



SHARDA
UNIVERSITY
Beyond Boundaries

MONTHLY NEWSLETTER

DEPARTMENT OF CIVIL ENGINEERING

Transforming
Engineering Students
into Industry-Ready
Professionals

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VISION

To become a globally known and recognized destination for technical, innovation, entrepreneurship and research excellence and transfer its achievements for the larger good of the society.

MISSION

- To create facility to integrate research, quality education, ethical values and professional service in the areas related to civil infrastructure and environmental engineering.
- To provide industry and academia with outstanding graduates, entrepreneurs and scholars who advance both engineering practice and fundamental knowledge and play a leadership role.
- To create a center of higher learning and innovation equipped with befitting infrastructure and faculty to attract the students from across nations to use niche facilities for the societal symbiosis.
- To create an environment to enrich graduates through experimental learning and motivate them for self-learning to provide solutions to the industry and society.

NEWS AND EVENTS

Sharda School of Engineering and Technology organised an Interactive Seminar on "Career Opportunities After Graduation" in collaboration with Unacademy on 9th November 2022 @ 2:00 PM.

Seminar Highlights :

1. Various career opportunities after Graduation.
2. Examination Paper Pattern Tips & Tricks to Crack Various Competitive Exams
3. Preparation Strategy

Speaker :Mr. G Rajput Ex-Civil servant.



The International Relations Division, in association with the Diversity Club - Cultural Society of Sharda University organised "The Global Village Competition" for the students of Sharda University, where the students got a chance to display their culture through food, ethnic wear, performances and speciality of their mother country. The objective was to amalgamate variations in cultures around the globe and picturizing Unity in Diversity. Md. Mahmudul Hasan(3rd year civil) participated in the event and displayed the culture of Bangladesh through food, ethnic wear and performances.

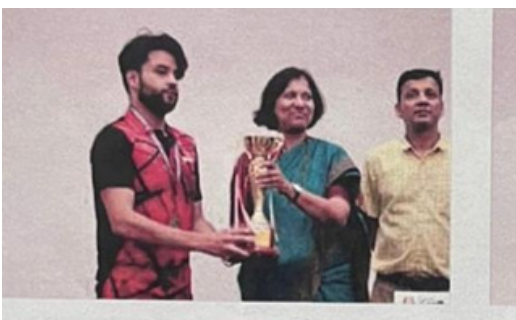
NEWS AND EVENTS

STUDENT ACHIEVEMENTS

A singing competition named SARGAM-DUETTO was organised by IIT Roorkee in their annual cultural festival THOMSO in which students from Colleges all over the India participated. Sakshi Rai(3rd year civil) and Spandhan represented Sharda University and came 1st runner up in the competition.



A Football match between SHARDA UNIVERSITY and ZAKIR HUSSAIN COLLEGE DELHI was organised and sponsored by Reliance Youth Sports Foundation. This match was a part of Delhi City Championship (Under 23). Sharda University team won the match with a score of 4-3 and Bini Tadik(3rd Year Civil) was declared MVP of the match.



Faisal Mir (3rd year civil) represented Sharda University in Table Tennis in the Indian Colleges Sports meet competition organised at Galgotias University and won the first prize in Table Tennis.

NEWS AND EVENTS

Sh. Kuldeep Kumar,(M.Tech Structural Sharda) EE(Retd.) CPWD, has successfully delivered lecture on Structural Designing using Stadd Pro. software, to newly recruited Assistant Executive Engineers (C&E/M) of CPWD during the period 31-10-2022 to 04-11-2022.



FACULTY ACHIEVEMENTS

Prof. Rakesh Kumar delivered a invited expert lecture on “Integrated Flood Management” during the Short Term Training Program on Flood Modelling Using HEC-RAS at the Department of Civil Engineering, Z. H. College of Engineering & Tech., Aligarh Muslim University (AMU), Aligarh, on 4-6 November 2022.

Paper titled "Assessment of Fine-Grained Soil Liquefaction using XGBoost Algorithm" authored by Dr. Sufyan Ghani from Sharda University, Uttar Pradesh has been presented by Dr. Sufyan Ghani at National Conference on Structural and Geotechnical Engineering (NCSGE-2022) held during 11 - 12, November 2022, organised by Department of Civil Engineering, National Institute of Technology Jamshedpur.

FIELD VISIT



Field Visit to Udham Singh Nagar for preparation of District Handbook for Cleaning of River Ganga under the GIZ, Germany sponsored consultancy project. The co-ordinator of the visit was Dr. Rakesh Kumar (Prof. C.E)

PATENTS GRANTED

A patent has been granted to the SHARDA UNIVERSITY for an invention entitled CONCRETE COMPOSITION USING SLUDGE FROM SEWAGE TREATMENT PLANT (STP) AND METHOD THEREOF

Inventor- Dr. Gaurav Saini

Patent No. 412932

Date of Grant- 29/11/22

PAPERS PUBLISHED

Title of Paper- Embedded Piezo-Sensor-Based Automatic Performance Monitoring of Chloride-Induced Corrosion in Alkali-Activated Concrete

Author- Dr. Tushar Bansal (Assistant Professor C.E) , Visalakshi Talakokula , Sri Kalyana Rama Jyosyula , Romeu Vicente and Guilherme Ascensão

Brief Description- This paper presents through an experimental campaign a novel method of automatically monitoring the performance of alkali-activated concrete (AAC and ordinary Portland cement concrete (OPCC) under chloride-induced corrosion conditions using an embedded piezo sensor (EPS) based on the electro-mechanical impedance (EMI) technique. The accelerated corrosion tests were conducted on reinforced AAC and OPCC specimens in which the EPS was attached to reinforcing steel bars inside the specimens to monitor the changes in the EMI signature during the corrosion progression. Further, the deterioration in structural parameters was identified by extracting the equivalent structural parameters (ESPs) such as stiffness, mass and damping from the raw EMI signatures. Based on qualitative and quantitative results, it can be seen that the changes in raw signature and damage in AAC were lower than OPCC. The deterioration in terms of stiffness loss was found to be 39.35% in OCC and 12.73% in AAC. Hence, it is demonstrated that the AAC exhibits a superior corrosion resistance to OPCC.

RESEARCH AND INNOVATION

Title of Paper- Reliability Analysis for Liquefaction Risk Assessment for the City of Patna, India using Hybrid Computational Modeling.

Author- Dr. Sufyan Ghani (Assistant Professor C.E)

Brief Description- In the study, the first-order reliability method (FORM) is applied to evaluate the failure of soil deposits during seismic excitation for the city of Patna, India. Liquefaction assessment of Patna is an important subject due to the geographical and seismic location of the city. A detailed comparative study has been performed between first-order second moment (FOSM) and advanced first-order second-moment (AFOSM) reliability methods to determine the suitable method to evaluate the potential risk of liquefaction for Patna city.

Title of Paper- Machine learning-based monitoring and predicting the compressive strength of different blended cementitious systems using embedded piezo-sensor data.

Author-Dr. Tushar Bansal (Assistant Professor C.E),Visalakshi ,Prabhakar

Brief Description- This paper presents strength monitoring and prediction of blended cementitious systems using embedded piezo sensor via machine learning (ML) models. Experiments were conducted on three cementitious systems such as ordinary Portland cement (OPC), fly-ash blended cement (FA), and limestone calcined-clay cement (LG3) in which piezo sensor is embedded inside the cement pastes to acquire electro-mechanical impedance (EMI) signatures in the form of conductance and susceptance during strength development.

NEWSLETTER TEAM

STUDENT MEMBERS

Shivam, Mohit (3rd year)
Monajir, Gajendra (2nd year)

FACULTY MEMBERS

Dr. Satya Prakash
Mr Sunil Saharan
Ms. Sukalpaa Chaki

STUDENT EDITORS

Shivam Kumar