

Brief Report on One Week STTP

Date: 08/02/2023

Department of Civil Engineering was organized A One Week STTP on “**Journey of Concrete from Waste to Best: Special focus on Mix Proportioning of Geopolymer Concrete**”, 2nd -7th Feb. 2023 under the banner of CESA and supported by Ferrocement Society of India and IEI, Ahmednagar Local chapter in hybrid mode, 2-4 Feb. 2023 in Online mode and 6-7 Feb.2023 in Offline mode.

Venue: Online Zoom Platform

Offline: Seminar Hall No.25, Ground Floor, Sanjivani C.O.E., Kopergaon

Hand on in TOM Lab. Of Civil Engineering Department

Total participants: 48 Nos.

Total Resource persons: 05

Inaugural function was started at 10.30am in presence of, Hon’ble Shri Vijayrao Naydu, Chief Technical Director, Sanjivani group of Institutes, Prof. Vaishali M. Bogar, HOD, Civil Engineering Department, Govt. Collge of Engineering, Karad, Chief Guest of this STTP, Dr. A. G. Thakur, Director, (Convener), Dr. M. V. Jadhav, HOD (Co-Convener) and Dr. S. V. Patankar, Program Coordinator.

Brief information of department and workshop was given by Dr. M. V. Jadhav, HOD Civil, Dr. S. V. Patankar, Coordinator, briefing the importance of STTP, objectives behind this STTP. and schedule of 4th and 5th day of the one week STTP. Dr. A. G. Thakur explained the importance of waste and quality of present structures constructed all over the world. Hon’ble Shri Vijayrao Nayadu highlighted the importance of Civil Engineering branch and their involvement in reducing environmental impact by using various industrial waste and appreciates the work done by organizers and give best wishes to the participants.

The first session of **Day-1 (02/02/2023)** of one STTP was started by resource person, Dr. C. D. Modhera, Department of Civil Engineering, SVNIT, Surat with experimental investigation on Geopolymer concrete in first session while in second session Dr. S. V. Patankar, Civil Engineering Department, SCOE., Kopergaon explained the Efficient utilization of various industrial waste in concrete and their applications in the field of construction.

The first session of **Day-2 (03/02/2023)** was started by Dr. Sanjay S. Jamkar, Structural Engineer, Archi D Tales, Aurangabad explained the Mix proportioning of concrete as per IS10262:2019 and development of high strength concrete mixes using various industrial waste. Second session delivered by Dr. S. V. Patankar, Civil Engineering Department, SCOE., Kopergaon highlighting the effect of various parameters in the development of Geopolymer Concrete and role in strength development as compared to cement concrete.

Day-3 (04/02/2023) was started by Er. Mayur Pathak, Managing Director, Technocrete India Pvt. Ltd., Nashik, explained the beneficial use of industrial waste for construction industry and role of civil engineer to help in reduction of waste in the first session while in second session, Dr. Y. M. Ghugal, Emeritus Professor, VJTI, Mumbai elaborate experimental investigation on

structural properties of polymer modified fiber reinforced concrete with Metakeolin and efficient utilisation of Metakeolin waste in concrete.

Day-4 (06/02/2023) which was in offline mode started by Dr. S. V. Patankar, Civil Engineering Department, SCOE., Kopargaon with Do's and Don't in Mix Design of fly ash based Geopolymer concrete just after inaugural function. Thereafter preparation of chemicals and various test required for mix design of Geopolymer concrete was carried out in TOM lab. with the help of Mr. R. B. Gaikwad and Mr. Gautam Gaikwad, supporting staff. After doing hand on in TOM lab., Power of thoughts in Stress management in our day-to-day life session was organised by Tej Gyan Foundation, Pune to balance stresses in our day to day life.

Day-5 (07/02/2023) which was also in offline mode, started with three different mix design suggested by Dr. Patankar, Dr. Rangan and Dr. Anuradaha in TOM lab and performed workability test by slump cone, compaction apparatus and Flow table and thereafter cast three samples each for compressive strength test. This hands on was carried out under supervision of Dr. S. V. Patankar and supporting staff Mr. R. B. Gaikwad, Lab. Assistant and Mr. Gautam Gaikwad. Dr. M. V. Jadhav, Dr. S. M. Ghumare, Prof. S.R. Nawale, Prof. D.D. More, Prof. A. V. Ghogare, Prof. A. R. Gaikwad were present during all practical sessions.

During hands on training, our trustee Hon. Shri Bipin Dada Kolhe and Shri. Bhausab Wakchaure, Ex. Shirdi MP meet all participants and discuss the new opportunities in Civil engineering field. Also asked participants to develop new materials for earthquake prone areas. He also remembering recent earthquake done in Turkey.

Valedictory function was started at 4.30 PM and ends at 5.00PM in presence of Dr. M. V. Jadhav, HOD Civil, Dr. S. M. Ghumare, Dean EDP Cell and faculties of Civil Dept. in TOM Lab.

Detailed Schedule of Two Days Workshop

Day/ Date	Resource person	Title	Time	Remark
Day 1 02/02/23	Dr. C. D. Modhera SVNIT, Surat	Experimental Investigation on Geopolymer Concrete.	11 am to 1pm	In ONLINE MODE
	Dr. S. V. Patankar SCOE., Kopargaon	Effect of various parameters in the development of Geopolymer Concrete.	3pm to 5 pm	
Day 2 03/02/23	Dr. Sanjay S. Jamkar Structural Engineer, Archi D Tales, Aurangabad	Mix proportioning of concrete as per IS10262:2019.	11 am to 1pm	
	Dr. V. Sairam SCOE., Kopargaon	Strength and Durability studies of Red mud "cement paste, mortar and concrete	3pm to 5 pm	
Day 3 04/02/23	Er. Mayur Pathak, Managing Director, Technocrete India Pvt. Ltd., Nashik	Beneficial use of industrial waste for construction industry.	11 am to 1pm	
	Dr. Y. M. Ghugal, Emeritus Professor, VJTI, Mumbai	Efficient utilisation of pozzolanic waste materials in concrete.	3pm to 5 pm	
05/02/23	No session			

Day/ Date	Resource person	Title	Time	Remark
Day 4 06/02/23	Dr. S. V. Patankar and his team	Do's and Don'ts in Mix Design of fly ash based Geopolymer concrete. Preparation of chemicals and various test required for mix design of Geopolymer concrete. Power of thoughts in Stress management in our day-to-day life.	11 am to 12.30pm 1.30pm to 2.45pm 3.00pm to 4.45pm	In OFFLINE MODE
Day 5 07/02/23	Dr. S. V. Patankar and his team	Hands-on in TOM Lab. Mix Design of Fly ash based Geopolymer concrete. Valedictory Function.	10 am to 3pm 4.00pm	Lunch break - 12.30pm-1.30pm



Outcome of STTP: For the last many decades, concrete gain its popularity due to utilization of all types of industrial waste like fly ash, bottom ash, GGBS, etc. and help to support nature to make pollution free partially. Mix proportioning of Geopolymer concrete with 100% utilization of industrial waste is today's topic for most of researchers. So, this STTP is beneficial to all the academicians, researchers and industrial engineers.

Dr. S. V. Patankar
Program Coordinator

