



A One-Day Hybrid Symposium on ADVANCED FUNCTIONAL & ENGINEERING MATERIALS [AFEM-2022] A Composite Event on August 5th, 2022 (Friday)



Organised by TRAERF and ASM International Kanpur Chapter, Under the Aegis of SFA, Hyderabad and Aerospace Resources Panel of AR&DB, DRDO
Symposium Venue: Defence Materials and Stores R & D Establishment (DMSRDE), DRDO, P.O. DMSRDE, Cantonment, G. T. Road, Kanpur - 208 013, U.P., India

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Registration Fee

ASM Member : Rs. 4000/-
Non ASM Member : Rs. 6000/-
Student Member : Rs. 2000/-
Industry : Rs. 25000/-
Exhibition Stall : Rs. 100000/-

For Registration of AFEM-2022 Pl. Contact:

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G.T. Road, Kanpur - 208013

TECHNICAL PROGRAMME

10:00 hrs. Inauguration of the Product Exhibition by Lt. Gen. J. K. Sharma (Retd.)
Declaration of Product Exhibition Open to Students (Coordinator: Shri J. N. Srivastava, DMSRDE)

Technical Session - I : Advanced Functional Materials
Chairman: Prof. L. M. Manocha; Co-Chairman: Dr. Ashish Dubey
Venue: Director's Conference Hall, DMSRDE, DRDO, Kanpur
Please Join us using the weblink: <https://meet.google.com/wwy-obtp-ytw>

10:15 hrs. Welcome by Dr. S. M. Abbas, Additional Director, DMSRDE, Kanpur, India
10:20 hrs. Address by Guest of Honour Dr. Kamachi U. Mudali, Trustee, ASM International, India
10:30 hrs. Address by Chief Guest Dr. Samir V. Kamat, DS & DG (NS&M), DRDO, Visakhapatnam, India
10:45 hrs. Introduction of Chairman and Speakers by Dr. Kingsuk Mokhopadhyay
11:00 hrs. Keynote Lecture: Ultra High Temperature Ceramics for Re-entry Space Vehicles
by Prof. Kantesh Balani, IIT/K, Kanpur, India
11:30 hrs. Invited Lecture: Refractory multicomponent alloys for next generation applications
by Prof. Koteswararao V. Rajulapati, University of Hyderabad, Hyderabad, India
12:00 hrs. Invited Lecture: Polymer composites of advanced functional materials for organic electronic applications
by Prof. Rajiv Prakash, IIT(BHU), Varanasi, India
12:30 hrs. Invited Lecture: Carbon Nanotubes Based Stretchable and Printable Conductive Materials
by Dr. Debmalya Roy, DMSRDE, Kanpur, India
13:00 hrs. Chairman Remarks
13:10 hrs. Vote of Thanks by Dr. Ashish Dubey, DMSRDE, Kanpur, India
13:15 hrs. Lunch

Technical Session - II : Product Exhibition
Chairman: Shri Hari Babu Srivastava; Co-Chairman: Dr. N. Eswara Prasad
Venue: DMSRDE Exhibition Hall, DMSRDE, DRDO, Kanpur
(Coordinator: Shri J. N. Srivastava, DMSRDE)

14:30 hrs. Welcome by Shri Amit Saraiya, DMSRDE, Kanpur, India
14:35 hrs. Address by Guest of Honour Prof. P. Venkitanarayanan, IIT/K, Kanpur, India
14:45 hrs. Address and Release of Souvenir by Chief Guest, Lt. Gen. J. K. Sharma (Retd.)
15:00 hrs. Keynote Lecture: Defence Products & ToT Road Map for DMSRDE by Shri J. N. Srivastava, DMSRDE, Kanpur, India
15:30 hrs. High Tea
16:00 hrs. Visit to Product Exhibition

Technical Session - III : Advanced Engineering Materials
Chairman: Shri Pradeep Goyal; Co-Chairman: Dr. Shantanu Chakraborty
Venue : Director's Camp Office, DMSRDE Transit Facility, G.T. Road, Kanpur
Please Join us using the weblink: <https://meet.google.com/fgb-fjmy-dnp>

17:00 hrs. Welcome by Dr. Ashok Kr. Tiwari, Chairman, ASM International India National Council
17:10 hrs. Address by Chief Guest Shri Pradeep Goyal, President (Elect), ASM International [2023-'24]
17:20 hrs. Introduction of the Speakers by Dr. Kingsuk Mukhopadhyay, DMSRDE, Kanpur, India
17:30 hrs. Invited Lecture: Quantitative Fractography (QF) for Fatigue Crack Growth Analyses of Metallic Aircraft Components by Dr. R. J. H. Wanhill, Emmeloord, Flevoland, the Netherlands
18:00 hrs. Invited Lecture: Additive manufacturing in Electrical Machines - The Road to Electrification
by Dr. Priya Munagala, University of Bristol, Bristol, UK
18:25 hrs. Invited Lecture: Acoustophoretic Self-assembly of Colloidal Composites for Additive Manufacturing
by Dr. Meghana Akella, Boston Science Corporation, Boston, MN, USA
18:50 hrs. Invited Lecture: On the Prediction of Long-term High Temperature Creep Life of Materials using Short-term High Temperature Creep Test Results by Prof. K. A. Padmanabhan, Anna University, Chennai, India
19:20 hrs. Invited Lecture: NEP of Light Metals by Prof. C. Suryanarayana, University of Central Florida, Orlando, USA
19:50 hrs. Keynote Lecture: Materials Design through Nano Engineering by Prof. P. M. Ajayan, Rice University, Houston, USA
20:30 hrs. Special Lecture: Aerospace Materials - A journey of 4 Decades by Dr. N. Eswara Prasad, DMSRDE, Kanpur, India
21:10 hrs. Vote of Thanks by Dr. Debmalya Roy, DMSRDE, Kanpur, India
21:30 hrs. Dinner

Dr. N. ESWARA PRASAD, a B.Tech. (1985) and Doctorate (1993) from IIT(BHU) Metallurgical Engineering Department, is an Outstanding Scientist of DRDO and Director of DMSRDE, DRDO, Kanpur. His contributions to DRDO and Indian Defence are numerous. Dr. Prasad's wide range of S&T and R&D contributions on the extensive fundamental scientific research on aerospace materials have led to more than 700 publications and Rs. 1650 Cr. worth Defence Materials / Store. For these accomplishments, Dr. Prasad received 15 major awards and more than 60 honours and recognitions including FIIM, FAESI, FlnSIS, FAPAM. He will be felicitated in this symposium, on the occasion of his superannuation.



Prof. Koteswararao V. Rajulapati



Prof. Rajiv Prakash



Dr. Debmalya Roy



Shri J. N. Srivastava



Dr. R. J. H. Wanhill



Dr. Priya Munagala



Dr. Meghana Akella



Prof. K. A. Padmanabhan



Prof. C. Suryanarayana



Prof. P. M. Ajayan



Dr. N. Eswara Prasad



Lt. Gen. J. K. Sharma (Retd.)



Hari Babu Srivastava



Dr. Samir V. Kamat



Dr. G. Satheesh Reddy



Dr. V. K. Saraswat



Dr. P. Rama Rao



Prof. V. V. Kutumbarao



Shri Pradeep Goyal



Dr. Kamachi U. Mudali



Dr. A. K. Tiwari