



# HIGH-END WORKSHOP (कार्यशाला – A SERB initiative) on Applications of AI and ML in Advanced Materials Processing Techniques (Under the Karyashala Scheme-A SERB initiative)



2-8 February 2024 (Offline Mode),

Sardar Vallabhbhai National Institute of Technology, Surat

## About Karyshala:

KARYASHALA is an effort to improve research productivity of promising final-stage UG and PG students from universities and colleges through high-end workshops on specific themes. It is sponsored program by Science and Engineering Research Board (SERB) and aims to provide opportunities to acquire specialized research skills. This workshop under the program aims to provide the knowledge and use of AI and ML with hands-on training in advanced materials processing techniques, especially forming and solidification processing.

## About the institute:

Sardar Vallabhbhai National Institute of Technology Surat (SVNIT Surat) was established as Sardar Vallabhbhai Regional College of Engineering & Technology in 1961 and then upgraded as a National Institute of Technology on 2002. SVNIT is one of the pioneering engineering institutions of the country with granted status of 'Institute of National Importance'. Six UG programs, nineteen PG programs and a Ph.D. program in all disciplines of engineering and applied sciences are conducted at SVNIT Surat.

## Course details:

This workshop will cover all major areas from basic science to advanced technologies of materials processing. The objectives will be to

- ❖ Understand the basic and advanced concepts of materials processing techniques in forming and solidification processing, and virtual Forming.
- ❖ Materials mechanics, simulation, and modeling.
- ❖ To optimize the materials processing techniques using AI and ML.
- ❖ Prediction of materials microstructure and materials properties correlation.
- ❖ Data Science in manufacturing processes.

## Who can attend:

The High End Workshop on Applications of AI and ML in Advanced Materials Processing Technique is open to Final year Undergraduate, postgraduate students and research scholars from nationwide institutes in India. Preferences will be given to those students, working in the areas of Materials Processing Techniques. The theory lectures are associated with Hands-on training. The candidates are expected to carry their personal laptops for participating in the Hands-on training sessions.

## Registration details:

- There are only 25 seats.
- Registration Fees: **There is no registration Fee.**
- The shortlisted participating students will also be eligible for **Travel (up to 3<sup>rd</sup> AC or BUS route), food, and Accommodation** related reimbursement, as per SERB, GoI norms.
- The candidate must upload an NOC letter duly signed by the competent authority.

## Important Dates:

**The last date for registration: Jan 18<sup>th</sup>, 2024. Workshop date: 2-8 February 2024**

- Selected candidates will be notified via email by Jan 20<sup>th</sup>, 2024, based on the screening results.
- Registration Link: <https://forms.gle/JKzo8T3FirWKhuv8A>

### Tentative List of Speakers

<b>Prof. D. Ravi Kumar</b> Professor IIT Delhi	<b>Prof. H.K. Raval</b> Professor (HAG) SVNIT Surat	<b>Prof. R. Venkata Rao</b> Professor (HAG) SVNIT Surat
<b>Prof. Shailendra Kumar</b> Professor SVNIT Surat	<b>Prof. Alankar Alankar</b> Associate Professor IIT Bombay	<b>Prof. S. Karagadde</b> Associate Professor IIT Bombay
<b>Mr. Om Prakash</b> Eli Lilly, Bangalore	<b>Mr. Ved Prakash</b> Ford India, Chennai	<b>Dr. Anirudh Jonnalagadda</b> IISc Bangalore, Bangalore
<b>Dr. Kandarp Changela</b> Saint-Gobain, Chennai	<b>Dr. Raju Prasad Mahto</b> Assistant Professor SVNIT Surat	<b>Dr. Ram Singar Yadav</b> Assistant Professor SVNIT Surat

### Chief Patron

Prof. Anupam Shukla,  
Director, SVNIT Surat

### Patron

Prof. A.A. Shaikh,  
Head, DoME  
SVNIT Surat

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