



A workshop on

# Static and Dynamic Characterization of Micro-components

[10:00-13:00, 28<sup>th</sup> September 2021 (in Online Mode only)]

The workshop will provide an opportunity for the participants to get familiarized with Laser Doppler Vibrometry, Stroboscopic Vibrometry, and White Light Interferometry using the Micro-System Analyzer (MSA) facility available at Suman Mashruwala Advanced Microengineering Lab as a central facility of IIT Bombay. The capabilities of MSA-500 will be elaborated with the help of previously recorded videos of the measurements. Moreover, the fabrication aspects of micro/nano components using 3D Laser Lithography (accessible as a central facility of IIT Bombay) will be presented.

## Programme Schedule

- 10:00 | Introductory Remarks  
| Prof. M. D. Atrey, Dean R&D, IITB
- 10:15 | Characterization of MEMS devices using MSA-500  
| Mr. R. Sivakumar, Aaral Tech Pvt. Ltd.
- 11:00 | Micro/Nano fabrication using 3D Laser Lithography  
| Prof. P. Tayalia, Professor, IITB
- 11:45 | Micro System Analyzer (MSA-500): capabilities and use cases  
| Prof. P. S. Gandhi, Professor, IITB
- 12:45 | Vote of thanks

## Speakers



**Dr. Prakriti Tayalia**  
Associate Professor  
BioSciences and Bioengineering  
IIT Bombay

**Dr. Prasanna S. Gandhi**  
Professor  
Mechanical Engineering  
IIT Bombay



**Mr. R. Sivakumar**  
Manager – technical  
Aaral Tech Pvt. Ltd.

## Registration

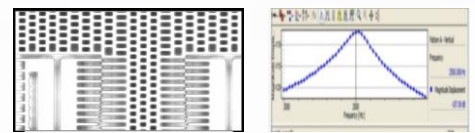
Register here:

<https://forms.gle/hRHtegNFQkKkKpX37>

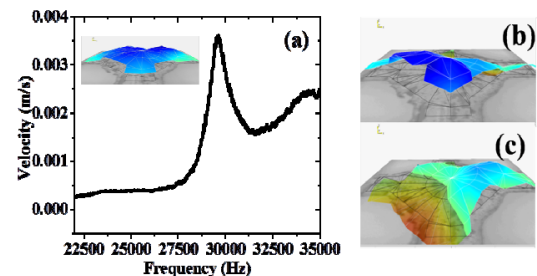
**No registration fee**

Registration Deadline  
27<sup>th</sup> Sep. 2021

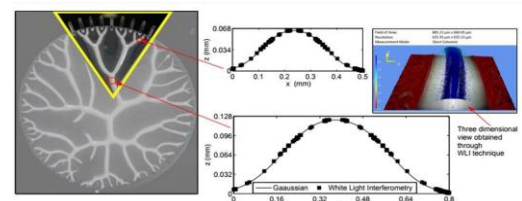
## Research



In plane vibration of comb drive, Kandpal et. Al., Royal Society of Chemistry Publishing (2015).



Out of plane mode shape. Courtesy: BARC(2006)



Fractal structure, Islam, Gandhi, Scientific Reports 6 (2016).

## Organizer:

Prof. P. S. Gandhi  
Dr. Rajendra Arya  
Mr. Juan Chowdhury

## Organized By:

Suman Mashruwala Advanced Micro-Engineering Laboratory,  
Department of mechanical engineering,  
IIT, Bombay

For any query, please drop a mail at [20002141@iitb.ac.in](mailto:20002141@iitb.ac.in), or contact : 9101077030, 8755535948