



RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University

NAAC Accredited with 'A+' Grade & An ISO 9001: 2015 Certified Institution

NBA Accredited UG Programs: CSE, EEE, ECE and MECH

RIT Research Council Organizes

R&D Conclave

for Faculty Members and Researchers



Dr. S. ARUMUGAM

Adjunct Professor - CSE
Ramco Institute of Technology
will Preside over the function

Resource Persons



Dr. M. PALLIKONDA RAJASEKARAN

Director - R&D
Kalasalingam Academy of Research and Education
Krishnankoil



Dr. L. ASHOK KUMAR

Principal
Thiagarajar College of Engineering
Madurai



Dr. J. REVATHY

Dean - Research
B.S. Abdur Rahman Crescent Institute
of Science and Technology, Chennai

**Session 1 : Project Management and
Funding Opportunities in India**
Session Timing : 09.30 AM - 10.45 AM

**Session 2: Driving Sustainable
Development through Collaborative
Research and Industrial Engagement**
Session Timing : 11.00 AM - 12.15 PM

**Session 3 : Sustainable and Eco-Friendly
Materials for Future-Ready Construction**
Session Timing : 02.00 PM - 03.15 PM

Date: 26.12.2024

Online Mode: Google Meet

Faculty Coordinator(s)

Dr. R. RAJALAKSHMI, ASP/ECE
Dr. G. S. SUJANTHA, AP/English

Convenor

Dr. V. SIVAKUMAR, Prof/Mech
R&D Coordinator

Patron

Dr. S. RAJAKARUNAKARAN
Vice Principal

Chief-Patron

Dr. L. GANESAN
Principal



Academic Year 2024-2025

RIT RC Organized

R&D Conclave 2024 for Faculty members and Researchers

R&D Conclave 2024 REPORT

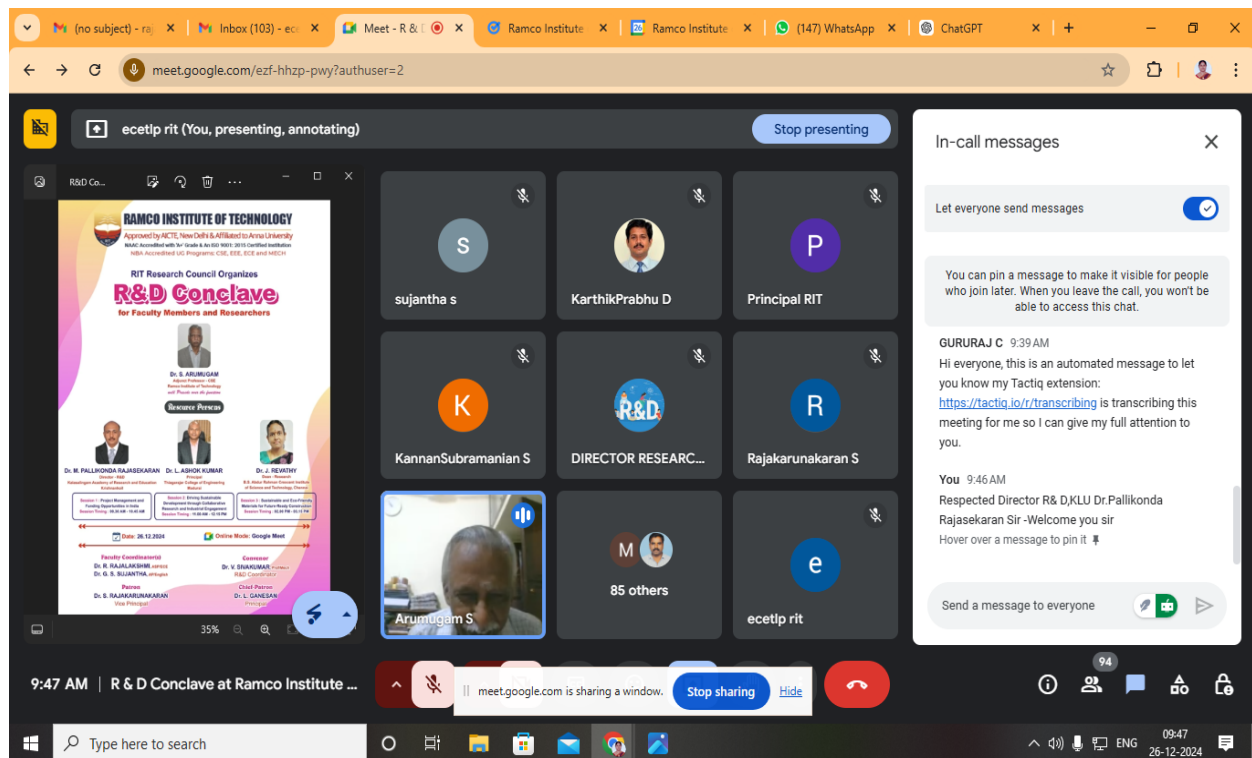
The R&D Conclave 2024, organized by the Ramco Institute of Technology Research Council (RTI-RC), was a significant event that brought together faculty members, researchers, and distinguished resource persons to foster innovation, collaboration, and excellence in research. The conclave aimed to provide a platform for sharing knowledge, discussing sustainable development, and exploring collaborative opportunities in research and development.

Date: December 26, 2024

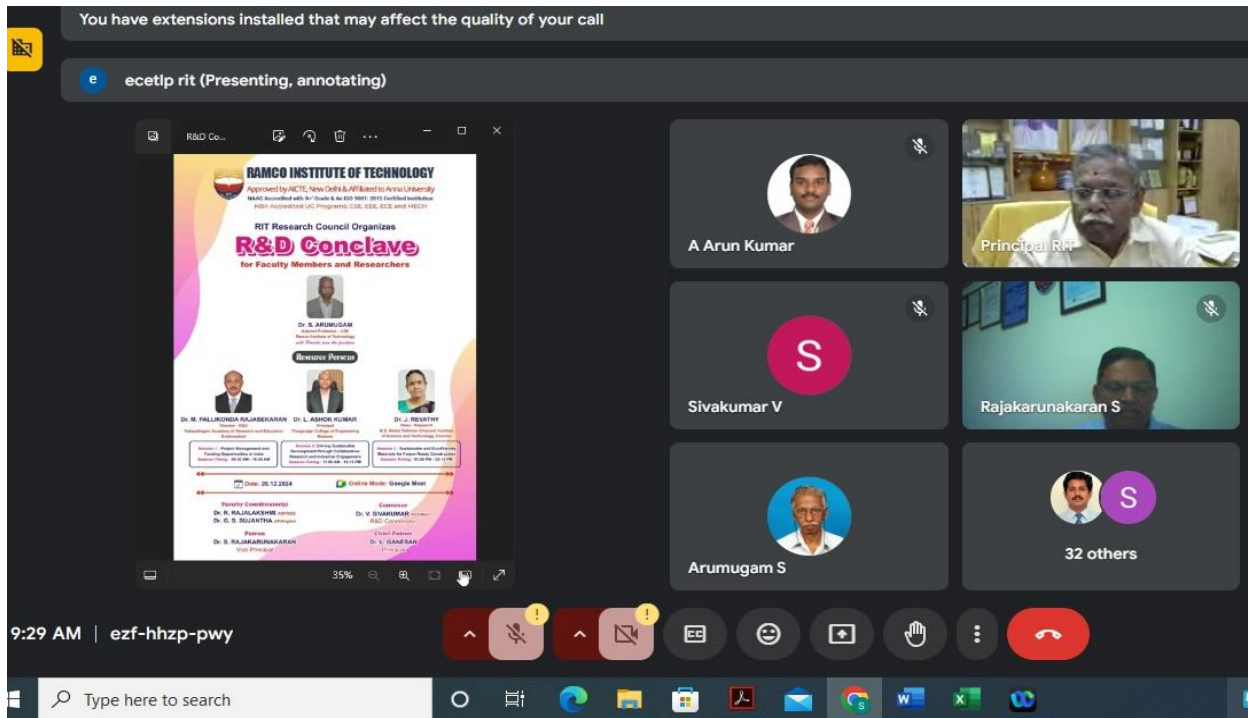
Venue: Online Mode (Google Meet),

Link: meet.google.com/ezf-hhzp-pwy

Organized by: Ramco Institute of Technology Research Council



The event began with a warm and heartfelt welcome delivered by Dr. R. Rajalakshmi, Associate Professor, Department of Electronics and Communication Engineering (ECE). Dr. Rajalakshmi graciously greeted the participants and set an inspiring tone for the day's activities, highlighting the significance of shared dreams and aspirations in research. Expressing sincere gratitude, she acknowledged the presence of esteemed dignitaries, resource persons, and participants, emphasizing their crucial role in making the event a success.



R& D Conclave 2024 was inaugurated by **Dr. L. Ganesan, Principal of RIT**. The event commenced with a warm welcome to all dignitaries, esteemed speakers, faculty members, and researchers, setting an optimistic tone for the day.

In his address, Dr. Ganesan- Principal of RIT highlighted the significance of research and innovation in academic growth, emphasizing the transformative role of Artificial Intelligence (AI) in shaping the future of higher education. He elaborated on the initiatives of the All-India Council for Technical Education (AICTE) to integrate AI into the educational landscape. Key initiatives discussed included:

- **AI Affirmation Pledge** for promoting leadership in AI innovation and ethics.
- **“AI for All” campaigns** to foster interdisciplinary learning and raise awareness about AI.
- **Curriculum updates and industry collaborations** to prepare students for AI-driven careers.

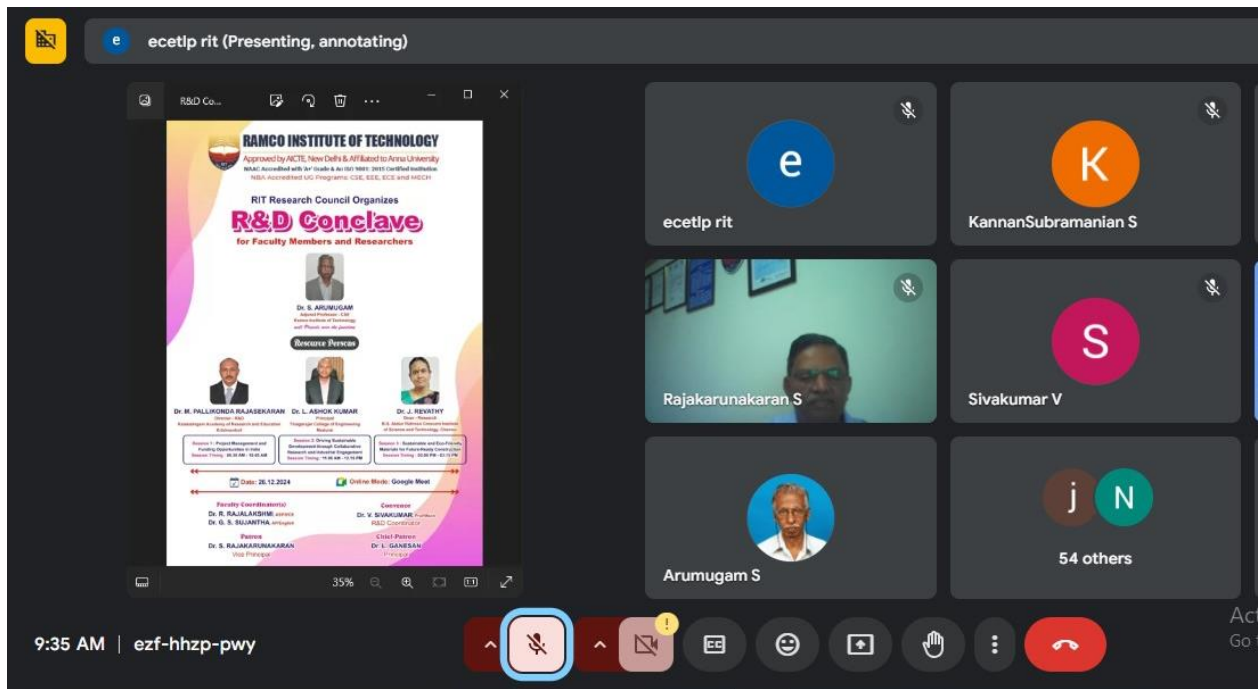
Dr. Ganesan - Principal of RIT affirmed RIT's commitment to integrating AI into its educational and research ecosystems, ensuring that students and faculty remain at the forefront of technological advancements.

The Principal expressed gratitude for the presence of distinguished speakers, who enriched the conclave with their expertise:

1. **Dr. M. Pallikonda Rajasekaran**, Director – R&D, Kalasalingam Academy of Research and Education, delivered a session on *"Project Management and Funding Opportunities in India"*.
2. **Dr. L. Ashok Kumar**, Principal, Thiagarajar College of Engineering, shed light on *"Driving Sustainable Development through Collaborative Research and Industrial Engagement"*.
3. **Dr. J. Revathy**, Dean-Research, B.S. Abdur Rahman Crescent Institute of Science and Technology, provided insights on *"Sustainable and Eco-Friendly Materials for Future-Ready Construction"*.

Their valuable contributions emphasized bridging the gap between academia and industry, a key objective of the conclave. Dr. Ganesan- Principal of RIT also extended his gratitude to **Dr. S. Arumugam, Adjunct Professor** and the Chief Guest for the event, as well as the coordinators and convenor. He acknowledged the support and guidance of **Dr. S. Rajakarunakaran, Vice Principal** and Patron of the conclave, along with the department heads, for their collective efforts in making the event a grand success.

The address concluded with a call to action for harnessing the power of research and innovation to achieve sustainable development and academic excellence. Dr. Ganesan- Principal of RIT wished the participants an engaging and inspiring conclave, setting a strong foundation for meaningful discussions and collaborations throughout the event.



Dr. S. Rajakarunakaran, Vice Principal of RIT shared an inspiring overview of the significance of the R&D Conclave and its pivotal role in bridging academia and industry. His remarks underscored how research not only drives institutional growth but also creates solutions to real-world challenges. Dr. Rajakarunakaran- Vice Principal, RIT dedication to nurturing a vibrant academic culture was evident in his emphasis on interdisciplinary research and innovation as key drivers of progress.



Dr. Arumugam-Adjunct Professor, Department of CSE, RIT delivered the presidential address, offering profound insights into the transformative role of research in academia and its impact on societal progress. He spoke about the need to align research efforts with global challenges, ensuring that academic work contributes to sustainable development and technological advancement. His address, introduced by **Dr. V. Sivakumar, R&D Coordinator, Professor-Mechanical Engineering** resonated deeply with the audience, inspiring both seasoned researchers and budding scholars alike.

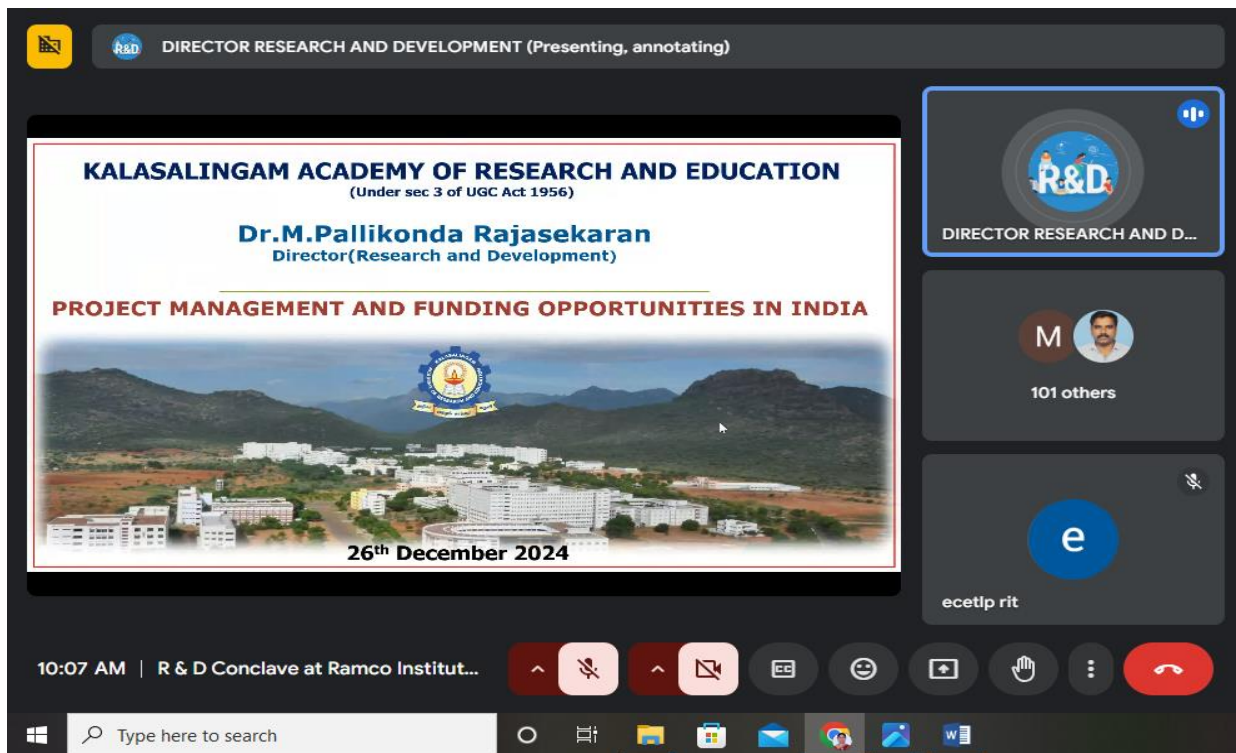
Highlights of the Sessions

The three technical sessions were highly engaging and informative:

- **Session 1:** Focused on effective project management strategies and funding avenues in India, providing researchers with practical insights.
- **Session 2:** Emphasized the importance of collaboration between academia and industry in driving sustainable development.
- **Session 3:** Explored innovative and eco-friendly materials, addressing the challenges and opportunities in future-ready construction.

Session 1: Project Management and Funding Opportunities in India

The session began with a resource person introduction by **Dr.A.Lakshmi-Professor/ECE**. She highlighted Dr. Rajasekaran's significant contributions to project management and his leadership in securing research funding in India. She emphasized his extensive experience in guiding both academic and industrial projects, making his session on "Project Management and Funding Opportunities in India" a valuable addition to the conclave.



The R&D Conclave 2024 featured an insightful session by **Dr. M. Pallikonda Rajasekaran**, Director – R&D at Kalasalingam Academy of Research and Education (KARE). Dr. Rajasekaran's presentation, titled "*Project Management and Funding Opportunities in India*", provided valuable knowledge and strategies for managing research projects effectively while identifying and securing funding opportunities within the Indian academic and industrial landscape.

Key Highlights of the Session

1. Introduction to Project Management in Research

Dr. M. Pallikonda Rajasekaran, Director – R&D at KARE began by emphasizing the importance of systematic project management in achieving research goals. He outlined the lifecycle of a research project, which includes:

- Conceptualization and proposal drafting.
- Resource planning, including budgeting and personnel allocation.
- Execution, monitoring, and iterative adjustments.
- Final delivery and dissemination of results.

He stressed the role of strong leadership, collaboration, and time management in ensuring project success.

2. Funding Opportunities in India

The speaker provided a comprehensive overview of funding agencies and schemes available for researchers in India. Key opportunities highlighted included:

- **Government Agencies:**
 - Department of Science and Technology (DST)
 - Indian Council of Medical Research (ICMR)
 - Council of Scientific and Industrial Research (CSIR)
- **Industry Collaborations:** Partnership opportunities with corporates through Corporate Social Responsibility (CSR) initiatives and Public-Private Partnerships (PPP).
- **International Grants:** Opportunities from organizations like the Bill & Melinda Gates Foundation, Horizon 2020, and others.

3. Proposal Writing and Approval Processes

Dr. Rajasekaran elaborated on crafting effective project proposals, focusing on:

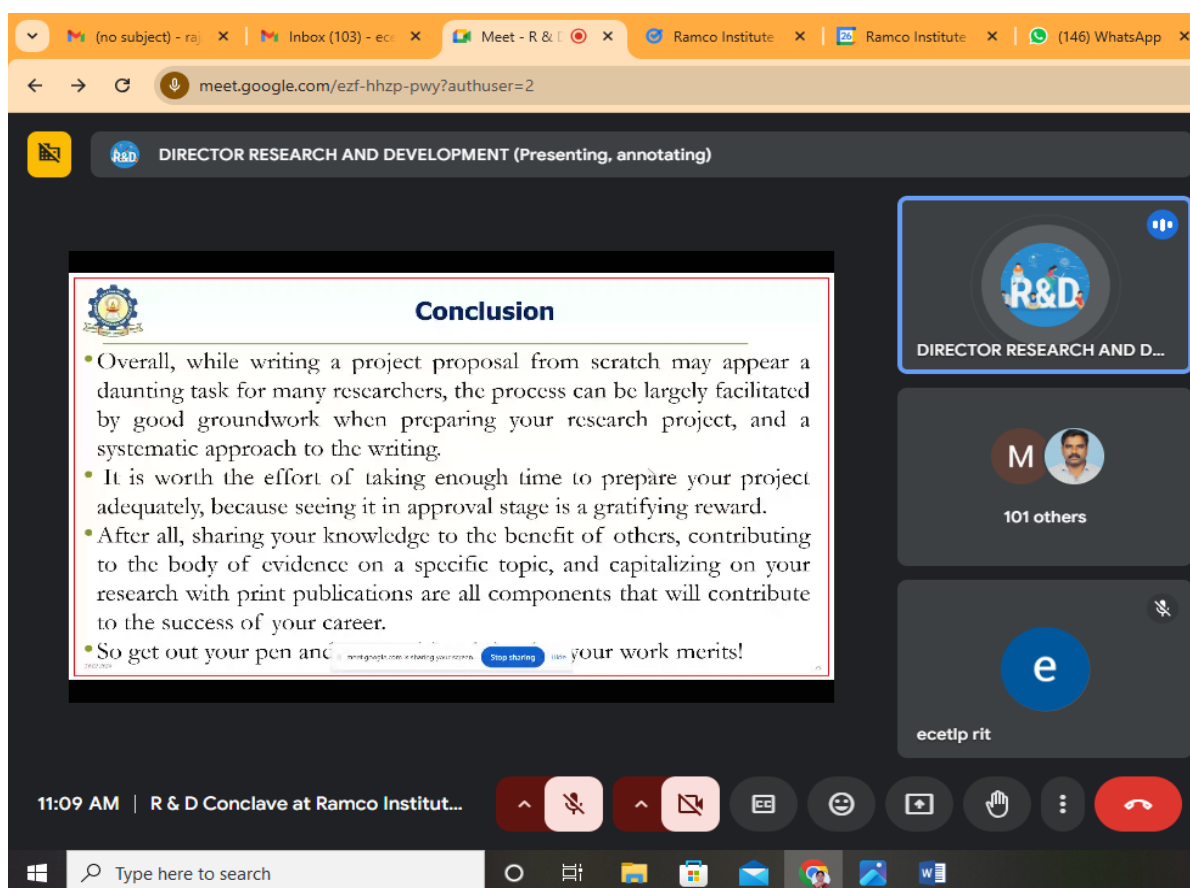
- Defining clear objectives and expected outcomes.
- Aligning research objectives with funding agency priorities.
- Providing detailed timelines, methodologies, and budgets.
- Including societal or industrial impact metrics to strengthen proposals.

He also discussed strategies for navigating the proposal review and approval processes, emphasizing persistence and adaptability.

4. Challenges and Mitigation Strategies

The session addressed common challenges in project management, such as resource constraints, delays, and compliance with funding requirements. Dr. Rajasekaran offered practical advice on mitigating these issues, including:

- Building interdisciplinary teams to enhance problem-solving.
- Leveraging institutional support for infrastructure and training.
- Establishing regular communication with funding agencies to ensure alignment and compliance.



The screenshot shows a Google Meet interface. The browser tabs at the top include '(no subject) - raj', 'Inbox (103) - ec...', 'Meet - R. & I...', 'Ramco Institute', and '(146) WhatsApp'. The address bar shows 'meet.google.com/ezf-hhzp-pwy?authuser=2'. The meeting title is 'DIRECTOR RESEARCH AND DEVELOPMENT (Presenting, annotating)'. The main content is a presentation slide titled 'Conclusion' with the following text:

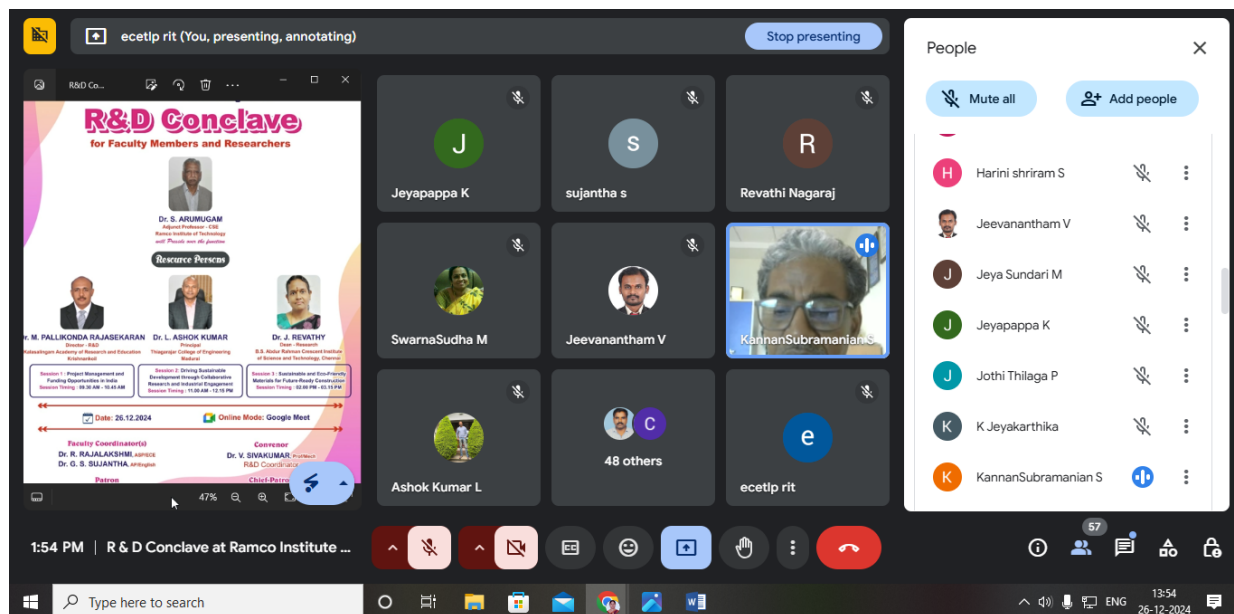
- Overall, while writing a project proposal from scratch may appear a daunting task for many researchers, the process can be largely facilitated by good groundwork when preparing your research project, and a systematic approach to the writing.
- It is worth the effort of taking enough time to prepare your project adequately, because seeing it in approval stage is a gratifying reward.
- After all, sharing your knowledge to the benefit of others, contributing to the body of evidence on a specific topic, and capitalizing on your research with print publications are all components that will contribute to the success of your career.
- So get out your pen and ink and start writing your work merits!

The slide also features a logo on the top left and a 'Stop sharing' button at the bottom. The meeting controls at the bottom show '11:09 AM | R & D Conclave at Ramco Institut...'. The Windows taskbar at the bottom includes a search bar and several application icons.

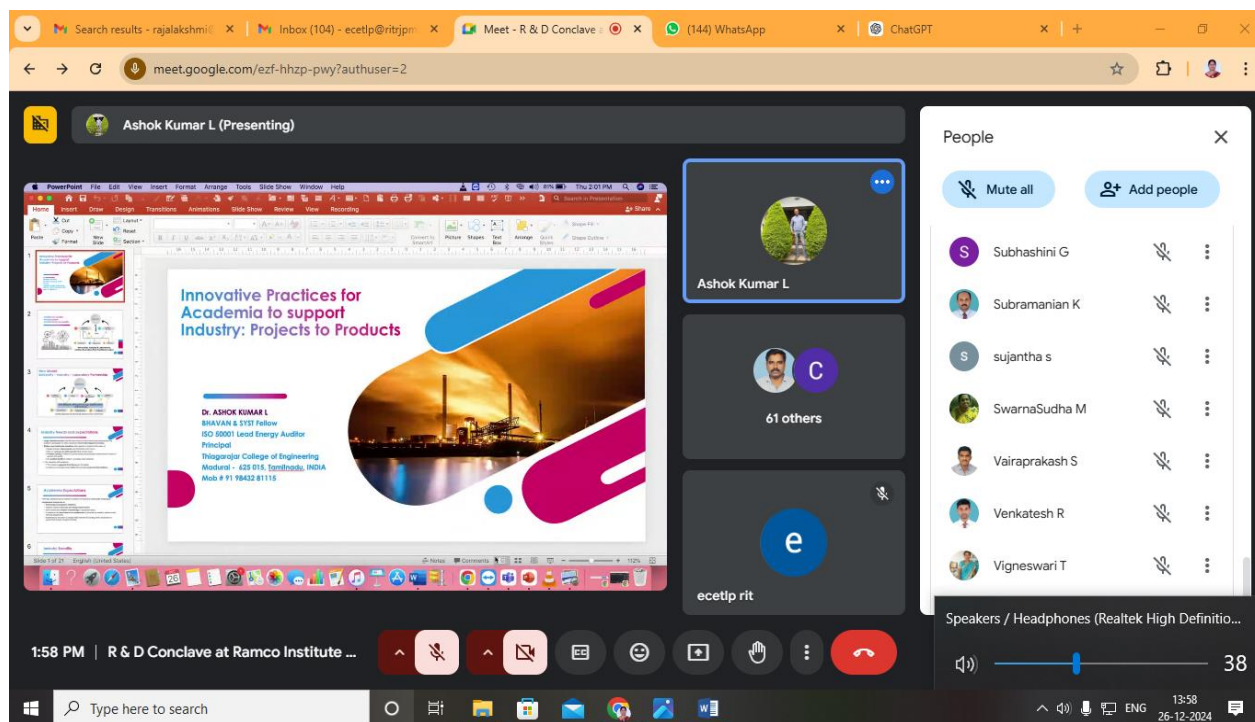
5. Case Studies and Success Stories

To inspire participants, Dr. Rajasekaran shared successful case studies of projects funded by prominent agencies in India. He highlighted how these projects achieved significant academic and societal impact through effective management and innovative approaches.

Session 2: Driving Sustainable Development through Collaborative Research and Industrial Engagement



Dr. S. Kannan, Professor and Head of the Department, Dept of EEE introduced Dr. L. Ashok Kumar, Principal of Thiagarajar College of Engineering. Dr. Kannan commended Dr. Ashok Kumar's leadership in driving research collaborations and his work in aligning academic research with sustainable development goals. He discussed Dr. Ashok Kumar's focus on fostering partnerships between academia, industry, and government, making his session on "Driving Sustainable Development through Collaborative Research and Industrial Engagement" crucial for advancing sustainability efforts.



The R&D Conclave 2024 featured a thought-provoking session by Dr. L. Ashok Kumar, Principal of Thiagarajar College of Engineering, Madurai. His presentation, titled "Driving Sustainable Development through Collaborative Research and Industrial Engagement", explored the transformative potential of partnerships between academia, industry, and society in addressing sustainability challenges.

Key Highlights of the Session

1. The Role of Research in Sustainable Development

Dr. L. Ashok Kumar, Principal of Thiagarajar College of Engineering began by contextualizing the urgency of sustainable development in today's global landscape. He highlighted:

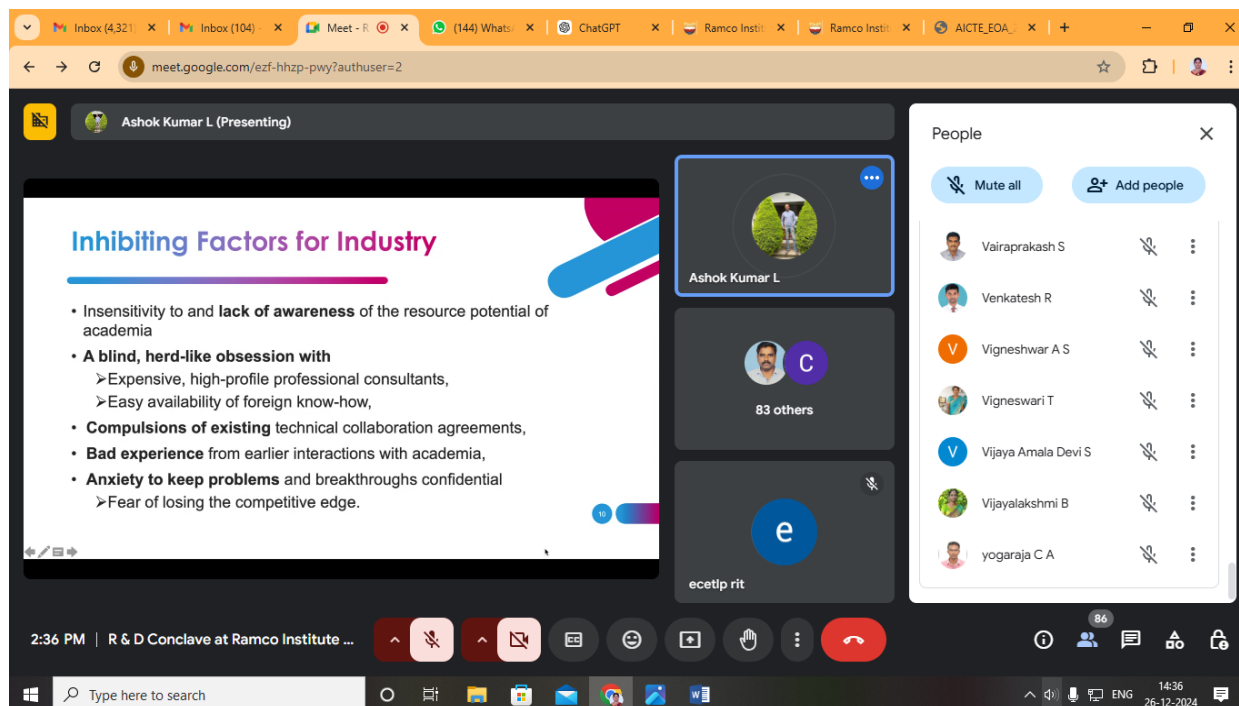
- The **United Nations Sustainable Development Goals (SDGs)** as a guiding framework for research priorities.
- The importance of aligning academic research with sustainability to ensure societal relevance and impact.
- The need for a shift towards interdisciplinary approaches to solve complex challenges in energy, environment, and social equity.

2. Collaborative Research Models

Dr. Ashok Kumar emphasized the power of collaboration in driving innovation and achieving scalability. He detailed several collaborative research models, including:

- **University-Industry Collaborations:** Joint ventures to develop market-ready technologies while addressing industrial challenges.
- **Public-Private Partnerships (PPPs):** Co-funding mechanisms that leverage government support to scale impactful projects.
- **International Collaborations:** Engaging global networks for knowledge exchange and best practices.

He also highlighted successful collaborations in sustainable energy systems, green technologies, and resource management.



3. Industrial Engagement for Practical Impact

The session outlined the critical role of industrial engagement in translating academic research into real-world applications. Dr. Kumar discussed:

- Establishing **Centers of Excellence** in partnership with industry leaders to drive innovation in key areas like renewable energy, circular economy, and smart manufacturing.
- Promoting **internships and joint research projects** for students and researchers to gain hands-on experience and industry insights.
- Ensuring technology transfer through licensing and commercialization, creating a bridge between lab-scale research and societal adoption.

4. Strategies for Academic Institutions

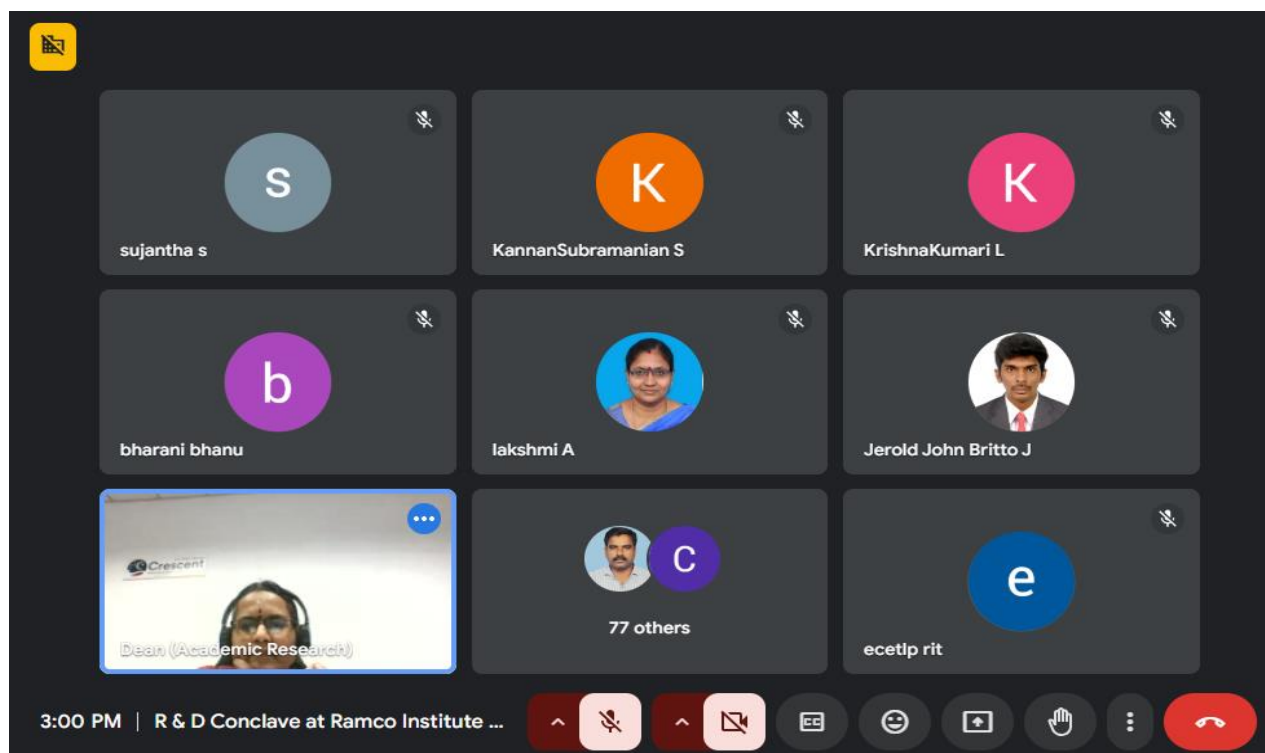
Dr. Ashok Kumar offered actionable strategies for academic institutions to strengthen their role in sustainable development, such as:

- Integrating **sustainability-focused curricula** to prepare students for emerging challenges.
- Developing research clusters that focus on critical areas such as clean energy, waste management, and sustainable urbanization.
- Fostering a culture of innovation through incubators and startup ecosystems.

Dr. Ashok Kumar concluded by emphasizing that sustainable development requires a united effort from academia, industry, and society. He encouraged participants to actively seek collaborations that prioritize long-term societal and environmental benefits over short-term gains. The session inspired the audience by showcasing the immense potential of collaborative research and industrial engagement in driving innovation for a sustainable future. Dr. Kumar's insights and practical strategies provided a roadmap for institutions to enhance their impact on sustainability through strategic partnerships.

Session:3- Sustainable and Eco-Friendly Materials for Future-Ready Construction

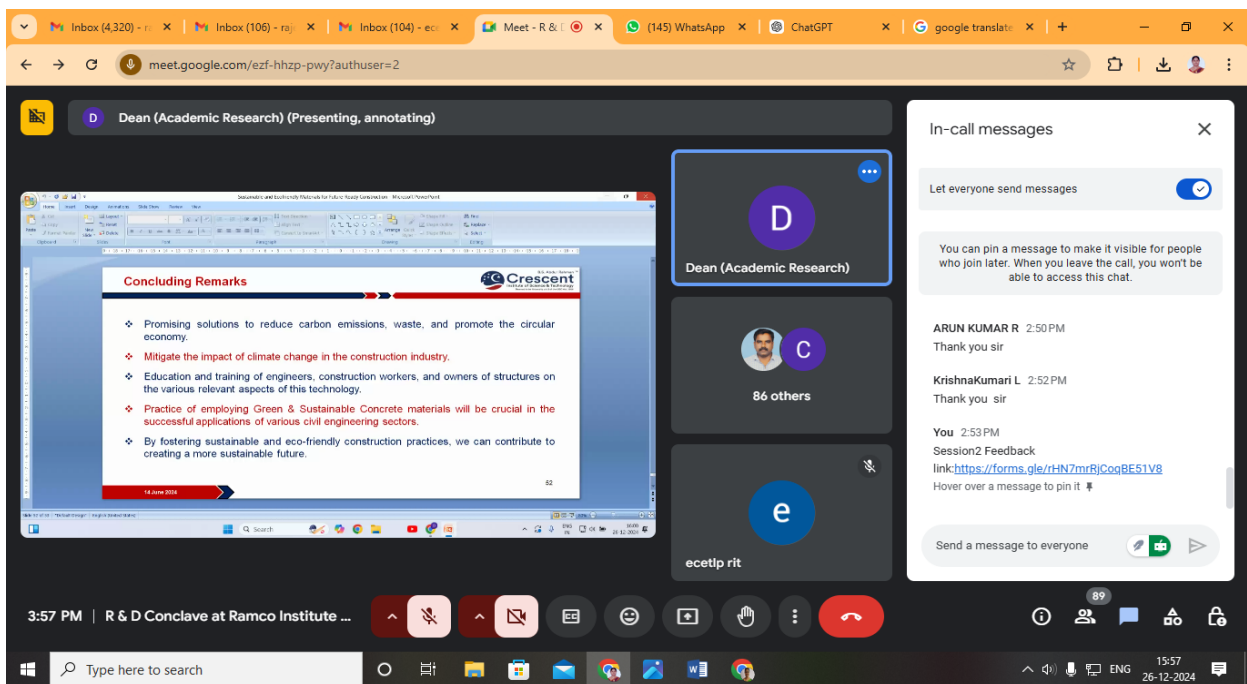
Dr. R. Rajalakshmi then introduced **Dr. J. Revathy, Dean of Research at B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai**. Dr. Rajalakshmi praised Dr. Revathy's expertise in sustainable and eco-friendly construction materials, noting her work in reducing environmental impact through innovative solutions. She highlighted how Dr. Revathy's research in materials such as self-healing concrete and bamboo is paving the way for more sustainable practices in the construction industry.



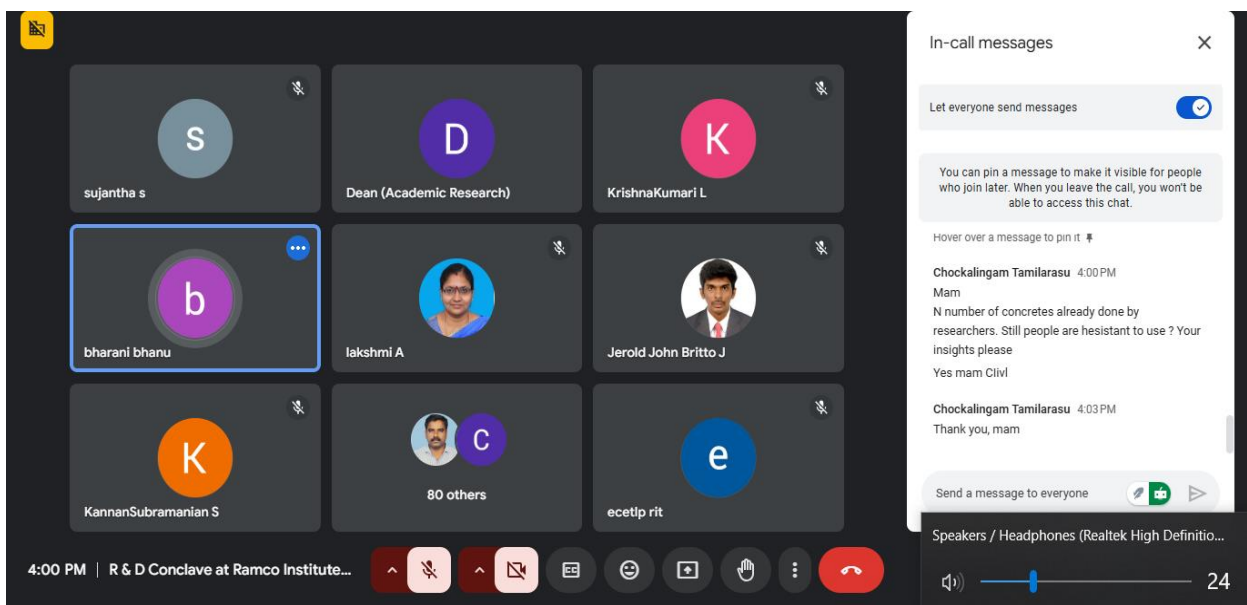
Dr. J. Revathy, Dean-Research at B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai delivered an engaging session on adopting sustainable materials in construction to address environmental challenges. She emphasized the need for reducing carbon emissions, conserving resources, and minimizing waste through innovative solutions.

Key materials discussed included recycled concrete, Geopolymer concrete, bamboo, self-healing concrete, and bio-based materials like hempcrete. Dr. Revathy also highlighted technologies such as 3D printing, smart materials, and passive design strategies to enhance sustainability.

She addressed challenges like cost barriers and regulatory hurdles, proposing subsidies, stakeholder training, and policy support. Real-world examples of successful projects, such as energy-efficient buildings and circular economy models, demonstrated the practicality of these innovations.



The session concluded with a call to action for adopting sustainable practices, integrating green certifications, and exploring carbon-negative solutions, inspiring participants to lead the transition toward eco-friendly construction.



The session was followed by an engaging discussion, where participants actively contributed with questions and insights, further enriching the session. The exchange of ideas between Resource persons and the participants created an interactive and thought-provoking atmosphere, enhancing the overall learning experience.

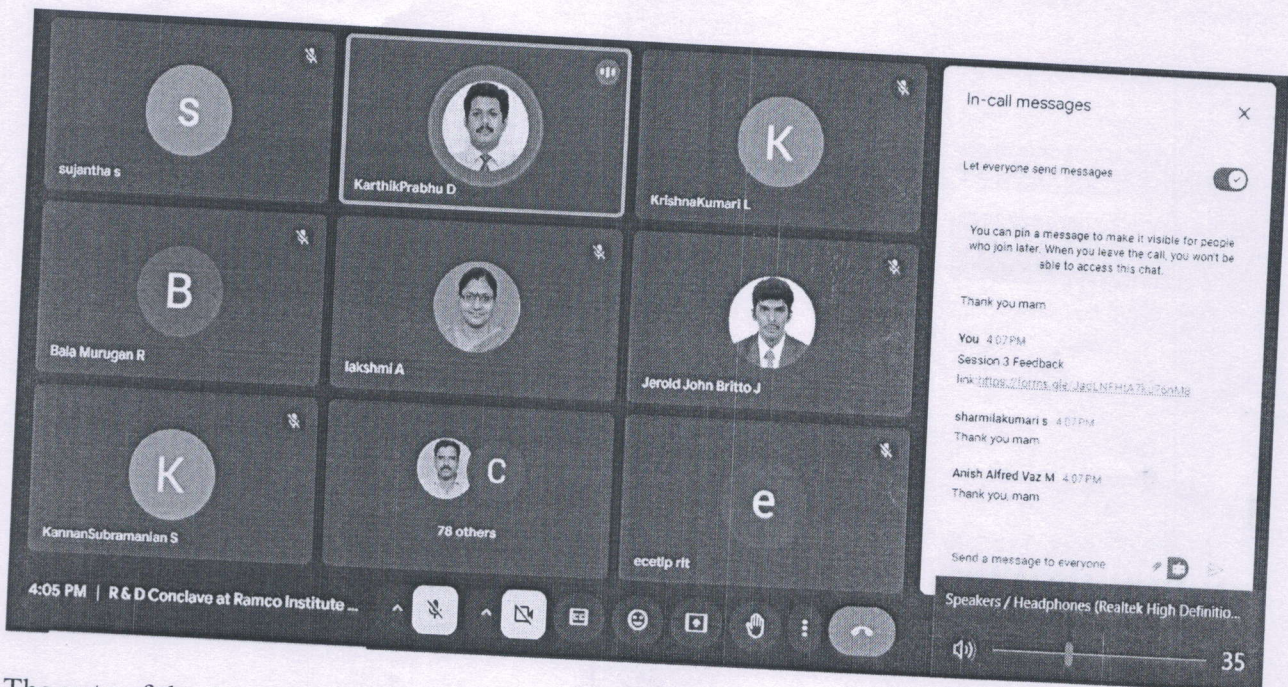
Acknowledgments

The conclave was made possible through the dedicated efforts of:

- **Chief Patron:** Dr. L. Ganesan (Principal)
- **Patron:** Dr. S. Rajakarunakaran (Vice Principal)
- **Convenor:** Dr. V. Sivakumar-RIT RC Coordinator, Professor, Mechanical Engineering
- **Faculty Coordinators:**
 - Dr. R. Rajalakshmi (ASP/ECE)
 - Dr. G. S. Sujantha (AP/English)

A special note of gratitude was extended to the Heads of Departments, Research Council Members, faculty members, and research scholars for their active participation and enthusiasm.

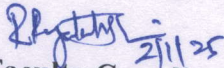
Vote of Thanks




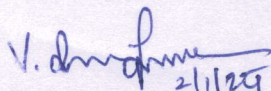
The vote of thanks was delivered by **Dr. Karthik Prabhu, Associate Professor, Department of EEE, RIT**. He expressed heartfelt appreciation to all dignitaries, resource persons, organizers, and participants for making the event a grand success.

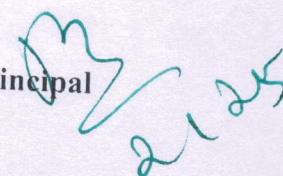
Conclusion

The **R&D Conclave 2024** provided a dynamic platform for intellectual exchange and collaboration, reinforcing Ramco Institute of Technology's commitment to research, innovation, and sustainable development. **With over 100 participants** actively engaging in discussions and activities, the conclave concluded on a high note, inspiring impactful research and societal contributions while leaving a lasting impression on all attendees.


21/11/25
Faculty Coordinators


21/11/25
Vice-Principal


21/11/25
RC Coordinator


21/11/25
Principal