SREE NARAYANA INSTITUTE OF TECHNOLOGY, ADOOR

DEPARTMENT OF CIVIL ENGINEERING

CEPTA

NEWSLETTER

e-Newsletter

TECHNICAL KRITHI

OCTOBER, 2022

11th ANNIVERSARY OF SNIT ADOOR

"Construction is matter of optimism; It's a matter of facing the future with confidence."

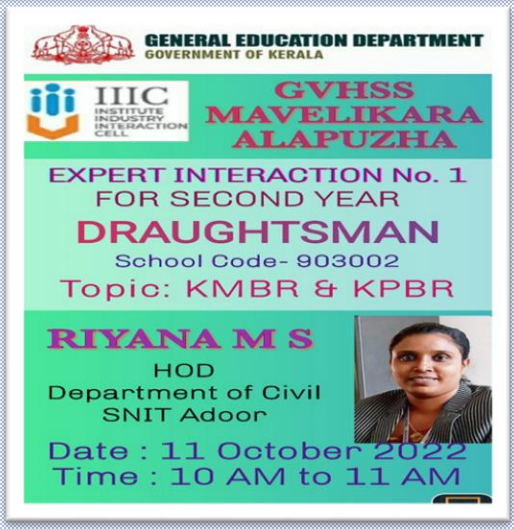
- Cesar Pelli

Time flies! SNIT Adoor has entered its 11th year. In these years, SNIT has been growing fast. Many years had passed and lots of people have been molded that are now. Though it started for B.Tech., it is so surprising to SNIT as it by now. It opened the door for M.Tech., MBA and for Polytechnic also. It is so impressive that SNIT have reached this far.

SNIT POLYTECHNIC COLLEGE- COMMENCEMENT OF CLASSES

Another chapter in SNIT legacy!
Classes of first year Polytechnic college has commenced on 10th October, 2022. Mr. K. Sadanandhan, Chairman of SNIT Adoor lighted the lamp. Managing Director Er. Abyin Ampadiyil, Principal Dr. Shaji Mohan B., Vice Principal Dr. M.D. Sreekumar, Academic Chairman Dr. Keshav Mohan, Academic Coordinator Prof. N. Radhakrishnan, HoDs of various departments were present in the function.

EXPERT TALK



Ms. Riyana M.S., HoD, Dept. of Civil Engineering has been a part of the 'Expert Interaction' organized by Institute-Industry Interaction Cell (IIIC) of GVHSS, Alappuzha.

The topic was KMBR & KPBR, which is of prime important for the Construction Industry in Kerala. KMBR and KPBR defines rules that allow to construct buildings. The rules are applicable for Municipalities, Corporations and Panchayaths.

FACULTY DEVELOPMENT PROGRAMME

A 'Faculty Development Programme' (FDP) was organized by the Dept. of Mechanical Engineering on 15th October, 2022. In association with the programme, there was a talk on 'Air Conditioning: A Bird's Eye View' by Dr. Shaji Mohan B., the Principal of SNIT Adoor. In the talk, the necessity, meaning, components and various other aspects related to Air Conditioning were explained. All the faculty members of Dept. of Civil Engineering participated in the programme. The programme was a great success.

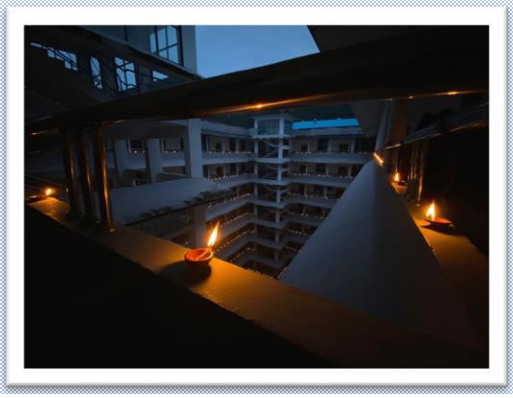
WORLD STANDARDS DAY CELEBRATION

World Standards Day is celebrated as a mean of paying tribute to the collaborative efforts of thousands of experts worldwide who develop the voluntary technical agreements that are published as International Standards. SNIT celebrated the day on 14th October, 2022. Mr. Madhusoodanan Nair M., Assistant Engineer, Electrical Section, Enathu, Adoor was the chief guest of the function. A quiz as well speech competition was conducted in association to the programme.

INDUCTION PROGRAMME INAUGURATION DAY

Induction Programme of B.Tech. 2022-'25 batch was conducted from 19th to 29th of October, 2022. The programme was inaugurated by Er. Abyin Ampadiyil, Managing Director, SNIT Adoor.

DIWALI CELEBRATION



Diwali signifies the victory of light over darkness. SNIT, on 21st October, 2022, celebrated Diwali. The festival was celebrated by lighting lamps on each floors of the college building, bursting crackers, sparklers.

AWARENESS CLASS ON 'ROAD SAFETY LEGISLATION & ROAD REGULATIONS IN INDIA'

An awareness class on 'Road Safety Legislation & Road Regulatiions in India' was organized by NSS unit 252, 551 of SNIT Adoor on 31st October, 2022. Mr. Sajimsha B. (AMVI, RTO Enforcement, Pathanamthitta) and Mr. Sreelal S. (AMVI, RTO Enforcement, Pathanamthitta) gave the class. 84 NSS volunteers attended the session.

‘NO TO DRUGS CAMPAIGN’ ORGANIZED BY KTU

SNIT faculty members and students witnessed the awareness programme session ‘No To Drugs Campaign’ organized by APJ Abdul Kalam Technological University. Hon’ble Minister of Higher Education and Social Justice, Dr. R. Bindu and presided by Sri. Kadakompally Surendran, MLA.

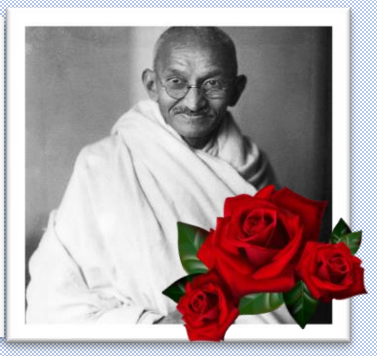
UNITY DAY PLEDGE

Faculty members and students of SNIT took pledge as a part of National Unity Day on 31st October, 2022.

IMPORTANT DAYS

2nd October, 2022: Gandhi Jayanti

Gandhi Jayanti marks the birth anniversary of Mahatma Gandhi. He was born in Porbandar in 1869. He was a freedom fighter who started the Non-Violence Movement and is remembered fondly as “Bapu”. He is also known as the Father of the Nation. The day is also celebrated as the International Day of Non-Violence. On 15th June 2007, the UN General Assembly adopted a resolution to mark this day.



5th October, 2022: World Teacher’s Day

The world celebrates this day to mark the importance of teachers. It is commemorated each year on the anniversary of the ILO/UNESCO Recommendation adoption regarding the Status of Teachers in 1966. Theme for 2022 was “Teachers at the heart of education recovery.”

15th October, 2022: World Students’ Day

The birthday of former Indian President A.P.J. Abdul Kalam is celebrated as World Student’s Day. 2021’s theme was “Learning for people, planet, prosperity, and peace.” Moreover, the day aims to highlight Kalam’s efforts towards education and students.

BIRTHDAY

Jörg Schlaich

17th OCTOBER, 1934

Jörg Schlaich was a German Structural Engineer and is known internationally for his ground-breaking work in the creative design of bridges, long-span roofs, and other complex structures. He was a co-founder of the Structural Engineering and consulting firm Schlaich Bergermann Partner. He was the brother of the architect Brigitte Schlaich Peterhans.

Jörg Schlaich studied Architecture and Civil Engineering from 1953 to 1955 at Stuttgart University before completing his studies at the Technical University of Berlin in 1959. He spent 1959 and 1960 at the Case Western Reserve University in Cleveland, United States. In 1963, he joined the firm Leonhardt & Andrä, the firm founded by Fritz Leonhardt.

Schlaich was made a partner and was responsible for the Alster-Schwimmhalle in Hamburg, and more importantly, the Olympic Stadium in Munich. He stayed with the firm until 1969. In 1974 he became an academic at Stuttgart University, and in 1980 he founded his own firm, Schlaich Bergermann Partner.

In 1993, with the roof of the Gottlieb-Daimler-Stadion (since 2008 Mercedes-Benz-Arena) in Stuttgart, he introduced the "speichenrad" principle to structural engineering. Indeed, this principle was employed for the first time in the history of Structural Engineering by the Italian engineer Massimo Majowiecki, the designer of the roof of the Olympic Stadium, Rome (built in 1990, three years before the Gottlieb-Daimler-Stadion). Since then, his company has successfully employed it in stadium projects across the globe. Other structures include the observation tower at the Killesberg park in Stuttgart. Most of his work as well of that of his company is documented on their website. He was also the developer of the solar tower (or solar chimney) and is largely credited with inventing the strut and tie model for reinforced concrete.

STUDENT'S CORNER

TEXTILE FIBER AND ITS APPLICATIONS IN CIVIL ENGINEERING

Sivakrishna R.
S7 CE

Textiles and apparel are our basic needs. The increase in the production of the textile has also increased the volume of textile waste. Dumping these wastes in landfills had created various environmental problems. This urged the textile and fashion industries to adopt and implement environmentally sustainable waste management and disposal strategies. A textile fiber is the basic element of fabrics and other textile structures which can be either natural or manufactured. It has properties such as length, strength, elasticity, abrasion resistance and various surface properties. Textile fibers can be used as a composite in concrete, for soil stabilization etc.

Textile fiber reinforced concrete (TRC) is a composite of textile structures within a cementitious matrix. Fiber addition in concrete can improve its strength parameters. Textile Fibers are AR Glass, E-Glass, and Polyester Cotton etc. Textile fiber can be used as a thermal insulator. Woolen fabric waste is an alternative for thermal insulators. Materials made from acrylic spinning waste have the same thermal conductivity and air-permeability to conventional insulators. Waste wool and polyester fibers are commonly used to manufacture thermal insulating mats. They show High thermal insulation, moisture absorption, resistance against fire, high physical and mechanical strength. Textile reinforced soil is an effective alternative to primitive methods of soil improvement.

Freed, in 1998, introduced the methodology for the addition of discrete fibers in soil as reinforcement. After the usage of Polyesters, Nylons, Acrylic fibers, the strength parameters was found to be increased. Fibers can be also used for subgrade pavement. The inclusion of fibers makes the soil tougher and more ductile. Fiber with minimum length of 2 inches and a content of 0.8% was effective in sandy soils. The stress strain behavior can be increased by 37.5% in case of polypropylene fibers and 63.9% for choir fibers. Fibers can be also used for slope stabilization. They increases the unconfined compressive strength of the mixture. Recycled Polypropylene is the most common material used. Recycled polypropylene is also used to analyze the stability of slopes subjected to freeze-thaw cycles.

STUDENT'S CORNER

ECO-TECHNIC ROAD SYSTEM (E.R.S.)

Akshaya G.
S7 CE

Transportation engineering has a vital role in economic growth of nation. Now a day's increase in population leads to increase in traffic vehicles. Continuous growth of transportation leads many environmental issues such as air pollution, noise pollution etc. It increases global warming To reduce global warming and ensure safety in traffic Eco-Technic Road System is implemented. E.R.S. is an introduction of eco-friendly, safer pavements which promotes the safe passage for vehicles. It is mainly focused on pavement construction. Water logging, noise pollution and exhaust gas treatment are the main environmental impacts on road system. To control these problems special type of pavements are constructed.

When rain water entering to the subgrade, it can change the moisture content of the pavement. Water reduces the friction between the pavements. It seriously affects the service life of road.

Use of permeable pavements can reduce waterlogging. Highly connected voids in permeable pavement provide an effective way for the surface rainwater infiltration. They avoid the formation of continuous water films on the pavement surface. Permeable pavements improve skid resistance, water spray an splashing, controlling surface runoff etc. Increase in number of vehicles increases noise pollution. Traffic noise severely disturbs the living environment and human health. Noise-reducing pavement can control these problems. They weaken the noise source of tires. Large pore structures reduce the flow resistance of the noise-reducing pavement smaller than that of ordinary pavements.

The main pollution components of automobile exhaust are hydrocarbons, nitrogen oxides and carbon dioxides. It can be catalyzed by photocatalytic materials to produce inorganic salts, carbon dioxide and water. Photocatalyst can be reused and has photocatalytic stability and long-term effect. Therefore photocatalyst can be used to prepare coating for road exhaust decomposition. Thus Eco-friendly pavements bring down a wide range of environments problems. They can improve permanent technological changes and drive the progress of modern road engineering.

STUDENT'S CORNER

Laguna Garzón Bridge

The Laguna Garzón Bridge is a bridge crossing the Laguna Garzón in Uruguay, on the border between the Maldonado and Rocha departments. The bridge is famous for its unusual circular shape and was designed by Uruguayan architect Rafael Viñoly. It is designed in a circular shape to force drivers to slow down, and allows for pedestrian access along the one-way circular route, including crosswalks that allow pedestrian access to either the inner or outer sidewalks of the circle. It carries 2 lanes of roadway (1 either side of circle), pedestrians and bicycles Crosses Garzón lagoon Locale Connecting Rocha Department and Maldonado Department.

Material: Steel, Concrete
Designer: Rafael Viñoly
Construction started: September 2014
Opened: 22 December 2015

Pranav Sathyan
S3 CE

KNOWLEDGE CORNER

DID YOU KNOW?

DISCOVERIES IN CIVIL ENGINEERING

- Father of Civil Engineering: John Smeaton
- Father of Soil Mechanics: Karl Terzagi
- Discovered Portland Cement: Joseph Aspidin
- Discovered Reinforced Concrete: Francois Coignet
- Discovered Ferro Cement: Joseph Monier
- Design of Concrete Mix: Duff Abrams

GAME CORNER

WORDSEARCH

Find out the 30 hidden words related to Civil Engineering.

K	H	L	G	N	I	T	N	I	A	P	K	S	N	U	L	Z	C	I	O	E	B	S	F
N	T	V	V	E	J	W	G	N	I	D	N	E	B	L	D	J	G	E	O	L	O	G	Y
T	P	E	R	U	X	E	L	F	K	Y	P	X	Q	J	G	O	X	W	T	D	D	N	F
N	H	F	Y	C	A	C	M	S	R	D	Z	E	O	Q	T	R	X	R	P	E	S	F	L
R	U	E	E	E	Y	E	Z	U	O	I	E	T	O	C	Y	Z	B	M	L	F	D	Y	F
E	C	Y	O	G	D	J	P	R	W	S	R	I	O	V	R	E	S	E	R	L	F	D	E
E	K	R	D	D	G	Y	L	F	M	P	O	Z	Q	N	L	F	I	M	Y	E	X	S	G
N	T	E	A	B	O	E	S	A	R	L	B	Q	K	C	O	X	B	M	D	C	Z	W	N
I	C	O	W	C	S	L	U	C	O	A	K	F	R	A	C	T	U	R	E	T	F	P	A
G	R	J	X	P	K	D	I	E	F	C	H	E	D	X	H	H	D	L	N	I	V	V	L
N	X	F	O	V	J	S	W	T	N	E	I	G	U	C	K	C	N	R	S	O	T	M	F
E	U	Z	K	Y	O	V	A	E	E	M	H	D	M	I	Q	O	N	Q	I	N	E	P	R
G	E	T	D	I	Z	T	Y	N	X	E	W	U	P	I	X	H	U	U	T	Q	Y	I	Q
M	U	A	V	T	P	B	R	S	W	N	C	L	Y	M	P	E	K	S	Y	G	G	F	N
K	P	X	G	O	O	T	C	I	X	T	N	S	L	P	E	S	J	T	X	I	O	V	P
J	W	Y	Q	R	S	R	Z	O	T	M	W	T	E	E	R	I	S	C	T	S	L	W	E
N	D	T	D	S	G	J	A	N	B	Z	I	C	V	D	I	O	E	X	L	U	O	G	H
R	E	I	B	I	N	E	N	V	Q	A	V	I	E	A	D	N	U	M	L	L	R	S	F
W	C	L	J	O	I	I	K	R	S	U	N	I	L	N	Z	R	G	Y	G	U	D	L	H
Z	D	I	P	N	T	T	A	N	G	E	N	T	J	C	T	A	O	Z	N	D	Y	G	U
Q	X	T	N	O	O	S	X	K	B	U	Z	W	F	E	H	E	B	X	I	O	H	D	L
F	U	C	B	V	O	H	C	O	N	C	R	E	T	E	O	H	N	L	C	M	A	O	D
H	G	U	W	C	F	B	U	C	K	L	I	N	G	T	E	S	E	J	C	Z	O	U	E
W	U	D	W	F	P	J	H	D	I	J	E	T	S	U	R	V	E	Y	I	N	G	N	G

WORDSEARCH September, 2022 ANSWERS

- WORKABILIY
- SAND
- MOLECULES
- HARDENING
- CONCRETE
- BUILDING
- WATER
- REACTANT
- MATERIALS
- GRAVEL
- COMPONENTS
- BINDER
- STRENGTH
- PLASTIC
- LIMESTONE
- DURABILITY
- COHESIVENESS
- ATOMS
- SETTING
- PATTERN
- HYDRATES
- CRYSTALLINE
- CEMENT
- AGGREGATES

SUDOKU

5	3			7				
6			1	9	5			
	9	8					6	
8				6				3
4			8		3			1
7				2				6
	6					2	8	
			4	1	9			5
				8			7	9

SUDOKU: September, 2022

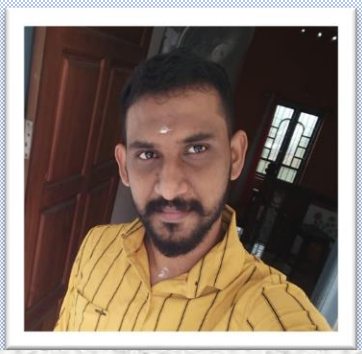
5	3	9	8	6	7	1	2	4
2	4	7	3	1	9	6	8	5
8	6	1	5	2	4	7	9	3
1	2	6	7	5	3	9	4	8
4	7	3	9	8	1	5	6	2
9	8	5	6	4	2	3	1	7
7	1	4	2	9	5	8	3	6
3	9	8	4	7	6	2	5	1
6	5	2	1	3	8	4	7	9

ALUMNI CORNER

JISHA S.
M.Tech. SECM (2018-'20 batch)
jishashajiadr@gmail.com
+919496624339

1 Year's Experience

- ✓ Working as **Structural Engineering Trainee** at **Kerala Water Authority**



NITHIN NANDAKUMAR
B.Tech. Civil Engineering (2017-'21 batch)
nithinsnit1271@gmail.com
+919048575256

2 Years' Experience

- ✓ Worked as **Designer** cum **Site Engineer** at **SR Construction, Kottarakara.**
- ✓ Working as **Interior Designer** at **Etilite Interior and Modular Kitchens.**

CHIT-CHAT WITH ALUMNI

Pranav S. Prasad is our alumnus of the 2017-'21 batch. He shared his experiences as a Site Engineer and Engineering Consultant with the students. He discussed about the practical application of classroom knowledge. He concluded by reminding that success depends on one's smart work.

BIRTHDAY BASH

Betcy Binu
S5 CE
2nd OCTOBER

Abhimanyu Sanil
S5 CE
11th OCTOBER

Akhila V.
S5 CE
14th OCTOBER

DEVIKA A.
S7 CE
17th OCTOBER

Mekha J.
S7 CE
22th OCTOBER

HEARTY WELCOME

NEW FACULTY

Ms. Preena Praveen
Assistant Professor
Dept. of Civil Engineering

NEW STUDENTS

M.Tech. 2022-'24 Batch

B.Tech. 2022-'26 Batch

ACHIEVEMENTS

ANSU P. SAJI
M.Tech.- Structural Engineering and Construction Management
2020-'22 Batch
CGPA: 10/10

Reenu Rajan
(M.Tech.- Structural Engineering and Construction Management 2020-'22 batch)
got admission to PhD.
at Vellore Institute of Technology, Tamil Nadu.

ACHIEVEMENTS

INSTITUTIONAL AMBASSADORS

As SNIT Adoor has been recognized as a valued premium member of ICT Academy of Kerala, Bhagyalekshmi P. from S7 CE, Arya Satyan and Athira Surendran from S3 M.Tech. were selected as Institutional ambassadors from Dept. of Civil Engineering

Athira Surendran of M.Tech. (S3 SECM) received merit award for securing B.Tech Degree (Honours) from Er. Abyin Ampadiyil, Managing Director of SNIT Adoor.

ARTIST'S CORNER

Art: Dream Catcher
Artist: Karishma Kathiresh
(S3 SECM)

Art: Wall Hanging Decor
Artist: Athira Surendran
(S3 SECM)

2022-'23 ADMISSION STARTED...

Entries are invited from students **before 25th** of every month

Comments related to this newsletter can also be sent to the mail id provided

Mail Id:

ceptatechnicalkrithi@gmail.com

THANK YOU