

**SIDDHARTH SHANDILYA**

Course : BE,CHEMICAL ENGINEERING - PLASTICS AND POLYMER

Email : mailtosiddharthshandilya@gmail.com

Mobile : 9521863982

CGPA : 7.31

**ACADEMIC DETAILS**

COURSE	SPECIALIZATION	INSTITUTE/COLLEGE	BOARD/UNIVERSITY	% CGPA	YEAR
XII	Science	RESONANCE INT. SCHOOL	CBSE	84.8	2015
X	General	RAMAKRISHNA MISSION VIDYAPITH	CBSE	91.2	2013

ELECTIVES/TECHNICAL PROFICIENCY**Electives** Fundamentals of Data Structures,Fundamentals of UNIX C Programming,French,Industrial Organisation and Management**Technical Proficiency** 1.COMPUTER SCIENCE FUNDAMENTALS 2.PROGRAMMING LANGUAGE :C 3.DATA STRUCTURE IN C,Software: 1. Autocad 2. Matlab 3. Aspen , Microsoft Tools: 1. MS-Word 2. MS-Excel 3. MS-Powerpoint**PROJECTS****1. Study of thermal and flame behaviour of phosphorus based silica for epoxy composites****Mar 2019 - Dec 2019****RESPONSIBILITY:**

Project under Prof. A.K. Sen

ACHIEVEMENTS:

Our aim was to prepare a Phos[horus based fire retardant material for composite application. Phosphorus containing silica powder was prepared successfully by acid hydrolysis of sodium silicate in the presence of Di-sodium hydrogen orthophosphate, orthophosphoric acid and hypophosphorus acid . Epoxy composite with pure silica and phosphorus containing silica were prepared and characterized by TGA and LOI.

TGA patterns of the composites are almost same upto 450 C. At this temperature residue for phosphorus containing sample is 20% higher than epoxy-silica composites. The flame behaviour in LOI test shows less flame propagation due to the formation of char.

2. Ionomer based polymer nano-composite for radio frequency absorber**Jan 2020 - Jun 2020****Responsibility:**

Project with Shalu under Prof. G. Sarkhel

Achievements:

Our objective was to develop a polymer, having electromagnetic shielding properties using the ASA/Zn-ionomeric blend.This polymer further could be used as an electromagnetic shield to either attenuate EM waves passing through it or to provide complete EM shielding. The blend was prepared by melt blending process.

The presence of Barium Titanate enhances the mechanical properties of the composite such as tensile-strength, Ultimate-strength and Young's modulus. The dielectric properties like dielectric constant and dielectric loss also increases due to the increase in its conductivity and is maximum for 1.5 wt% filler content. There was an increase in total shielding effectiveness with increase in filler content due to the increase in conductivity. It was concluded that the ASA/Zn ionomeric blend with Barium titanate as filler can be used for the shielding of the EM wave and optimum filler concentration for this was nearly 1-1.5 wt.%.

POSITION OF RESPONSIBILITY**R.K.MISSION VIDYAPITH****Jan 2011 - Nov 2012**

AUDITORIUM MINISTER

R.K.MISSION VIDYAPITH**Mar 2009 - Nov 2012**

LIBRARY CAPTAIN

ACHIEVEMENTS AND AWARDS

PROBLEM SOLVING ASSESSMENT (PSA)

2013

DAMODAR SHREE ESSAY COMPETITION

2017

Ranked among top 5% in the class

G.P.Birla scholarship

2019**EXTRA CURRICULAR ACTIVITIES**

Certificate of Participation on Unity in Diversity