DHANRAJ BAID JAIN COLLEGE (AUTONOMOUS)

PG & Research Department of Computer Science in association with Internal Quality Assurance Cell organizes
Five Days Online Faculty Development Program on
Research – The Journey from Inception to Publishing
(05/02/2024-09/02/2024)

Introduction:

Faculty Development Programs play vital role in enriching the quality, reputation and nurturing constant improvement within the educational institutions. Faculty development programs are planned to enable the faculties to enhance teaching skills and remain up-to-date in the educational field. FDPs help educators follow the latest teaching methodologies, tools, and trends. FDPs help deliver effective and appropriate instructions to their students. The five days' online faculty development program arranged by **PG & Research Department of Computer Science in association with Internal Quality Assurance Cell** as per NAAC guidelines in **DHANRAJ BAID JAIN College** under the title **Research – The Journey from Inception to Publishing, dated (05/02/2024-09/02/2024)** has the main idea of inculcating various aspects of research among faculty members in their respective field of computer science.

Objectives of the Five Day Faculty Development Program:

1. **Skill Enhancement:** The five days FDP tries to improve the specific skill gaps and needs of research in their respective filed.

2. **Research and Publication:** The main theme of the FDP is encouraging the faculty members in research and guiding them in conducting quality research, writing quality articles, and publishing their papers in good quality journals. Removing plagiarism in articles and thesis and avoid publishing articles in fake journals, ideas about writing potential thesis.

3. **Technology Integration:** This FDP help faculty integrate technology effectively into their research methods, ensuring that faculties have access to innovative updated tools in the field of research.

4. **Peer Collaboration:** Encouraging collaboration among faculty members improves the exchange of ideas and best practices among the participants.

Online Faculty Development Program
Day – 1
Effective Article Writing

Activity Title	:	**IQAC** Online Faculty Development Program
Name of Guest Speaker	:	Dr.V.R. Elangovan, SRM University, Kattangulathur.
Topic	:	Effective Article Writing
Organization Name	:	Dhanraj Baid Jain College, Thoraipakkam, Chennai
Day and Date	:	Monday, February 05, 2024
Platform	:	Google Meet – Link: https://meet.google.com/vqw-azvd-ajj
Time	:	1.30 P.M to 2.30 P.M
YouTube Link	:	https://youtu.be/9btKLTMT938?si=EU_1uzeCiY38Gvt6

Invitation for day 1

DESCRIPTION OF ACTIVITY –

The inaugural session was started by **Dr. B. Jagadhesan, IQAC Coordinator and HOD of Computer Science Department** with the commencement of the Faculty Development Program with the aim of creation, transmission, and dissemination of knowledge in order to achieve sustainable development and empowering the qualified and trained faculty members. He then continued with the overall objective of the five days' virtual faculty development program on **Research – The Journey from Inception to Publishing** is to provide the participants with an opportunity to acquire knowledge about good research – step by step procedures involved in effective article writing and publishing manuscripts in good journals.

Mr. M.Ganesh Raja addressed the faculty members by welcoming them and eventually introduced the Chief Guest of the Program Dr.V.R. Elangovan, SRM University, Kattangulathur revealing about his competencies and experiences in the field of research to the participants.

Dr.V.R. Elangovan started the session by greeting the gathering and giving an overview of the description and introduction of Research and also stated how to write high quality research papers.

His introduction started with research overview, types of research article, research paper vs research proposal, components of research paper writing, citing references, Tools used for research paper writing.

His discussion reveals the fact that a research paper is a piece of academic writing that provides analysis, interpretation, and argument based on in-depth independent research.

He further guided with the steps of research paper writing with the following topics: Title, abstract, table of contents, background and significance, literature review, research design and methods, hypothesis and discussion, citations.

Good literature reviews though time consuming not only is the significant area in any research, but also guides to identify and formulate the research problem. In a research paper, the use of literature as a foundation and as support for a new insight that one can contribute. The focus of a literature review, however, is to summarize and synthesize the arguments and ideas of others without adding new contributions.

During the session following points were discussed by giving suitable examples.

1. What is a research?

2. Defining various types of research?

3. Illustrate the importance of research?

4. How to write good research paper?

5. Assessing the types of research article writing?

6. Analyze components of the research paper writing?

7. Formulate the difference between research paper and research proposal?

8. Discuss Tools for research paper writing

Outcome of Day 1 FDP:

The outcome of day 1 FDP on Effective Article Writing by Dr.V.R. Elangovan not only cultivate the scholarly research skills of researchers but also provided step-by-step guidance which help the researchers in writing effective article, Quality and structure of the article, detailed steps of research paper writing and help them publish in good journals.

Further he emphasized that choosing quality journals is important for a researcher and selecting a good journal for getting the research work published is very important for any researcher.

The entire session was an eye opener for the faculties who pursue the research or planned to do in the future. Various aspects like tool for research paper writing will help aspiring faculties in the field of research to develop the basic ideas of research paper writing in an effective and easy manner.

Finally, the session was ended with the VOTE OF THANKS speech given by Miss. Monica, Computer Science Department.
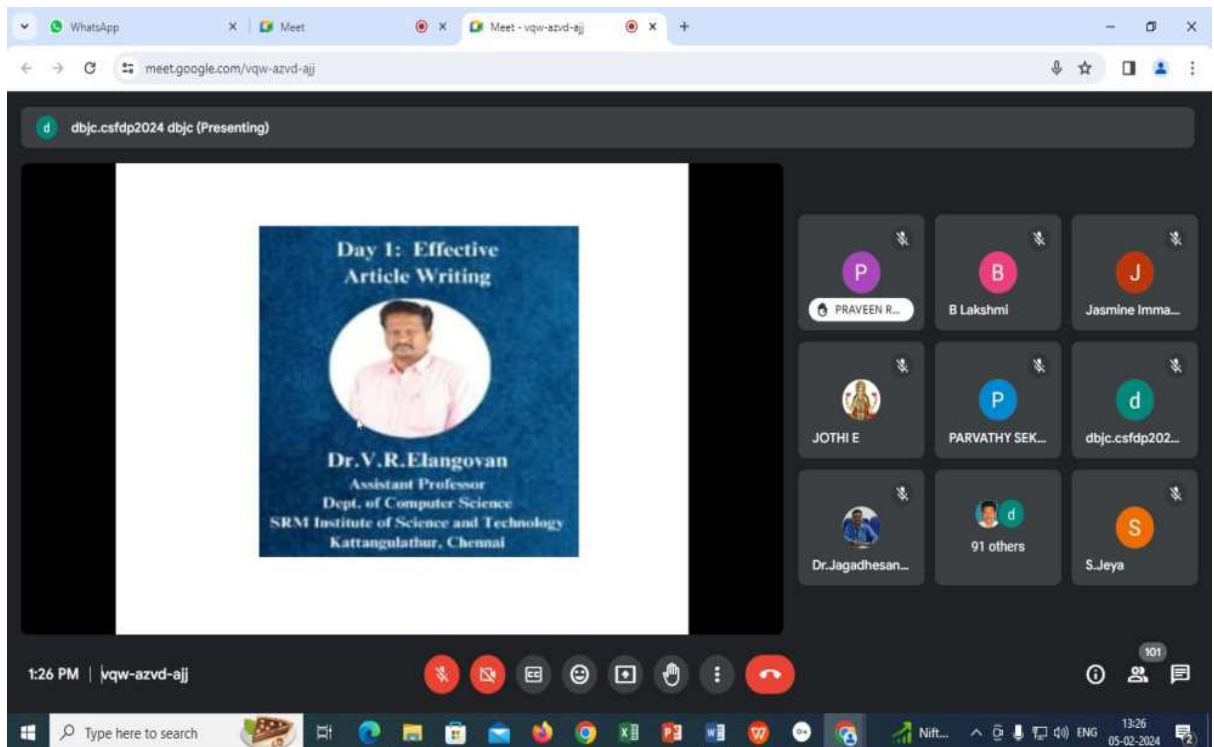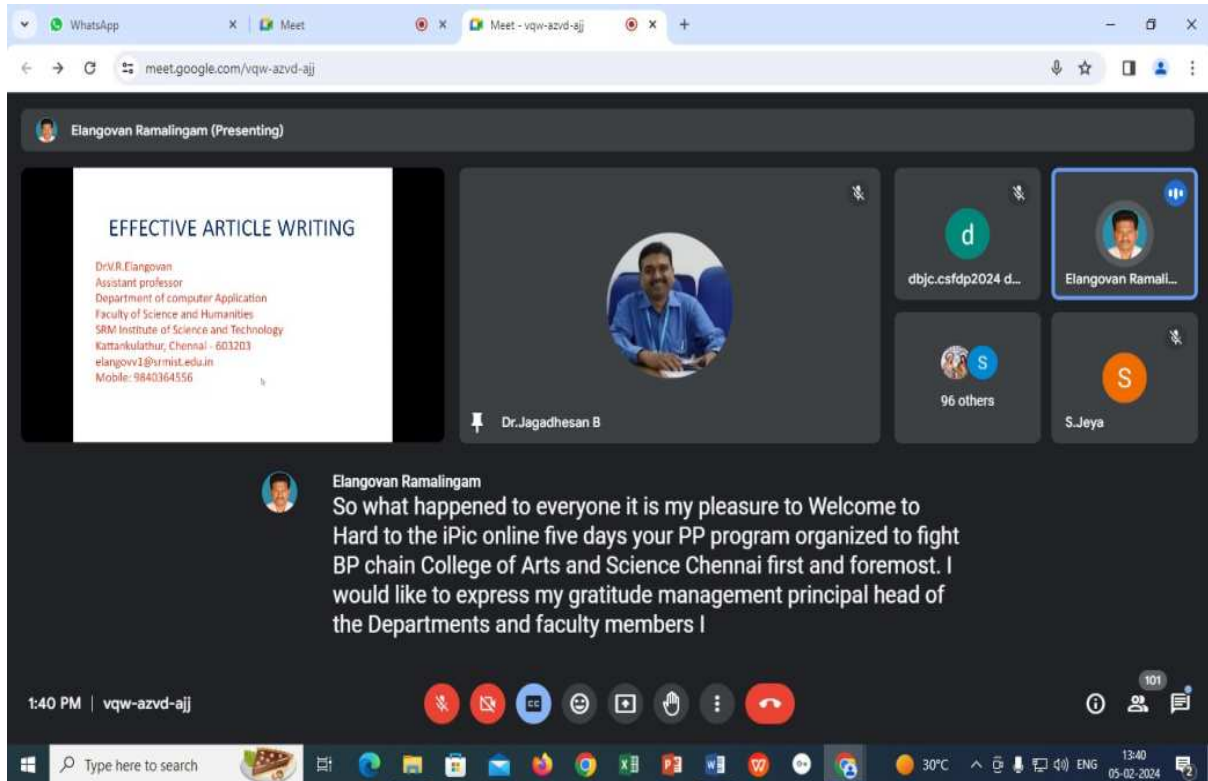
Screenshots of Day 1 FDP:
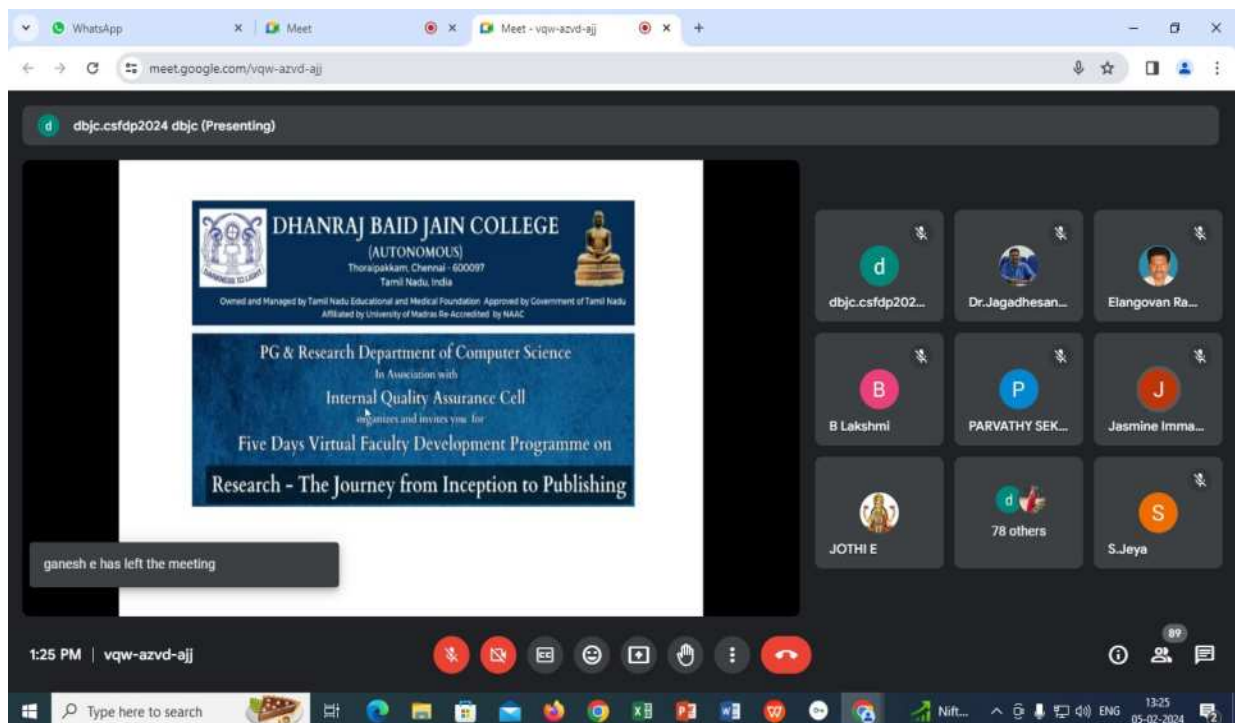
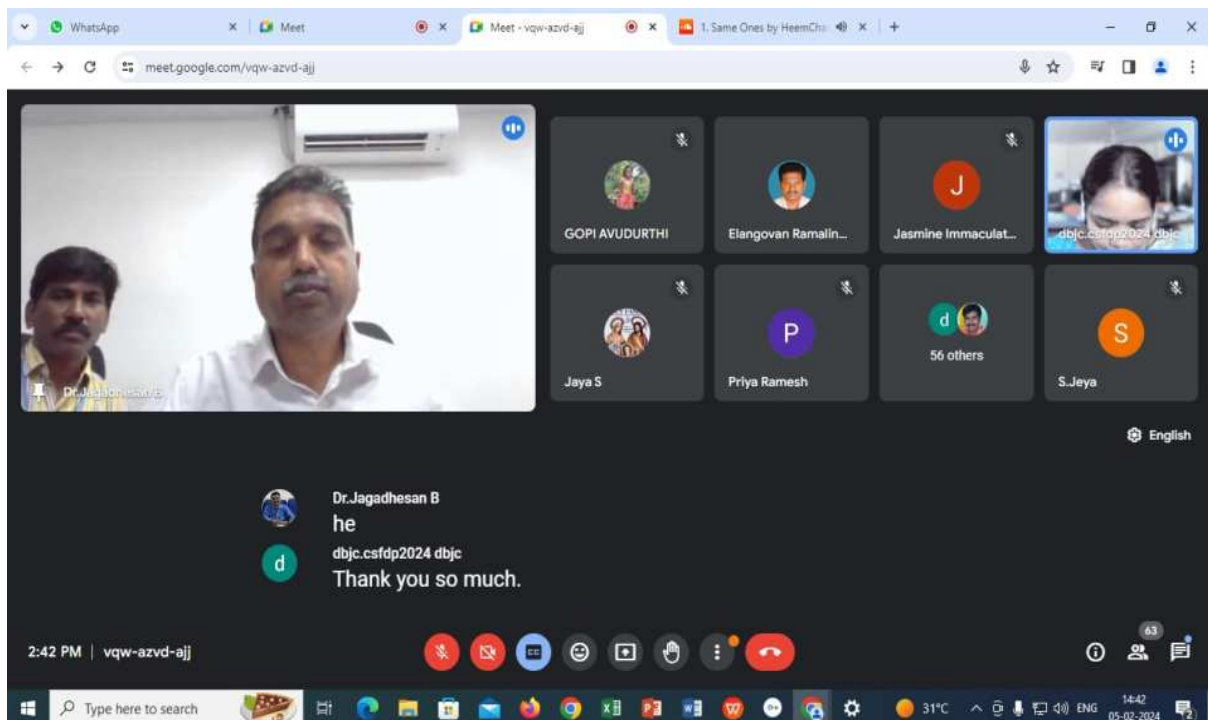**Inaugural session of the FDP**
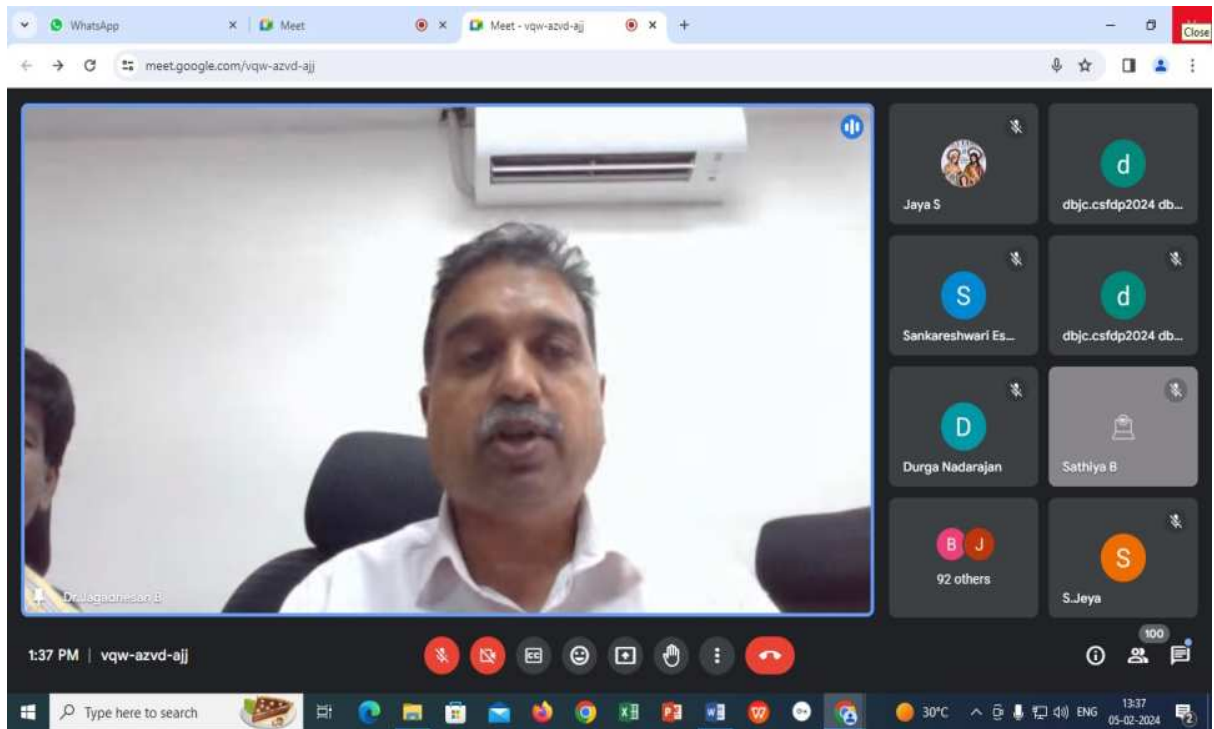
Inaugural speech of the FDP by Dr. B. Jagadhesan, IQAC Coordinator and HOD of Computer Science Department

Introducing Resource Person Dr.V.R. Elangovan

Dr.V.R. Elangovan delivering the highlights of effective article writing to the audience

Session ended with vote of thanks by Mrs. Monica

Online Faculty Development Program
Day – 2
Identification of Journals for Publication

Activity Title	:	Online Faculty Development Program
Name of Guest Speaker	:	Dr.K. Dharmarajan, Vels University, Chennai
Topic	:	Identification of Journals for Publication
Organization Name	:	Dhanraj Baid Jain College, Thoraipakkam, Chennai
Day and Date	:	Monday, February 06, 2024
Platform	:	Google Meet – Link: https://meet.google.com/aku-nzte-kpp
Time	:	1.30 P.M to 2.30 P.M
YouTube Link	:	https://youtu.be/Vx19FQkMpio?si=c9wEhWYtMWtetuxn

Invitation for day 2

DESCRIPTION OF ACTIVITY –

In Day 2 of the Faculty Development Program Mr. P. Saravanan introduced the Resource Person Dr.K. Dharmarajan, Vels University, Chennai and revealing about his high expertise and experience in the field of academics and research.

Prof. Dr.K. Dharmarajan, started the session with the objective of research, Types of Research and later on proceeded with the following facts

1. Point out the Issues of publication,
2. Calculate Journal impact factor,
3. Apply Quartile: Q1,Q2,Q3,Q4 in journals,
4. Formulate UGC Care List Journals

He later discussed elaborately about how to choose a good journal, what are the journal metrics to consider, how to stay away from fake predatory journals, Research Publication Issues, H-Index, citation in Scopus journal, choosing good journals in web of science and Scopus. He concluded with Thesis Search, Dataset Websites, AI Power Tools for Research, Plagiarism Checker. He stated what research gate is and how to access it.

Finally, he concluded with dataset websites, searching UGC care list, research paper finding technique, research tools and techniques.
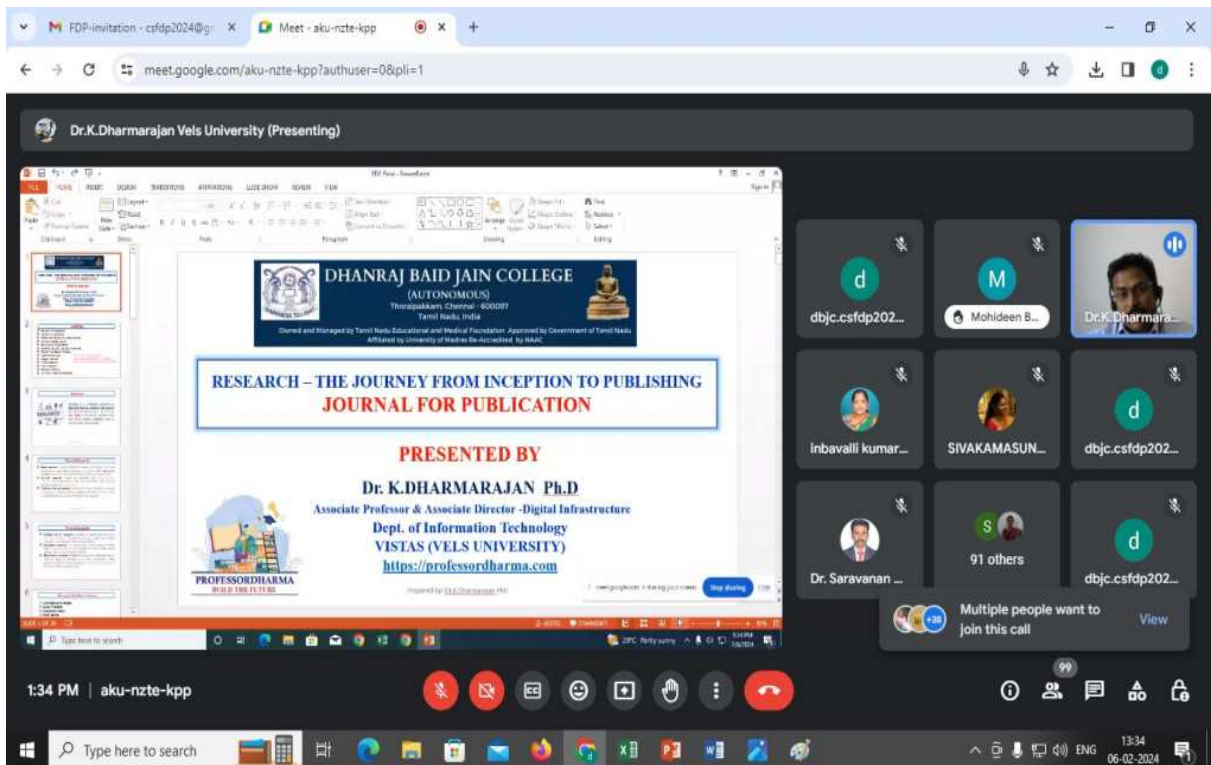
Outcome of Day 2 FDP:

The entire session was remarkable by Dr.K. Dharmarajan by guiding the audience to identify and choose the good quality Journals for Publication and enthralling the audiences by his concepts in identifying best journals, calculate the metrics, safeguard from fake-predatory journals. Publication ethics was clearly stated by him and also his speech guided in avoiding journals that do not have a good and rigorous peer review process.

At the end of 2nd day session the vote of thanks was given by Prof. Miss. Monika

Screenshots of Day 2 FDP:

Resource Person introduction by Mr. P. Saravanan

Inaugural session by Dr.K. Dharmarajan

Agenda of Day 2 FDP explained by Dr.K. Dharmarajan

Explaining Types of Research
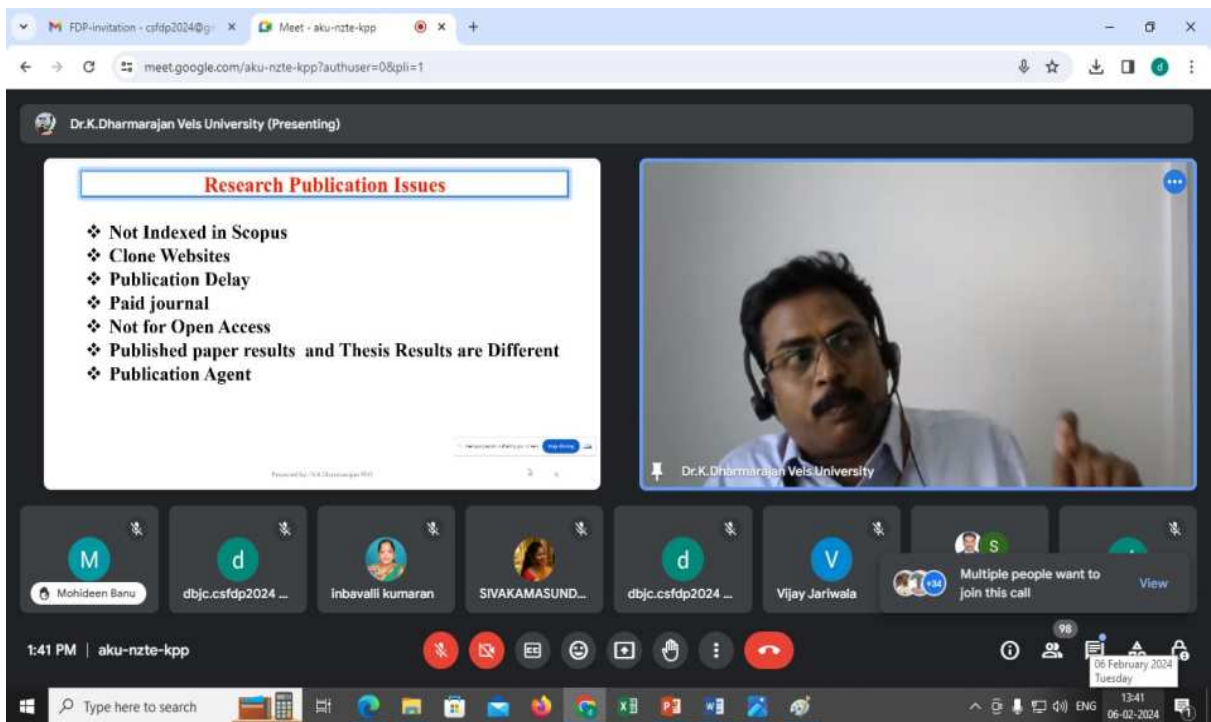
Delivering research publication issues to Faculty Members
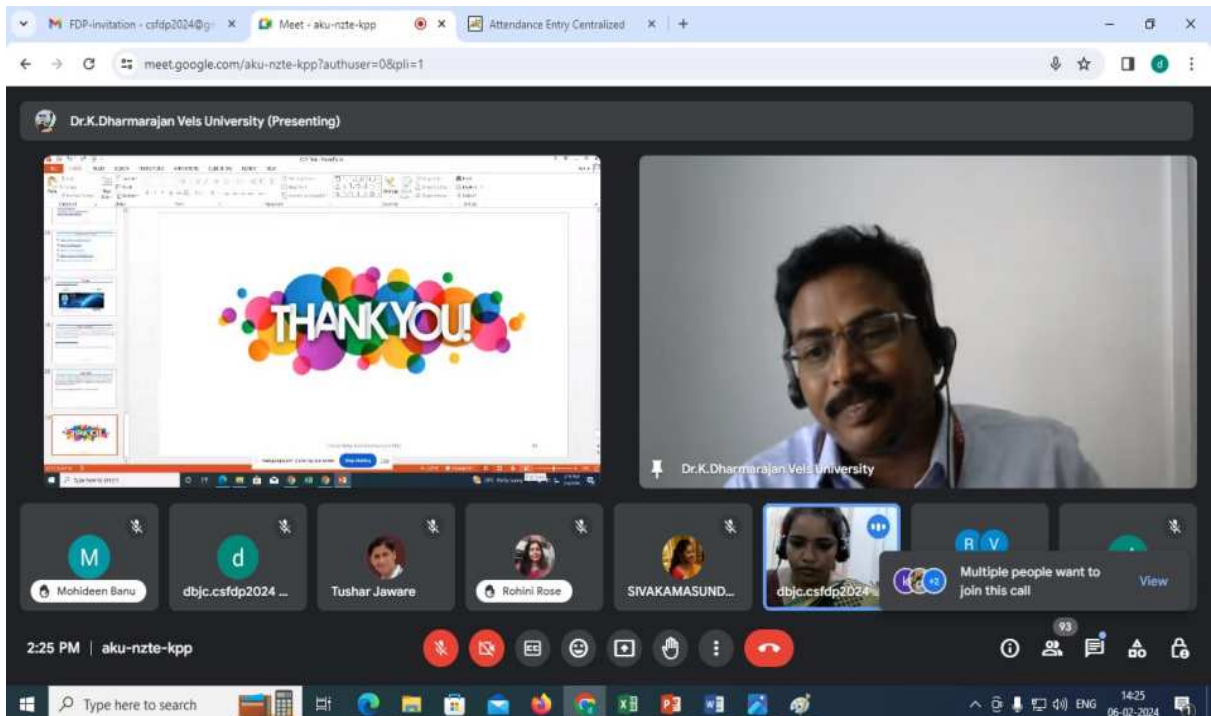
Session ended with vote of thanks by Mrs. Monica

Online Faculty Development Program
Day – 3
Strategies to enhance Research visibility, Impact and citation

Activity Title   :   Online Faculty Development Program

Name of Guest Speaker :   Dr. Viji Vinod, MGR University, Chennai

Topic   :   Strategies to enhance Research visibility, Impact and citation

Organization Name   :   Dhanraj Baid Jain College, Thoraipakkam, Chennai

Day and Date   :   Monday, February 07, 2024

Platform   :   Google Meet – Link: https://meet.google.com/uea-ygxj-xvx

Time   :   1.30 P.M to 2.30 P.M

DESCRIPTION OF ACTIVITY –

In Day 3 of the FDP Mrs. Durga Siddharth introduced the Resource Person Dr. Viji Vinod, MGR University, Chennai and revealing about her eminent proficiency and rich experience in the field of research.

Dr. Viji Vinod started the session with

➢ Research visibility

➢ Indicators to check research visibility

➢ Strategies to enhance research visibility

➢ Tips to enhance journal visibility

➢ Social media sites for researchers

➢ Graphical strategies of research publications in India

➢ Publish research papers in online platforms

During session following points were discussed by giving suitable examples.

➤ She elaborately discussed the fact that how to select an appropriate journal for your research work and creation of online author profile, where to create an author profile.

➤ Subject repositories, components of VIDWAN, Scopus, orchid ID, tools used for polishing your research paper, citation styles, publication ethics, plagiarism tools.

The day 3 of the FDP where participants enjoyed the most as it was well structured and interactive. The entire session was very much informative for researchers.

Outcome of Day 3 FDP:

In day 3 of the FDP Dr. Viji Vinod emphasized the need for enhance the research visibility and through which improve the citations. The valuable ideas include sharing the visual, multimedia contents in the web, the importance of publishing in open access journals, the importance of social media and research networks, attending and presenting conferences, participating in workshops, communicate with other researchers in the relevant field and also apply for research fund.

Increased visibility and impact of research activity, and recommendations of tools that can help increase chances of the research being noticed, used and having impact, thus increasing one's own reputation and chances of success in your academic work. This in turn attracts more citations and downloads for the research articles concerned. The use of various academic identifiers should be made mandatory field in various applications such as research grant, project proposal, ranking system, honors and awards application etc., Academic institutions and R&D organizations should encourage faculty members, researchers and students to get these academic identifiers specially ORCID, Vidwan and make it as a mandatory field in the research ecosystem such as research management systems, faculty profile management, institutional repositories, e-theses and dissertations etc.,

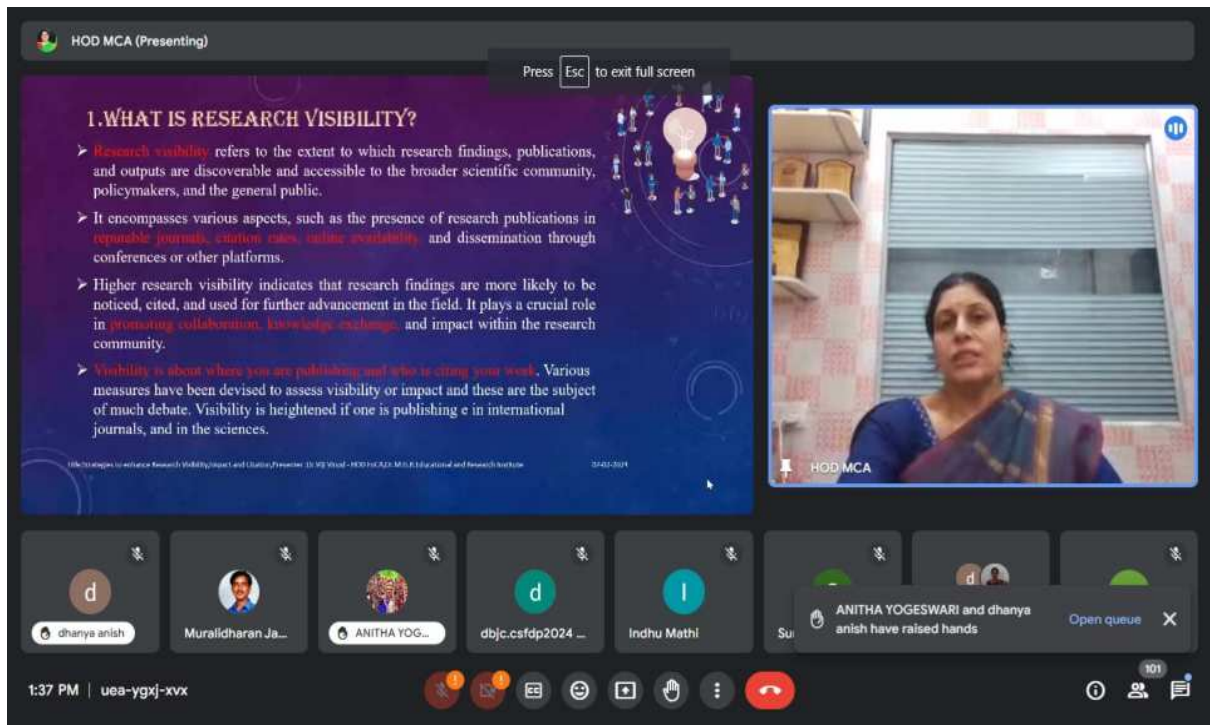Day 3 session was concluded with vote of thanks by Prof. Miss. Monica, Computer Science Department.
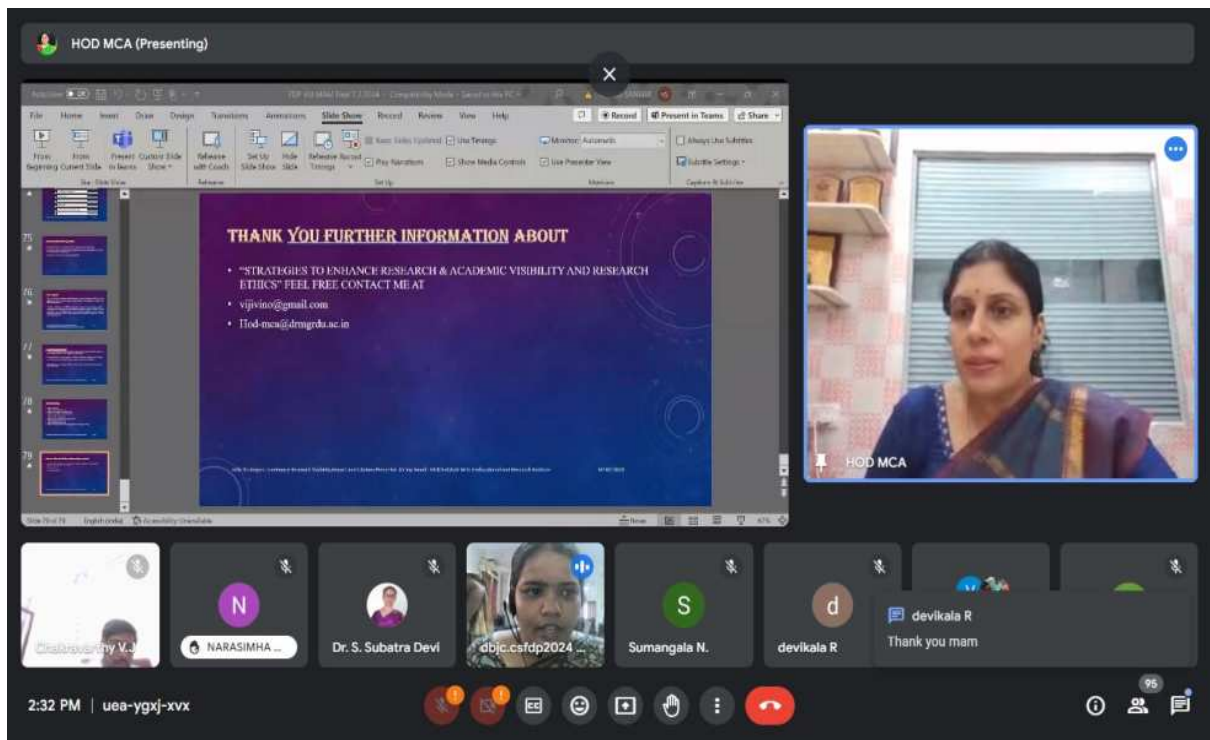
Screenshots of Day 3 FDP:
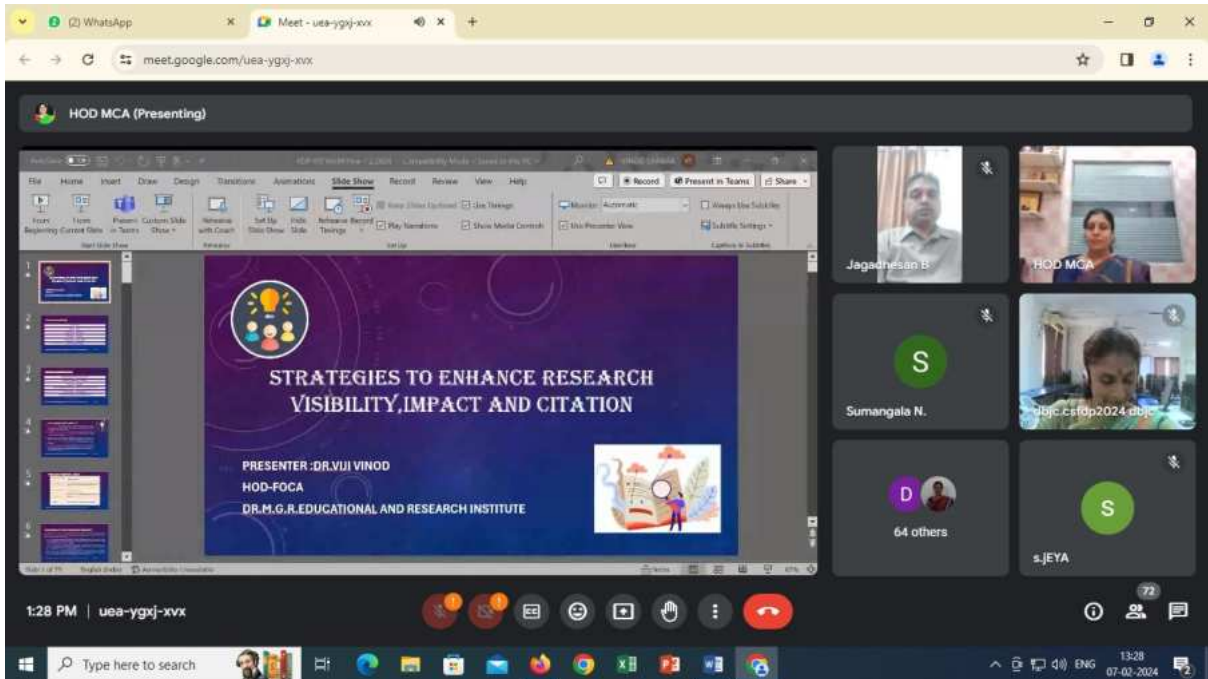
Introducing the resource person Dr. Viji Vinod by Mrs. Durga Siddharth
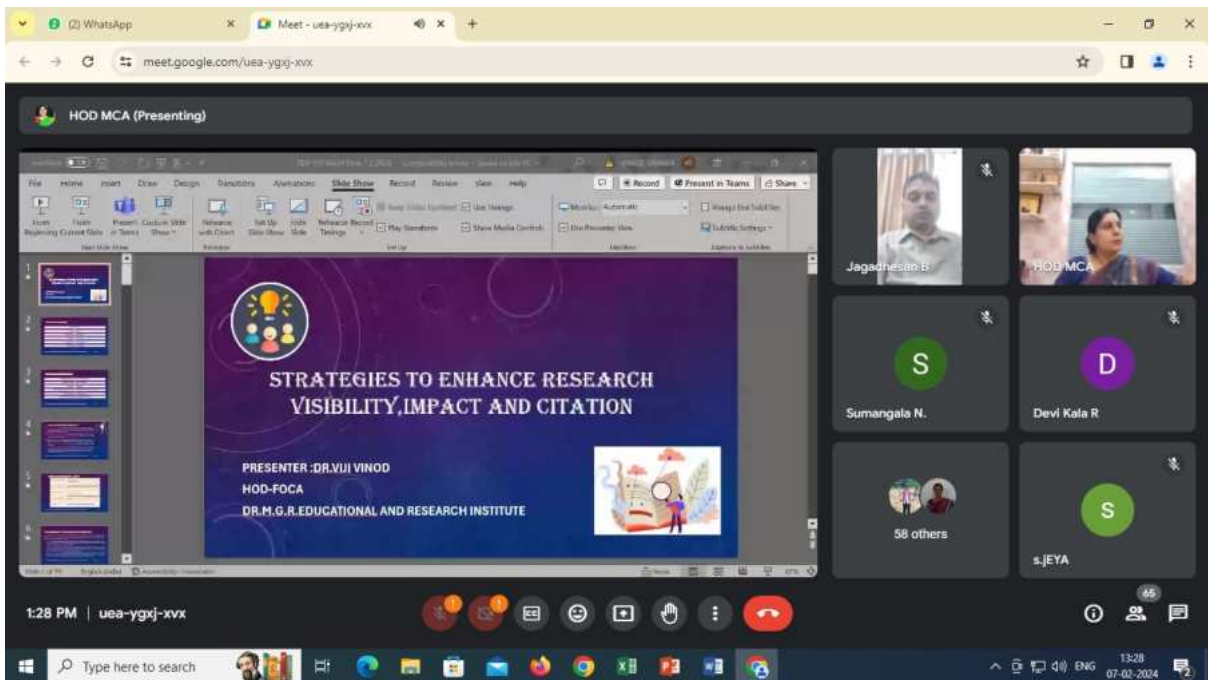
Day 3 Session started by Dr. Viji Vinod

Delivering the Strategies to enhance Research Visibility by Dr. Viji Vinod

Session ended with vote of thanks by Miss. Monica

Online Faculty Development Program
Day – 4

Potential Thesis Writing

Activity Title	:	Online Faculty Development Program
Name of Guest Speaker	:	Dr. D. Akila, Saveetha College of Liberal Arts and Sciences, Chennai.
Topic	:	Potential Thesis Writing
Organization Name	:	Dhanraj Baid Jain College, Thoraipakkam, Chennai
Day and Date	:	Monday, February 08, 2024
Platform	:	Google Meet-Link: https://meet.google.com/eyn-gvrw-soa
Time	:	1.30 P.M to 2.30 P.M
YouTube Link	:	https://youtu.be/YAunHOe8uRY?si=-czZzTJASJoxcKlM

Invitation for Day 4

DESCRIPTION OF ACTIVITY –

The session was started with the introduction and welcome address of resource person Dr. D. Akila SadheeshKumar by Mrs. S. Bhuvaneswari. Dr. Akila started the session by discussing about 'research' and 'thesis'. During the session, Dr. Akila talked about the general guidelines to be adhered upon before starting a thesis.

Some key points to be noted here are:

1. Consult your supervisors.
2. Familiarize yourself with the style or format of thesis writing.
3. Decide on the word length.
4. Learn about your referencing styles.
5. Make sure you have all the necessary information for the reference section.
6. Learn about indexing your thesis.

Dr. Akila also gave few pointers or tips on the following topics:

1. Tips for writing the Introduction.
2. How to write your problem statement.
3. Contribution of your research – Significance and ways to measure Significance.

Then, Dr. Akila, touched upon Literature review and briefed the audience about how to leverage previous research and the important questions to be asked while conducting a literature review.

Then Dr. Akila discussed how to write Research methodology, how to present the results in the Results section and how to write the Conclusion. Also the audiences were brought to attention about Plagiarism and how to avoid it while writing their thesis. The day 4 of the FDP was very unique and resourceful for all the participants who were satisfied with content delivered by the resource person. From her detailed articulation a strong thesis statement address specific intellectual questions, have clear points, and use a structure that indicates the general structure of the paper. It relies on one's ability to conduct research from start to finish. Referencing style, length, format of thesis writing is some of the guidelines one has to concentrate when writing the thesis.

Outcome of Day 4 FDP:

The art of writing thesis efficiently is the core of any research. Thesis should be constructed so that they are specific and direct to the point. Thesis message should be clear enough to remove any ambiguity about the purpose of the study or paper. The thesis should also clearly state the main problem or stand on the issue of research. Vote of thanks was given by Miss. Monica

Screenshots of Day 4 FDP:

Day 4 Introduction by Mrs. S. Bhuvaneshwari
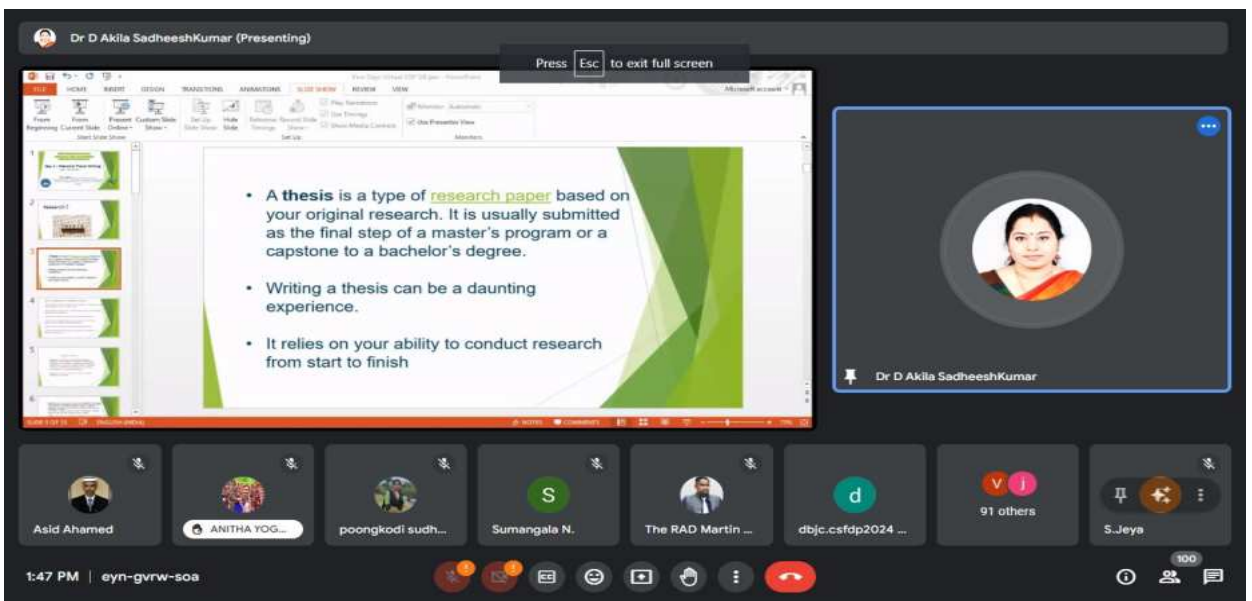
Dr. Akila introduced the topic Potential Thesis Writing to audience

Elaborating Guidelines to write a good thesis by Dr. Akila

Captivating speech on contribution of Research

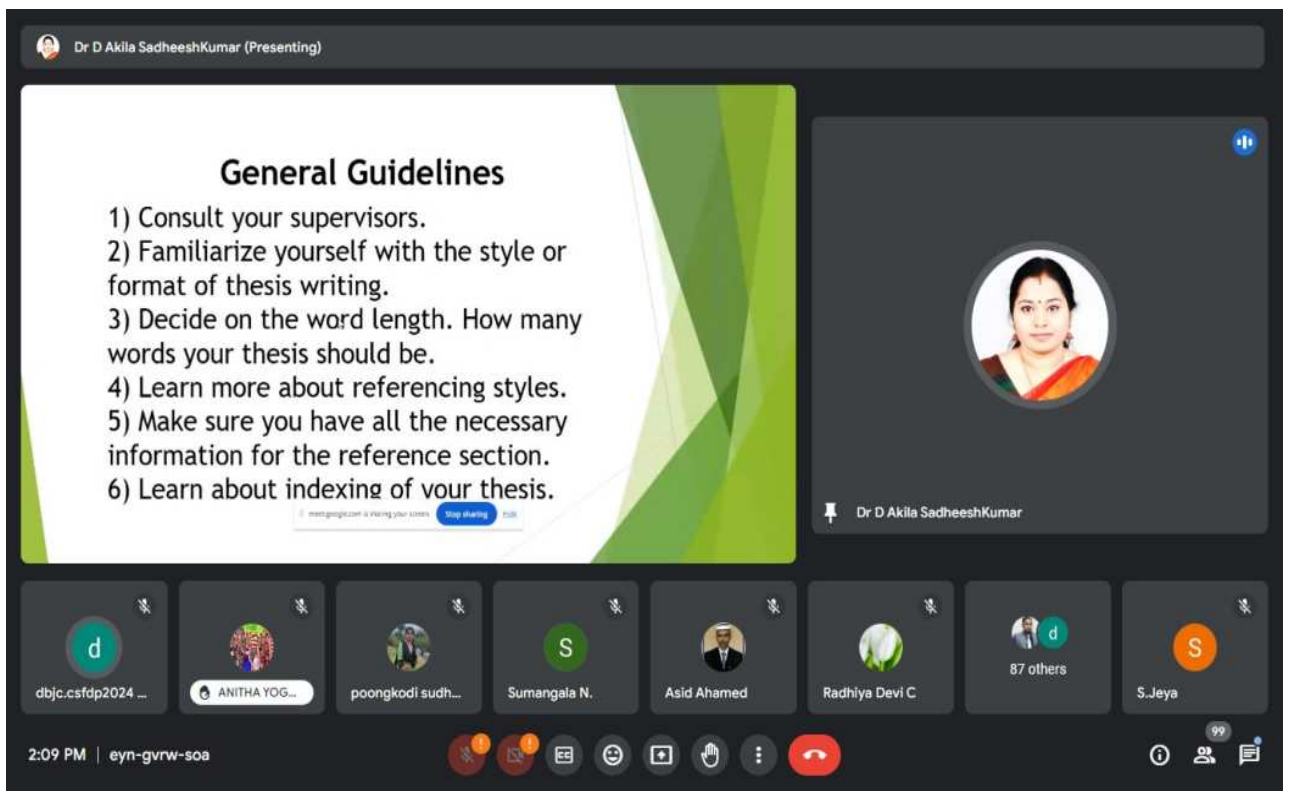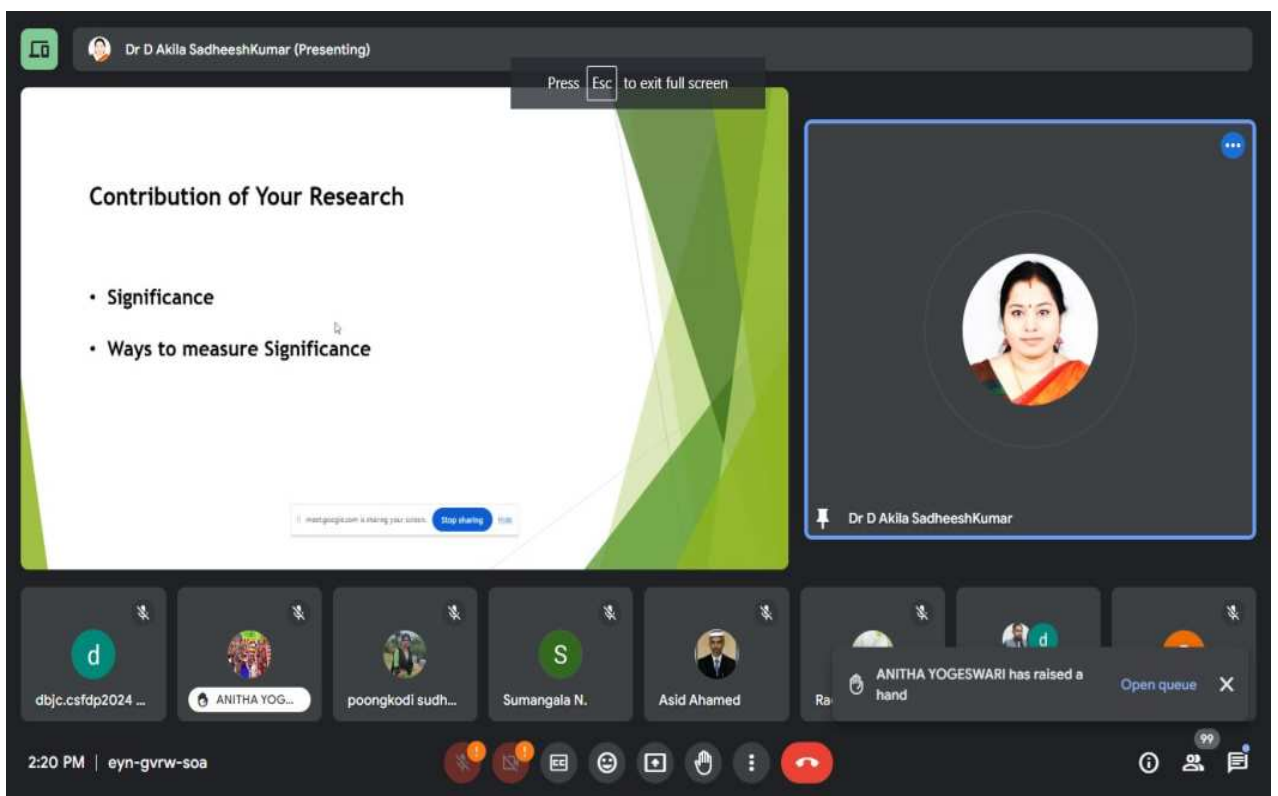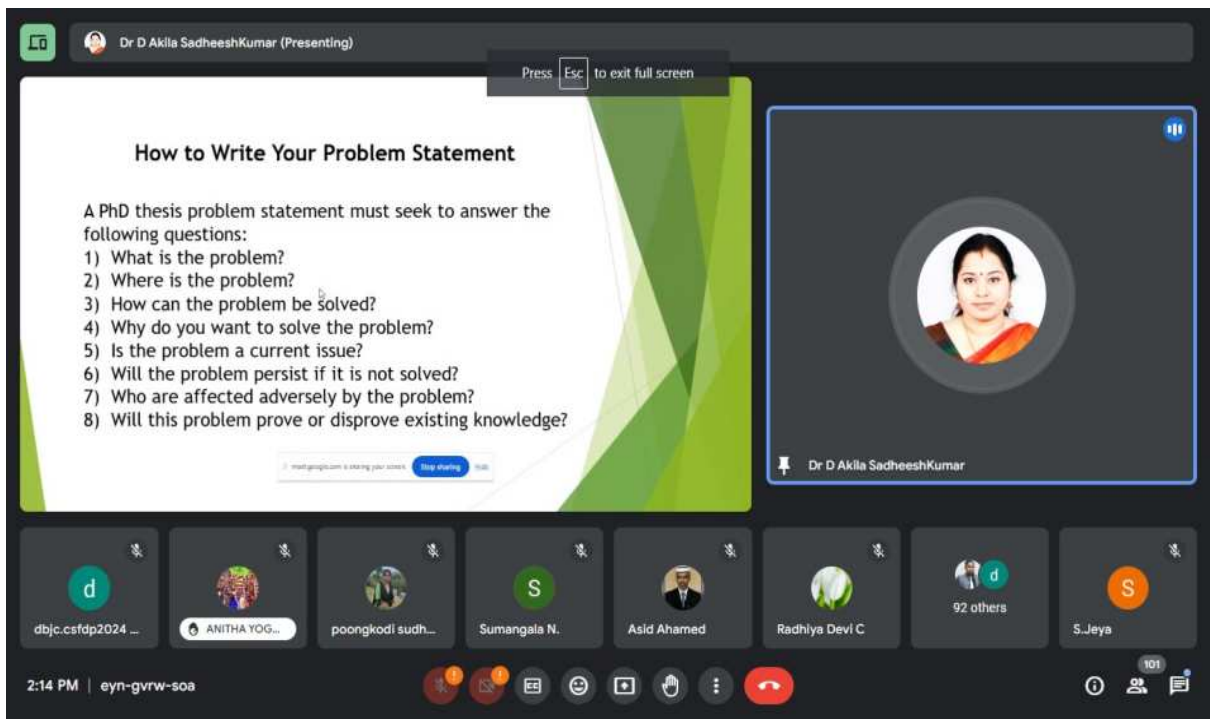**Tips for identifying the problem statement and finding the solution**
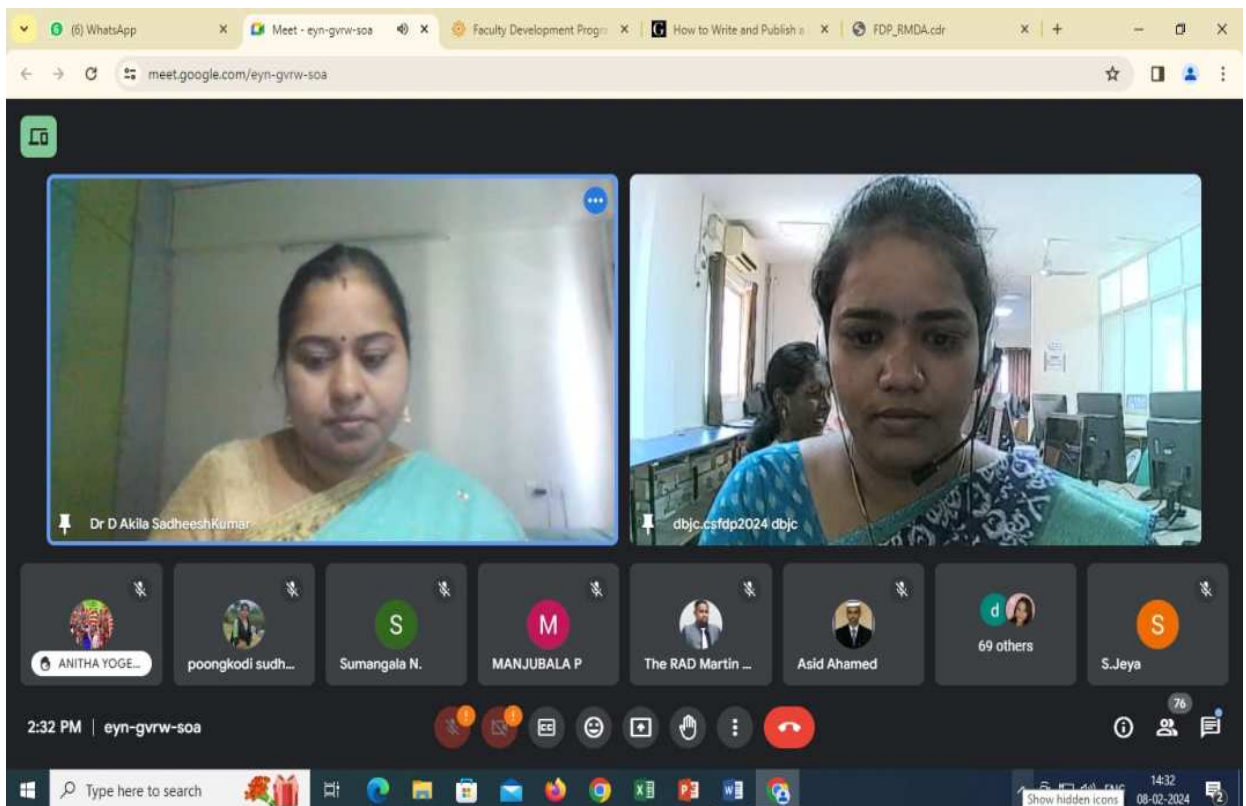
Session ended with vote of thanks by Mrs. Monica

Online Faculty Development Program
Day – 5

Tools and Techniques of Research Methodology

Activity Title	:	Online Faculty Development Program
Name of Guest Speaker	:	Dr.S. Sasikala, University of Madras
Topic	:	Tools and Techniques of Research Methodology
Organization Name	:	Dhanraj Baid Jain College, Thoraipakkam, Chennai
Day and Date	:	Monday, February 09, 2024
Platform	:	Google Meet-Link: https://meet.google.com/aeu-ifmt-mmr
Time	:	1.30 P.M to 2.30 P.M
YouTube Link	:	https://youtu.be/oj_GXRfG2x0?si=q-zLj9T1s0lT4PnU

Invitation for Day 5

DESCRIPTION OF ACTIVITY –

The day 5 of the online FDP started with the introduction of resource person Dr. S. Sasikala by Mrs. M. Rengalakshmi.

Dr. Sasikala opened the Day 5 session on Tools and Techniques of Research Methodology by explaining briefly on what are the tools, knowledge transfer and how creative AI can be leveraged for research methodology.

Some key points that were discussed in relation to Creative and Generative AI were:

➢ Creative AI: ability to create new content, such as images, music, and text that closely resembles human-created content by leveraging techniques like deep learning and neural networks.

➢ Generative AI- realistic and novel outputs, pushing the boundaries of machine creativity; Creating high quality text, graphics and videos, new user interfaces.

Dr. Sasikala also demonstrated use cases of generative AI as given below:

a. Implementing the chatbots for customer service and technical support.

b. Deploying deep fakes for mimicking people or even specific individuals.

c. Improving dubbing for movies and educational content in different languages.

d. Writing email responses, dating profiles, resumes and term papers.

e. Creating photorealistic art in a particular style.

f. Improving product demonstration videos.

g. Suggesting physical products and buildings.

h. Optimizing new chip designs.

i. Writing music in a specific style or tone.

Dr. Sasikala also talked about the benefits of Generative AI such as

- Automating the manual process of writing content

- Reducing the effort of responding to emails

- Improving the response to specific technical queries

The branch of artificial intelligence known as "generative AI" is concerned with developing models and algorithms that may generate fresh and unique content. Generative AI algorithms apply probabilistic approaches to produce new instances that mirror the original data, typically with the capacity to demonstrate creative and inventive behavior beyond what was explicitly designed.

Dr .Sasikala also discussed about the following Generative AI tools with special and detailed emphasis on how to use ChatGPT.

- Text Generation tools - GPT, Jasper, AI-Writer and Lex
- Image Generation tools - Dall-E 2, Midjourney and Stable diffusion
- Music generation tools - Amper, DadaBots and MuseNet
- Code generation tools- CodeStarter, Codex, GitHub, Copilot, Tabnine
- Voice synthesis tools - Descript, Listnr, Podcast.ai
- AI chip design Tools-Synopsys, Cadence, Google and Nvidia.

Outcome of Day 5 FDP:

Dr .Sasikala in day 5 FDP emphasizes the importance of chatGPT which help develop language through artificial intelligence. Further she explored the importance of Deep learning algorithms, discussed about the importance for AI powered tools, and also reiterated the online research tools in conducting quality research. Generative AI algorithms apply probabilistic approaches to produce new instances that mirror the original data, typically with the capacity to demonstrate creative and inventive behavior beyond what was explicitly designed.

Vote of thanks was given by Mrs. Monica.

Screenshots of Day 5 FDP:
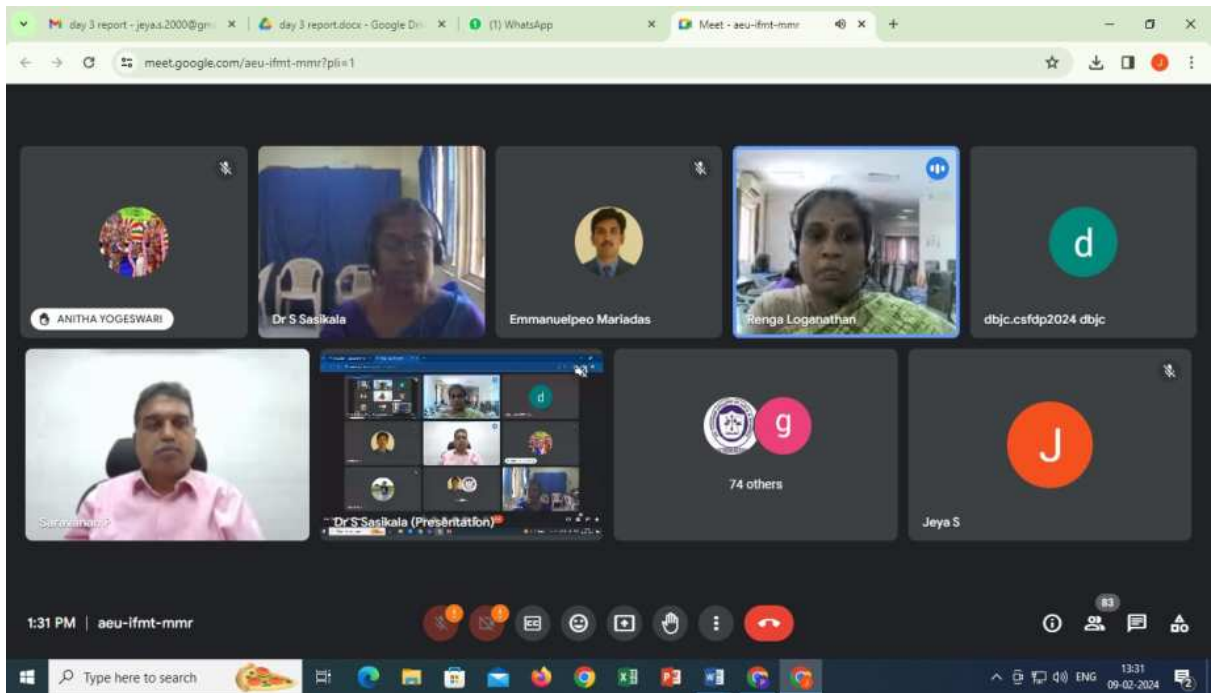
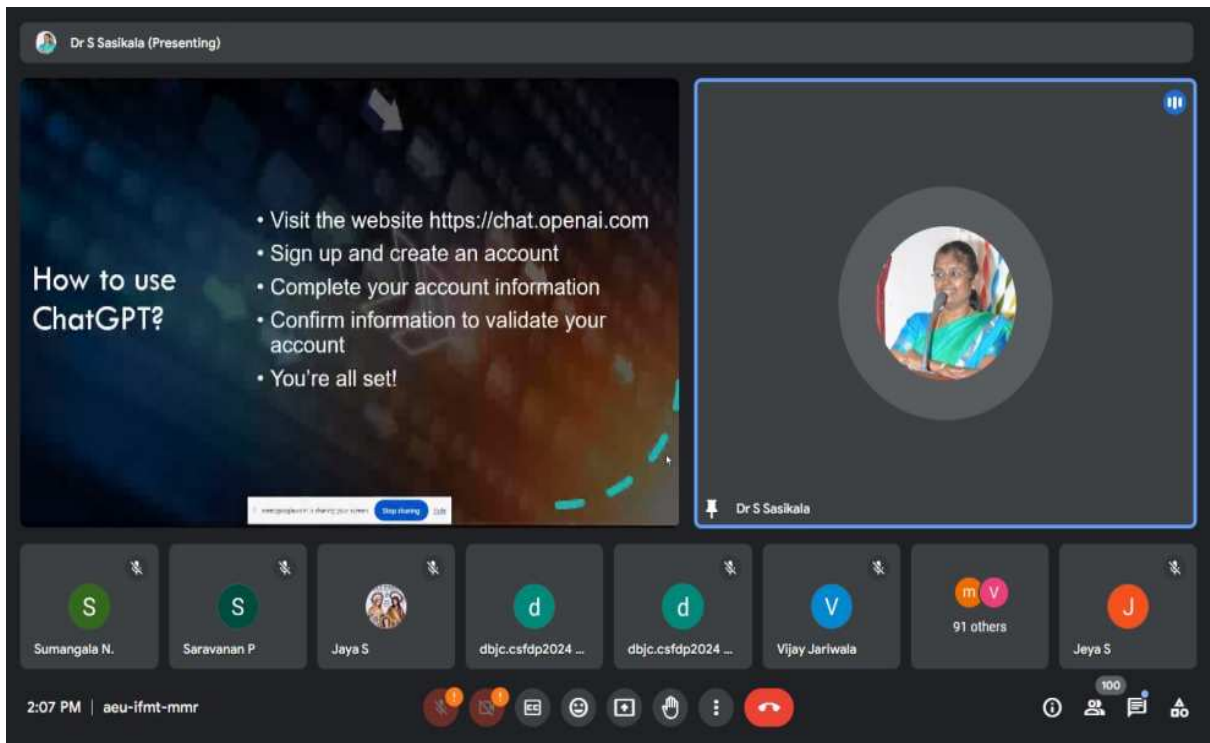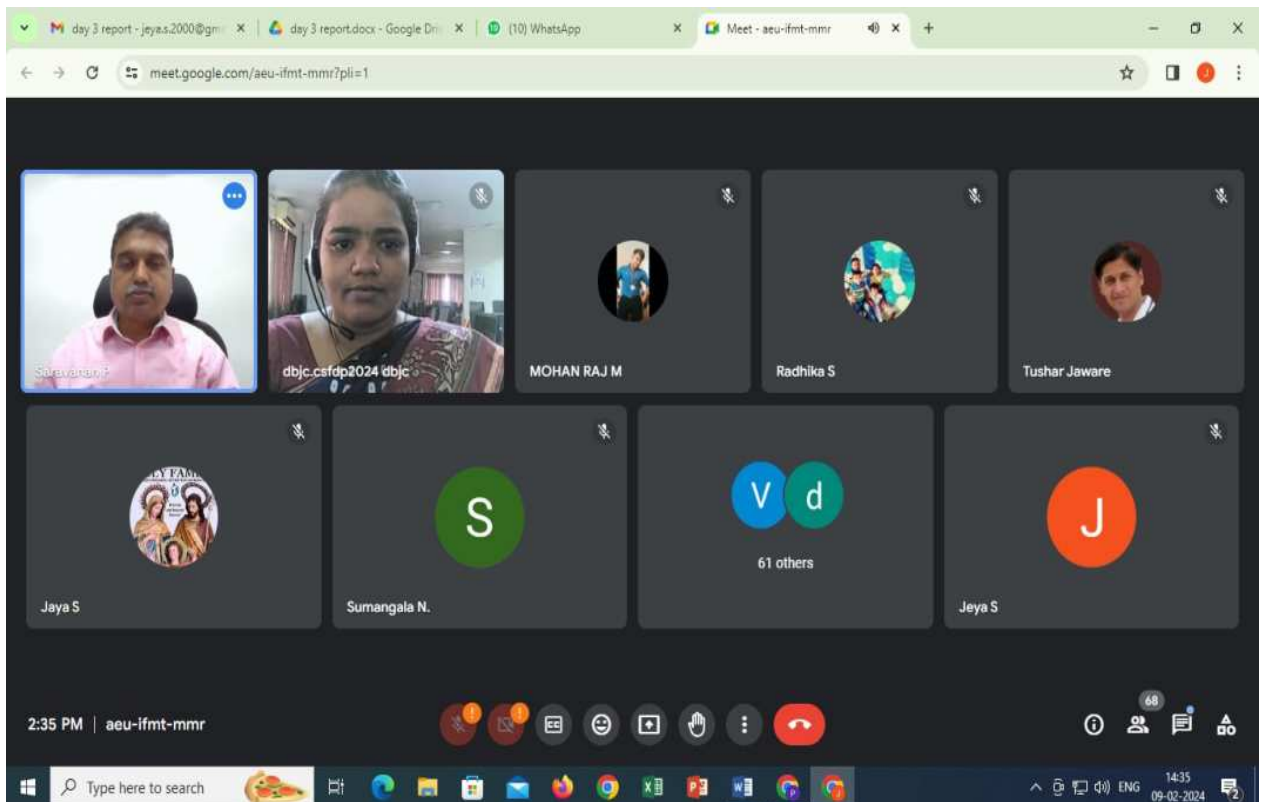**Session started with introductory speech by Mrs. Rengalaxmi**
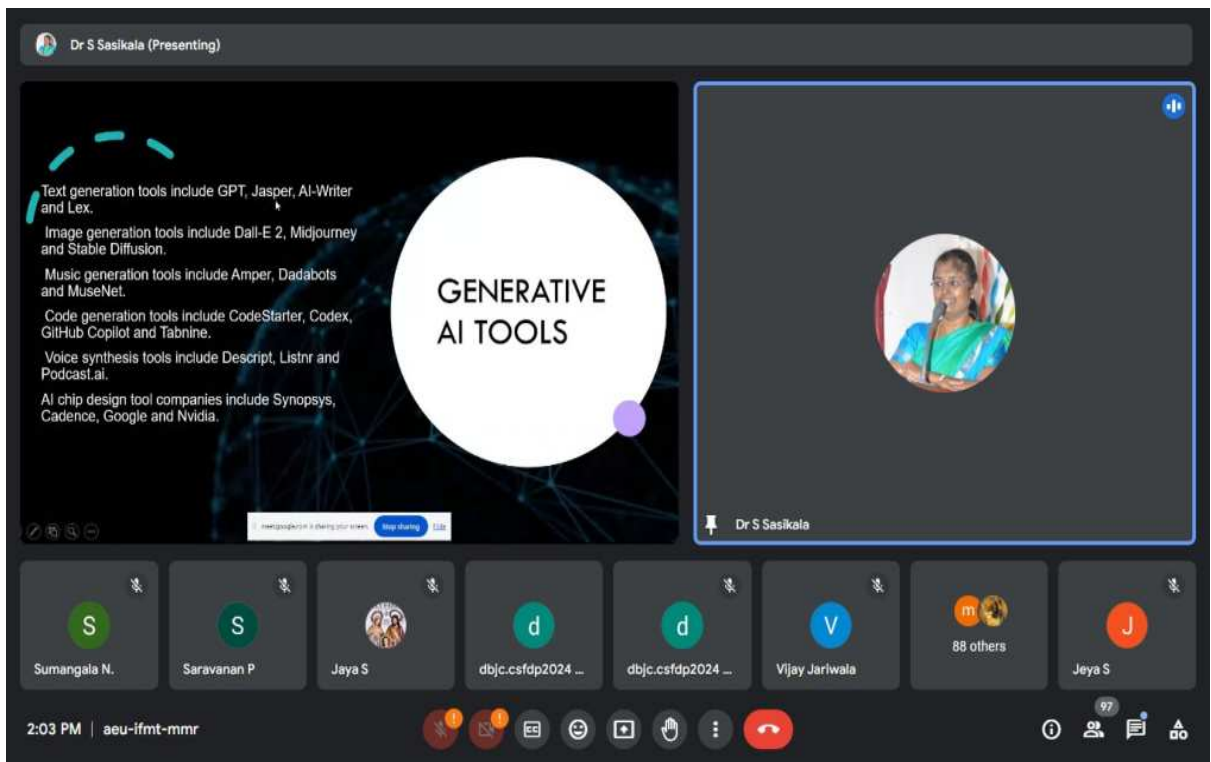
Dr. Sasikala's enticing speech on Generative AI tools

Dr. Sasikala explaining to the audience about how to use ChatGPT

Fifth day Session ended with vote of thanks by Miss. Monica

Faculty members who actively organized the FDP under the guidance of **Dr. B. Jagadhesan, IQAC Coordinator and HOD of Computer Science Department and Dr. S. Balaji HOD P.G & Research Department of Computer Science** are

1. Day 1 coordinator Mr. M.Ganesh Raja

2. Day 2 coordinator Mr. P. Saravanan

3. Day 3 coordinator Mrs. Durga Siddharth

4. Day 4 coordinator Mrs. S. Bhuvaneswari

5. Day 5 coordinator Mrs. M. Rengalakshmi

6. Certificates and Invitation – Mrs. J.Archana

7. Registration – Mrs. S.Kalpana

8. Google link – Mrs. R. Georgina Shefani, Ms.M. Gomathi

9. Feed Back Form – Mrs. S. Jayaselvi

10. Report Generation – Dr. S. Jeya

11. Vote of thanks – Ms. P. Monika

Conclusion: The five day FDP is conducted as per the NAAC guidelines in an excellent manner under the following titles.

Day 1: Effective Article Writing

Day 2: Identification of Journals for Publication

Day 3: Strategies to enhance Research visibility, Impact and citation

Day 4: Potential Thesis Writing

Day 5: Tools and Techniques of Research Methodology

The entire FDP session outcome is to give exposure to the participants about research problem formulation, application of appropriate research design, skill of data collection, data processing and statistical analysis as well as how to write quality research paper and publish the article in quality journals, writing thesis in an effective manner, introducing the latest tools and techniques for research.

The invitation is shared in what's group and 1000 participants including from various states of India are participated. The google link to join the meeting at 1.30 P.M for every day is shared in what's app and also the feedback form is also shared in what's app and collected.

Certificate link is generated and sent to participants in what's app and dispatched the certificates to the respective active participants. Large numbers of participants who are actively participated in this session make this FDP as a great exceptional effective event.

We thank all the staff members and the technical staff of computer science department and IQAC team for accomplishing the five-day faculty development program as a grand and successful program.

In short the FDP **Research - The Journey from Inception to Publishing** aims to enhance research capabilities among faculties and upskilling with new concepts and techniques in the field of research.