



One day Meet on

PLASMA PROCESSING OF NANOMATERIAL AND ITS APPLICATIONS (PPNA) 2021

3rd December 2021



Venue

ONLINE: Through zoom
platform



About the Institute

Institute for Plasma Research (IPR) is a grant-in-aid R & D organization of the Department of Atomic Energy (DAE), Government of India, situated on the west bank of river Sabarmati in Ahmedabad, Gujarat (India). This institute is primarily involved in theoretical and experimental studies in plasma science including basic plasma physics, magnetically confined hot plasmas and plasma technologies for industrial application. The institute has two other campuses - ITER India working on nuclear fusion and FCIPT campus working on industrial applications of plasma.



About FCIPT Campus

Facilitation Centre for Industrial Plasma Technologies (FCIPT) links industries with IPR. FCIPT campus has two divisions: Atmospheric Plasma Division (APD) working in areas such as nanomaterial synthesis, plasma pyrolysis, plasma sterilization, plasma torch etc. and Plasma Surface Engineering Division (PSED) working in plasma nitriding, PVD, nanopatterning, plasma jets etc.

About PPNA - 2021

Over the last couple of decades research on nanoscience has increased considerably leading to development of varied nanomaterials. Industrial applications of these nanomaterials has further boosted the research infrastructure. These nanomaterials have applications ranging from biomedicine to optoelectronics to consumer products.

Industrial applications of these materials have driven the need for producing them in large quantities and that too by an easy and quick process. Plasma process is an ideal route to produce industrial scale nanomaterials in short time scales in an environmental friendly manner.

This one-day meet is aimed at disseminating the current status and latest advances in the use of plasma for nanomaterial production; bringing together industries and researchers working in this area. It is also aimed to understand the requirements and problems faced by Indian industries in commercial production of nanomaterials.

Topics to be covered

- Different plasma sources for nanomaterial production and challenges involved
- Nanomaterials for biomedical applications
- Ceramic, alloy and magnetic nanomaterials by plasma
- Nanostructured surfaces by plasma for sensing applications
- Status of nanomaterial production in India and market potential

Important Dates

Registration opens : 25/11/2021

Registration Closes : 01/12/2021

Date of Seminar : 03/12/2021

Who Can Attend

Scientist/Engineers/Faculties/Industries/Private Sectors, mainly dealing in field of nanomaterials.

Registration Procedure

No registration fee is required for attending the PPNA-2021 one day seminar, however pre-registration is mandatory for us for reserving a place for you due to limited number of participants planned. Kindly fill the online registration form given at our website www.ipr.res.in for completing the registration.

Register Here

<https://forms.gle/pCwpsU391dtyFYq7A>

Contact details

Dr. C. Balasubramanian (Convener)

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Dr. Mukesh Ranjan (Co-Convener)

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Mentor

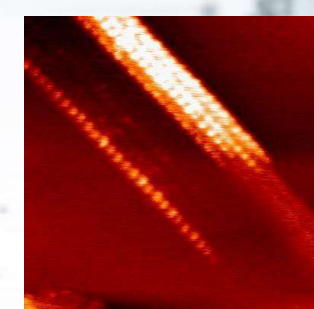
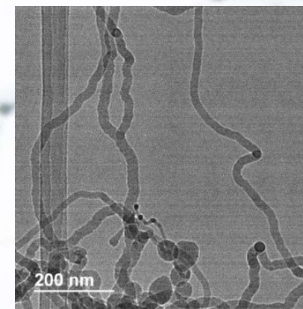
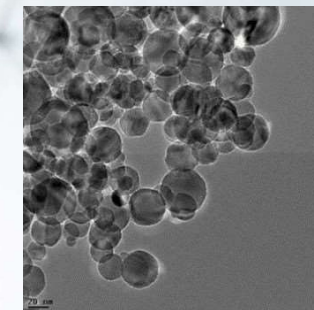
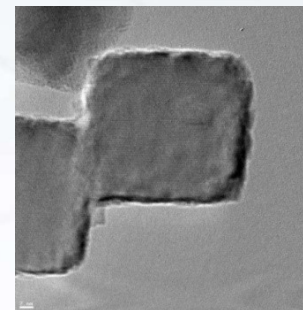
Dr. Shashank Chaturvedi (Director, IPR)

Organising Committee

- Dr. Balasubramanian (Convener)
- Dr. Mukesh Ranjan (Co-convener)
- Dr. P.K. Atrey
- Dr. Sudhir K. Nema
- Dr. Alphonsa Joseph
- Dr. Paritosh Chaudhuri
- Dr. A.V. Ravi Kumar

Invited Speakers (Tentative)

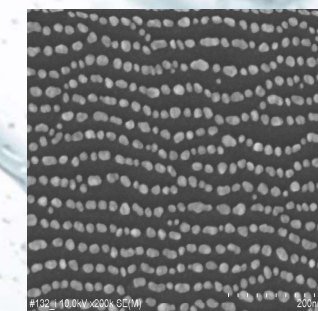
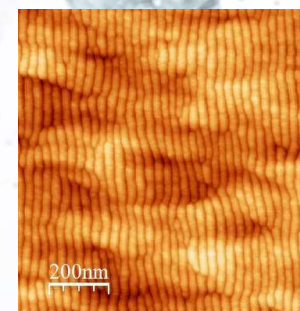
- Dr. Srikumar Ghorui, BARC, Mumbai
- Prof. K. Ramachandran, Bharathiyar University, Coimbatore
- Prof. Vikas L Mathe, Savitribai Phule Pune University
- Prof. Superb Mishra, IIT, Gandhinagar
- Dr. Balasubramanian/Dr. Mukesh Ranjan, IPR, Gandhinagar
- Dr. Nirav Jamnapara, IPR, Gandhinagar
- C.S. Birla, Rubamin, Vadodara
- Vignesh Nagarajan, Saveer Matrix Nano Pvt. Ltd., Noida
- Dr. Venkatramani, Plasma & Vacuum Technologies Pvt. Ltd, Ahmedabad



Images of Nanostructures prepared by plasma



Nanoparticle synthesis system at FCIPT



Images of Nanopatterning of surfaces

PPNA-2021 is organized by
Institute for Plasma Research (IPR)
Bhat Village, Gandhinagar-382428, Gujarat