RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University
Accredited by NAAC & An ISO 9001: 2015 Certified Institution
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Academic Year 2021 – 2022 (Even Semester)

Details of Programme Organized

Sl. No.	Contents	Details
01.	Title of the programme	Introduction about Geopolymers
02.	Programme Theme	Research opportunities
03.	Programme Type	Webinar
04.	Details of resource person	Prof. Kinga Korniejenko Researcher Cracow University of Technology Poland
05.	Mode & Venue / Platform	Google Meet & YouTube https://meet.google.com/gpu-mwjo-ohd
06.	Date & Duration	28.03.2022 & 1 hour 30 minutes
07.	No. of Student Participants	26
08.	No. of Faculty Participants	13
09.	No. of External Participants	29
10.	Expenditure amount (if any)	NIL
11.	Social Media URL	https://youtu.be/VuSg_Zq6iMU
12.	Registration Link	https://tinyurl.com/Intro-Geopolymers

13. Objective of the Programme:

- To impart knowledge on cutting edge technologies (Geopolymers) to the participants and to upgrade the expertise of the faculty members in mechanical engineering field.

14. Detail description of the activity:

Extramural Lecture Series on the topic **"Introduction about Geopolymers"** was organized by Department of Mechanical Engineering, Ramco Institute of Technology, Rajapalayam on 28.03.2022. The main objective of this ELS is to impart knowledge about cutting edge technologies related to Geopolymer and its application in the field of engineering. The Resource Person was Prof. Kinga Korniejenko, Researcher, Cracow University of Technology, Poland.

Dr.S.Godwin Barnabass, ASP/Mech welcomed the participants and delivered the introduction about the resource person. Prof. Kinga Korniejenko gave a brief introduction about Geopolymers along with-it history. She briefed the structure of geopolymers and the future scope of geopolymer applications. The technology through which geopolymers are extracted was explained with a flowchart along with time requirement, temperature and curing period. Advantages and the limitations of geopolymer usage and the current research to overcome the limitations were narrated by the Professor.

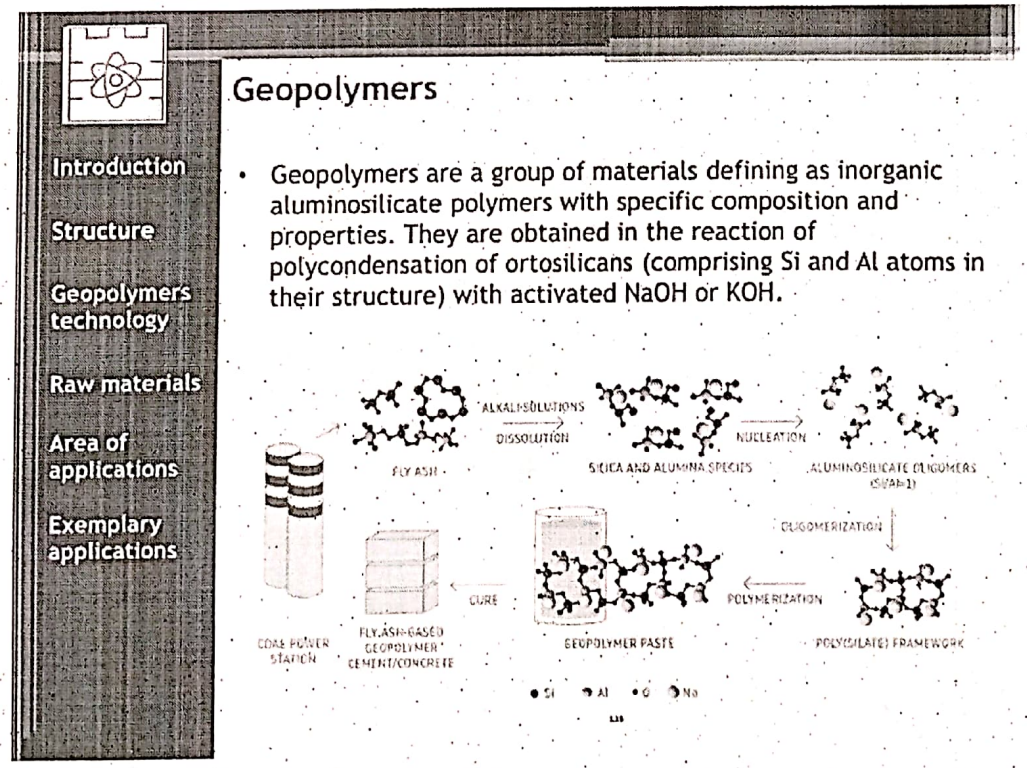
Towards the second half of the session, Professor shared the different application areas of the geopolymers. She stressed that the maximum use of the geopolymers is in the area of construction followed by runway, pipe, concrete repair. She also stressed that India is having higher potential of growth rate in utilization of geopolymers. Resource person finally completed the session by sharing benefits of geopolymers as follows:

- Geopolymers are the valuable alternative for Portland cement.
- Using local sources for raw materials gives benefits to the ecology and is cost-effective.
- Raw materials from different sources could have different characteristic; the properties of the final products will be correlated with the features of raw material.
- The important issue is also proper reinforcement for the materials that can significantly improve their properties.
- Products made from geopolymers can be produced traditional casting technology as well as using additive manufacturing.
- Geopolymers find some industrial application and they have a potential to find many others.

The vote of thanks was delivered by Dr.S.Godwin Barnabas, ASP/Mechanical, RIT. The total no. of participants presented in the webinar was 68. The entire sessions were interactive where participants raised their doubts and a precise explanation was given by the resource person. The overall feedback of the program was good. Finally, the participants were distributed with the e-certificates after filling the feedback form.

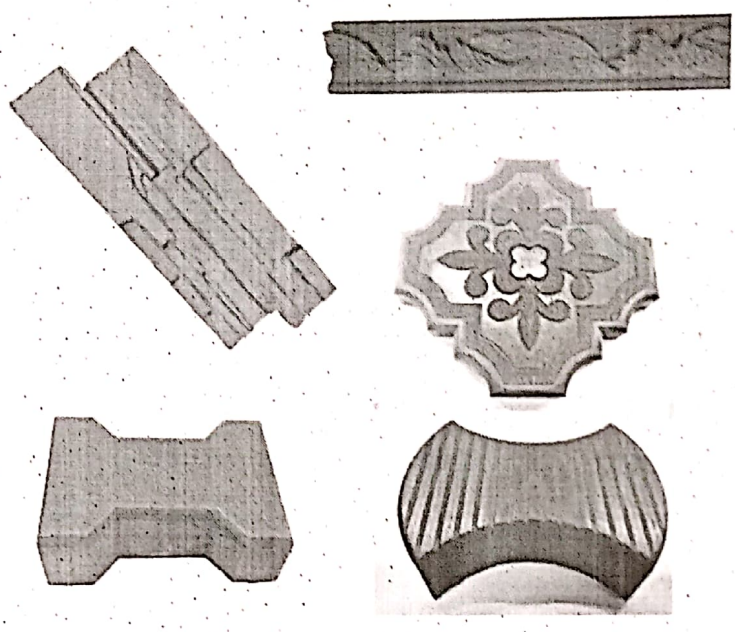
15. Banner / flyer of the programme:

16. Programme Photographs:



Geopolymers - applications

- Introduction
- Structure
- Geopolymers technology
- Raw materials
- Area of applications
- Exemplary applications



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GEOPOLYMER MARKET, GROWTH RATE BY REGION, 2019-2024

Source: https://www.mordorintelligence.com/industry-reports/geopolymer-market

31/03/22

Prepared by:

5/15/22

Approved by

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Department of Mechanical Engineering

EXTRAMURAL LECTURE SERIES(ELS) - INT006

INTRODUCTION ABOUT GEOPOLYMERS

Academic & Research Credentials

Kinga Korniejenko

Researcher,
Cracow University of Technology,
Poland

Date :March 28, 2022
(Monday)
IST: 3.10 P.M.
Poland Time: 10.30 A.M.

Registration Link : https://tinyurl.com/Intro-Geopolymers

COORDINATOR	CONVENER	PATRON	CHIEF PATRON
Dr.V.SIVAKUMAR	Dr.P.SURESHKUMAR	Dr.S.RAJAKARUNAKARAN	Dr.L.GANESAN
ASSOC. PROF./MECH	ASSOC. PROF./MECH	VICE PRINCIPAL & HEAD/MECH	PRINCIPAL