



Samrat Ashok Technological Institute

(Engg. College) Vidisha (M.P.)

Website www.satiengg.in

e mail : hod.civil@satiengg.in

योगः कर्मसु कौशलम् (Skill in action is Yoga)

Quarterly Edition July – Sept. 2023

**CIVIL
SCOPE**

Department of Civil Engineering
NEWS LETTER



OUR VISSION

To be at the forefront in the field of Civil Engineering by contributing towards the service and development of the society.

OUR MISSION

To provide quality education and research facilities at an affordable price, so as to produce competent civil engineers with human values to develop quality civil engineering infrastructure for mankind.

From the HoD desk



It's the great pride and satisfaction in presenting the first edition of its newsletter, i.e. **"CIVIL SCOPE"**, which has been released by the Department of Civil Engineering. The department has made significant progress in all areas, including academics, non-academics, and capacity building for both staff and students. The department has also achieved a significant milestone by obtaining accreditation from the National Board of Accreditation (NBA). It is my belief that this issue of the department newsletter will send a positive message to staff, students, and those interested in technical education and technology-based activities. A newsletter serves as a mirror that reflects the various activities undertaken by a department and helps to develop writing skills among students and teaching faculty. I would like to extend my congratulations to the Dr. Pramod Sharma Prof Civil engineering and his team for their outstanding work in completing this task within a record time. Finally, I extend my heartfelt congratulations to the all faculty members, staff members and students for their fruitful efforts. Best wishes to all.

Dr. Rajeev Jain

HoD,

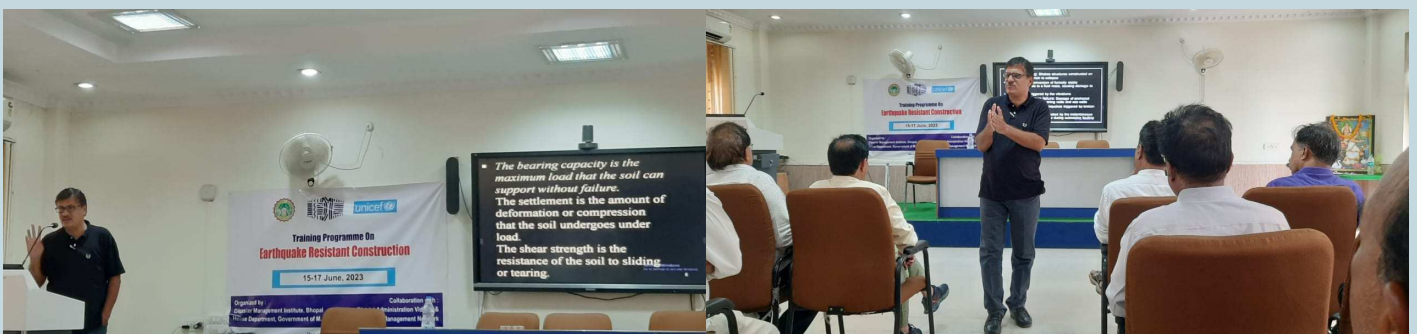
Department of Civil Engineering

MAJOR ACHIEVEMENTS OF THE DEPARTMENT

- Patent awarded to Dr.J S Chauhan Sr. Professor
- Dr. J.S.Chauhan Sr.Professor is nominated as the chief coordinator(Hony) for Green Hydrogen Knowledge Project by Construction Industry Development Council. (Established by Planning Commission now NITI Ayog G.o.I.)
- INDUSTRIAL VISIT
- Expert talk cum Interaction program with alumni
- Dr Janardan Singh Chauhan, Sr Professor, Addressed in ICI Bhopal
- On line Seminar on “Regenerative Building Architecture with Generative”
- MoU between C.E.D. & I.S.E.D. Services Bhopal.
- Students of department wins the first and second prizes in Bhopal Vigyan Mela 2023.

Training programme on Earthquake Resistant Construction, Organised by Disaster Management Institute, Bhopal & Home Department of M.P., 15-17 June, 2023.

Dr. Rajeev Jain presenting a Key note Speaker



A Training programme Organised by Adani Group of, Vidisha (M.P.).

Dr. Rajeev Jain presenting a Key
note Speaker



STRUCTURAL CHANGES NEEDED IN THE CURRICULUM IN THE TECHNICAL EDUCATION SYSTEM.



Dr. Sanjay Bhandari,

Professor in Civil Engg. Deptt. S.A.T.I. (Degree) Vidisha

Present status of Tech. Education:

Presently in our country technical education is divided in two part broadly theory and lab practical's. In some Institutions practicals are performed as a project work in fields also.

Advised Structural Changes:

Theory part of technical education should be updated proportional to the rapid technological changes in word scenario since technology is getting advance day by day the education system does not response as rapidly as the changes are occurred because of lengthy procedure taken to change the subject in the syllabus of technical institution. In process when the new changes are added in syllabus we look forward that the technology is further advance therefore it does not co-relate with the technological advance available presently.

In terms of lab practical's working in lab's is not sufficient this should be properly under-stood that working in field and working on lab equipment's have various environmental and practical difference. Through lab practical's given the basic knowledge of technology but implementation of that technical education in practice may not be sufficient enough to survive in the dynamic work of advance technologies. In this connection what I feel that there should be a system of CASE STUDIES of technical prospect prevailing currently in various organisation which are working for development or research of technical aspects this will load to open a student's the various aspects which are practically coming in the process.

For example:

Some organisation making research work on some tech. aspects under the working environment of that particular organisation and same another company working on the same project in different work environment so the outcome of the two company with related to the same project may be slightly different but successful so this study of project as a problem can be given to student to find out the solution and then co-relate this solution with what those organisation have successfully solved the problem, so this will give student to work successfully in the organisation with different environments.

In this connection a group discussion with the exports can be organised time to get in touch with the correct technological advances and minute problems which are not there in books can be thought to the student.

EMERGING TRENDS IN CIVIL ENGINEERING:



Dr. Pramod Sharma,

Professor Civil Engg Deptt ,S.A.T.I. VIDISHA

The construction industry has to always keep pace with the 'developments' around the world (pun intended?). Be it climate change, climate adaptation, sustainable living,

or technological Advancements like AR/VR or the Metaverse, Unmanned Aerial Vehicles (UAVs)...they are bringing in new 'ground-breaking' innovations in Architecture, Engineering and Construction (AEC) Industry.

Multi-disciplinary Collaboration.

With the use of advanced building construction technology such as Building Information Modelling (BIM), cloud collaboration across various disciplines and updates in real-time on the various changes and improvements in the design is now possible. *From conception to completion, and further to the operations stage, all the information regarding the project can be stored in the form of a collaborative virtual model using BIM.*

Extending our Realities-AR and VR

Another emerging trend in Civil Engineering and construction is being induced using Augmented and Virtual Reality (AR/VR). AR is essentially about viewing an imaginative world through a lens. The use of AR allows for planning and plotting sites even before breaking ground (for real this time). VR is about creating and accessing the virtual world through immersive technology Use of

Advanced Materials

One of the best emerging trends in Civil Engineering is the recycling of materials that are hard to dispose of to be used as construction materials. Plastics are being incorporated into roadways and 3D printed projects. Carbon Dioxide (CO₂) that is obtained as a by-product of various industrial processes is being injected into concrete during 'curing', mixing with other chemicals and forming nanoparticles of limestone imparting to it a great compressive strength.

The Fab. Prefab. (and 3D-Printing)

The scope of prefabrication has increased tremendously. Another interesting emerging trend in civil engineering is the latest construction technology of 3D Printing. With innovations in techniques and materials, 3D Printed structures are well on their way to becoming one of the cheapest and quickest methods of construction.



Machine Interventions - Reducing the 'workload'

The use of machines such as robots and exoskeletons is another emerging trend in civil engineering.

Building Sustainably

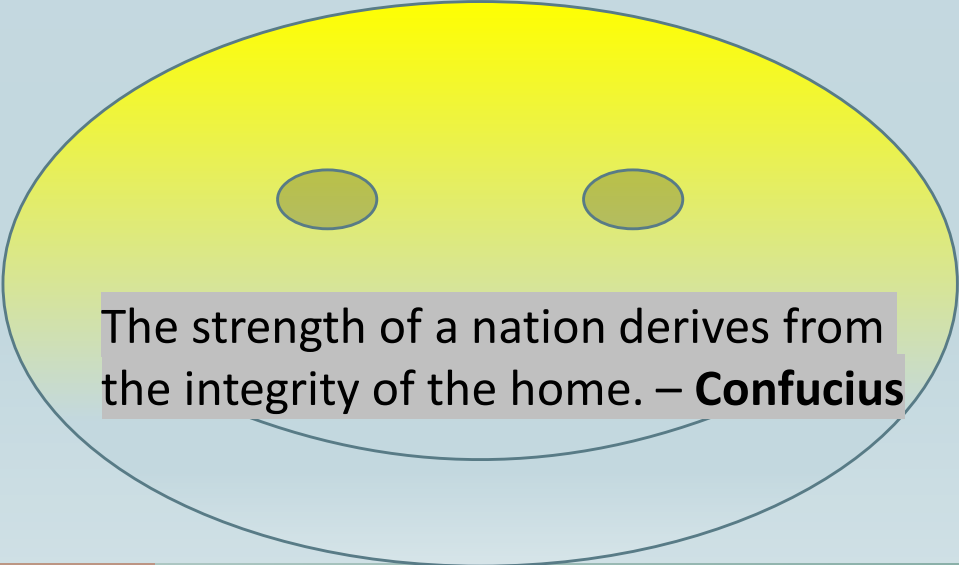
Along with the use of sustainable materials and adopting better construction methods on-site, the recent trends in civil engineering are focusing on **sustainable buildings**.

The use of **smart materials** embedded in buildings powered by intelligent electric grids is creating a system of construction that is leading the way to creating more energy-efficient housing. The use of innovative ideas like double-skin facades, PV panels etc. is also adding to this.

Smart Designs

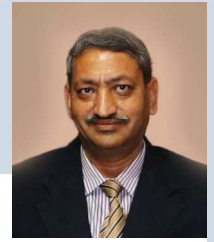
The surveys and inquiries are being carried out using Unmanned Aerial Vehicles (UAVs) or Drones, the use of Artificial Intelligence (AI) and Machine learning during construction are helping to improve productivity, safety and quality of construction.

Internet of Things (IoT) is another innovation in civil engineering bringing together a network of structures like smart housing societies that function through detection sensors and energy-efficient methodologies. The Data Ecosystem created through such systems is helping in a better demographic and technical analytics.



The strength of a nation derives from the integrity of the home. – **Confucius**

PATENT AWARDED TO
Dr. J S Chauhan
Sr. Professor



Intellectual
Property
Office

Certificate of Registration for a UK Design

Design number: 6293255

Grant date: 06 July 2023

Registration date: 29 June 2023

This is to certify that,

in pursuance of and subject to the provision of Registered Designs Act 1949, the design of which a representation or specimen is attached, had been registered as of the date of registration shown above in the name of

Dr. Jambi Ratna Raja Kumar, Dr. Mona Girish Deshmukh, Dr. Janardan Singh
Chauhan, Viswanatha Reddy Allugunti, Dr. Kishor Bhaskar Waghulde, Dr. Babji
Prasad Chapa

in respect of the application of such design to:

Intelligent Transport Locations Display and Management Server Device

International Design Classification:

Version: 14-2023

Class: 14 RECORDING, TELECOMMUNICATION OR DATA PROCESSING
EQUIPMENT

Subclass: 02 DATA PROCESSING EQUIPMENT AS WELL AS PERIPHERAL
APPARATUS AND DEVICES

Adam Williams

Comptroller-General of Patents, Designs and Trade Marks
Intellectual Property Office

The attention of the Proprietor(s) is drawn to the important notes overleaf.



INDUSTRIAL VISIT OF 3RD SEM CIVIL & AGRICULTURE

Industrial tour cum destructive testing demonstration for 3rd semester civil and Agriculture students were arranged on the Vidisha - Ashok Nagar road near Ram Lila Chauraha on 24/08/2023.



The trip was aimed to give exposure of core cutting testing to the students. The students performed the non-destructive test on core cutting machine, about 40 students of both the semesters participated in the training cum industrial tour. Under the guidance of Dr Bablu Kirar, Prof Deepak Sharma, Shri Ajay Dhotiya, Shri H.S.Parihar and Shri Sita Ram Goliya.



EXPERT TALK CUM INTERACTION PROGRAM WITH ALUMNI

Expert talk cum Interaction program with alumni, Mr Shubham Gupta 2018 batch (2023) UPSC,Engineering Services passed out) & Aishwarya Moondra 2017 batch (MPPSC Qualified) on 25.08.2023.



SEMINAR ON “REGENERATIVE BUILDING STRUCTURAL DESIGN”

Expert opinion given by Dr Janardan Singh Chauhan Sr. Professor of Civil Engg Deptt – in the Power Seminar on “Regenerative Building Structural Design” organised by ICI Bhopal chapter at Radisson Hotel Bhopal Dated 26.08.23



MOU EXECUTED

A MoU is Executed between Civil Engg.Deptt. & I.S.E.D. Services Bhopal to produce high quality engineers with better employability and training of faculty and students.

Memorandum of Understanding
Between
Civil Engineering & Agricultural Engg. Department
Samrat Ashok Technological Institute (Engineering College) Vidisha (M.P.)
And
I.S.E.D. Services, Shivaji Nagar, Bhopal (M.P.)


This Memorandum of Understanding is made on this **31st July 2023** between Samrat Ashok Technological Institute (Engineering College), Vidisha (M.P.), and I.S.E.D. Services, Shivaji Nagar, Bhopal (M.P.).


Areas of Mutual Cooperation :


1. To produce high quality engineers for better employability.
2. To promote demand-Driven Research & Development, Innovation, Consultancy and Publication.
3. Establishing Centers of Excellence for focused applicable research.
4. Training of faculty and staff for effective Teaching.
5. Enhancing Institutional and System Management Effectiveness.
6. Jointly organized national and International Seminars, Workshop and Expert lecture by resource person.
7. Jointly Enhanced interaction with industries.
8. Improvement in the placement rate and the average salary of placement package of graduates.

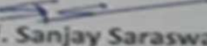
- By the Memorandum of Understanding both parties affirm their commitment to carry out the activities and achieve the objectives mutually agreed upon.
- Amendment to this MoU, if required, shall be carried out in writing duly authenticated and executed by both the parties.

Date : 31-07-2023


(Dwanika Singh)
Founder & Chairman
ISED Services, Bhopal


(Dilip Okhade)
FPO – Coordinator
ISED Services, Bhopal


(Dr. Rajeev Jain)
Prof. & Head,
Civil Engg. Deptt. SATI, Vidisha


(Prof. Sanjay Saraswat)
Assistant Professor
Civil Engg. Deptt, SATI, Vidisha

STUDENTS OF DEPARTMENT WINS THE FIRST AND SECOND PRIZES IN BHOPAL VIGYAN MELA 2023.

Students of 5th semester civil won the **FIRST & THIRD** Prize in **BHOPAL VIGYAN MELA** Aa state level completion organized by **Madhya Pradesh council for Science and technology (MPCOST)** Bhopal. the mela was organized during **15-18 Sept.2023** at **Dashhera Maidan Bhopal**, the main attraction of mela was **Various Technical seminars** showcase of cutting edge **Technologies** and face to face meeting with prominent scientists like **Shri Sudhanshu Mani** who launches the idea of **Bande Bharat Train** and **Dr. P. Veeramuthuvel**, **Project Director of Chandrayan -3 Mission**.

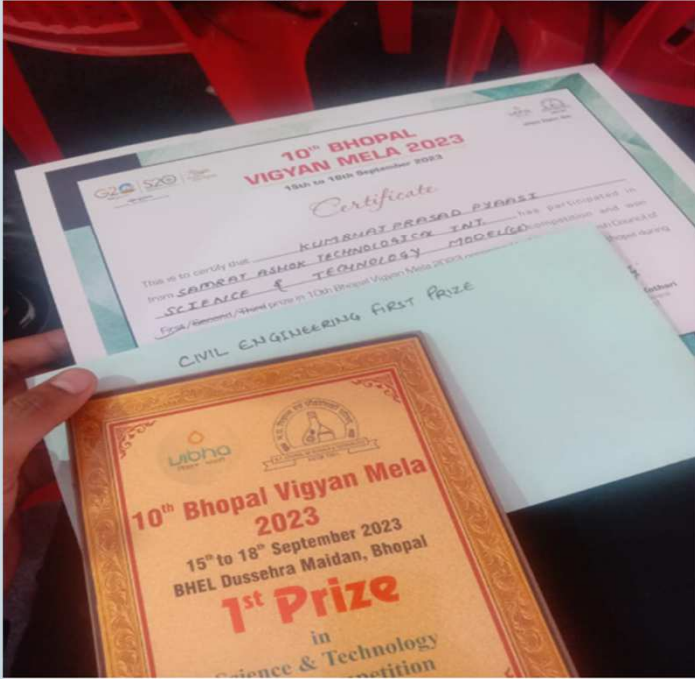


In BVM Mr Kumbhaj Payasi, Mr Mukund Patle, Ms Ankita Lodhi s team won the first prize of for exhibiting their project on plastic waste Bricks with a cash prize of Rs 5000.00,

In the same event The team of Ms Preeti Kumari has won the third prize with a cash prize of Rs 2000.00 for their model of rotating Bridge.



All the teaching and non-teaching staff of Civil Engg Deptt congratulate both the team members.



भोपाल विज्ञान मेला में एसएटीआई की फतह

नवभारत न्यूज
विदिशा, सभाट अशोक अभियांत्रिकीय संस्थान डिग्री के विद्यार्थियों ने भेल दशहरा मैदान भोपाल पहुंचकर दसवां भोपाल विज्ञान मेला 2023 में तीन विज्ञान मॉडल प्रस्तुत किये थे, जिनमें से एक मॉडल ने सिविल कैटेगरी में प्रथम एवं एक मॉडल ने तृतीय पुरस्कार प्राप्त किया।

सिविल कैटेगरी में मिला प्रथम एवं तृतीय पुरस्कार

मॉडल प्रस्तुत किये गये, इस प्रतियोगिता में एसएटीआई विदिशा से डॉ. डीआर साहू एवं संदीप श्रोवास्तव के समन्वयकत्व में तीन मॉडल प्रस्तुत किये गये थे, सिविल ब्रांच के विद्यार्थी आयुष ओझा, आश्रय जैन, अभिषेक राजपूत, कुम्बज प्रसाद ने बेस्ट प्लास्टिक सेड ब्लांक मॉडल प्रस्तुत किया, जिसे आयोजन में सिविल कैटेगरी में प्रथम पुरस्कार प्राप्त हुआ, पुरस्कार के रूप में टीम को पांच हजार रुपये नगद, प्रमाण पत्र एवं शील्ड प्रदान की गई, वहीं सिविल ब्रांच की प्रीती कुमारी एवं मुकुंद पाटले की टीम ने रोटेटिंग ब्रिज मॉडल पेश किया, जिसे सिविल कैटेगरी में तृतीय पुरस्कार प्रदान किया गया, पुरस्कार के रूप में दो हजार रुपये नगद, प्रमाण पत्र एवं शील्ड प्रदान की गई, वहीं छात्रा अंकिता लोधी, प्रिया चौहान एवं शारदा उईके ने ईको फेंडली बिल्डिंग का मॉडल प्रस्तुत किया, महाराजा जीवाजीराव एज्युकेशन सोसायटी के सचिव डॉ. लक्ष्मीकांत मरखेडकर, संस्था संचालक डॉ. आरके पांडे, उपसंचालक डॉ. वायके जैन, आइक्यूएसी कोऑर्डिनेटर एवं जनसंपर्क अधिकारी डॉ. आशीष मनोरिया, सिविल विभागाध्यक्ष डॉ. राजीव जैन ने विजेता टीम को बधाई देते हुए उनके उज्ज्वल भविष्य की कामना की है।

All paid jobs absorb and degrade the mind. – J. Goodwin