

**MET's Bhujbal Knowledge City  
Institute of Engineering  
Department of Electrical Engineering**

**Report of Expert talk on "Overview of Cyber Security in Power System"**

**Class: T.E & B.E.**

**Academic Year: 2021-22**

**SEM: II**

The expert talk is conducted on **Overview of Cyber Security in Power System** for the students of **T.E. and B.E.** class on dated **12/03/2022**. The expert talk is conducted during a day from 11:00 AM to 02:00 PM on above mentioned date. There were 89 numbers of students present out of 167.

The above expert talk is conducted by the expert trainer of **Research Schlor, Malaviya National Institute of Technology, Jaipur.**

### **Trainer Profile:**

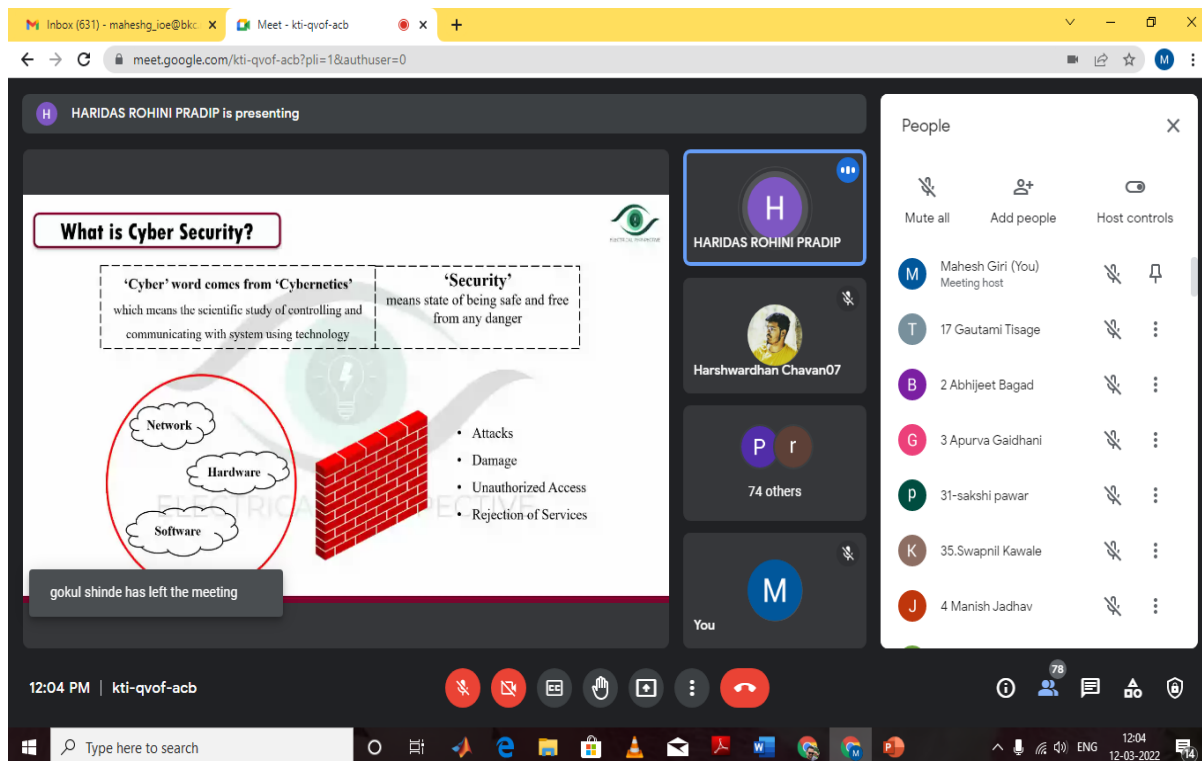
**Name: Miss Rohini Haridas**

**Company/ Institute: Research Schlor, Malaviya National Institute of Technology, Jaipur.**

### **Topics Covered:**

Introduction to Overview of Cyber Security in Power System, different types of cyber threats that can occur in electrical power system, protection system against cyber attack.

### **Photos:**



Inbox (631) - maheshg\_je@bkc X Meet - kti-qvof-acb

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HARIDAS ROHINI PRADIP is presenting

### Why power grids are increasingly vulnerable to cyber attacks?

Electrical Infrastructure

2-way flow of electricity and information

"Intelligence" Infrastructure

12:06 PM | kti-qvof-acb

VLC media player

People

- Mute all
- Add people
- Host controls
- Dhanashri Khaire
- Dipali Bhoje
- Ganesh Pawar 9
- Ganesh Salve
- Ganesh Shinde
- Ghanshyam Rathod
- HARIDAS ROHINI PRADIP

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### Impact of Attacks against Smart Grid at different Stages

Easier to Hack

Cyber Attack (Type 1)

Cyber Attack (Type 2)

Cyber Attack (Type 3)

Communication Infrastructure

Generation

Distribution and Control

Consumption

Larger Scale to be Effective

Hacking a Single Powerplant = Hacking Multiple Thousands of Meters

Jayesh Marathe \*46\* can now join this meeting

12:21 PM | kti-qvof-acb

People

- Mute all
- Add people
- Host controls
- Ganesh Salve
- Ganesh Shinde
- HARIDAS ROHINI PRADIP
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- HARIDAS ROHINI PRADIP Presentation
- Harshwardhan Chavan07
- Janhavi Khaladkar 16

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graph TD; Root[Classification of Attacks in CPPS] --> Physical[Physical Attacks]; Root --> Cyber[Cyber Attacks]; Root --> CyberPhysical[Cyber-Physical Attacks]; Cyber --> Communication[Communication Attacks]; Cyber --> Information[Information Attacks];
```

12:30 PM | kti-qvof-acb

People

- Mute all Add people Host controls
- Ganesh Shinde
- HARIDAS ROHINI PRADIP
- HARIDAS ROHINI PRADIP
- HARIDAS ROHINI PRADIP Presentation
- Harshwardhan Chavan07
- Janhavi Khaladkar 16
- Jayesh Marathe \*46\*

62 others

You

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Step 4\_Maintaining Access

- ✓ Once a hacker has gained access, they want to keep that access for future exploitation and attacks.
- ✓ Hacker tries to maintain the access to the target until he finishes the tasks he planned to accomplish in that target.

12:43 PM | kti-qvof-acb

People

- Mute all Add people Host controls
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- Harshwardhan Chavan07
- Janhavi Khaladkar 16
- kanchan phadol
- Karuna More

53 others

You

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\*\*\*\*\*End of Report\*\*\*\*\*