CIVIL INFO

MAGAZINE

2019-2020

EDITORIAL FACULTY

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DESIGN TEAM

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NSS

SERVICE TO THE NATION

On the eve of **5th International yoga day** 21st JUN 2019, College NSS unit have organized Yoga Session at college Auditorium premises. Almost 50 Student volunteers with NSS Program officer and staff coordinators have participated in this and made the session fruitful. The session was headed by Mrs.D.Prasuna state co-convener of Indian OAM ASPA & Mr.B.Prabakara Rao, M.Sc Yoga Retired Bank Manager (Syndicate Bank).

At the end of session student volunteers have asked the yoga remedies for their General health complaints and have learnt that doing yoga regularly improves the brain function, memory, concentration and improves blood circulation.

On as part of Environment Protection, College NSS unit have organized an event of collecting Used books from Students, Later these books will be taken by IRDA (Integrated Rural Development Association and will be recycled for later purpose.

This event was jointly organized by NSS and IRDA Representatives Mr. P.Vinay,President IRDA ,G.Sambi Reddy ,Coordinator IRDA Almost above 100 Student`s volunteers have participated in this and made this event a grand success

At the end of session student volunteers have promised that they will initiate the event every year with IRDA such that Government school Students are going to be benefited by them

The National Service Scheme (NSS), in association with Maxvision Eye Hospital, Vijayawada have arranged a **Awareness Camp on eye** for Staff & B.Tech students on 19th & 20th July . The event lifted with a great participation from staff & students almost 300 above have participated and haven taken medical advice from the team of Maxvision Eye Hospital, The session initially was carried by Dr Rakesh, in which he majorly concentrated on the health issues and Surgeries available on Eye such as PRK,LASER etc., at the end of camp Head of Institution Dr.Ravi Kadiyala on behalf of Dhanekula NSS unit have honored the guests with mementoes

On 03-08-19 DIET- National Service Scheme (NSS) in association with Young Indians Amaravathi Chapter have Conducted Awareness Program on **ORGAN DONATION**.This was initiated by Mr. D.Rajesh Kumar co-chair YI, and Chair of YI Mr.Nannapaneni Bhaskar who focused mainly on students world after college, YI in this occasion have invited Dr.Bhavan Chand who said that humans can donate over all 8 organs thus they can add life to 8 members even after their death ,Most Students Participated Actively and gave their opinions on Organ donation.

On 18th July 2019 NSS cell of DIET have Initiated a **Fund Raiser** for IAB and Ms. N. Santhi Priya Admitted in Manipal Hospital Suffering from Cancer all most 200 above Students have participated in this Fund raising and an amount of Rs 20440 was collected

The collected charity amount was transferred to Account of Miss N.Santhi Priya and IAB, on the basis of 75/25 Division, Both neediest have appreciated DIET-NSS cell for their contribution towards a noble cause, College Principal Dr Ravi Kadiyala and NSS coordinator Mr. V.Subba Raju have appreciated the student volunteers who have collected the fund and helped the needy.

Dhanekula NSS unit have organized a Essay Writing Competition on **150th Anniversary of Mahatma Gandhi** on 30.07.2019. This Essay Writing have got tremendous response from NSS volunteers and almost 50 above students have exhibited their talent in literary arts

An Awareness Program On Jsa(JAL SHAKTI ABHIYAN**) Is** Organized By Dhanekula Nss Unit on 01-08-2019 **To** Aware Water Conservation In Public ,The Benefit Of Water Conservation Using Soak Pits Was Demonstrated At Adopted Village Eedupugallu.

As An Initial Step Students Have Demonstrated Water Conservation At Each Door Step With Mobile Demo SAOK Pit And Later they have digged a Live Soak Pit And Have Explained The Process Of Water Conservation To The Villagers, This Program have gained attention in public and have Received An Appreciation From Panchayat Of Edupugallu.

On 05-09-19 DIET- National Service Scheme (NSS) in association with New City Blood Bank – Vja & HDFC bank-Vja have organized a blood donation camp in DIET-T&P HALL about 88 members have attended this event on 5-09-19 and 400 above students have checked their blood group on 06-09-2019 this camp was headed by Mrs.Kalyani from New City Blood Bank who involved in Process of testing donors before donation, Mr.Linga Murthy from HDFC Bank have appreciated the Management, Principal and NSS coordinators for helping them in making this a grand success.

On 04-09-19 DIET- National Service Scheme (NSS) in association with Passport Seva Kendra, Vijayawada have Conducted Interactive Session on Passport Services at ECE Seminar Hall

This camp was initiated by Mr. Sankar and Mr. Balaji Employees of Passport Seva Kendra Vijayawada ,As a part of this our college students have attended the camp on 04-09-2019 almost 200 plus students have Cleared there dough's and observed the proceedings from this session,

On 17-09-19 DIET- National Service Scheme (NSS) in association with RTO-VIJAYAWADA have Conducted LLR MELA in College Premises This camp was initiated by Mr. M.V.Narayana Raju,MVI Vijayawada ,As a part of this our college students along with the villagers have attended the camp on 17-09-2019 almost 200 plus students have registered for LLR.

PLASTIC AWARENESS & SOIL CONSERVATION

As a part of NSS SPECIAL CAMP, DHANEKULA NSS UNIT have organized a Door-to-Door campaign on 02.01.2020 about "PLASTIC AWARENESS" and "SOIL CONSERVATION in Madduru Village. Around 50 Volunteers have participated in this awareness campaign.

Volunteers have educated the people in the village about the harmful effects of plastic on Health, Environment, Wildlife and urged them to avoid single use plastic. They have also asked the people to use Jute or Cloth bags in place of plastic. On the same day, Volunteers also explained about the importance of soil fertility and enlightened the farmers of the village about the different ways of improving it. Also, the harmful effects of chemical pesticides and insecticides on soil and health are explained in detail by the volunteers to the farmers.

HEALTH AND FAMILY WELFARE & AIDS AWARENESS

As a part of NSS SPECIAL CAMP, DHANEKULA NSS UNIT have organized a Door-to-Door campaign on 03.01.2020 about "HEALTH & FAMILY WELFARE" and "AIDS AWARENESS in Madduru Village. Volunteers have educated the people about the benefits of taking healthy diet, exercising and keeping premises clean. They also conveyed that only with clean surroundings we can avoid large number of diseases. The volunteers have also mentioned about various causes of common diseases and how to treat them with household remedies. On the same day, volunteers have also tried to bring awareness among the villagers about AIDS disease and explained about the precautions that everyone must take.

"POPULATION EDUCATION & WOMEN'S RIGHTS"

As a part of NSS SPECIAL CAMP, DHANEKULA NSS UNIT have organized a Door-to-Door campaign on 04.01.2020 "POPULATION EDUCATION" and "WOMEN'S RIGHTS" in Madduru Village.

Volunteers enlightened the people of the village about the current population situation of the country and how it is affecting the progress of the nation and thereby individual. The limited resources of earth and their exploitation by these masses have also been told and conveyed the seriousness of controlling population.

On the same day, volunteers have also taken part in educating the women in the village about the basic fundamental constitutional rights of women and how they can utilize them. The rights regarding women safety were focused by the volunteers since that is the major issue right now in the current society in the form of eve teasing, domestic violence etc.

LITERACY AWARENESS

DHANEKULA NSS UNIT have organized a Door-to-Door campaign on 05.01.2020“LITERACY AWARENESS” in Madduru Village. Around 50 Volunteers have participated in this awareness campaign.

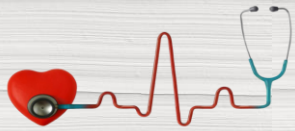
The volunteers have urged the people of the village about the importance of ability to Read and Write. The different ways in which fraudsters cheat illiterates and how misinformation / fake news from others can be avoided were explained.

SCHOOL DROPOUTS

As a part of NSS SPECIAL CAMP, DHANEKULA NSS UNIT have organized a seminar on 06.01.2020 “LITERACY AWARENESS” in Z.P. High School in Madduru Village. Around 50 Volunteers have participated in program. Volunteers have demonstrated the students of the school about the importance of education in the current era and its significance. Volunteers have also interacted with the students individually and gave them valuable suggestions and advice related to education

“PLANTATION OF TREES & USE OF NON-CONVENTIONAL ENERGY

DHANEKULA NSS UNIT have organized “TREE PLANTATION” and a awareness program on 07.01.2020 “USE OF NON CONVENTIONAL ENERGY” in Madduru Village. Around 50 Volunteers have participated in this campaign. The villagers were explained about the different health and environmental issues of using non-conventional energy sources wood, coal, kerosene, and petrol. The villagers are also urged not to burn their crop leftovers. The different benefits of alternate clean energy sources like solar and wind were explained by the volunteers to the people of the village. On the same day, the volunteers have distributed and planted various trees throughout the village signifying the importance of trees for our health and environment.



FREE MEDICAL CAMP

DHANEKULA NSS UNIT have organized a "FREE MEDICAL CAMP" on 10.01.2020 in collaboration with doctors from Dr. Pinnamaneni Siddhartha Medical College in Madduru Village. Around 50 Volunteers have participated in this camp.

A total of 108 villagers have benefited by the medical camp where they received free consultation for various diseases like heart, lungs, knee, sugar, blood pressure and eyes etc. Volunteers played a major role in spreading the news of free medical camp throughout the village and also guided and helped the aged during consultation. Volunteers solely have taken the responsibility and succeeded in conducting the camp smoothly. The doctors were later honored for their self-less service with mementos.

"National Girl Child Day Celebrations"

On the eve of National Girl Child Day with the theme of "Beti Bachao Beti Padhao" on 24th JAN 2020, College NSS unit honored 16 girl volunteers with certificates who have participated actively in various NSS events to bring a positive change in the society including creating awareness in adopted villages about girl child education in the special camp organized from 03-01-2020 to 10-01-2020. The session was conducted at ECE Seminar Hall and was presided by Dr. Ravi Kadiyala, principal of the institution.

About 100 Student volunteers with NSS Program officer and staff coordinators have participated in this and made the session fruitful. Students talked about the achievements and the capabilities of girls in current society citing various examples, and also discussed how girls play a crucial role in shaping the society

One Day Conference on "Drug De-Addiction"

The National Institute of Social Defense Ministry of Social Justice and Empowerment, Government of India have sponsored a One Day conference on "Drug De-Addiction" in LBRCE College, Mylavaram. Two volunteers of Dhanekula NSS Unit have attended the conference and gained immense knowledge about the harmful effects of Drugs and the different ways in which the addicted can be treated. The volunteers have expressed that the conference was the useful, due to the increase in use of drugs by the youth in the country. They thanked the Ministry in sponsoring such conferences and urged them to put on more related programs in the future.

On the occasion of 71st Republic Day celebrations held at JNTU Kakinada on 26th January 2020, about 10 volunteers from the college NSS unit took part in the celebrations. The volunteers have participated in the Republic Day parade along with other institutions and received participation certificates.

The Indian Red Cross Society (IRCS), Andhra Pradesh has attempted and achieved Guinness World Record for the "**Most People to Sign Up To Donate Blood in 8 Hours**" on 14/02/2020 at Fr. Devayya Memorial Auditorium in Andhra Loyola College, Vijayawada from 11.00AM to 07.00PM.

The program is presided by Honorable Governor of AP and President of IRCS AP Manyashri Biswabhushan Harichan to promote awareness on the importance of donating blood voluntarily. About 500 students from the institution has taken part in this event by signing their consent to donate blood. The students found motivation to donate blood through this program and helped achieve the World Record. Students and the Institution were appreciated for participating through certificates for the selfless contribution.

The managing committee of Sri Ramalingeswara Swamy Devasthanam, Yanamalakuduru celebrated Mahashivarathri Festival on 21/02/2020, for which a large number of pilgrims turned up. About 30 NSS Volunteers from our college has taken part in the smooth conduct of the festival. The volunteers are involved with distribution of food and water, maintaining the que lines and also helped in traffic control in the temple premises. The temple management has appreciated the selfless service of the volunteers to the pilgrims.

संस्कृति
samskruthi

Regarding **WORLD POPULATION DAY** ON **JULY 11th 2019** under Dhanekula Samskruti, events of essay writing & painting competitions were held for all the **II, III, IV B.Tech** students for the 1st phase of selection on **8th**, **9th**, and **10th** july 2019 during association hours at the department level in Civil Engineering Department.

THEMES FOR COMPITITIONS

ESSAY WRITTING: A time to reflect on Population trends and related issues

PAINTING: Population Growth

Singing, Dance and Elocution Competitions were held for the B.Tech Students by **Dhanekula Samskruthi** for the occasion of 73rd INDEPENDENCE DAY. The competition was held in two phases, for the 1st Phase the competition is conducted from JULY 27th To 3rd AUGUST 2019 During Association Hours in their respective departments and I,II and III places, are awarded. In 2nd phase the competition was held for the Institute level for those students who secured I,II and III places in their respective departments .

SHOW CASE 2K19

A one-day State Level Student Fest was organized by MARIS STELLA COLLEGE. Total 10 students have participated from Civil Department in different events like Report Writing and Spot Photography. Out of 10 students who have participated in the events one students have secured first prize in sport photography.

Congratulation to P.Jyotsna Latha (178T1A0150) for securing first prize in spor photography.

Short Story Writing, Spell Bee and Role-play Competitions were held for the B.Tech Students by **Dhanekula Samskruthi** for the occasion of TEACHER'S DAY. The competition was held in two phases, for the 1st Phase the competition is conducted from AUGUST 28th to 4th SEPTEMBER 2019 During Association Hours in their respective departments and I,II and III places, are awarded. In 2nd phase the competition was held for the Institute level for those students who secured I,II and III places in their respective departments .

YOUTH FEST

Youth Fest was organized by Young Indians for the occasion of SRI KRISHNA JANMASTAMI on **23rd & 24th AUGUST 2019.** Total 14 students have participated in different events like **QUIZ, DUM CHARDES, THUG OF WAR and Utti Kottadam** from Civil Department.

K. Phanindra Sai (188T5A0115), G.Basha(188T5A0112) and K.Anil (188T5A0116) have won I st prize and also a cash prize of 10,000 Rs in Quiz competition.

Poster Presentation and Extempore Competitions were held for the B.Tech Students by **Dhanekula Samskruthi** for the occasion of WORLD OZONE DAY**.** The competition was held in two phases, for the 1st Phase the competition is conducted from 6th to 13th SEPTEMBER 2019 During Association Hours in their respective departments and I,II and III places, are awarded. In 2nd phase the competition was held for the Institute level for those students who secured I,II and III places in their respective departments .

Classical Dance Folk Dance and **M3 Talentia (Mime , Mimicry, Mono Action)** Competitions were held for all the B.Tech Students by **Dhanekula Samskruthi** for the occasion of **Dussera Festival** on **October 4TH 2019**. Total 9 students participated in the **M3 Talentia** from Civil Department in that 2 students have won prizes. P.N.Unnath Kumar won 2 nd and V.Giridhar won 3rd Prize in the institute level .

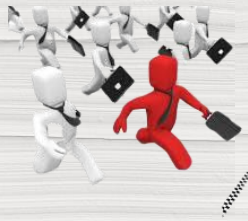
Department of youth Services Government of Andhra Pradesh celebrated National Youth Day on 12th January by conducting various competitions like Essay Writing, Elocution, Debate, Drama/Skits and Quiz Competitions.

Final year students (G Sai Krishna Reddy, B Chandukumar, B Venkat Krishna, Ch Rajesh, Ch Prakhya, D Pravallika, Ch Anulatha and Ch Yamini) had won first prize in Quiz.

Second and Third year students (B. Naga Usha Sree , B.Niharika, Md.Naveed Ahmed) had won Second prize in Skit.

Dhanekula Samskruthi conducted kite flying and traditional walk competitions in the view of Makara Sankranthi at the Institute Level. Total 35 students participated in kite flying and 2 members in traditional walk. In kite flying two Students, Ch.Bhargav Kumar (188T1A0110) and B.Varun Teja (188T1A0104) from Civil Department won the 2 nd Prize in the institute level and in traditional walk one student, G.Pavanisitha (188T1A0113) had won 1st Prize in the institute level .

In association with Youth Forum, Dhanekula Samskruthi conducted Group Discussion and the topic was Children's Rights. The competition is conducted in the department level from 2 nd to 7th December 2019 for all the II, III and IV B.Tech Students by Mrs. M.Vineela (Art, Literary and Cultural Cell Committee member). Total 25 members participated in the department level, out of 25 members 10 members were selected for the final competition at the Institute level.



PLACEMENTS

COMPANY NAME	NO. OF SELECTED STUDENTS
ALIENCE SPACE STATION	30
MAHAVIR GROUP	5
RAAM GROUP	1
AP STATE GOVT JOBS	11
ACS CAPITAL SERVICES LTD	36
TOTAL	83

Job Vs Entrepreneurship as a profession

On 30th August, 2019 DIET has conducted an awareness program on Job Vs Entrepreneurship as a profession. The session was attended by Dr. N. Vishnuvardhana Rao, Entrepreneur, Educationist & Professor, Panimalar Engineering College, Chennai. The main purpose of the session is to make the students to aware the differences between an Employee and a entrepreneur so that students can set a goal towards their career. Interested students from all the branches are registered for this program.

SEDIBUS Hustle Talk- The Idea Book

On 12th September,2019 DIET has conducted an awareness program on The SEDIBUS Hustle Talk- The Idea Book. The session was attended by Raja Sekhar Vasa, Happy Adda Co-Founder, Banglore. The main purpose of the session is to make the students to aware the mobile gaming apps and their development. Happy adda studios provides online contents through mobile applications like Kettle Mind and websites. Interested students from all the branches are registered for this program and participated in Mobile trail games conducted by the resource persons.

73rd Independence Day Celebrations

In our college 73rd Independence Day had been celebrated patriotically. Our respected Chairman Sri. D Ravindranath Tagore Garu had hoisted National Flag. The teachers address the students and explain the importance of Independence. Students gave patriotic speech. There was a guard of honor by NCC students.

On Occasion on Independence Day, cultural activities have been conducted by College Cultural Cell and students were give prizes on this auspicious day.

Parents Meet

The Department of Civil Engineering had conducted a PARENTS MEET on 27 - 07 - 2019 for 2nd, 3rd and 4th year students of CE. The Parents meet was conducted at the CE department seminar hall which is started at 02:00 Pm and completed by 04:30 PM evening. Head of the department Dr. G Vinay Kumar addressed the parents for an hour addressing different activities, policies and procedures following in the department and later parents interacted with the respective class in charges, counsellors and the subject teachers and collected suggestions and feedback forms from parents.

Dhanush-2K19

As per the culture of Dhanekula Institute of Engineering and Technology every academic year the college organizes National level Techno-Cultural Symposium for the aspirants assembling from various engineering colleges with a very high competitive spirit to participant and with the strong determination to include their achievements & accomplishments to their resumes. This year college organized Dhanush 2K19 on 20th and 21st December.

These fests are organized every year with the objective to provide platform for the students to showcase their talent with a competitive spirit. The event was successful enough to attract as many as 92 registrations from Civil Department. Students are actively participated in all the events and presented their work.

The fest executed with a total 7 events planned and organized at its best of quality. Focusing on the types of events to include in the fest was decided by fest coordinators keeping the interest and need of the engineering student into consideration, with little emphasis on the fun full events behind the scene. The events like Paper Presentation, Tech Trix, Theme Ballet, Spot Model Making, Technical Quiz, Tech Thought and CAD Expertise were equally planned, executed and have managed to gather maximum response.

As far as Paper Presentation event is into consideration the registrations were done in advance as the paper scrutiny needed to be done and to give opportunity to present best innovative idea submitted during the fest days. Apart from these many fun events like gaming, etc. were also organized. The winners were encouraged with a cash prizes for all the events. Department feels proud to organize such a successful event and would like to convey thanks to principal and management for their timely advice and cooperation for organizing successful Fest.

Civil Department organize fresher's party to the fresher's every year. This year we organized on September 1st. The main aim of this party is to give a warm welcome to the new comers.

FAREWELL DAY CELEBRATIONS

Civil Engineering department III year students organized Farewell party "NEVER SAY GOODBYE" on 13th March 2020 in the civil seminar hall where students of III-year bid farewell to the outgoing students of IV year with great enthusiasm and off course nostalgia. The function began with the welcoming Head of Department, staff and IV-year students. Later they played a video clip for IV-year students in which all the memories of students have been recalled. Many events were conducted on that all the seniors and juniors has joined and enjoyed the event well. Also, students shared their views and experience about the department.

Industrial Visits

All the Final year students visited **R.V.Labs and Amaravathi Labs Private Limited** on 26th August 2019

RV LAB is a contract research and food testing laboratory it is the 1st commercial laboratory established in Guntur with multiple laboratory activities. In their journey this far they have been providing wide range of analytical services to commodity Packers, exporters and research scholar.

RV LABS inspects the quality check of spices, vegetable oils, food grains, analysis of water, soil, minerals.

RV LABS has

- Necessary accreditation, recognition certificates and approvals for testing
- Complete food analysis under one roof
- End to end approach in complete environmental monitoring and safety
- Capability to analyze high and chemical, microbiological, physical and instrumental parameters
- Skilled chemist and scientific professional with experience in the relevant field with high operational efficiency

All the Second year students visited **UltraTech ready mix** which is located at near Vijayawada - Guntur Highway on 11th September 2019

2nd year students at Ultratech ready mix, Vaddeswaram

It is established in 1998.Across 36 cities In India. and it is the largest manufacturer of cement in India. UltraTech Concrete is the largest RMC manufacturer in India with a nationwide presence established in less than two decades. UltraTech Concrete has achieved consistent quality & service through IT solutions.

In the vist they gave a brief description about concrete. They showed them some equipment which is used for testing the concrete like compression testing machine, digital control machine and curing tanks.

They also showed them how the the ready mix plant works. The average capacity of the concrete mixer truck is 8 cubic yards.

UltraTech Concrete is engaged in continuous search of competitive edge over environmental concerns such as ecological degradation at mines sites, air pollution due to both fugitive and stack dust emissions, and green house gases.

All the Third & Final year students from Civil Department visited the **Inventaa Industries Private Limited** Company for two days (17-9-2019 & 18-9-2019). The company which is located in Keesara Village,Kanchikacherla Mandalam, Keesara Village, Andhra Pradesh with the 40 acres of land occupancy for the company 20 acres of land for the manufacturing and rest of the land for placing the precast elements.

3rd year students at Inventaa Industries Private Limited

In this company there are preparing precast elements for the construction of buildings.

There are five types of elements which are giving by the company as an output.

- Light weight bricks
- Precast beams, columns
- Precast slabs
- Pavers
- Precast walls

4th year students at Inventaa Industries Private Limited

All the Third year students from Civil Department visited **K.C.P. SUGAR & INDUSTRIES CORPORATION** on 12-12-2019. The company is located in Vuyyuru Bypass Rd, Vuyyuru, Andhra Pradesh 521165.

All the Final year students from Civil Department visited **Dr. KL RAO head water works** on 24.02.2020. Students learnt the water treatment process and techniques.

WORKSHOPS

Workshop on "Revit, STAAD Pro and Etabs "

Civil Department have organized workshop on **Revit, STAAD Pro and Etabs** for II, III and IV year students from 11.09.2019 to 13.09.2019 by G.Puja Akhila

- On 11.09.2019 workshop is conducted on Revit total 44 students have participated from II year
- On 12.09.2019 workshop is conducted on STAAD Pro total 60 students have participated from III year
- On 13.09.2019 workshop is conducted on **Etabs**

Workshop on " STAAD Pro "

In association with 'CAD and CAM' experts Civil Department have organized 6 days (23.09.2019 to 28.09.2019) workshop on " **STAAD Pro** " for II year students who have registered for ITC STAAD Pro program.

Workshop on "AUTO CAD"

In association with 'CAD and CAM' experts Civil Department have organized 4 days (18.09.2019 to 21.09.2019) workshop on "**AUTO CAD**" for II-year students who have registered for ITC AutoCAD program.

AutoCAD is a commercial computer-aided design (CAD) and drafting software application. Developed and marketed by Autodesk, AutoCAD was first released in December 1989 as a desktop app running on microcomputers with internal graphics controllers. Before AutoCAD was introduced, most commercial CAD programs ran on mainframe computers or minicomputers, with each CAD operator (user) working at a separate graphics terminal. Since 2010, AutoCAD was released as a mobile- and web app as well, marketed as AutoCAD 360.AutoCAD is used in industry, by architects, project managers, engineers, graphic designers, city planners and other professionals. It was supported by 750 training centers worldwide in 1994.

Workshop on " Total Station "

In association with AMIGP ARCHITECHS Civil Department have organized 6 days (23.09.2019 to 28.09.2019) workshop on " **Total Station** " for students who are interested for this program.

SEMINARS

Seminar on Retrofitting of Structural Elements & Optimization of Mix Design

A Seminar has been conducted by ICI (south zone vijayawada center ICI VJWC) and Ultratech Cement Team on 18.07.2019. The two topics involved in the seminar are Retrofitting of structural elements by wrapping methods and Optimization of mix design using Artificial Neural Network which are very effectively addressed by P.Poluraju (ICI VJWC Chairperson) and G.Hari Krishna (Ultratech member) respectively.

Pre-disaster preparedness strategies lead to repair/retrofitting of reinforced concrete structures for ensuring satisfactory performance during earthquakes. Repair can lead to increased stiffness, strength, and failure deformation. There is a need to quantify the performance of the structure after repair has been carried out. Performance factors using wrapping technique have been suggested for such quantification. These are adequate in certain cases and may not be totally satisfactory in others. If there are inherent weaknesses on detailing in the original structure, it may not be possible to improve the performance to the desired levels. In these cases, the performance factors may depend on the state of deformation considered for evaluation and may not be unique where all these issues has been addressed and clearly explained

Compressive strength of concrete is one of the most important elements for an existing building and a new structure to be built. While obtaining the desired compressive strength of concrete with an appropriate mix and curing conditions for a new structure, with non-destructive testing methods for an existing structure or by taking core samples the concrete compressive strength are determined. One of the most important factors that affects the concrete compressive strength is age of concrete. Estimation of compressive strength, modelling Artificial Neural Networks (ANN) and using different mixture ratios and compressive strength of concrete samples at different ages have been explained clearly.

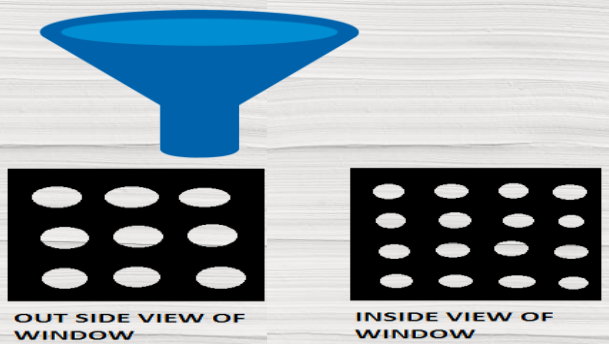
Student Articles

EFFICIENT AIR COOLERS

India is the second largest country in world's population and most part of the country people are living below poverty line. And another biggest catastrophy to our country is, global warming. To escape from heat people are using ac's & coolers who can effort. But the people who cannot effort, can use these to escape from heat.

EXPLANATION:

Funnels contains a large opening on one side & a small opening on other side. When we insert these funnels into fibernet & place the whole arrangement near window we get cool air. Because, when hot air enters into large diameter of funnel to small diameter of funnel pressure increases because in small diameter pipes pressure is more. As pressure increases, temperature also increases & the air from small diameter reaches room it is cool because in large diameter i.e.; room pressure decreases obviously temperature decreases.



THEORITICAL PROOF: According to ideal gas equation:

$PV=nRT$

$P \alpha T$

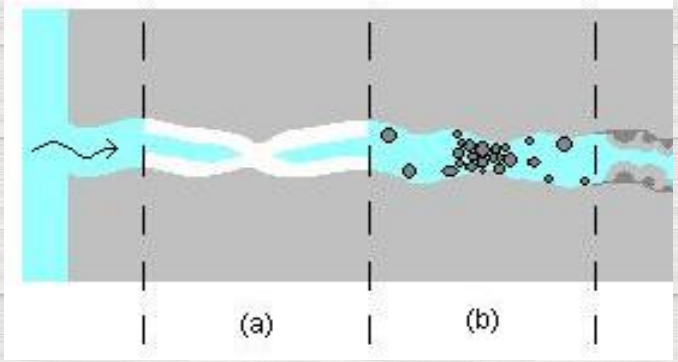
i.e.; Pressure is directly proportional to temperature. So, as pressure increases temperature increases & pressure decreases temperature also decreases. This is hoe it work.

By:

B. Usha Sri (178T1A0106)

BACTERIAL CONCRETE

Self-healing materials are a class of smart materials that have the structurally incorporated ability to repair damage caused by mechanical usage over time. The inspiration comes from biological systems, which have the ability to heal after being wounded. Initiation of cracks and other types of damage on a microscopic level has been shown to change thermal, electrical, and acoustical properties, and eventually lead to whole scale failure of the material. Usually, cracks are mended by hand, which is unsatisfactory because cracks are often hard to detect.



This bacterial concrete is also known as bio concrete. Hedrick jonkers is a Dutch scientist invented the bacterial concrete in the year of 2006. Over the years, scientists and engineers around the globe have experimented with various healing agents to perfect self healing concrete. Some of these healing agents have been bacteria, sodium silicate, and even fungus.

The bacterial concrete is importantly made to increase the durability and the life span of the structure. The cracks less than 2mm can be auto filed by the concrete; if the crack is more than 2mm then we have to pass the chemical and other mixtures to fill the face of the object or to repair the structure.

IF THE WATER IS ADDED TO THE CRACK SURFACE WHEN THE WALL IS OF BACTERIAL CONCRETE THE WALL GET HEAL BY THE METABOLIC ACTIVITY AND THE CRACK WILL FILL ITSELF.

By: -

N.Mohith Datta {188T5A0131}

R.VenuMadhav {188T5A0137}

ROBOTICS

2020 may be the year where robotics makes a bigger impact in the construction industry. Somewhat linked to the impact of 3D printing above, robotics is also seeing impressive infiltration into the industry.

In fact, one report by the World Economic Forum predicted that 2020 could be the year of the robot in the construction industry.

From robotic bricklayers to laying roads, robots are increasingly finding their place amongst the workforce on construction sites. This is interesting as traditionally the construction industry has seen very little automation, relying largely on manual labor.

By adding robots to the workforce, construction companies are seeing improved construction times and improved quality of builds. Robots are also being used to help demolish buildings too.

While currently slower than human demolition crews, they are far safer and cheaper for bringing down concrete structures at the end of its life cycle.

Robots are also being developed to help with certain building maintenance like window cleaning.

- P.N. Unnath Kumar
178T1A0149

SUSTAINABILITY

Several decades now, building regulations have been placing more and more burden on building design to reduce their environmental impact and sustainability. This is a trend that will only become more strict heading into 2020 and beyond.

Optimized energy efficiency and a drive for low to zero carbon emissions have driven innovation in building construction and service design for years. In response, new, better thermal performance materials are being developed that promise to make the buildings of the future incredibly well insulated for a fraction of the cost of current solutions.

One example from a few years ago was the development of a concrete roof that can generate and store energy. Innovations like this should make buildings of the future cheaper to live in and reduce their impact on the environment.

Reducing waste or recycling old materials is another area where sustainability is helping drive innovation in the construction industry. For example, last year one architecture firm announced its plans for a new method of recycling construction waste into ton new reusable building materials.

- D. Naresh Varma
178T1A0113

World's Largest Crane Set to Begin Work on its First Project

Late 2018 year, crane manufacturer, Sarens, announced that their brand new – and enormous – crane, was ready to be sent off to it's first job. After several months of prep, the Sarens SGC-250 has finally made it onto its intended jobsite and is ready to lift.

The SGC-250 stands an astonishing 820 feet at its tallest point, has a maximum lift capacity of 5500 US tons and a swing radius of over 900 feet. The behemoth will be a key component in the construction of the Hinkley Point C nuclear power station in South West England.

Nicknamed "Big Carl" after the father of Sarens company, Carl Sarens, the crane is expected to lift over 600 pre-fabricated panels over 4 years of construction, according to the company.

After being completed in Belgium, the crane was then broken up into 280 modules, according to the Construction Enquirer, and shipped to a nearby dock. It took a total of 10 weeks and at least 5 other cranes to safely rig the crane after it reached the site.

Big Carl's first lift is expected to be in mid-September and one of the project's significant lifts is scheduled in Spring of 2020.

You can check the crane on site in the link given below:

https://youtu.be/pFlU4S6iuJY

-Viswendra Uppala

198T5A0135

Modular and Prefabricated Construction

Modular and prefabricated solutions are nothing new to the construction industry. For example, the end of the Second World War saw something of a 'Cambrian Explosion' in prefab design in war-torn cities across the UK.

While it has fallen out of favor over the last few decades, prefabs have been making something of a comeback in recent years. The promise of faster on-site assembly and higher quality, standardized builds are seen by some as the solution to tackle perceived housing crises around the world.

"Advances in high-tech design and construction mean increasing numbers of components can be manufactured off-site. That means buildings can go up more quickly and quietly, with fewer materials wasted – an enticing prospect given London's housing crisis.

To accommodate modular house-building, developers are building their own factories, and architects are getting ever more ambitious in their designs. Here are five of our favorite London modular housing designs." - The Spaces.

B Niharika

178T1A0105

Staff Articles

CHINESE BUILD UNBELIEVABLE 350FT WATERFALL ON A SKYSCRAPER

People travel far and wide to view one nature's most spectacular sights, the waterfall. Somebody at Chinese construction company guizho ludiya property management recognized this and thought, "hey, why don't we build a waterfall on the side of our skyscraper?". And so, they created the world's tallest man-made waterfall, and people can't quite decide if it's a good idea or not. There's no denying that it does indeed look spectacular, creating a glorious rainbow in from of the building when the sun is out. But the artificial waterfall, located in the city of guiyang, the capital of guizhou province in southwest china, requires 4 large pumps to lift the recycled water 350ft up before it cascades down the side of the huge building. If faced huge engineering challenges during construction and because of electricity costs, believed to be over $100 an hour, the waterfall is only in use for special occasion.

A&D spoke to one resident of Guiyang, Tengyu Zhang, to get his take on the unusual new attraction in his city. “Personally, I think it’s nice,” he told us. “I think it’s more for showing the tourism of Guizhou province. Since Huangguoshu waterfall is the most famous waterfall in China and it’s located in Guizhou, this one can be like a small ad for that.” Many people have reacted negatively to what they perceive as an extremely wasteful vanity project, but Tengyu doesn’t agree. “Well, it’s not always on. Only if there are some international and important events and then it will be open. Moreover, there are fountains in the park, and light decorations in the modern city. If you really consider the aspect of environment, I guess all those should be closed as well.”

Guiyang is experiencing rapid growth as people flock from the other parts of the province to take advantage of the building boom. “Five years ago it was still one of the poorest provinces in China,” Tengyu told us. “But now the government wants to build a big data center in Guiyang. So, the economy is developing rapidly. For example, the bases for Apple, Google, and Amazon will be located in Guiyang.” Seems like there’ll be plenty more creative and crazy skyscrapers to come in Guiyang!.

By:

K. Srimukha

(Asst Professor)

LIGHTWEIGHT EXPANDED CLAY AGGREGATE (LECA)

Introduction

Lightweight expanded clay aggregate (LECA) or expanded clay (exclay) is a lightweight aggregate made by heating clay to around 1,200 °C (2,190 °F) in a rotary kiln. The yielding gases expand the clay by thousands of small bubbles forming during heating producing a honeycomb structure. LECA has an approximately round or potato shape due to circular movement in the kiln and is available in different sizes and densities. LECA is used to make lightweight concrete products and other uses

Characteristics

LECA is usually produced in different sizes and densities from 0.1 millimeters (0.004 in) up to 25 millimeters (1.0 in),commonly 0-4 mm, 4-10 mm, 10-25 mm and densities of 250, 280, 330, and 510 kg/m3. LECA *boulder* is the biggest size of LECA with 100–500 mm size and 500 kg/m3 density.

Some characteristics of LECA are lightness, thermal insulation by low conductivity coefficient (as low as 0.097 W/mK[1]), soundproofing by high acoustic resistance, moisture impermeability, being incompressible under permanent pressure and gravity loads, not decomposing in severe conditions, fire resistance, a pH of nearly 7, freezing and melting resistance, easy movement and transportation, lightweight backfill and finishing, reduction of construction dead load and earthquake lateral load, being perfect sweet soil for plants, and as a material for drainage and filtration.

Uses

Common uses are in concrete blocks, concrete slabs, geotechnical fillings, lightweight concrete, water treatment, hydroponics, aquaponics and hydroculture.

By
T Rajini Devi
Asst. Prof.

Building Information Modeling (BIM)

BIM is similar to CAD (computer-aided design), but not exactly the same. It is software for 3D design to digitally model what will be built. But it's capabilities don't stop there: "It doesn't just create a visually appealing 3D model of the building, it also creates numerous layers of metadata and renders them within a collaborative workflow," writes Engineering.com. It captures things in a way that paper just can't.

30 to 35% of builders are currently using BIM software. The use of BIM provides space for better collaboration because each person and expertise area can add their piece to the same model, instead of broken out onto multiple versions of a 2D paper drawing. This way, the model evolves immediately as people contribute, streamlining the process and increasing efficiency. BIM also helps with problem-solving in the design and planning stages of a project, by automating clash detection and providing a more complete picture of the project.

What is BIM?

Building Information Modeling (BIM) is an intelligent 3D model-based process that gives architecture, engineering, and construction (AEC) professionals the insight and tools to more efficiently plan, design, construct, and manage buildings and infrastructure.

What is BIM used for?

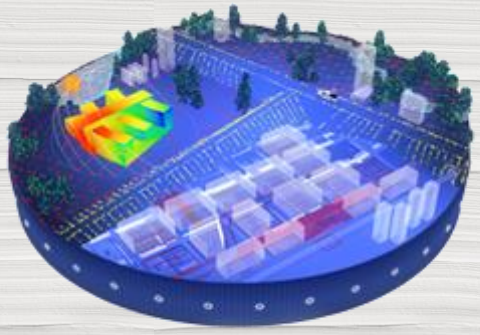
BIM is used to design and document building and infrastructure designs. Every detail of a building is modeled in BIM. The model can be used for analysis to explore design options and to create visualizations that help stakeholders understand what the building will look like before it's built. The model is then used to generate the design documentation for construction.

What is the process of BIM?

The process of BIM supports the creation of intelligent data that can be used throughout the lifecycle of a building or infrastructure project.

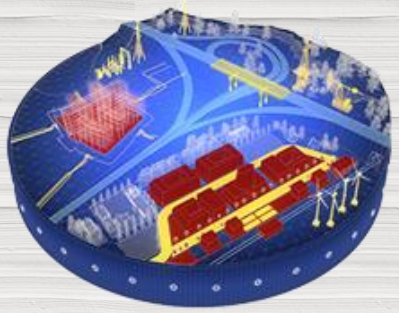
Plan

Inform project planning by combining reality capture and real-world data to generate context models of the existing built and natural environment.



Design

During this phase, conceptual design, analysis, detailing and documentation are performed. The preconstruction process begins using BIM data to inform scheduling and logistics.



Build

During this phase, fabrication begins using BIM specifications. Project construction logistics are shared with trades and contractors to ensure optimum timing and efficiency.

Operate

BIM data carries over to operations and maintenance of finished assets. BIM data can be used down the road for cost-effective renovation or efficient deconstruction too.

Design

During this phase, conceptual design, analysis, detailing and documentation are performed. The preconstruction process begins using BIM data to inform scheduling and logistics.

Why is BIM important?

According to the United Nations, by 2050 the world's population will be 10 billion. The global architecture, engineering and construction (AEC) industry is responsible for delivering the social and economic spaces for the global population, and for helping maintain and restore the buildings and infrastructure already in use. The industry must look to smarter, more efficient ways to design and build not just as a means to keep up with global demand but to help create spaces that are smarter and more resilient too.

BIM not only allows design and construction teams to work more efficiently, but it allows them to capture the data they create during the process to benefit operations and maintenance activities. BIM data can also inform planning and resourcing on the project, city or country level. This is why BIM mandates are increasing across the globe.

What is BIM in civil engineering?

BIM for civil projects improves outcomes with its ability to investigate multiple scenarios, providing data-driven assurance that projects can be delivered on schedule and on budget. BIM offers shared information throughout the project life cycle, driving compelling results.

Why BIM is important for civil engineering?

Infrastructure projects today have become more complex. Implementing BIM facilitates project team collaboration; reducing errors, increasing cost predictability, and improving understanding.

By

K Srimukha

Asst.Prof .

BOLLARDS

A bollard is a short post used to create a protective or architectural perimeter. They come in a wide variety of shapes and styles to accentuate or visually stand out in their settings. Bollards can be made from almost any material, depending on their needed function, but the most common bollards are metal, stone, cement, or plastic.

APPLICATIONS OF BOLLARDS

Bollards have become a ubiquitous part of the modern landscape. Planners and architects use them to manage both pedestrian and vehicle traffic enhances landscape and architecture, light pedestrian pathways, secure and protect buildings and people, and provide bike parking. Bollards are also now being used indoors, in warehouses, for asset protection.

TYPES OF BOLLARDS

- Traffic Line or Street Bollards
- Pedestrian Bollards
- Construction Bollards
- Security Bollards
- Ram-Raid Bollards
- Bicycle Parking Bollards

INSTALLATION OF BOLLARDS

1. Layout the desired location for the bollard placement and mark the ground at the approximate centre point.
2. Dig a hole using a post hole digger. The diameter of the hole should be the diameter of the bollard plus 6 inches and it should be 18 to 24 inches deep.
3. Mix the concrete following the manufacturer's printed directions on the bag label. Add an extra 1/2-gallon of water to make the mix slightly wetter. This will help the concrete flow to fully pack the post hole.
4. Insert the bollard into the hole and use a level to hold it plumb.
5. Shovel the concrete mix into the hole opening around the perimeter of the bollard. Gently tap the bollard's side with a rubber mallet or hammer while inserting the concrete mix to help pack the mix and fill the mix up to the ground level.
6. Allow the concrete mix to cure for a minimum of 48 hours to complete the bollard installation.

--M.VINEELA
Assistant Professor

GLOW STONE AGGREGATES

Designed for indoor and outdoor applications, AGT's glow aggregates absorb and store natural and artificial light energy, from both the sun and artificial lighting. Once the light source is no longer present, AGT's glow pigments begin releasing their stored energy.

They utilize a proprietary formulation of powerful, patented photo-luminescent pigments, so they will emit their glow for 12 hours or longer to provide a self- generating ambient light source.

The aggregates can be seeded decoratively in a variety of ways, ranging from pool decks, patios and outdoor entertainment areas to kitchen countertops and bathroom vanities. They can also serve as an effective, self-emitting way-finding system in low-light areas such as stairways and hallways.

-CH HEMA SINDUSHA
Assistant Professor

SUSTAINABLE DEVELOPMENT THROUGH FUNCTIONALLY GRADED MATERIALS

INTRODUCTION

The lightest weight composite materials with high strength/weight and stiffness/weight ratios have been used successfully in industries and other engineering applications. However, the traditional composite material is not successful when used under high-temperature environments, as there occur a reduction in strength of the metal in the high temperature. Recently, a new class of composite materials known as functionally graded materials (FGMs) has drawn considerable attention. In materials science functionally graded material may be characterized by the variation in composition and structure gradually over volume, resulting in corresponding changes in the properties of the material. Within FGMs the different microstructural phases have different functions, and the overall FGMs attain the microstructural status from their property gradation.

Functionally graded materials are graded property materials and are used as medical implants, for thermal protection of space vehicles, as a thermoelectric converter for energy conservation etc. Due to their versatility of behavior, they are now used as Nano, optoelectronic and thermoelectric materials also. Future applications demand materials having extraordinary mechanical, electronic and thermal properties which can sustain different environment conditions and are easily available at reasonable prices. The carbon nanotubes (CNT) reinforced functionally graded composite materials (FGCM) is expected to be the new generation material having a wide range of unexplored potential applications1 in various technological areas such as aerospace, defense, energy, automobile, medicine, structural and chemical industry. They can be used as gas adsorbents, templates, actuators, catalyst supports, probes, chemical sensors, Nano pipes, Nanoreactors etc. Typical Solids Mechanics equations assume the use homogeneous materials have uniformed properties. Significant research is being done 2 by Industry, Universities, and Federal Agencies to take more FGMs to the marketplace. An example of FGM is shown in figure-1, where spherical or nearly spherical particles are engraved within an isotropic matrix.

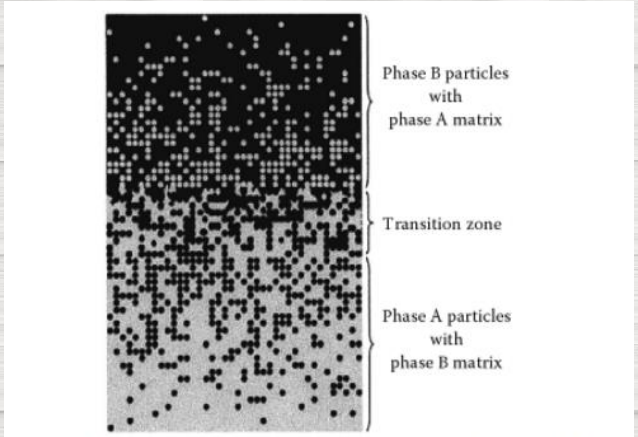


Fig.-1: An FGM with volume fractions of constituent phases graded in the vertical direction.

FUNCTIONALLY GRADED MATERIALS

Functionally Graded Materials The structural unit of an FGM is referred to as an element or a material ingredient. It is a conceptual unit for constructing an FGM that includes various aspects of its chemical composition, physical state and geometrical configuration. Generally, there are two main types of FGMs i.e. continuous graded materials and discontinuously graded materials. In the simplest FGMs, two different material ingredients change gradually from one to the other as illustrated in figure-2a. In the second type, the material ingredients change in a discontinuous way such as the stepwise gradation illustrated in figure-2b. A material can be considered to be an FGM even if the gradation of the material ingredients is limited to a specific location in the material3 such as the interface, a joint, or a surface. As long as the material incorporates the FGM concept it can be categorized as an FGM.

Therefore, an FGM can be produced from a homogeneous material and then processed with a different condition such as heat treatment and deformation.

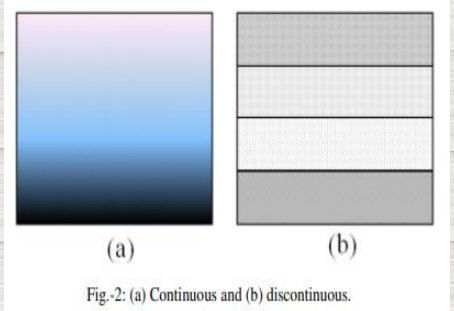


Fig.-2: (a) Continuous and (b) discontinuous.

By
K P MANJUSHA
Assistant Professor

HEMPCRETE BLOCKS

Hempcrete or Hemplime is bio-composite material, a mixture of hemp hurds (shives) and lime (possibly including natural hydraulic lime, sand, or pozzolans) which is used as a material for construction and insulation. It is marketed under names like Hempcrete, Canobiote, Canosmose, and Isochanvre.

Hempcrete is easier to work with than traditional lime mixes and acts as an insulator and moisture regulator. It lacks the brittleness of concrete and consequently does not need expansion joints. The result is a lightweight insulating material ideal for most climates as it combines insulation and thermal mass.

Production of Hempcrete Blocks

The production process is divided into three simple steps

1- Mixing

The raw materials (hemp shives, lime-based binder and water) of hempcrete are proportionately dosed and mixed together.

2- Moulding

Hempcrete obtained is poured in the blocks of widths between 6 and 30 cm in a special press.

3- Open-air Curing

After a while, the frail blocks of hempcrete are placed on an automatic conveyor belt which takes them to a storage area for open air-drying. This brings strength and hardness to the blocks. Depending on the width of blocks, it takes around 6-10 weeks for the blocks to become ready to use.

Applications of Hempcrete Blocks

1- As external and internal wall insulation
2- As floors and roof Insulation
3- Underneath floors
4- As Plasters
5- New Builds
6- For Insulating older buildings
7- Renovation

By
K SRIMUKHA
Assistant Professor

POTHOLES: HOW ENGINEERS ARE WORKING TO FILL IN THE GAPS

Potholes are a perennial problem. They are dangerous to road users, and the damage they cause to vehicles can be hugely expensive. The cost of repairing them is also vast. But still they appear, and reappear, in countless places. So why do these pesky crevices pose such a difficult challenge? And is there any light at the end of this pothole-filled tunnel?

Potholes often begin as imperceptible microscopic cracks in the road surface. Bad weather, poor drainage and heavy traffic can all cause that surface to loosen and wear away.

At the moment, where and when these microscopic cracks will appear is hard to determine. But in the future, it is likely that high precision measuring techniques will be able to predict the time and location that potholes will appear. To repair the road before potholes, grow, machines will be installed into autonomous vehicles, cleaning out the damaged areas and filling them in again

Self-healing roads

The development of new types of road material, such as “self-healing” asphalt, something they are investigating at the Nottingham Transportation Engineering Centre, could reduce the necessary frequency of repairs – and hopefully help turn potholes into a distant memory.

Asphalt roads are composed of mineral aggregates that give structural stability, and bitumen, a viscous liquid that binds the other materials together. When cracks appear in the road, bitumen drains into the cracks and fills them. The problem is that bitumen is a very viscous liquid at normal temperatures, and the healing of the cracks can take weeks. With regular traffic, the rate of crack growth may occur at a faster rate than they are filled – allowing potholes to form.

Asphalt roads are composed of mineral aggregates that give structural stability, and bitumen, a viscous liquid that binds the other materials together. When cracks appear in the road, bitumen drains into the cracks and fills them. The problem is that bitumen is a very viscous liquid at normal temperatures, and the healing of the cracks can take weeks. With regular traffic, the rate of crack growth may occur at a faster rate than they are filled – allowing potholes to form.

To accelerate the “healing” of the road, they are exploring the addition of tiny capsules containing asphalt rejuvenators such as sunflower oil, or tall oil, a byproduct of paper production.

The idea is that when roads start to crack, the capsules break open and release the oil within, softening the surrounding asphalt. This helps the asphalt stick back together more swiftly, effectively filling in cracks and preventing small defects from deteriorating. With this idea, we expect to delay the first potholes by at least five years, reducing the need for maintenance and all the troubles that come from it, such as slow traffic and travel delays.

Warming things up

Another solution being investigated at Brunel University – which could save a fortune – is the use of infrared heat to make repairs cheaper and longer-lasting.

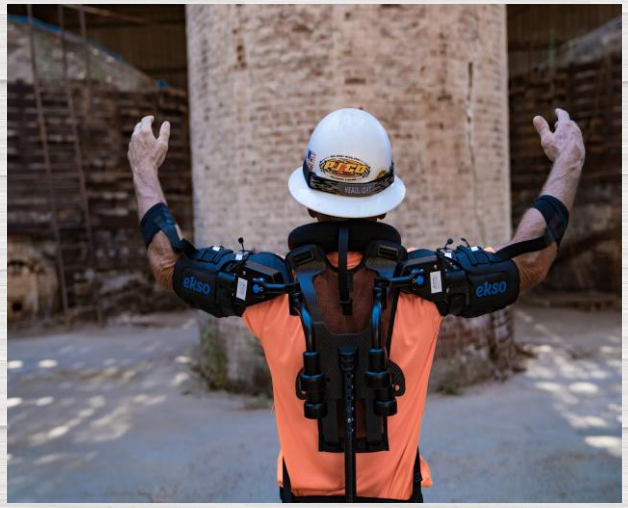
Wet weather, combined with cycles of freezing and thawing, dramatically accelerates pothole development – and many repairs fail prematurely. This is because the traditional way to repair potholes with heat is to inject them with boiling hot asphalt. But if the road is cold, the temperature of the repair material falls significantly, creating weaker bonds with the surrounding material.

https://www.youtube.com/watch?v=k41hp669X_g

-K Sri Bindu
Assistant Professor

EXOSKELETONS

The tech trend to watch 8in 2020 is the use of exoskeletons. The potential benefits this can afford to a construction site's workforce are obvious.



Laborers can carry more load than their fragile human bodies would normally be able to cope with, and if it is widely adopted, it would largely increase the safety of construction sites. For construction companies, this will dramatically improve their bottom line by reducing the number of laborers needed on-site as well as reduce lost man-hours from injury.

"ABI Research predicts the robotic exoskeleton market alone will reach $1.8 billion in 2025, up from $68 million in 2014. This year, about 6,000 suits will be sold, mainly for rehabilitation. By 2025, ABI expects to see about 2.6 million on the market." - Constructible.

But they may ultimately lose out to robots and 3D printing alternatives as exoskeletons still rely on a human operator at their heart. That being said, they might offer the perfect compromise between labor unions who will inevitably try to protect their member's jobs from becoming obsolete.

But they are yet to significantly infiltrate the industry. Perhaps 2020 will be the year they make it?

-K Harish Babu

Assistant Professor

CHRONOS CHROMOS CONCRETE

Turn up the heat and this concrete will tell you the time

A trio of UK-based product designers has developed a method for incorporating dynamic patterns, numbers, and text into concrete surfaces. Chris Glaister, Afshin Mehin, and Tomas Rosén have figured out that by incorporating thermochromatic pigment and wire heating technology into a standard concrete mix, the color of concrete can be changed. With the use of microprocessor control devices, the color-changing pattern can be precisely manipulated to form complex patterns and even information displays, such as dot-matrix clocks. While Chronos Chromos Concrete is not yet commercially available, the material is being used in several projects, including a 40x78-inch information display in the entrance hall of a new building in London.

-G Priyanka

Assistant Proffesor

WALLED PAPER

The world's heaviest wallpaper. At first glance, walls constructed with Walled Paper precast concrete may appear to be covered with decorative paper, but the complex, ornate patterns are actually cast into the surface of the concrete panel. UK-based Concrete Blond can cast more than 50 standard patterns and virtually any custom design into architectural precast panels for interior and exterior cladding, flooring, and surface applications. The patterns can be cast with a textural depth of 1/64 to 3/16 inch on to three types of concrete: Brutalist gray, Victoriana black, and Portland white.

--J Divya

Assistant Professor

SOLID POETRY

Don't forget to water your concrete Developed by Dutch designers Frederik Molenschot and Susanne Happle, Solid Poetry is a concrete tile that reveals a pattern when wet. The detailed patterns are created by carefully applying surface treatment to the finished concrete surface that darkens when exposed to water or humid air. Solid Poetry is ideal for floors, walls, and surfaces in environments that encounter frequent humidity changes, such as poolside's, gardens, bathrooms, and saunas.

-K Srimukha
Assistant Professor

ARTIFICIAL INTELLIGENCE (AI)

The construction industry is already seeing the implementation of artificial intelligence on the job site with the use of robotics for tasks like bricklaying and autonomous equipment that can operate and complete tasks without the need for human interaction. One of the best emerging trends in civil engineering.

AI can benefit construction projects through increased safety, improving workflows, and getting jobs done faster and better. It can also identify when information or pieces are missing and ask questions and use the data it collects.

-M Sai Ganesh
Assistant Professor

CLOUD & MOBILE TECHNOLOGY

Mobile technology isn't just for games anymore. Apps are becoming more of the norm in actual construction. The increased portability of tablets and smartphones allows for greater communication and the ability to work from anywhere.

Integrating this type of technology into your current processes can be much simpler and require a smaller upfront investment while still providing major benefits and boosting productivity in your day to day processes.

Mobile technology can help to save time and keep the project moving forward faster by providing real-time monitoring, updates, and making information available between the job site and the office.

Companies can easily access the latest revisions to plans or report a problem to the project manager off-site. One of the best emerging trends in civil engineering.

Just a few years ago most people either didn't know or couldn't explain what a cloud operating system was. Today, this is no longer the case. In fact, most mobile devices can leverage cloud technology from anywhere, at any time.

There are many great advantages to this, including storing almost limitless amounts of information that you can then share instantly with the touch of a button. This is much less expensive too – about one-tenth of what sharing old technologies cost.

Since the cloud-based business phone system is accessible from anywhere you have an internet connection you can expect it to become a mandatory part of the construction industry in the future, especially if you want to remain competitive.

- Ch.Sri Varma
Assistant Professor

SPORTS

A NIKHIL SATYA SAI (178T1A0101) and K SAI SRINIVASA MANIKANTA (178T1A0123) students of third year were selected for JNTUK Cricket Team. They played south zone inter university tournament which was held in Mysore. The team reached up to pre quarters Finals.
Nikhil took 9 wickets and Manikanta 7 wickets in the overall tournament.

P.SURESH KUMAR (188T5A0136) student of third year , won bronze medal in Power Lifting and Body Lifting championship which was held at Priyadarshini Institute of Technology & Science , Tenali.

T.Thanuja student of Second year , Secured Second place in Senior Nationals Women TCS Won Silver Medal and cash prize