One Day Workshop on Biodegradable Implants: Materials and Processes (BIMP-2024)

September 17, 2024

VENUE ARCI, Hyderabad

TOPICS

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 Manufacturing technologies for implants and devices
Materials for biodegradable implants and devices
Surface engineering of medical implants
Insights into in-vivo testing of the biodegradable implants
Commercialization and market

opportunities

Register for FREE

Last Date for Registration:

06/09/2024 Medical implants are devices transplanted either temporarily or permanently inside the body by surgery. The implants are generally used to replace any damaged organs of the body or used for diagnosis or prevention of any function. The medical implants market worldwide is predicted to increase substantially

due to increase in incidences of chronic diseases, sport injuries, changes in lifestyle and adoption of a sedentary lifestyle, technological advancements, rise in aging population, etc. The permanent metallic implants are non-degradable and remain inside the body which necessitates secondary surgery for removal. To overcome such problems, biodegradable (BD) metallic implants (Fe-Mn, Mg, Zn) are being developed. Mg based alloys are recently being commercialized for dental, trauma and orthopaedic applications where as Fe-Mn based alloys are gaining due to high mechanical strength.

The Indo-German Science & Technology Centre (IGSTC), a joint initiative by the Department of Science & Technology (DST), Government of India and the Federal Ministry of Education and Research (BMBF), Government of Germany was established to facilitate Indo-German R&D networking through substantive interactions among government, academia/research system and industries, thus fostering innovation for overall economic and societal developments in both the countries.

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> International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad is an autonomous research and development centre of the Department of Science and Technology, Government of India for the promotion of research as well as technology development in the area of advanced materials, including nanomaterials, energy technologies,

Maxillofacia implant zation and HAp coatings on

PVD coated stent at ARCI

extrac

engineered coatings, sol-based coatings, laser processing of materials, ceramic processing, and powder metallurgy. ARCI has established an ensemble of the latest technologies in the abovementioned areas and has subsequently transferred them to private industries for commercialization. More recently, ARCI has embarked on the development of biomaterials and implants.

ARCI has undertaken a collaborative project funded by IGSTC on "Development of Biodegradable Alloys and AM Processes for Soft Tissue Anchors" along with WIPRO 3D (India), Charite University (Germany) and KCS Europe (Germany). Under the aegis of IGSTC, ARCI is organizing a "**One Day Workshop on Biodegradable Implants: Materials and Processes**" on **September 17, 2024** that aims to bring together leading scientists, academicians, researchers, clinicians and industry personnel to exchange and share their experiences and research on all aspects of biomedical implants and devices specially on biodegradable materials and processes.

Venue: GS Bhattacharjee Seminar Hall, ARCI, Hyderabad (https://maps.app.goo.gl/zEL8jBaVBNyJDAZK8)

Registration (FREE): Participants should register by submitting the filled-in form:

1. Google link: <u>https://docs.google.com/forms/d/</u> e/1FAlpQLSdcGSqO_LCtaoi81Njz9OtWGKrFRgbrutC_ RrEiO4af53Y6JA/viewform?vc=0&c=0&w=1&flr=0&usp=mail_ form_link

OR

2. Email the registration form to events@arci.res.in

Last Date: 06/09/2024

Contact details: Dr. B. V. Sarada (9963978039) and Dr. Kaliyan Hembram (9440046318)

Organizing Committee

Dr. R. Vijay, Director, ARCI (Chairman) Prof. Dr. Frank Witte, Charité Uni., Germany (Co-Chairman) Dr. Ing. Franziska Schmidt, Charité Uni., Germany Mr. Peter Jaschinski, KCS Europe,Germany Dr. Sanjay Bhardwaj, ARCI Dr. Sanjay Bhardwaj, ARCI Dr. B. V. Sarada, ARCI Dr. Kaliyan Hembram, ARCI (Convenor) Mr. Manish Tak, ARCI Dr. Gururaj Telasang, ARCI Mr. M. Ramakrishna, ARCI Mr. Suhaib Abdurahman, Wipro 3D Mr. N Hemanth Kumar, ARCI Mr. Rishikesh B, ARCI Mr. Rajkiran, ARCI

इंटरनेशनल एडवांस्ड रिसर्च सेंटर फॉर पाउडर मेटलर्जी एंड न्यू मटेरियल्स (एआरसीआई) INTERNATIONAL ADVANCED RESEARCH CENTRE FOR POWDER METALLURGY AND NEW MATERIALS (ARCI) (An autonomous Research & Development Centre of Department of Science & Technology, Government of India) बालापुर, हैदराबाद / Balapur, Hyderabad - 500 005



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