



**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

**Thirty fourth Annual General Meeting (34th AGM) 17th October 2020
Virtual meeting (Through online)**

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 year 2019-2020. Even though, due to the current pandemic situation (Covid -19) and as per the prevailing Government of India SOP (guide lines on restriction on mass gathering), this year ISAMPE could do its best efforts to conduct few technical sessions virtually (through online) However, once the situation comes to normal and the ease of government regulation for the mass gathering we would like to have the few more technical sessions including Shri Vijay Zaveri Memorial lecture, Prof AK Rao Memorial lecture etc as in the past occasions.

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-2 and Director - 2 in the Executive Council of the Society for the official years 2019-2021. As no other nominations were received, the following ISAMPE EB nominees were elected unopposed and this was approved in last the AGM, held on 27th September 2019.

Post	Board Nominee
Vice President	Dr. S. Rajagopal, Sc –F, Aeronautical Development Establishment (ADE) Suranjan Das Road, New Thippasandra PO, Bengaluru, Karnataka 560075

Secretary	Mr. M. Srinivas, Aerospace Composites Division, Hindustan Aeronautics Limited Bangalore -560037
Jt. Secretary-2	Mr. Sandeep Kumar Panigrahi Aircraft Research & Design Center, Hindustan Aeronautics Limited Bangalore -560037
Director-2	Mr. A Gnanasekar HOD (Material) –ARDC Aircraft Research & Design Center, Hindustan Aeronautics Limited Bangalore -560037

ISAMPE Main Body Activities (2019-20):

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

➤ Activities Completed

- 33nd AGM of ISAMPE was held on 27th Sep 2019 at HAL Convention Center, Marathahalli, Bangalore. The AGM was well attended by ISAMPE members. The Chief Guest for the Inaugural Function was **Shri. Arup Chatterjee**, Director (Engineering and R&D), Hindustan Aeronautics Limited, Bangalore.
- Vijay Zaveri Memorial Lecture: The 28th Vijay Zaveri Memorial Lecture was delivered by **Shri C.R.Sathya**, Ex TAML, Bangalore on the topic “**FUTURE MAN**”
- 14th Prof. AK Rao Memorial Lecture: The 14th Prof. AK Rao Memorial Lecture was delivered by **Prof. N. Balakrishnan**, IISc, Bangalore on the **Topic: “Four Decades of Computational Electromagnetics Research and Advances in High Performance Computing”**.
- We had on more technical session by **Dr. Shankar Venugopal**, Vice president, M/s Mahindra & Mahindra, Chennai was delivered a technical session on the topic "**DESI Leaders – Leading Exponential Innovation**"

- ISAMPE understands the importance of imparting education and exposures to the engineering student community. In this context, ISAMPE organized one technical session exclusively for the benefit of students on “**Testing and Characterization of Composite Materials for Aircraft Structural Application**”. The session was delivered by **Shri A Gnanasekar, HOD, Materials and process Engineering, ARDC, HAL** through online session.
- ISAMPE also instituted a student contest on “**Design of Foldable Ladder for Military Aircraft**” for which there is a good response from the student communities through participating for this contest.
- Life Membership: ISAMPE has crossed 2002 in terms of life membership count. The drive will continue further
- ISAMPE Website Update: Freshly designed ISAMPE website with various new value added features is being launched, **Website ID: www.isampe.org**. It also provides a platform for Industries to advertise their products and capabilities and provide a forum for interaction between ISAMPE members, industries and institutions. Freshly designed ISAMPE website with various new value added features has been launched.
- E-mail ID Updating: Serious efforts have been initiated for E-mail ID updating 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. However, in website there is a provision to update the member email ID through the enquiry link. All the members are requested to use the same for updating their Email ID's.

➤ **Activities in Progress**

- Issue of Photo ID Cards to ISAMPE Life members: The process for the issue of Photo ID Cards to ISAMPE Life members is initiated and as of now already close to 500 ID cards are printed and handed over to the respective individuals. This process will be continued 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 give the same to the Society, enable the society to take care of their ID cards also.

- ISAMPE understands the importance of imparting education and exposures to the engineering student community. In this regard, ISAMPE has instituted a Student Chapter in Bangalore, which is spread across several engineering colleges in the city. The students are given necessary exposure to composite technologies by through workshops, lectures and visits to relevant facilities. Similar student chapter is also being planned to be set up in Pune.

➤ **Future Activities**

- ISAMPE would like to improve the industrial participation in the ISAMPE activities. Increase the corporate membership, through which the industries can be directly involved in the corporate activities.
- Enhance the ISAMPE activities through the website.
- Involvement of the student members in the ISAMPE activities though organizing the workshops and visits to the industries.

Highlights of Various ISAMPE Chapter Activities (2019-20)

ISAMPE Bangalore Chapter:

The main activities of the Chapter are listed below.

- The AGM of the chapter was held on 10th Oct 2020 (Virtually), which was well attended.
- The AGM was preceded by 7th Dr. BR Somashekar Memorial Lecture on “Advanced Composites for Emerging Aerospace programs” by **Dr. I Srikanth**, Sc-F, HTCC, ASL, DRDO, Hyderabad.
- Bangalore chapter organized one technical session exclusively for the benefit of students on “**Testing and Characterization of Composite Materials for Aircraft Structural Application**”. The session was delivered by **Shri A Gnanasekar, HOD**, Materials and process Engineering, ARDC, HAL through online session.
- Bangalore chapter organized one seminar on “Latest developments in Ultrasonic testing of critical aerospace metallic & composite parts” by **Dr. Christopher John Leslie** from M/s Olympus Singapore on 14th Feb 2020 at KTMD Seminar Hall, CSIR, NAL, Bangalore and was well attended by members from CSIR-NAL and other organizations.

- Bangalore chapter organized webinar and an interactive session on “SOLVAY COMPOSITE TOOLING MATERIALS & SERVICES” on 11th Sep 2020, by Mr. PATRICK STIMPSON (Project Manager, Tooling, Solvay Composite Materials)

Office bearers for 2019 - 20 are as mentioned below:

Chairman	Shri T C Subba Reddy, ADA
Co- Chairman	Dr. Vijay Petley, GTRE
Secretary	Shri S Sanjeev Kumar ,CSIR-NAL
Jt. Secretary	Mr. Madhav Murthy,BMSCE
Treasurer	Ms A Revathi, CSIR-NAL

ISAMPE Pune Chapter:

The activities undertaken by the Chapter in the last year are listed below.

- The AGM of the chapter was held on 25th Sep 2020, which was well attended.
- One Technical lecture was organized. Talk was delivered by **Dr. Anoop Anand** from R&DE(E) on “**Manufacturing of Axi-symmetric composite products using RFI Process**”. The talk was focused on different aspects of RFI manufacturing processes and its advantages in realization of axi-symmetric composite structures as compared to other manufacturing processes.
- It is also decided by the chapter to increase the involvement of composites industries and academia of Pune region with ISAMPE by conducting workshops/ seminars with active industrial participation.
- It has been decided to organize workshops on Certification of composite structures and SHM in the year 2020-21.
- Apart from this, it is planned to add more members in ISAMPE for which membership drive is being undertaken for both individuals and organizations to increase interaction between people of composites fraternity in the region.

Office bearers for 2019 - 20 are as mentioned below:

Chairman	Shri VV Parlikar, OS and Director R &DE(E)
Co- Chairman	Dr. Makarand Joshi, Scientist, R & DE (E)
Secretary	Dr. Amit Kumar Gupta, Scientist, R & DE (E)
Joint Secretary	Ms. Jayalakshmi CG, Scientist, R & DF (E)
Treasurer	Shri Rajendra Kumar Gupta, Scientist, R & DE (E)

ISAMPE Coimbatore Chapter:

The activities undertaken by the Chapter in the last year are listed below.

- The Chapter gave financial support to the second edition of SCICON, International Conference on Advanced Materials, was held at Amrita Vishwa Vidyapeetham, from December 15-17, 2019.
- The three-day conference saw eminent researchers from countries like Canada, USA, Thailand, France, Italy, UAE, Bangladesh, South Korea, Hungary, Singapore, and several parts of India congregate to share their expertise in areas such as biomaterials, electronic and magnetic materials, as well as high energy materials.
- With 12 plenary lectures and 34 invited talks that included parallel sessions on Basic Sciences, Materials for Energy Applications, Computational Materials, Electronic and Magnetic Materials, Biomaterials and Nanomaterials, the conference was a hub for an intensely diverse approach to science and technology. The publications co authored by ISAMPE members of Coimbatore Chapter were presented in the conference.
- ISAMPE Coimbatore Chapter supported the 10th National-level Techfest, Anokha 2020, from February 13-15, 2020 organized by the School of Engineering, Amrita Vishwa Vidyapeetham, Coimbatore campus. The Chapter members were judges for many events conducted as part of the Techfest.

- The Chapter gave financial support to the student contests organized by the Federation of Indian Petroleum Industry – Coimbatore Chapter conducted during November 2019.
- Office bearers for 2019 - 20 are as mentioned below:

Chairman	Prof. K.Jayanarayanan
Co-Chairman	Prof. Sriram Devanathan
Hony.Secretary	Prof.R.Subba Rao
Joint.Secretary	Mr. Mahadevan Lakshmanan
Treasurer	Dr.Meera Balachandran

ISAMPE Thiruvananthapuram Chapter:

The main activities of the Chapter are listed below.

- The National Conference (INNCOM-16) with theme “Advanced Composites – Opportunities & challenges from Earth to Space” was conducted on 20-21 Sep 2019. The INNCOM -16 was well attended.
- One more Workshop for technicians with theme “Composites Technology – Best Practices, Procedures and Precautions for Total Quality” was conducted on 22 Sep 2019.
- Chapter planned technical sessions through the webinar

Office bearers for 2019 - 20 are as mentioned below:

Chairman	Shri E N Ananthapadmanabhan
Vice-Chairman	Shri. L. Mohan Kumar
Hony. Secretary	Shri. John Paul
Joint Secretary	Shri. Manoj M.R
Treasurer	Shri. N. Muthuraju

Secretary’s report was not received from the other Chapters (Hyderabad, Dhanbad & Kanpur) and hence could not be reflected in this report.

I thank all the ISAMPE Chapters for conducting many programs for the benefit of ISAMPE members as well as for the student members during the difficult situation (Covid -19).

ISAMPE Annual Awards (2019)

The following ISAMPE Annual Awards-2019 were announced and distributed during the Inaugural Function of the 33rd AGM.

- ISAMPE award for Outstanding Design and /or Process Development - 2019 awarded to a team lead by Dr Makarant Joshi Sc-G of R&DE Pune and the other members of the team ,**Dr C Ramdas, Mr Rajendra Gupta, Mr Mayaur Godbole, Dr.Rahul Harshe, Mr Irfan Khan, Mr Anil Kajari& Mr Felix Barla** of R & DE (E), Pune for their Contribution towards "**Design and development of indigenous Composite Sonar Dome for P15A class Ships**".
- ISAMPE award for smart materials and system technology development (General)-2019 awarded to team from CSIR-NAL Bangalore comprising of **Dr. S Raja, Dr. ST Aruna, Mr. G Jerald Maria Antony & Dr. Chetan S Jarali** for their contribution to "**Development of an improved thermoset Shape Memory Polymer (SMP) and the preparation thereof**".
- Shri. Vijay Zaveri Award for Excellence in Technical Support - 2019 awarded to **Mr K Ramesha** of CSMST, CSIR-NAL, Bangalore for his contribution in the "**Development of 10kW &7.5 kW Wind Turbine Blades**".
- ISAMPE Student Award for Smart Materials and Systems Technology Development – 2019, awarded to **Ms. M G Pooja** of School of Electronics & Communication, Reva University for her contribution in the work titled -"**CNN based methodology for inclusion detection in prepreg based manufacturing process of aerospace composite structures**".

On behalf of ISAMPE, I would like to thank Dr RV Krishnan. Chairman and Dr. D Saji, Convener and other members of ISAMPE Awards Committee for their continued support towards the ISAMPE Awards.

Honorary Member Ship For year (2019) :

Felicitation of the Honorary Member ship to **Dr. RMV Gopala Krishna Rao**
Founder Head, FRPD,CSIR-NAL, by President ISAMPE.


ISAMPE EB Meetings (2019-20)

The ISAMPE EB arranged 4 meetings and 4 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.

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 Saji, President-ISAMPE, for supporting me to conduct ISAMPE activities in befitting manner for the past one year. 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 honor to serve you all.

Thanking you,

Bangalore
15th Oct 2020


(Srinivas M)
Secretary, ISAMPE