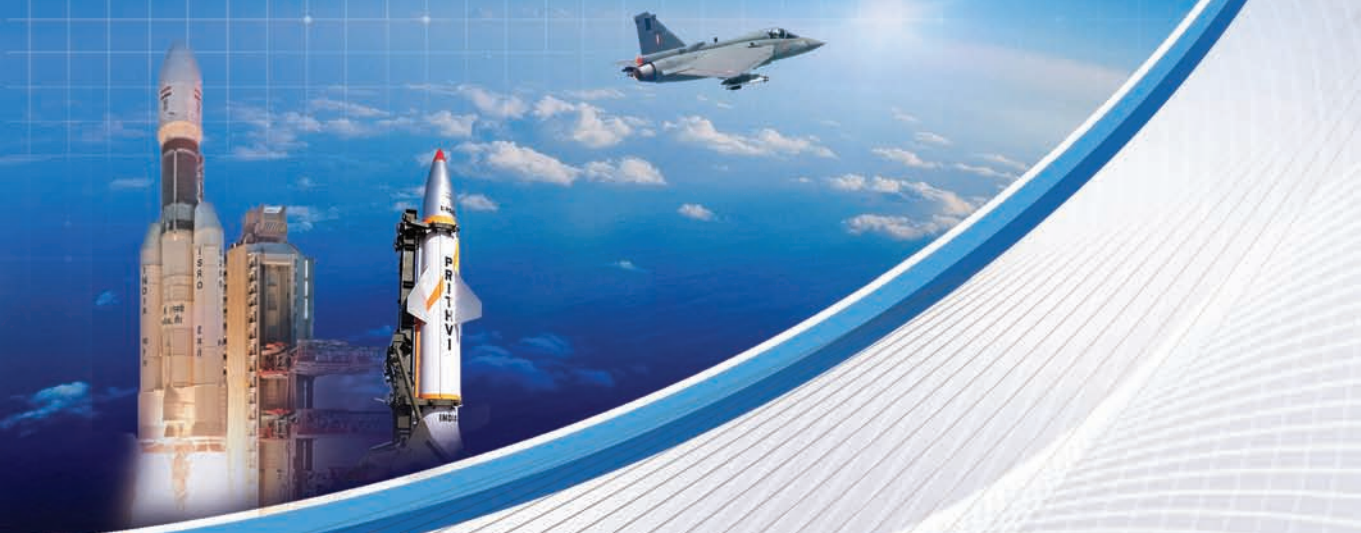
International Conference on
Advanced Materials and Processes

ADMAT 2017
SkyMat

Make in India, Fly in Space: Enabling Materials and Processes

December 14-16, 2017

Kovalam
Thiruvananthapuram, India



ISRO
SAE
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ADMAT 2017

SkyMat

Make in India, Fly in Space: Enabling Materials and Processes

Background & Objectives

India is an emerging economy with competence of advanced countries in space, atomic energy and defence. The three important areas of space, defence and nuclear sectors have been at the forefront of many important technological achievements in a relatively short time and with affordable cost. The systems developed by Indian Space Research Organisation are robust, reliable, state of art and cost competitive in global context. Materials are the backbone of many developmental activities across the above key sectors and in order to consolidate the developments in the area of Materials Science and Technology, to discuss the emerging trends, etc., a biennial thematic conference, ADMAT (acronym for 'Advanced Materials') has been proposed in association with ASM India National Council. Each conference will have a theme subject in this series of conferences. The first one is proposed to be held at Thiruvananthapuram in Kerala and theme of the conference will be "*Make in India, Fly in Space: Enabling Materials and Processes*" and is christened as SkyMat.

Enabling affordable competitive access to space mandates the development of state of art high-performance and light-weight materials. The needs of space travel demand a variety of materials dominated by myriad properties depending on space system stringent requirements. It is proposed that ADMAT 2017 will have participation of experts from around the world. The conference will have plenary and invited lectures with emphasis on various aspects of the focus areas. It will also feature an exhibition on state of art materials and related technologies. Chosen areas of national importance with international perspective shall culminate in to a road map for advanced materials development for the country and the globe. Scientists, engineers, academicians and delegates from industry shall participate in the conference to establish synergy of their efforts with a purpose to Advanced Materials Science and Technology.

The conference aims at:

Creating an 'Aerospace Materials Policy' through the participation of R&D and manufacturing experts from government, industry and academia.

Collaborating to identify, develop and deploy a family of materials systems and processes to enable affordable competitive, high-performance, and reliable access to space.

Focus areas

1. Additive manufacturing
   - Manufacture of powders
   - Processes and techniques in additive manufacturing
   - Modeling and simulation in additive manufacturing
   - Post processing and defect healing
   - Testing, quality control and acceptance
2. Light structural alloys
   - Processing of aluminium-lithium alloys
   - Processing of titanium alloys
   - Friction stir welding of aerospace structures
   - Mechanical properties and microstructures
   - Advanced aluminium and titanium alloys, forming processes, etc
3. High temperature materials and coatings
   - Ultra-high temperature ceramics and composites
   - High temperature thermal barrier coatings
   - Modeling of high temperature systems and coatings
   - High temperature properties testing and evaluation

Preconference Tutorials

To give focus on the two important and upcoming areas such as “Additive Manufacturing” and “Friction Stir Welding”, which are coinciding with the main themes of the conference, preconference tutorials shall be conducted on December 14, 2017 morning session. Eminent speakers having hands-on experience will interact and disseminate their experiences. Young practising engineers and researchers (below the age of 40 years) working in these emerging areas are encouraged to enroll for the tutorials. The total number of participants per tutorial will be restricted to 50 on a first-come-first-serve basis. The fee for participation in the tutorial is Rs.2500 / US$ 75 (inclusive of service tax) per participant.

Proceedings

It is proposed to publish the proceedings of the technical talks presented at the conference through ASM International in the form of a book. All the papers will be peer reviewed prior to publication. Invited speakers will be requested to provide a full length paper for the publication in the book. Authors are requested to e-mail their manuscripts on or before 1st December 2017. The manuscripts shall be Microsoft Word files, page size A4, fonts Times New Roman 12pt with all margins set to 25mm. The manuscript shall contain the author details with contact address. The full length manuscripts should be sent to skymat2017@gmail.com

Registration

Participation in ADMAT-2017 requires a valid registration. All participants of the conference are expected to register for the conference.

Delegate fee

Type of Delegate	Registration fee *	
	Rs.	US $
Academia and R&D	7,500	300
Member of ASM, IIM, MRSI & SAME	5,000	200
Industry and others	10,000	400
Students	3,000	100
Spouse	4,000	175

**Inclusive of Taxes*

Registration can be made on-line at www.admat2017.org by entering the required personal and payment details. The registration process will be completed only after the payment details are verified at our end. Written communication of government nominations sent by post will also be considered for payment authorization in the case of delegates from government organisations. The conference secretariat may be contacted in case of difficulty in online registration.

Registered delegates are eligible for conference materials and kit, entry to sessions and exhibition halls, refreshments, lunch and conference dinner.

Exhibition

Exhibition is an integral part of ADMAT-2017. The exhibition shall showcase state of art industrial products and software in the field of Materials and Metallurgical engineering. The conference offers a gateway for industries within India as well as from abroad engaged in material science, processing, production, application, modeling, hazard mitigation and safety. This will be a golden opportunity to network with about 500 professionals and academicians with a rare chance to share latest information in these fields.

Stalls will be issued on a first-come-first-serve basis. Each stall will have a minimum area of 6 m^2. Each stall will be covered on three sides with pre-laminated boards; has one table, one chair and a 5A power supply. Additional area can be provided on demand. The conference secretariat will facilitate third party support for additional requirements such as plasma TV and display systems. The exhibitors are offered complimentary benefits as mentioned under “Sponsorship Charges and Privileges”.

Each regular exhibition stall (3 m x 2 m) shall cost Rs.1.0 lakh for Indian organizations and US $ 2500 for overseas organizations. A few 3 m x 3 m stalls are also available for which the charges are Rs. 1.25 lakh and US $ 2750 respectively.

For exhibition stall booking, please contact:

- Mr. Sunil More, Director, FairAct Exhibitions & Events LLP,
  1st Floor, India Printing House, 42, G D Ambekar Marg, Wadala, Mumbai 400 031,
  Tel: 91-22-66562115 / 16 / 17
  Mobile: +91 9820223022, email: sunil.more@fairact.in
  Website: www.fairact.in
- Dr. A.K Tiwari, Convener, Exhibition Committee, ADMAT 2017
  Mobile: +91-9820057736, email: chemichemindia@gmail.com

Souvenir

A commemorative souvenir will be brought out on the occasion. The souvenir will be made available to all registered delegates, invitees and exhibitors. It will be a good opportunity for organizations and industries to advertise their products and services in the souvenir, which will be read and preserved by the participating delegates. In addition to advertisements, the souvenir will host sponsored features from industries subject to editorial clearance. The souvenir will be printed on good quality paper in color. Advertisement and features should be provided in print ready high quality .pdf format with an editable .psd file. All materials should be uploaded to www.admat2017.org

Souvenir advertisement tariff

Position	Tariff *	
	Rs.	US $
Double Spread (Colour)	90,000	1,600
Back Cover (Colour)	1,00,000	1,750
Inside Front Cover (Colour)	1,00,000	1,750
Inside Back Cover (Colour)	80,000	1,500
Full Page (Colour)	50,000	900
Full Page (B/W)	30,000	500
Half Page (Colour)	30,000	500
Half Page (B/W)	20,000	400

** Exhibitors will get 20% discount , GST extra*

Sponsorship and Opportunities

Associated industries and institutions are requested to support ADMAT 2017 by sponsoring the conference events. Three levels of sponsorships are available. Depending on the nature of sponsorship, the conference will provide any or a combination of business opportunities which include complimentary registration, business publication in the conference kit, company logo in conference documents, website and at the venue, opportunity for business presentation at sessions, complimentary pages in the souvenir and complementary stall at the exhibition. Institutions and industries are encouraged to sponsor the conference and avail of the business opportunities offered.

Sponsorship charges and privileges

Sponsor Type	Amount (Rs)*	Free stalls (3x2 m)	Free delegates	Advt. in Souvenir
Principal	15 lakh	6	15	2 page colour
Platinum	10 Lakh	4	10	1 page colour
Diamond	7.5 Lakh	3	8	1 page colour
Gold	5 Lakh	2	5	1 page colour
Silver	3 Lakh	1	3	Half page colour
Bronze	1 Lakh	-	1	
Seminar Kit	10 Lakh		8	Company Logo inside kit and 1 page colour
One day lunch	3 Lakh		3	Name display on banners and display board
One day dinner	5 Lakh		5	Name display on banners and display board

**GST extra*

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Organizers

ADMAT-2017 SkyMat is organized by ASM India National Council, Mumbai, The Indian Institute of Metals, Trivandrum Chapter, Materials Research Society of India, Trivandrum Chapter, Society of Aerospace Manufacturing Engineers, Trivandrum Chapter, National Institute of Advanced Studies, Bengaluru and Indian National Academy of Engineering, New Delhi with the active support of Indian Space Research Organisation (ISRO).

ASM India National Council

ASM International is a premier professional society of metallurgists, material scientists and technologists with a membership of over 30000 worldwide. It offers invaluable opportunities to interact & learn from fellow material engineers across the globe and sharpen creative vision. ASM offers excellent networking link, gives an instant access to insights and wealth of information through its technical books, acclaimed handbooks, engineering software and CD-ROMs and information sharing network for anyone who works with metals, alloys, composites, ceramics, polymers and electronic materials.

India National Council's vision is:

- to bring various Materials professional bodies in the country together and provide them with a platform to network and help promote the materials research in the country and bring it on par with that in the developed countries
- provide a strong materials foundation to the society and
- rope in other Asian countries to promote a strong Asia Pacific Material research environment.

with the help of all chapters in India and ASM International HO in USA.

The Indian Institute of Metals (IIM)

The Indian Institute of Metals is a premier professional society representing the family of metallurgists and materials engineers and scientists in India. IIM was formed in 1947 with the objectives of promoting and advancing the study and practice of science and technology of metals and alloys, and fostering the interests of metallurgists and materials engineers. With its headquarters at Kolkata, the activities of the Institute are conducted through 3 divisions and 51 chapters spread across the country. The IIM, Trivandrum Chapter was established in 1979. Today, in its long professional and technical journey it has become a nodal platform for the metallurgists, materials engineers and scientists covering R&D organisations like VSSC, CSIR-NIST, LPSC, SCTIMST and industries like Brahmos (Thiruvananthapuram) Ltd., IREL, KMML and Carborundum Universal Ltd.

Materials Research Society of India (MRSI)

Materials Research Society of India (MRSI) is an interdisciplinary professional body, based at Bengaluru, which is dedicated to stimulate accelerated growth of indigenous research and development in the area of materials science and engineering and their applications. MRSI has established its eminent presence in the country and outside with eight National and eight International seminars and conferences.

Society of Aerospace Manufacturing Engineers (SAME)

The Society of Aerospace Manufacturing Engineers (SAME) is a premier body representing the family of professional manufacturing engineers in the field of aerospace R&D institutions, academic and industry in India. SAME provides a common platform to engineers / technologists / scientists from different R&D institutions, academicians and industries associated with the manufacturing activities in the aerospace field, for interaction on up gradation of technologies, enhancement of productivity, value-engineering, improvements in quality and reduction in cost. The Society has more than 400 life members from aerospace community across the industries, academia & R&D institutions in the country

National Institute of Advanced Studies (NIAS)

National Institute of Advanced Studies (NIAS) was conceived and founded in 1988 by the late Mr. J. R. D. Tata, who sought to create an institution to conduct advanced multidisciplinary research. The Institute is unique in its integrated approach to the study of intersections between science and technology, philosophy, social issues and leadership. The objective is to nurture a broad base of scholars, managers and leaders who would respond to the complex challenges that face contemporary India and global society, with insight, sensitivity, confidence and dedication.

Indian National Academy of Engineering (INAE)

The Indian National Academy of Engineering (INAE), founded in 1987 is an autonomous institution supported partly through grant-in-aid by Department of Science & Technology, Government of India. It comprises India's most distinguished engineers, and technologists covering the entire spectrum of engineering disciplines. INAE functions as an apex body and promotes the practice of engineering and technology and the related sciences for their application to solving problems of national importance. The academy provides a forum for futuristic planning for country's development requiring engineering and technological inputs and brings together specialists from such fields as may be necessary for comprehensive solutions to the needs of the country.

Indian Space Research Organization (ISRO)

The Indian Space Research Organisation (ISRO) is the space agency of the Government of India headquartered in Bengaluru. Its vision is to harness space technology for national development, while pursuing space science research and planetary exploration. ISRO built India's first satellite, Aryabhata, named after the great Indian mathematician. In 1980, Rohini became the first satellite to be placed in orbit by an Indian-made launch vehicle, SLV-3. ISRO subsequently developed two other rockets: the Polar Satellite Launch Vehicle (PSLV) for launching satellites into polar orbits and the Geosynchronous Satellite Launch Vehicle (GSLV) for placing satellites into geostationary orbits. Satellite navigation systems like GAGAN and IRNSS have been successfully deployed. In January 2014, ISRO successfully used an indigenous cryogenic engine in a GSLV launch for the GSAT-14. ISRO sent lunar orbiter, Chandrayaan-1 in 2008 and its Mars Orbiter Mission successfully entered Mars orbit in its first attempt. On 15 February 2017, ISRO launched 104 satellites using a single rocket (PSLV-C37) and created a world record.

About Kerala

Kerala 'The God's Own country' is an enchantingly beautiful, emerald green land, flanked by the western ghats on one side, the arabian sea on the other, and strewn with rivers, lagoons, backwaters and rich vegetation. Legends state that Kerala was created by Parsuram (a famous ancient sage). Vasco da Gama discovered the sea route to India from Europe when he landed near Calicut in 1498 AD. Kerala is situated, in the south west corner of Indian peninsula. It is a tropical state




with green and lush vegetation and has a 550 km coastline on the Arabian sea. Kerala is the most densely populated state in India with 38,863 sq km area with around 33 million population. Kerala is also one of the richest states in India with forests and rubber plantations, cashew and coconut trees are everywhere. It has a particularly rich heritage of dance and drama (Kathalkali, Koothu, Mohiniattam) and people here are among the most industrious and well educated in the country. Kerala is renowned all over the world for its backwaters, natural beauty, health resorts and beaches. More on Kerala can be obtained at www.keralatourism.org

Thiruvananthapuram

Thiruvananthapuram, the capital of Kerala, houses many government offices, organizations and is also a major academic hub. The city is also a tourist destination for both domestic and international tourists. There are many tourist destinations in or near the city including Kovalam beach, Sanghumukham Beach, Napier museum and Zoo, Agasthyarkoodam peak, Neyyar Wildlife Sanctuary and Neyyar Dam, Kuthira Malika Palace, Sree Padmanabha Swamy temple, Ponmudi hill station, Poovar beach resorts, Varkala Cliffs and beaches and many others. Thiruvananthapuram is also famous for being the evergreen city of India.

Thiruvananthapuram has an international airport and is well connected with different parts of India through a good network of roads. Public and private bus services connect all the big and small cities inside Kerala. Thiruvananthapuram is also well-connected by the Indian railway network.

The city has a climate that borders between a tropical savanna climate and a tropical monsoon climate. As a result it does not experience distinct seasons. The mean maximum temperature is 34 °C and the mean minimum temperature is 21°C. Humidity is high and rises to about 90% during the monsoon season. Thiruvananthapuram is the first city along the path of the south-west monsoons and gets its first showers in early June. The city gets heavy rainfall of around 1700 mm per year. The city also gets rain from the receding north-east monsoons, which hit the city by October. The dry season sets in by December. December, January and February are the coldest months while March, April and May are the hottest. The lowest temperature recorded during winter is 15°C, and the highest temperature recorded in summer is 39°C.

Address for Correspondence

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Thiruvananthapuram 695 022, Kerala, India
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www.admat2017.org
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Payments

All payments shall be made to ADMAT2017 account no.36921235408, IFSC:SBIN0002279.
State Bank of India, Thumba branch. Transaction ID shall be mentioned in the registration form.

TDAD, VSSC