



# INDIAN SOCIETY FOR ADVANCEMENT OF MATERIALS AND PROCESS ENGINEERING

Aeronautical Society of India Building, Suranjan Das Road Junction  
New Thippasandra, Bangalore 560 075

Website: [www.isampe.org](http://www.isampe.org)

## Thirty Six Annual General Meeting

10<sup>th</sup> November 2023

Dr. V M Ghatage Convention Centre, HAL, Marathahalli, Bangalore

**Ref No. ISAMPE 37<sup>th</sup> AGM 2023 dated 04<sup>th</sup> Nov 2023**

### **SECRETARY'S REPORT**

Dear ISAMPE Members,

It gives me great pleasure to present to you the annual report of the Indian Society for Advancement of Materials and Process Engineering (ISAMPE) for the last financial year (2022-2023).

#### **Election of Executive Board (EB)**

In pursuance of the Election Procedure (vide-Sec. 5.3 of the Rules and Regulations) elections were required to be held this year to the offices of Vice President, Secretary, Joint Secretary-1 and Director-2 in the Executive Council of the Society for the official years 2023-2024. As no other nominations were received, the following ISAMPE EB nominees are being get elected.

<b>Post</b>	<b>Nominations</b>
Vice President	Mr. M N M Patnaik Division Head, Experimental Structures Division, Structures Group, U R Satellite Centre, Bangalore
Secretary	Mr. Sandeep Kumar Panigrahy Senior Manager, ARDC, Hindustan Aeronautics Limited(HAL), Bangalore
Joint Secretary-1	Mrs. S. Deepasakravarthini Principal Scientist, National Aerospace Laboratories(CSIR-NAL), Kodihalli, Bangalore
Director-2	Shri. T C Subba Reddy Group Director(Composites), Aeronautical Development Agency, Bangalore

## **ISAMPE Main Body Activities (2022-23):**

Following is a summary of activities completed / initiated / planned by ISAMPE in the last one year.

### **Activities Completed**

**36th AGM:** The 36th AGM of ISAMPE was held on 28<sup>th</sup> October 2022 at Dr. S R Valluri Auditorium, CSIR-NAL, Kodihalli, Bangalore. Highlights of the AGM are listed below:

- **Dr. Atul K Bakare** Director (Aircraft) CEMILAC delivered the chief guest address
- **Dr. N Kishorenath** Project Director VEDA ASL Hyderabad delivered the 29<sup>th</sup> Shri Vijay Zaveri Lecture on “Development of Composite Products for Aerospace Applications”
- **Prof. R Velmurugan** of Dept of AE, IIT (Madras) delivered the 16<sup>th</sup> Prof AK Rao memorial lecture by on “Shape Memory Polymer and its Applications in Aerospace Engineering”
- The Technical lecture by **Shri. S Manicka Vasagam** GM (Aircraft Division) HAL Bangalore on “Aerospace Materials-Challenges in Procurement and Conversion to Aircraft Parts “

**Life Membership:** ISAMPE has crossed 2200 in terms of life membership count.

- **ISAMPE Website Update:** Freshly designed ISAMPE website with various new value added features is being launched.
- **E-mail ID Upgradation:** Serious efforts have been initiated for E-mail ID update of members and many communication gaps have been already bridged. The drive will continue further till almost all members are brought within the e-mail communication loop.
- **17<sup>th</sup> Prof AK Rao Memorial Lecture**

As during corona period Prof AK Rao memorial lecture could not conduct in FY20-21, So this year 2 lectures were arranged. One during 36<sup>th</sup> AGM and second one in Dec-22

**Dr Ripudaman Singh** fondly called Ripi Singh “, Innovation coach of Inspiring Next, Founder **Plus4Pi LLC**, CT USA delivered 17th Prof AK Rao memorial lecture on “**Why Not ... Purposeful Design** “ on 02 Dec 2022 at ACD conference Hall CSIR-NAL Bangalore. More than 80 Scientists and honorable members of ISAMPE from various organizations attended the lecture.

- **Corporate Membership:**

M/s Hexcel Composites India LLP has taken corporate membership of ISAMPE in Dec-2022. ISAMPE is proud to get to get M/s Hexcel , leading producer of carbon fiber reinforcements and resin systems as a corporate member. Hope to plan any joint workshop or conference with them in composite tooling or product development . Special thanks to Mr D Poomani URSC and Mr Ram Kumar of M/s Hexcel for their support in this endeavour.

- **Activities in Progress**

- **Renewal / regularization of ISAMPE's registration with Registrar of Societies:**

The process for Renewal / regularization of ISAMPE's registration with Registrar of Societies has been completed for the Year 2022-23

**Issue of Photo ID Cards to ISAMPE Life members:** The process for the issue of Photo ID Cards to ISAMPE Life members is in progress and as of now already close to 700 ID cards are printed and handed over to the respective individuals. This process was slower last year. This financial year we will speed up the process till the completion for all the members. It is also initiated for a fresh members, the ID card will be issued along with the Life member ship certificate. And also requested all the members who have not given their ID card applications are requested to given the same at the reception desk, enable the society to take care of their ID cards also.

- Current President Dr S Rajagopal taken charge of ISAMPE in August 21 and running it well for the past two years. Today he is laying down from his post and Mr A Rajarajan Director Satish Dhawan Space Center (SDSC) Shriharikota by (SHAR) as President of ISAMPE. I would like to place on record services given Dr S Rajagopal to ISAMPE during the last two years. I am grateful to him for the guidance and support given to ISAMPE in running many activities during 21-23. ISAMPE is not new to Mr A Rajarajan, as he is instrumental in coordinating ISAMPE Trivandrum Chapter activities under various capacities and last two years he served as Vice President of ISAMPE. Also welcome new President Mr A Rajarajan to our fold.

- **Future Activities**

- **NECTAR Workshop:** Efforts are already put forth to conduct the NECTAR Workshop at the earliest.

**Highlights of Various ISAMPE Chapter Activities (2022-23)**

**ISAMPE Bangalore Chapter:**

The 21<sup>st</sup> AGM of the Bangalore Chapter was conducted at S R Valluri Auditorium, CSIR-NAL on 11th November 2022. This was well attended. The deliberations of the AGM were started with the 9<sup>th</sup> Dr. B.R. Somasekhar memorial lecture on “Relevance of Vibration and Aero Elasticity in Aerospace Design” which was delivered by Dr R Balasubramaniam, Head Structures Div. & Advisor (Retd)., CSIR-NAL & Editor, Journal of Aerospace Sciences and Technologies, Aeronautical Society of India, Bengaluru. After the lecture, Business session of AGM was conducted.

During the present tenure, our Chapter conducted various online lectures for the benefit of students as well as professional members. Special emphasis was laid on the involvement of industry professionals from the Materials fraternity as well as students.

**Details of activities (during Apr 2022 to Mar 2023) organized by ISAMPE-BC are as follows:**

1. An online session on “**Nano Composites for Biomedical Device Applications**” by **Dr.S Kanagaraj** was organized by ISAMPE on **9<sup>th</sup> June, 2022** via Cisco Webex platform. The informative session was well attended by faculty, students and other professional members.
2. **NDRF** in association with **IIT Jammu, BMS College of Engg.** and **ISAMPE-BC** organized an online National Conference on “**Additive Manufacturing in Aerospace, Defence (AMAD 2022) and other Engineering Sectors**” on **2nd July, 2022**. This was hosted by BMS College of Engg., Bengaluru and was well attended.
3. **ISAMPE BC** was the supporting partner for **Metal Additive Manufacturing Symposium 2022 (MAMS 2022)** hosted by M/s. AM Chronicle, a neutral information & content platform for additive manufacturing & 3D printing, held at Taj Yeshwantpur, Bengaluru **during 27-28th July, 2022**. The symposium was well attended by delegates from various states.

4. An online lecture on “**Braiding Technique in Composites and Industrial Textiles**” by **Shri. Pradeep Kulshrestha** was organized on **23rd Sept, 2022** via Cisco Webex platform. The lecture was well attended by the members.

5. An online lecture on “**Aerospace Prepregs & Resin Systems – A Make in India Approach**” by **Dr. Milind Khandwe** was organized on **1st Oct, 2022**. The lecture was interactive and well attended by the members.

6. An online lecture on “**Advancements in Thermoplastics**” by **Mr. Dan Ursenbach**, Chief Engineer, Thermoplastic Value Stream, Chula Vista, California, USA was organized on **28th Jan 2023**. This informative and interactive lecture was well attended by the members.

7. An online lecture on “**Large Scale Manufacturing of Carbon Nanotube Films and Fibres for Advanced Aerospace Engineering Applications**” by Dr. Sameer S Rahatekar, Sr. Lecturer in Sustainable Polymers & Composites, School of Aerospace, Transport & Manufacturing, Cranfield University, UK, was organized on **25<sup>th</sup> March 2023**. This online session was well attended by the members.

There is a need to include more and more student members as there is a great demand from students to avail benefits of ISAMPE membership.

The office bearers have proposed to continue with M/s. Suri & Co as auditors for the current financial year.

With continued encouragement and support by ISAMPE Main Board as well as organizations like CSIR-NAL, DRDO, HAL, IISc., etc the Chapter has enjoyed an eventful and satisfying year. We wish the next committee members all the success and greater achievements ahead.

#### **Office Bearers for 2023-24**

Chairman	Dr. Aruna S T, NAL
Secretary	Mr. Mohan Kumar M, NAL
Joint Secretary	Dr. Anil Chandra A R, BMS College
Treasurer	Ms. Archana Shukla, URSC

## ISAMPE Pune Chapter



INDIAN SOCIETY FOR ADVANCEMENT OF  
MATERIALS AND PROCESS ENGINEERING



Pune Chapter, Research and Development Establishment (Engineers)  
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RDE/ISAMPE-AGM

7<sup>th</sup> Aug 2023

### Report of activities-PUNE Chapter

The activities undertaken by the chapter in the last year are listed below:

- Two technical talks were organized on 4<sup>th</sup> Aug 2023 which was attended by ISAMPE as well as non ISAMPE members. First talk was delivered by Dr. Abhilash M, Research Associate, IISc Bangalore on "Novel composite materials for emerging engineering applications". The talk focused on ceramic matrix composite (CMCs) for high temperature applications and enhancement of toughness in high temperature composites.
- Second talk titled "Drilling damage in laminated polymer matrix composites considering thermal effects: Experimental and numerical analysis" was delivered by Dr. Sagar K, Research Associate, IISc Bangalore. In this talk, speaker presented work on drilling induced damage in multi- directional carbon fiber reinforced polymer (MD-CFRP) laminates through experimental and numerical approaches.
- It is decided to increase participation of students along with working professional from industry in Pune chapter activities by organizing workshops/seminars.

(Dr Mayur G. Godbole)  
Secretary, ISAMPE Pune Chapter

### Office Bearers for 2023-24

Chairman	Dr. Makarand Joshi, R&DE
Hony. Secretary	Dr Mayur Godbole, R&DE
Joint Secretary	Dr Rahul Purandare, R&DE
Treasurer	Dr. Sajal Roy, R&DE

## **ISAMPE Coimbatore Chapter**

### **Report by Secretary for the year 2022-23**

ISAMPE Coimbatore Chapter was associated with the following activities for the year referred above.

- ISAMPE Coimbatore Chapter organized an expert lecture in collaboration with Amrita School of Engineering on “Unlocking New Opportunities in Engineering Materials Research with ZEISS 3D-Xray Microscopy Solutions”. The resource person was Mr. Nagaarjun Sridhar, Application Specialist, XRM PAS, Research Microscopy Solutions, Carl Zeiss India. (Bangalore) Pvt. Ltd. on November 18, 2022.
- An expert lecture on “Piping engineering for Process Industries” by Aroon Bhanu K., Director, The Piping Institute, Kozhikode, Kerala was organized on December 11, 2022.
- A webinar on “Multiscale Hybrid Polymer Composites: Prospects and Future Challenges was organized on June 24, 2022 by Dr. N. Rasana, Assistant Professor- Amrita Vishwa Vidyapeetham, Coimbatore.
- ISAMPE office bearers and members were invited to judge the events during ANOKHA 2023 a National Level Technical Fest of Amrita Vishwa Vidyapeetham, Coimbatore. Financial Assistance was provided by the Chapter for the prize money for few events.

There are nearly 80 life members in the ISAMPE Coimbatore Chapter.

#### **Office Bearers for 2023-'24**

Chairman	Prof. Meera Balachandran
Hony. Secretary	Prof. K. Jayanarayanan
Hon. Joint Secretary	Prof. D. Kumaresan
Hon. Treasurer	Mr. L. Mahadevan
EC Member	Prof. Nikhil Kothurkar
EC Member	Prof. R. Subba Rao
EC Member	Prof. Murali Rangarajan
EC Member	Prof. K. I. Ramachandran

## **ISAMPE Thiruvananthapuram Chapter**

### **Annual Secretary Report for the year 2022-2023**

Dear ISAMPE Members,

It gives me great pleasure to present you the annual report of the Indian Society for Advancement of Materials and Process Engineering (ISAMPE) Trivandrum Chapter for the financial year 2022-2023. Summary of activities carried out from April 2022 is highlighted below

#### **1. Annual General Body Meeting 2022**

The annual general body meeting of ISAMPE Thiruvananthapuram chapter was held on on 12<sup>th</sup> November 2022 at Hotel Residency Tower, South Gate of Secretariat, Press Road, Thiruvananthapuram. Dr L Mohan Kumar, Chairman of ISAMPE Thiruvananthapuram chapter welcomed all the members. He highlighted the important activities of the chapter which was completed and planned for coming year. Dr Aravind Jithin A J, Secretary, presented the annual report highlighting the activities and Shri Karthikeyan B, Treasurer, presented the audited accounts for the financial year 2021-2022. The AGM unanimously passed the annual report and audited account as Shri Sridhar S proposed and Shri K K Krishnakumar seconded the proposal. Family get-together and cultural programs were also arranged along with AGM 2022 with active participation of more than 300 participants.

#### **2. Technical Talks**

Seven technical talks along with dinner were arranged from April 2022 to March 2023

1. Shri M C Dathan, Mentor (Science) to the Chief minister of Kerala, Former Director, VSSC, LPSC & SDSC on 'Reminiscences'
2. Shri Sridhar S, Group Head, VSSC on 'My rendezvous with VSSC and ISAMPE'
3. Dr Sasikumar P, SR/VSSC on 'Trains and its Science'
4. Dr Arun DI, CMSE/VSSC on 'Time Travel'
5. Shri.Vibhu Unnikrishnan, VSSC on 'Advanced Chemical Systems and Polymers'



6. Dr K G Satyanarayana, Former Director, RRL-Trivandrum (CSIR -NIIST); Former Visiting Professor/Scientist, UFPR, Curitiba & Visiting Scientist, EMBRAPA, Colombo (Brazil) on 'Developments in nano materials and their composites'
7. Shri Prasanna G, Former Scientist, VSSC / ISRO on "Few Mysteries and Mathematics in Music"

ISAMPE members were actively participated in these technical talks with more than hundred participants. Similar active participation of ISAMPE members is requested for future technical talks as well.

### 3. Membership

New Life members joined in Trivandrum Chapter during 2022-2023	: 102
Total Life Members in Trivandrum Chapter as on March 2023	:393

### 4. Financial Position

The statement of account for the chapter during the year 2022-23 has audited by M/s. Suresh Babu & Associates and cleared by executive committee.

### 5. Executive Committee

Executive committee meetings were conducted through online/offline modes and regular discussions were conducted through online mode.

### Future Activities

Following activities are proposed to be conducted during coming months

**Technical Talks:** It is planned to conduct more technical talks on various topics in coming months.

1. **Refresher courses:** It is proposed to organize one day refresher course for supervisors as well as for technicians working in composite area.
2. **ISAMPE Award Ceremony:** ISAMPE Trivandrum chapter awards for the previous years is planned to be distributed in an Award Ceremony with participation of eminent personalities.

### Office Bearers for 2023-24

Chairman	Dr. L. Mohan Kumar, VSSC
Vice-Chairman	Shri V Vinu Viswanath, VSSC
Hony. Secretary	Dr.. Aravind Jithin A J, VSSC
Joint Secretary	Shri. Sree Kumar A, VSSC
Treasurer	Shri. Karthikeyan B, VSSC
EC member	Dr. T.P.D. Rajan, NIIST
EC member	Shri. Able C Kurian, VSSC
EC member	Smt. Sonali Gyan, VSSC
EC member	Shri. Salil Kanj Jalan, VSSC
EC member	Shri. Abhilash, VSSC
EC member	Shri. Akshay Ranjan Patak, VSSC

### ISAMPE Hyderabad Chapter

ISAMPE Hyderabad chapter's Secretary's report 2022-23

ISAMPE Hyderabad chapter has been actively organizing workshops and seminars to spread knowledge among the ISAMPE members and scientific fraternity under the able leadership of Dr M R M Babu distinguished scientist and Director ASL.

#### **Technical activities :**

Executive committee meeting for organising 17th ISAMPE National Conference on Composites was held at ASL, DRDO on 25 May 2022. The following committee members have attended the meeting.

- Dr M R M Babu- Chairman
- Dr Manoj Buragohain- Vice Chairman
- Dr Anil KUMar - Vice Chairman
- Dr K Srinivas- Vice Chairman
- Shri Seetharam-Vice Chairman
- Dr K Veerabrahmam- General Secretary

- Dr I Srikant- Jt Secretary
- Dr Basant Kumar- Jt Secretary
- Shri T Ramalingam-Treasurer
- Executive Committee members
- Dr Padmanabha Raju
- Shri P Srinivas Yadav
- Dr Atul Bhagat
- Shri S Balasubramaniam
- Shri Sameerkant Behera

Chairman Dr M R M Babu, has formed organising committee for hosting INCCOM17. In his address he emphasized need for more technical papers at the conference on varied subjects related to composites design, processing and testing. First call for papers was released and requested all ISAMPE members to actively participate in the deliberations. He also initiated the process of publishing the conference proceedings in Springer Nature conference proceedings. INCCOM17: Chairman Dr M R M Babu, has thanked all the organising committee members for successfully organizing INCCOM17. ISAMPE Hyderabad chapter also unanimously passed resolution thanking ISAMPE Hqrts for all the support and encouragement in hosting the event. He also intimated the progress in the process of publishing the conference proceedings in Springer Nature conference proceedings. Salient features of INCCOM17 are given below

1. INCCOM17 was well attended by over 600 participants from Industry, academia and research institutions.
2. Overall there were 72 presentations which included 12 invited talks and 60 contributory talks.
3. Plenary talk was given by Mr A Rajarajan , Director, SHAR, ISRO & Vice President ISAMPE HQ.
4. Industrial exhibition was participated by 36 industry partners whiting various composite products.

The INCCOM17 was well attended by ISAMPE members, about 120 members registered and attended the national conference. All the talks were of very high quality and felt with advances developments in composites and polymers.

Secretary, ISAMPE, Hyd

### Office Bearers for 2023-24

Chairman	Dr M R M Babu
Vice-Chairman	Dr Manoj Buragohain
Vice-Chairman	Dr Anil KUMar
Vice-Chairman	Dr K Srinivas
Vice-Chairman	Shri Seetharam
Hony. General Secretary	Dr K Veerabrahmam
Joint Secretary	Dr I Srikant
Joint Secretary	Dr Basant Kumar
Treasurer	Shri T Ramalingam
EC member	Dr Padmanabha Raju
EC member	Shri P Srinivas Yadav -
EC member	Dr Atul Bhagat
EC member	Shri S Balasubramaniam
EC member	Shri Sameerkant Behera

### ISAMPE Annual Awards (2022-23)

The following ISAMPE Annual Awards-2022-23 were announced

Presentation of ISAMPE Awards by Dr. S. Rajagopal, President, ISAMPE (citations read by Dr. Saji, Convener, ISAMPE Awards, Committee chaired by Dr. M Vijayakumar, (Ex -HAL). The following category awards were presented to the winners during 36<sup>th</sup> AGM and the details are as follows:

- **“Vijay Zaveri Award for Excellence in Technical Support - 2022”**  
was awarded to Mr. Basavaraj S M and Mr.Margan A of ACD, CSIR-NAL, Bangalore for their contribution towards **“Industrialization of Hybrid Structural Assembly Technologies for LCA-Tejas Composite Rudder”**

- **“ISAMPE Outstanding Design and / or Process Development Award – 2022”** was conferred to Mr Samudra Dasgupta, Ms Chandrey S Ghosh, Ms Hema K S, Mr Kandala Ravi Sekhar and team of Aeronautical Development Establishment (ADE), DRDO, Bangalore for their contributions towards **“Innovations in composite materials & Process for UAV Technology Demonstrator”**
- **ISAMPE Award for Outstanding Design and/or Process Development - 2022** was conferred to Smt. Sheeja Mathew from VSSC, ISRO PO, Thiruvananthapuram For Contribution Towards **“Development of Indigenous MEMS Acoustic Sensor for Launch Vehicles”**
- **“ISAMPE Award for Smart Materials and Systems Technology Development-2022”** was awarded to Team of NAL Comprising of Mr Venkatesh S, Mr Pitchai P, Dr D Saji, Dr Byji Varughese, Mr. Nondappa Naik B, Mr Senthilnathan K, Mr Pichuka MadhuBabu, Mr Shadakshari K S, Dr S Raja, Dr C N Sathyanarayana, Dr.Chandra N, Mr Shivaprasad MV, Mr Mahesh, Mrs Radha B R & Mr Punitha S J for their work titled **“Indigenous Recovery of Searcher Mk-II Remotely Piloted Aircraft(T-2012)”**
- **“ISAMPE Student Award for Smart Materials and Systems Technology Development-2022”** was awarded to Ms Isha Paliwal, Dept. of Mechanical and Aerospace Engineering, IIT-Hyderabad for contribution towards, **“A Novel Multiple Micro bolt configuration for a single lap CFRP hybrid joints”**

On behalf of ISAMPE, I would like to thank Dr. M Vijayakumar, (Ex HAL), Dr Rajagopal Chairman & President, ISAMPE, Dr. D Saji Past President ISAMPE and Convenor of ISAMPE Awards Committee (IAC) & other members of IAC for their continued support towards the ISAMPE Awards.

### **ISAMPE EB Meetings (2022-23)**

The ISAMPE EB arranged 3 meetings and 3 EC meetings during the year to chalk out many programs. We used to meet about once a quarter and the EB Meetings were also attended by members from various chapters to discuss their issues.

I am **very grateful to ISAMPE, Thiruvananthapuram Chapter** for enrolling more than **100 Professional Life Members** to ISAMPE during FY 22-23. Request other

chapters also to take up membership drive during FY 23-24 so that ISAMPE will have **2500** members by then.

With this, I wish you all a professionally satisfying association with the society during the coming year as well. I would also like to thank members of ISAMPE EB, especially Dr. S Rajagopal, President-ISAMPE, for supporting me to conduct ISAMPE activities in befitting manner for the past one year. Special thanks to the executive committee for their support to me in conducting various activities during FY 22-23. I also thank all of you for the cooperation and constructive suggestions extended to the new EB for improving ISAMPE in all possible ways. I once again thank all ISAMPE members for giving me the opportunity. It was a great pleasure and honour to serve you all.

Thanking You,



**04<sup>th</sup> November 2023**  
**Bangalore**

**(Sandeep Kumar Panigrahy)**  
**Secretary, ISAMPE**

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