



# OXY-PSA: A course on PSA Technology for Oxygen Generation



Course Coordinator Prof. M. D. Atrey

26/11/2021 - 04/12/2021

## Overview

**IIT Bombay** in collaboration with **Spantech** has devised a 5 day online course combined with an industry visit to train young technical graduates & diploma holders to deliver trained manpower to healthcare industry.

The continuous education program (CEP) at IIT Bombay offers a range of vocational training courses catering to the need of different industries. These training programs of short durations are intended for upskilling of technical graduates.

The latest addition to this list is a new course on '**PSA technology**'

Pressure swing adsorption (PSA) oxygen generation plants are a source of medical grade oxygen. The PSA system produces oxygen suitable for many more applications such as brazing/soldering, ozone generation, chemical oxidation, fermentation, waste water & sewage treatment, glass & neon manufacturer, pulp & paper, battery manufacture, metal melting etc.

The need for oxygen gas has multiplied many-fold. With the increased demand for oxygen in recent pandemic times, there is a critical need for trained personnel who can operate the PSA plants.

**Spantech** is an engineering, manufacturing and services company setup in 1992 and founded by an IIT Bombay Alumnus. It is a pioneer in the in manufacturing of Oxygen, Nitrogen and Ozone generating plants using PSA Technology.

## Faculty

- Prof. M. D. Atrey
   Department of Mechanical Engineering
   IIT Bombay
- Mr. Rajendra Tahiliani
   Founder and Technical Director
   Spantech Engineers
   B. Tech (Chemical Engineering, IIT Bombay)

With other faculty from IIT Bombay and Spantech.

Mode: Online lectures and Hands-on experience at live sites

#### **Duration: 5 Days**

- 4 days online lectures
- 1 day industry visit at any of the 10 locations (Hyderabad, Mumbai, Nashik, Ahmedabad, Chennai, Aurangabad, Surat, Jalgaon Chandigarh and Vijaywada)

Course Fee: INR 59,000 (inclusive of 18% GST)

### Course content

- Oxygen usage and production techniques
- PSA technology: introduction and applications
- Role of compressors and their effectiveness in PSA plants
- Molecular sieves and adsorption technology
- Understanding of pressure, temperature, instrumentation, process control valves and control philosophy in PSA plants
- Industry visit for hands on understanding of PSA technology

### Who benefits and how

- The program is aimed at engineers, science graduates and diploma engineers with 5 years work experience or someone who has been extensively working in this area or plans to work.
- Getting the knowledge and hands on training on PSA technology will give candidates a unique opportunity to become 'Covid warriors' in current pandemic, through serving in hospitals and helping them maintain continuous oxygen supply for their patients.

#### **Registration:**

https://portal.iitb.ac.in/ceqipapp/courseDetails. jsp?c\_id=4459

#### To know more about Spantech Engineers:

www.spantechengineers.com

### LAST DATE for APPLICATION November 15, 2021



#### Prof. M. D. Atrey Course Coordinator

Department of Mechanical Engineering Refrigeration and Cryogenics Laboratory Indian Institute of Technology Bombay Powai, Mumbai - 400 076 Tel.: (022) 2576 4525/7522 Fax: (022) 2572 6875, 2572 3480 Email: matrey@iitb.ac.in