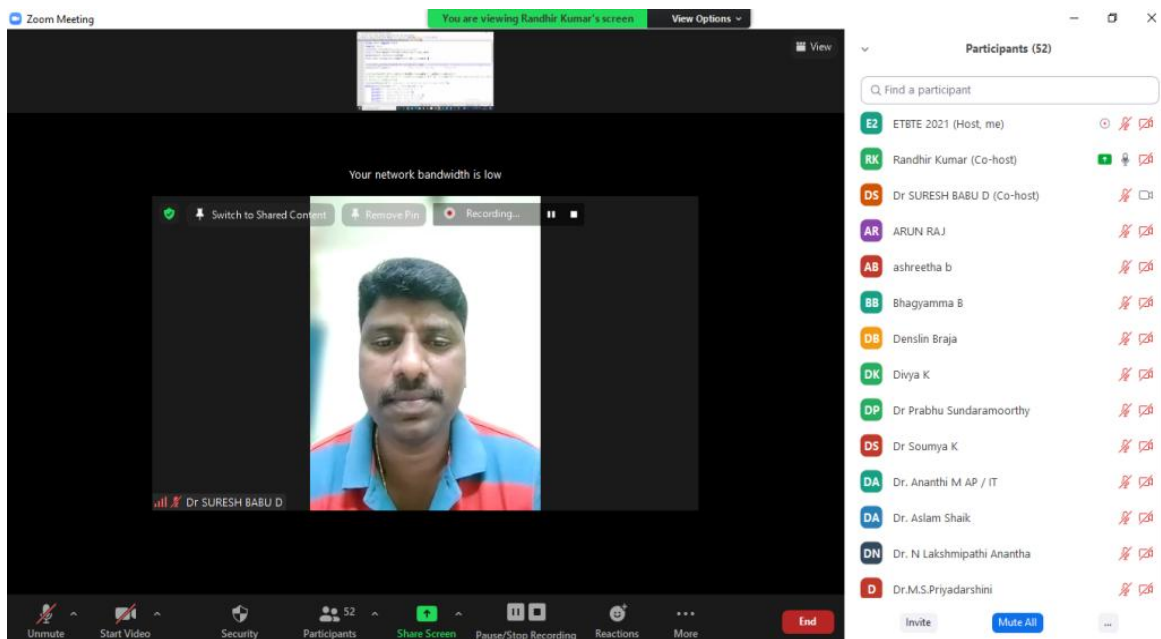


Ms. Namrata Chacko, Research Scholar in the feedback session



Dr. M.S. Priyadarshini, Associate Professor in the feedback session

Dr. D. Suresh Babu, Convener in his thanking note has summarized the program and thanked each and every speaker for giving their valuable time to make the participants aware about the importance of Blockchain technology. He also emphasized that after the completion of this FDP, now the participants may apply for their own individual research problems get some good publications. He also thanked every participants for being active in all the session, though the sessions were conducted in the evening times.



Dr. D. Suresh Babu, Convener of the program delivering vote of thanks

All the personalities appreciated the Department for organizing the workshop. The certificates and course material were sent to the participants.

Dr. D. Suresh Babu
(Convener)