## **Short Course on Semiconductor Packaging with Hands-on Training**

Semiconductor Fabrication

#### Semiconductor Packaging



**Course Co-ordinator** Prof. Veeresh Deshpande

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## 16<sup>th</sup> November to 20<sup>th</sup> November 2023

Course conducted by:

The Centre for Semiconductor Technologies (SemiX), Indian Institute of Technology Bombay (IITB) In association with: Kaynes SemiCon

Job role networking session with Kaynes SemiCon



# **KAYNES** SEMICON



### Introduction

India is poised to grow its local semiconductor industry. The government of India has brought out India Semiconductor Mission (ISM) to coordinate the efforts and set in place policy for growing the semiconductor ecosystem. Several private companies are setting up manufacturing units on chip packaging and testing (ATMP/OSAT). As this is an emerging area, there is a skill gap at various levels (from PhD to technicians) in the workforce in India. Particularly, the skill gap at engineer and technician level (diploma/vocational training education level) needs to be bridged at the earliest, as the required workforce at this level will be the largest. The semiconductor chip packaging domain needs to training and education options as this is the least developed in India.

### **Course Content**

Introduction to semiconductor technology and manufacturing

Cleanroom environment and fundamentals

Semiconductor packaging: basic to advanced packaging technologies Various unit process modules involved in semiconductor packaging Discussion and test on course content

Single chip packaging eyes-on and hands-on training

#### Highlight: Interaction for job opportunities at Kaynes SemiCon

#### Accommodation

Limited accommodation is available on a first-come-first-serve basis (self-payment) in Hostels, IIT Bombay

- Rs 300 per person per day on sharing basis (Room rent + Mattress Charges) - Payment to be made in advance cepsemix@ee.iitb.ac.in

### **Broad Objectives**

The broad objectives of this course are as follows:

- To provide an overview of semiconductor packaging technologies in manufacturing
- To provide necessary fundamental theory and develop understanding of processes involved in packaging
- To provide lab scale hands-on training on single chip packaging process steps with aim to make students quickly ramp-up in packaging job roles
- To provide interaction and **networking for** students with Kaynes SemiCon for job opportunities in their upcoming OSAT fab.

#### Faculty

Renowned faculty members from IIT Bombay will deliver lectures along with industry professionals from Kaynes SemiCon. Lab sessions will be led by experienced research staff from IITBNF and Labs in Mechanical Engineering Department

#### Venue for Lectures and Labs

- Lectures Victor Menezes Convention Centre (VMCC), IIT Bombay
- Lab sessions IIT Bombay Nanofabrication Facility ٠ (IITBNF), Electrical Engineering Department, IIT Bombay
- Labs in the Mechanical Engineering Department ٠

\* Minimum educational requirement is a Diploma or Bachelor's Degree in Science/Engineering

To fully realize the objectives of the course, the lecture notes/slides will be made available to the participants after the event Registration Per participant Rs 80,000 /- for industry participants Rs 40,000 /- for faculty from academia Rs 75,000 /- for government officials Rs 25.000/- for students Rs 25,000/- for startup engineers The course fee includes course material, lunch, and coffee/tea

## Who may benefit?

Students (graduated or about to graduate) looking for career in semipackaging

Startups, Scientists, and Technical Staff • Government Officials

#### **Lecture Notes**

#### Important Dates

Last date for receipt of the registration form:

- 12<sup>th</sup> November 2023
- Course dates: 16<sup>th</sup> Nov. to 20<sup>th</sup> Nov., 2023

#### Contact

For any further queries, please contact us at office.semix@iitb.ac.in or 022-21593930