Event Name	**ADVANCED TOOLS AND TECHNIQUES FOR BEST RESEARCH**
Theme	Practicing Tools for doing research activities
Date	26th September 2022 to 30th September 2022(5 Days)
Venue	Online

Objective of the Program:

The FDP aims at deliberation, sharing knowledge to the target audience about the significance of research skills and ethical research practice by subject matter experts with practical exposure to faculty members and research scholars. This FDP provides the participants with an opportunity to acquire knowledge about contemporary developments that are taking place in various dimensions of research practice and inculcate and enhance the abilities of the faculty members to carry out independent research, write successful research projects, and finally to enable them for the technical communication considering national/international journal/conferences. Lectures on fundamental aspect of relevant research topic selection, literature review, planning of research, project proposal writing and research paper writing will be conducted by the experts along with some hands-on practices which will enable participants to grasp the content methodologically.
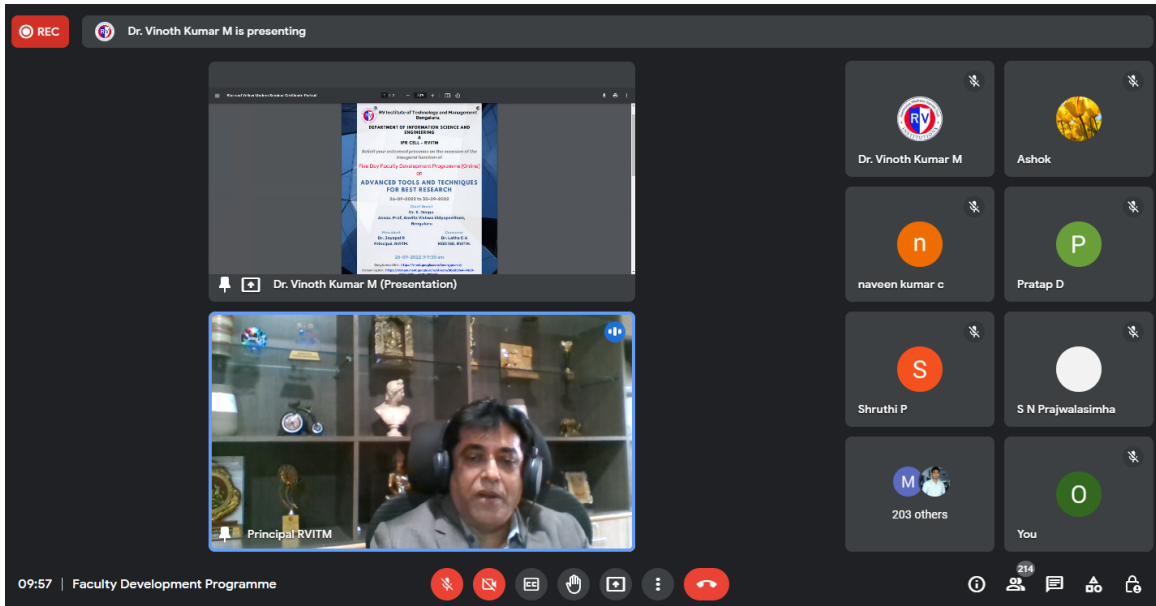
Topics Covered:

- Best Research practice
- Research Management
- Tools for Research
- PCA and FA analysis
- R-Tool in Research
- Idea for patent

Day 1:26.09.2022   **9.30am to 10.00am**   **Inaugural Function**

The program was started with the Inauguration session. Dr. Latha C A, HoD, Department of ISE started the session with the Welcome address. It was then followed by invocation song by Mrs. Chaitra   H R, Programmer, RVITM. Dr.Vinoth Kumar M, Associate Professor, Dept of ISE gave details about the objectives and details about the FDP. Dr. Niharika P Kumar Associate Professor, Department of ISE has introduced the chief guest to session. The Chief guest of the session Dr. K. Deepa Assoc. Prof, Amrita Vishwa Vidyapeetham, has set the right tone to the program by delivering Inaugural address to the participants and by outlining the importance of Research and the usage of tools in research. Finally, Prof. Deepak D J, Assistant Professor, Department of ISE proposed vote of thanks to the august gathering and concluded the Inaugural function.

Day 1:26.09.2022   **10.00am to 12.00pm**   **Forenoon Session**

Topic:
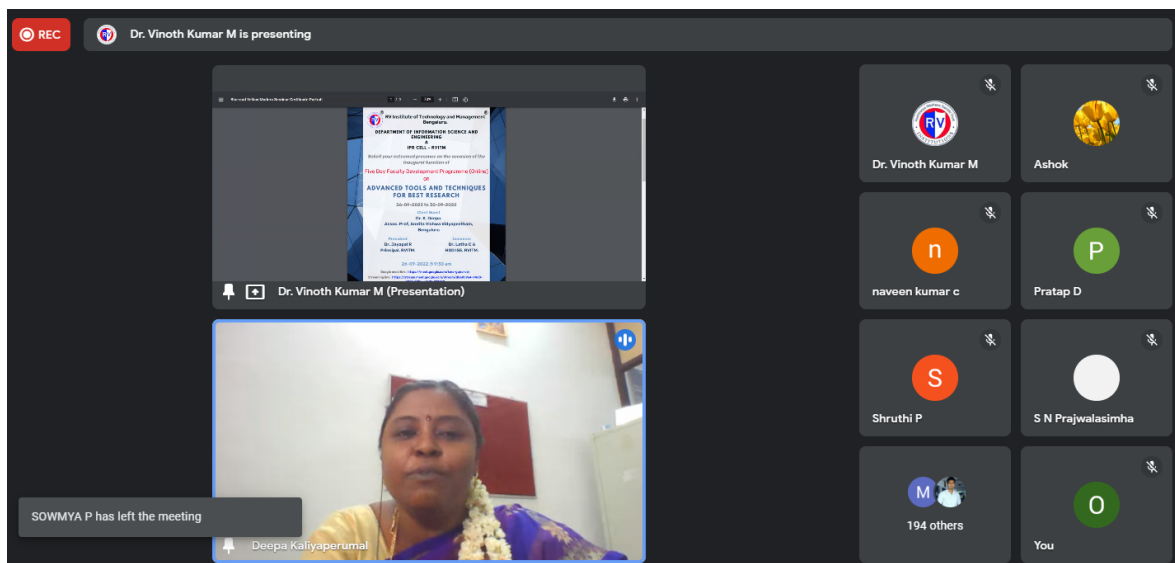Best research practice

Resource Person:
Dr. K. Deepa
Amrita Vishwa Vidyapeetham
Bengaluru

The following titles are covered in the forenoon session
- Good Research Practices
- Research Community
- Values and Research Integrity
- Research Design

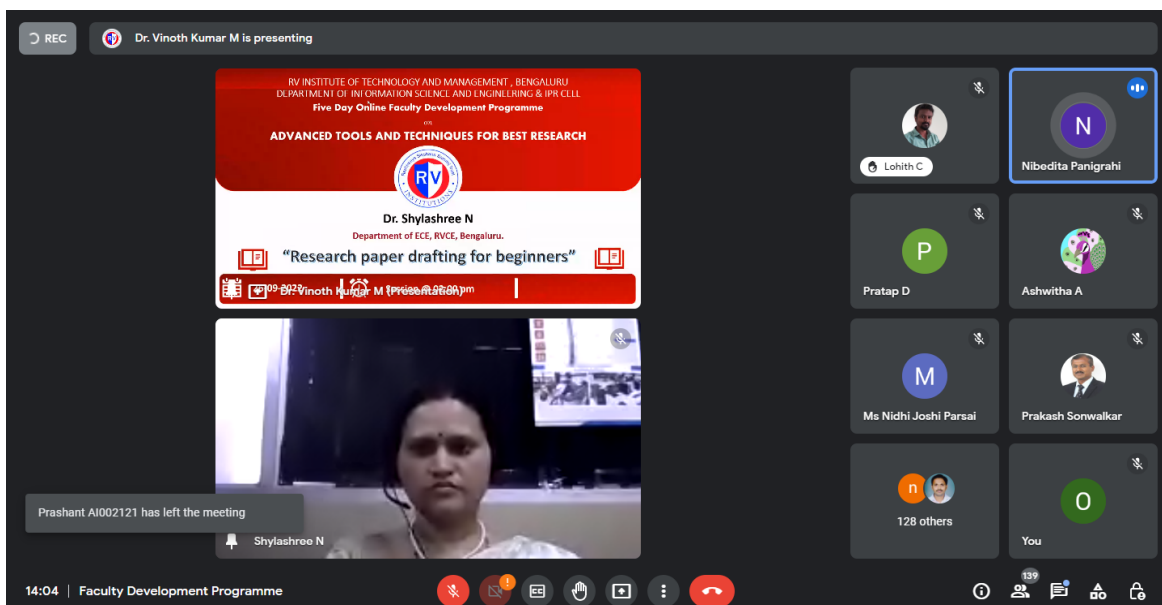**Day 1: 26.09.2022**   **02.00pm to 04.00pm**   **Afternoon Session**

Topic:
Research paper drafting for beginners.

Resource Person:
Dr. Shylashree N
Department of ECE
RVCE, Bengaluru.

The following titles are covered in the Afternoon session
- Research ideas
- Scientific writing
- Writing abstract, title, keywords, different sections
- Preparing semantics and figures
- Ethics

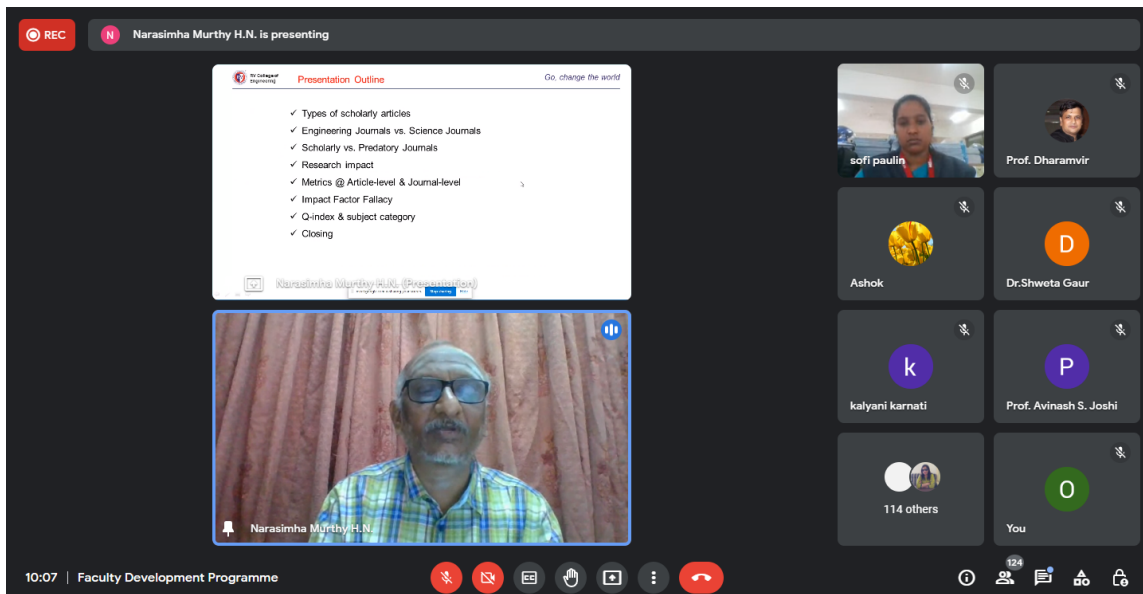**Day 2:27.09.2022**   **10.00am to 12.00pm**   **Forenoon Session**

Topic:
Types of Reseacrh publication

Resource Person:
Dr. H N Narasimha Murthy
Professor and Dean
RVCE, Bengaluru.

The following titles are covered in the forenoon session
- Types of scholarly articles
- Engineering journals v/s Science journals
- Scholarly vs Predatory journals
- Research impact, Metrics, Impact factor, Q-Index

Day 2: 27.09.2022   **02.00pm to 04.00pm**   **Afternoon Session**

Topic:
High Indexing Paper Publications and Research Management
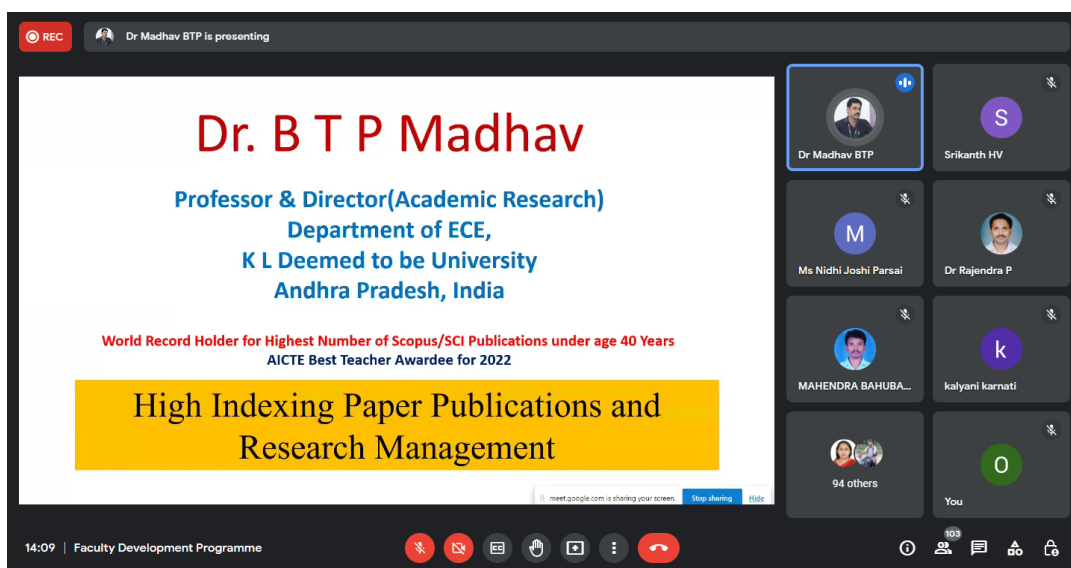
Resource Person:
Dr. B T P Madhav
Professor & Director (Academic Research)
Koneru Lakshmaiah Education Foundation, Hyderabad.

The following titles are covered in the afternoon session
- Research Measurement
- Different types of publications – Open access, Subscription based
- Citations, H-index
- Plagiarism
- Reviewers

Day 3: 28.09.2022   **10.00am to 12.00pm**   **Forenoon Session**

Topic:
Data Analytics using R Programming.

Resource Person:
Dr. G. Kumaravelan
Pondicherry University
Karaikal

The following titles are covered in the forenoon session
- About Data Science – Life Cycle
- R Programming – R studio and R packages
- Practical sessions using R

Day 3: 28.09.2022   **02.00pm to 04.00pm**   **Afternoon Session**

Topic:
Text Analytics using R Programming
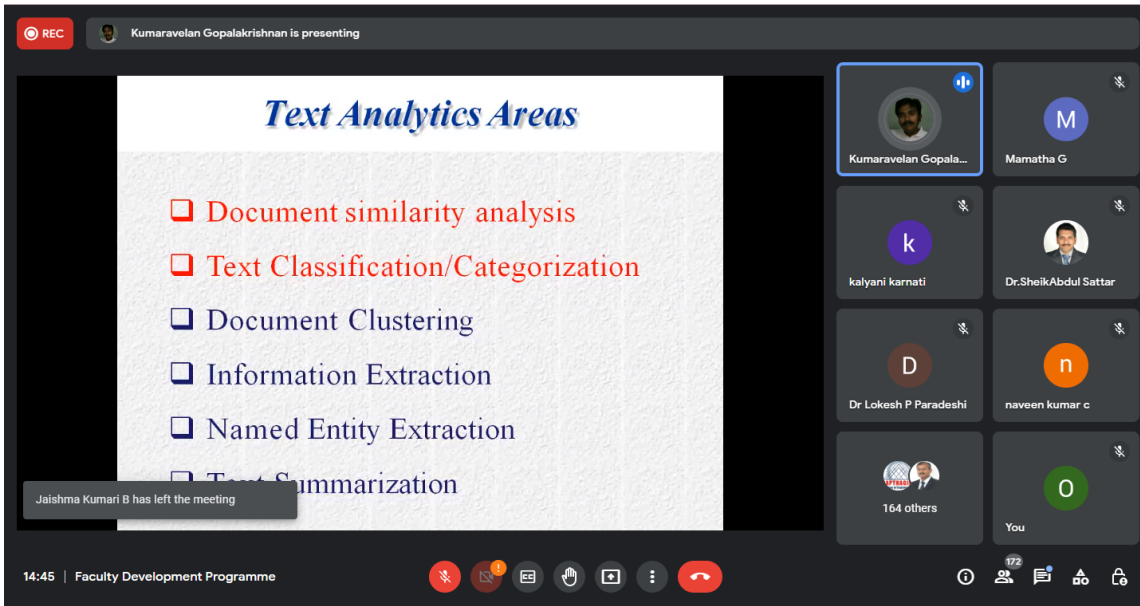
Resource Person:
Dr. G. Kumaravelan
Pondicherry University
Karaikal.

The following titles are covered in the forenoon session
- Framework for text analytics
- Document Representation
- Text analytics areas

Day 4: 29.09.2022   **10.00am to 12.00pm**   **Forenoon Session**

Topic:
Research Management
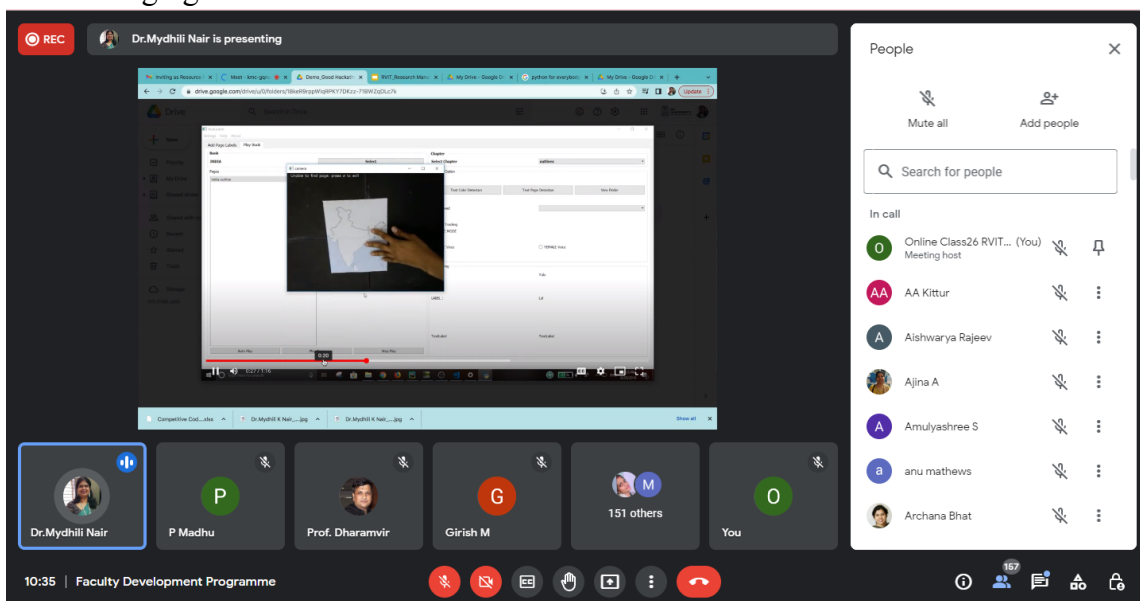
Resource Person:
Dr. Mydhili K Nair
Professor & Head
School of CSE
RV University, Bengaluru.

The following titles are covered in the forenoon session
- Good and bad research
- Difference between project or research
- Finding research problem
- Writing quality literature review
- Managing references

Day 4: 29.09.2022   **02.00pm to 04.00pm**   **Afternoon Session**
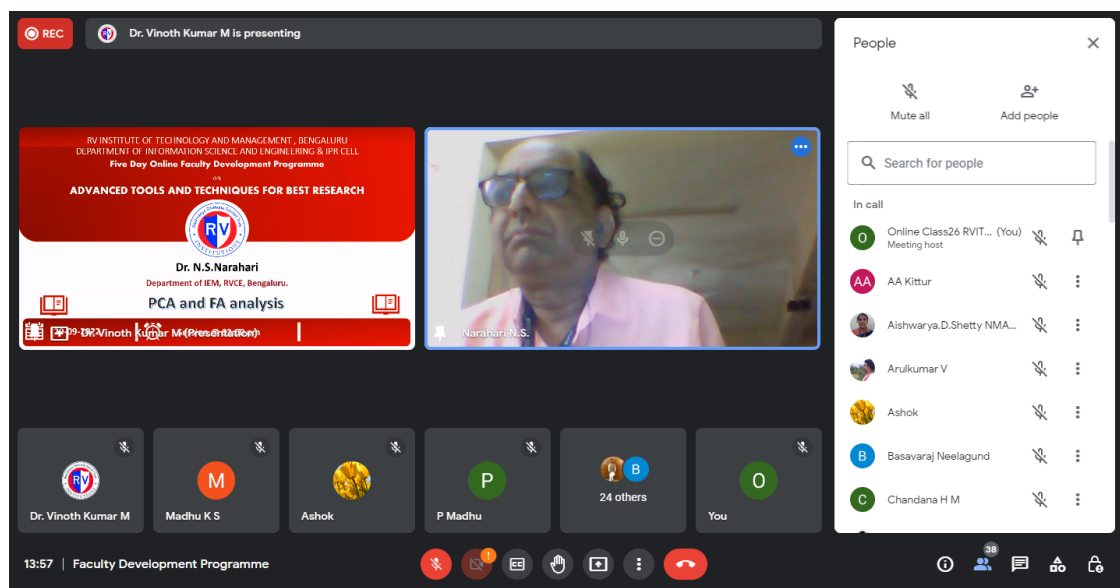
Topic:
PCA and FA analysis

Resource Person:
Dr. N.S.Narahari
Department of IEM,
RVCE, Bengaluru.

The following titles are covered in the forenoon session
- Dimensionality Reduction using Principal Component Analysis
- Factor Analysis – Exploratory and confirmatory multivariate technique

Day 5: 30.09.2022   **10.00am to 12.00pm**   **Forenoon Session**
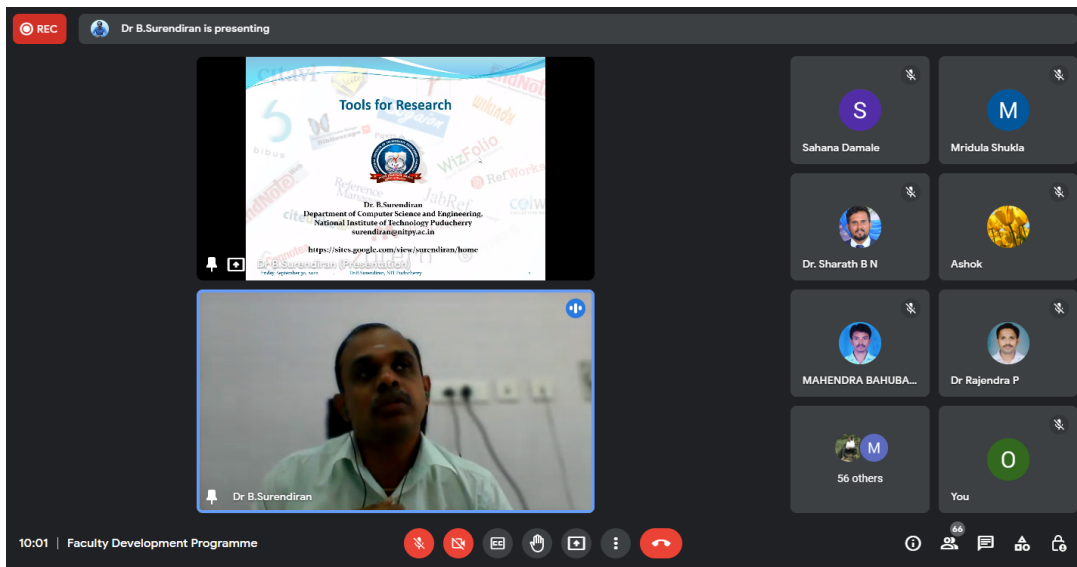
Topic:
Advanced tools for Research

Resource Person:
Dr Surendiran
Dept. of CSE
NIT Puducherry.

The following titles are covered in the forenoon session
- Document writing tools
- Searching files and contents
- Plagiarism checker
- Tools for Image processing, Data mining, Flowchart, Diagram, Paraphrasing , Data visualization
- Research profiles

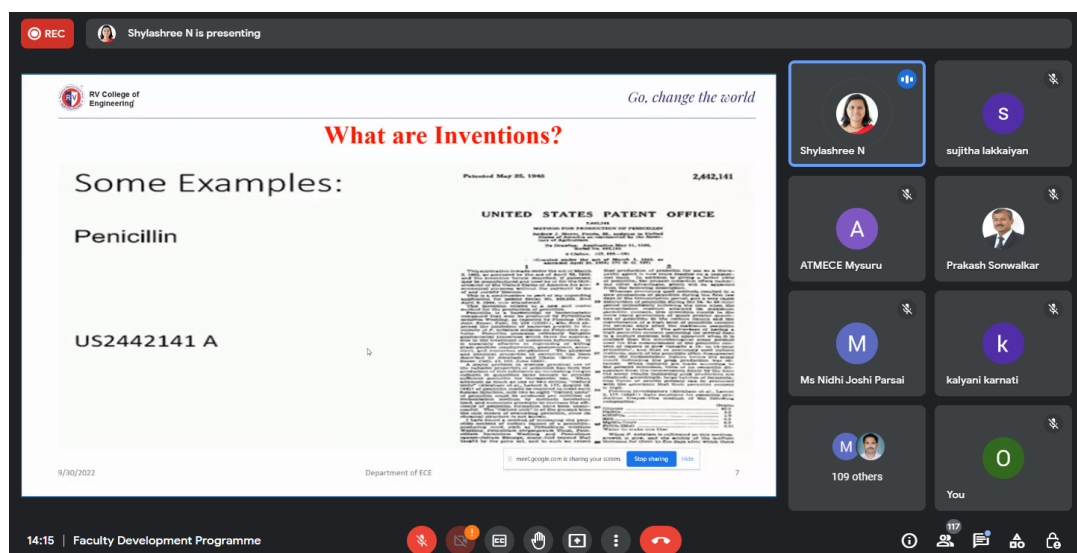**Day 5: 30.09.2022**   **10.00am to 12.00pm**   **Afternoon Session**

Topic: Patent drafting for beginners

Resource Person:
Dr. Shylashree N
Department of ECE
RVCE, Bengaluru.

The following titles are covered in the forenoon session
- What are Inventions?
- Fields of inventions
- How to apply for patents?
- Different types of patents.

Coordinators Signature   **HOD's Signature**