

# Erasmus Internship Report



I am Anand Jain, a master student from Process safety and Environmental Engineering (M.Sc.). I did my Erasmus Internship from 1<sup>st</sup> October 2018 to 30<sup>th</sup> June 2019 at University of Chemistry and Technology, Prague, Czech Republic in the department of Inorganic Technology.

In the Erasmus Internship, I worked on the project of Preparation and Characterization of Mixed matrix membranes (MMMs) based on 6FDA-DAM:DABA (3:1) Polymer and ZIF-8/GO as fillers for Gas separation. In this Project, I prepared 6FDA-DAM:DABA (3:1) polymer, ZIF-8 filler, membrane of neat polymer and Mix matrix membranes of GO, ZIF-8 and GO+ZIF-8 fillers with different loadings. I did Characterization of ZIF-8 and GO fillers using XRD, TGA, DSC, SEM &

FTIR measurements and Characterization of all membrane using FTIR, DSC, TGA, SEM & RAMAN measurements.

During the Internship, I did industrial training in MEMBRAIN(MEGA) Company in north bohemia (Czech Republic) where I learnt about industrial membrane preparation and its applications on lab scale as well as industrial level. The basic skills for the preparation and characterization of membranes and knowledge in evaluation of experimental data from permeation measurements have been acquired. Erasmus Internship will enhance my opportunities to get a good job in chemical, environmental industry or PhD in the relevant field in future.

I got this opportunity during my Erasmus semester in the same institute from Associate Professor Dr. Ing. Vlastimil Fíla. I was studying his course Process Design during my Erasmus semester. When I contacted him, he accepted me as an intern in his lab after reviewing my educational records and motivation towards his project. Generally, one can get the information about the Erasmus Internship opportunities and grants by contacting <http://www.leonardo.ovgu.de> website.

The University of Chemistry and Technology, Prague is one of the country's largest educational and research institutions focused on technical chemistry, chemical and biochemical technologies, material and chemical engineering, food chemistry, and environmental studies. Erasmus Internship in UCT, Prague was really a nice experience for me. I learned a lot in terms of Experimental work, team working and extracurricular activities. I got many friends from different countries and learnt about their cultures and traditions.

I would surely recommend experiencing the Erasmus Internship abroad. I would suggest choosing the area of your interest and contacting the concern department of the organization/enterprise as per the rules given on the above-mentioned website with your resume and motivation letter.