AIMHHA
Association of Industrial
Microwave Heating & High Frequency Applications

THE AIMHHA GLOBAL WORKSHOP SERIES

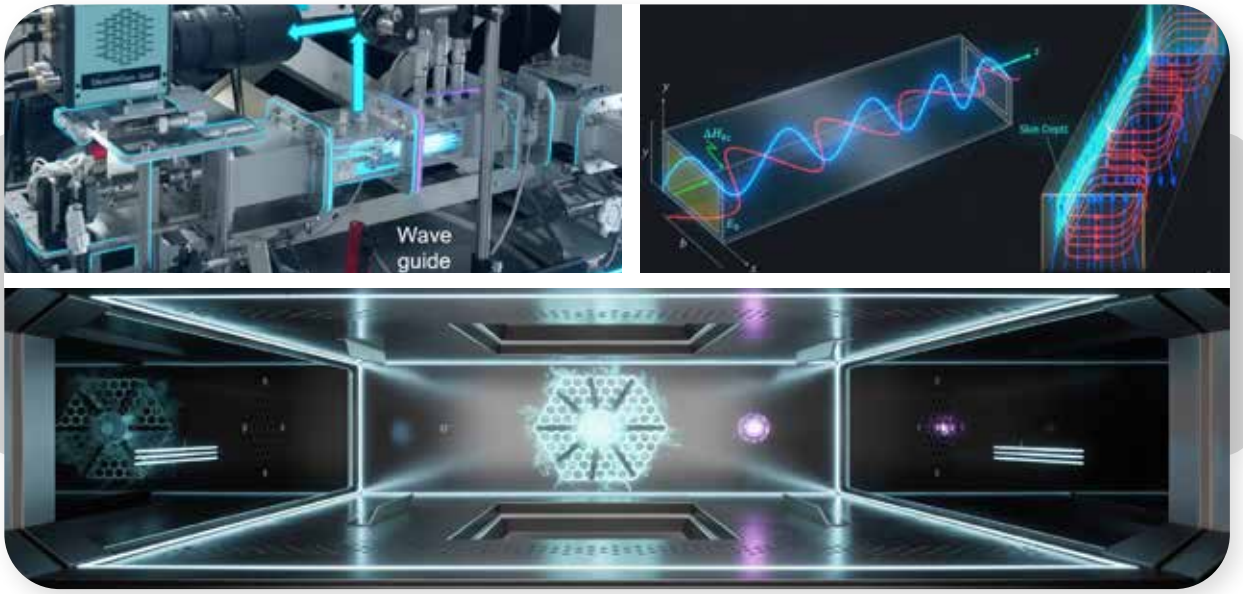
ANNOUNCING OUR **SECOND GLOBAL WORKSHOP**

FROM MATERIALS TO MANUFACTURING

Next-Gen Industrial Heating

ADVANCED MICROWAVE PROCESSING AND APPLICATION DEVELOPMENT

Saturday, December 13, 2025	10:00 AM - 5:40 PM (IST)	Online Workshop (Free)



Workshop Schedule

Opening Session

10:00AM - 10:10 AM
Opening Remarks by Mr. John F. Gerling

10:10AM - 11:00 AM

Performance of Reactive Chokes for Conveyorized Processing Systems
Mr. John F. Gerling, Gerling Consulting, Inc., USA

11:00 AM - 11:50 AM

Microwaves in Manufacturing: Fundamentals, Resource Efficiency and Challenges
Prof. Apurbba Kumar Sharma, Indian Institute of Technology (IIT) Roorkee, India

Break (11:50 AM - 12:00 PM)

12:00 PM - 12:50 PM

Localized Microwave-Heating (LMH) Phenomena and Applications:
Intentional Hotspot Formation, Drilling and Cutting, Dusty-Plasma Ejection, Thermite Ignition, Basalt Melting, and Incremental Solidification of Metal Powders (Additive Manufacturing)

Prof. Eli Jerby, Tel Aviv University, Israel

Lunch Break (12:50 PM - 2:00 PM)

2:00 PM - 2:50 PM

Labs and Industrial Applications of MW and RF Machines
Mr. Jean Paul Bernard, Microwave Industrial Solutions, France

2:50 PM - 3:40 PM

Development of Innovative Food Processing Operations Using Microwaves
Dr. P. P. Sutar, National Institute of Technology Rourkela, India

Break (3:40 PM - 3:50 PM)

3:50 PM - 4:40 PM

Microwave Processing of Polymer Composites
Dr. Gaurav Kumar, Assistant Professor, National Institute of Technology Rourkela, India

4:40 PM - 5:30 PM

Microwave-Assisted Additive Manufacturing of Materials
Dr. Radha Raman Mishra, Birla Institute of Technology and Science Pilani, India

5:30 PM - 5:40 PM
Closing remarks, panel discussion, and a look ahead to the future of AIMHHA.

Register Today (Free)

Join us for this landmark global event. Visit our website to register and be a part of the future of microwave technology in India.

www.aimhha.org

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AIMMHHA
Association of Industrial
Microwave Heating & High Frequency Applications

MEET OUR ESTEEMED SPEAKERS

LEADING VOICES IN ADVANCED MICROWAVE PROCESSING & APPLICATION DEVELOPMENT

We are honored to present a lineup of distinguished global experts who are pioneering the future of industrial heating technologies.

Mr. John F. Gerling

Gerling Consulting, Inc., USA

Past President, International Microwave Power Institute

With over 40 years of experience, Mr. Gerling is a leading authority in engineering products for consumer, industrial, and scientific microwave heating. He is an inventor on several patents and founded Gerling Applied Engineering, a leading manufacturer of industrial microwave equipment.

Prof. Apurbba Kumar Sharma

Indian Institute of Technology (IIT) Roorkee, India

Prof. Apurbba Kumar Sharma is a Professor in the Department of Mechanical and Industrial Engineering at the Indian Institute of Technology (IIT) Roorkee. His research interests include micromachining and the application of microwave energy in processing ceramics. He has supervised numerous Ph.D. and Master's students and has been recognized for his research contributions.

Prof. Eli Jerby

Tel Aviv University, Israel

Dr. Eli Jerby is a Professor Emeritus at Tel Aviv University, Faculty of Engineering, where he has studied various aspects of microwave engineering, plasma physics, and material processing. He and his research team discovered new interactions of electromagnetic radiation with materials, intentionally excited by localized microwave-heating (LMH), such as the fire-column and fireball ejection from solids in air. His inventions and studies include the development of novel LMH-based applications, like the microwave-drill invention, 3D-printing techniques, nano-powder production, and more. Recently, Dr. Jerby has established a new independent laboratory, branded E.J. R&D Lab., to pursue industrial cooperations for research and development towards commercialization

Mr. Jean Paul Bernard

Microwave Industrial Solutions, France

With over 40 years of experience, Mr. Jean Paul Bernard is a leading authority in industrial microwave and radio frequency technologies. He began his career in 1980 with THOMSON MICROWAVES and was the Associate & Managing Director of SAIREM for 36 years. Currently, he leads Microwave Industrial Solutions (MIS) as a consultant , specializing in a wide range of processes including food, rubber, and chemistry. He is an expert in optimizing industrial machines and training customers on MW and RF technologies.

Prof. Parag Prakash Sutar

National Institute of Technology Rourkela, India

A distinguished researcher in Food Process Engineering, Dr. Sutar is recognized for his work in applying microwave technology for thermal processing and dehydration. He has developed advanced hybrid techniques, including microwave vacuum drying and steam-impinged microwave blanching. He developed alternative food engineering applications using microwaves.

Dr. Gaurav Kumar

National Institute of Technology Rourkela, India

Dr. Gaurav Kumar is an Assistant Professor in Mechanical Engineering at NIT Rourkela and holds a Ph.D. from IIT Roorkee. His research specializes in advanced manufacturing processes and microwave materials processing. He has contributed significantly to areas such as microwave drilling and the development of advanced composite materials for industrial applications.

Dr. Radha Raman Mishra

Birla Institute of Technology and Science Pilani, India

Dr. Radha Raman Mishra is an Assistant Professor of Mechanical Engineering at BITS Pilani. He holds a Ph.D. from IIT Roorkee and an M.Tech. from IIT BHU. His experience includes an international role as an Honorary Senior Visiting Lecturer at the City University of London and work as a Project Officer at the Design Innovation Centre, IIT Roorkee. He is recognized as a leading voice in mechanical engineering, specializing in research, innovation, and global academia.

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