

P.S.R.ENGINEERING COLLEGE

An Autonomous Institution (Approved by AICTE & Affiliated to Anna University, Chennal)

Accredited by NAAC and listed under 12(B) of the UGC Act, 1956.

An ISO 9001:2008 Certified Institution

Sivakasi - 626140, Tamilnadu, India.

CIVIL ENGINEERING NEWS LETTER

722. 2020 Volume 8 Issue 2

DEPARTMENT OF CIVIL ENGINEERING

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ACHIEVEMENTS

FACULTY ACHIEVEMENTS

- 1. Dr.M.Shahul Hameed received an AICTE STTP titled "Industrial and Municipal Solid Waste Management for Green India" with grant Rs. 3,63,750.
- 2. Ms.A.Dhanalakshmi, Assistant Professor/Civil Engineering, completed NPTEL online course on "Plastic Waste Management" with score 100%.

STUDENTS ACHIEVEMENTS

- 1. Ms. V. Abarna IV Year Civil has participated ISTE Student Convention-2019.
- 2. Ms.S. Niranjana III Year Civil has successfully completed 500 Plus Coursera online courses.

FACULTY ACTIVITIES

INTERNATIONAL JOURNALS

- 1. **Arun Raja L, Dr. Shahul Hameed M,** "Experimental Investigation on Recron Fibre Reinforced Self Compacting Concrete using Silica Flour and M-Sand", International Journal of Current Engineering and Scientific Research, Volume 6, Issue 12, ISSN (ONLINE:2394-0697), ISSN Print:2393-8374, DOI:10.2176/ijcesr, Dec 2019.
- 2. **Dhanalakshmi A, Manoj Guru R, Ranjitha K.,** "Phytoremediation of E-Waste Using Nicotiana Tabacum & Moringa Oleifera", International Journal for Scientific Research & Development (IJSRD), Volume 7, Issue 12, February 2020.
- 3. **Manoj Guru R, Dhanalakshmi A,** "Phytoremediation of E-Waste Using Nicotiana Tabacum" International Journal of Engineering Research and Application, Volume 10, Issue 03, March 2020.
- 4. **Dhivakar M, Baskar Singh, G, Dhanalakshmi A,** "Characterization of Textile Wastewater and Treatment by Chemical Coagulation", International Journal for Scientific Research & Development (IJSRD), Volume 08, Issue 01, ISSN (online): 2321-0613, April 2020.
- 5. **Kumar R, Dr.Shahul Hameed, M, Ayyapan, A,** "Influence of Fibre Reinforcement on Strength and Toughness of Light Weight Concrete", International Journal of Science, Engineering Development Research, Volume 05, Issue 04, April 2020.
- 6. **Dhanalakshmi A, Dhivakar M, Baskar Singh G,** "Experimental Investigation on Strength Properties of Concrete Using Silica Flour", International Research Journal of Engineering and Technology (IRJET), Volume: 07, Issue: 07, p-ISSN: 2395-0072, July 2020.

JOURNALS

- **1. Mahendran K**, **Dr. Shahul Hameed M**, "Non-Destructive Test Study On High Strength Reactive Powder Concrete", Journal of Nondestructive Testing, ISSN 1435-4934, June September 2020.
- 2. Arun Raja L, Shahul Hameed M, "Non Destructive Studies on Fibre Reinforced Self Compacting Concrete Ductile Beams", Journal of Nondestructive Testing, ISSN 1435 4934, June 2020.

CONFERENCES

- Mahendran K, Dr. Shahul Hameed M, "Experimental Investigation of Behaviour of Fiber Reinforced Concrete Pile in Medium Dense Sand", AICTE sponsored First International Conference on Challenges and Opportunities for Development of Smart Cities (ICDCODS) 2020, P.S.R Engineering College, Sivakasi,
- 2. **Dhanalakshmi A**, **Dr. Shahul Hameed M**, "Influence on the mechanical and Rheological properties of High Strength Self Compacting Concrete by incorporating Marble Sludge Powder", AICTE sponsored First International Conference on Challenges and Opportunities for Development of Smart Cities (ICDCODS) 2020, P.S.R Engineering College, Sivakasi.
- Arunraja L, Dr.Shahul Hameed, M, "Structural Behaviour of Fiber Reinforced Self compacting Concrete", AICTE sponsored First International Conference on Challenges and Opportunities for Development of Smart Cities (ICDCODS) 2020, P.S.R Engineering College, Sivakasi.
- 4. **Karthik Ragunath S, Dr. Shahul Hameed, M,** "Optimize the project performance in construction using Project Management Software" AICTE sponsored First International Conference on Challenges and Opportunities for Development of Smart Cities (ICDCODS) 2020, P.S.R Engineering College, Sivakasi.

COURSERA COURSES

Name of the Faculty	Title of the Course		
Dr.M.Shahu Hameed	Mastering bitumen for better roads and innovative applications		
	Mechanics of Materials I: Fundamentals of Stress		
	& Strain and Axial Loading		
	Deep Learning Inference with Azure ML Studio		
	Engineering Systems in Motion: Dynamics of Particles and Bodies in 2D		
	Motion		
	Building Digital Media using Graphic Design in Google Slides		
	Fundamentals of Fluid-Solid Interactions		
	Mechanics of Materials II: Thin-Walled Pressure Vessels and Torsion		
	Mechanics of Materials III Beam Bending		
	Introduction to Basic Vibrations		
	Introduction to Project Management		
	Wood Science: Beyond Building		
Mr.L.Arun Raja	Avoid Over fitting Using Regularization in Tensor Flow		
	Climate Change and Water in Mountains: A Global Concern		
	GIS Data Acquisition and Map Design		
	Global Environmental Management		
	History of Rock, Part One		
	Introduction to GIS Mapping		
	Municipal Solid Waste Management in Developing Countries		
	Water Supply and Sanitation Policy in Developing Countries Part 1:		
	Understanding Complex Problems		
Mr.S.Karthik Ragunath	Climate Change and Water in Mountains: A Global Concern		
	Intro to Scheduling with When I Work		
	Introduction to Project Management		
	Municipal Solid Waste Management in Developing Countries		
Mrs.A.Dhanalakshmi	Applications in Engineering Mechanics		
	Big Data Integration and Processing		

	Building Candlestick Charts with Google Sheets			
	Building Custom Regional Reports with Google Analytics			
	Ecology Ecosystem Dynamics and Conservation			
	Intro to Scheduling with When I Work			
	Introduction to Project Management			
	Municipal Solid Waste Management in Developing			
Mr.G.Baskar Singh	Ecosystem Dynamics and Conservation			
	A Method for Sustainable Development			
	Introduction to Advanced Vibrations			
	Introduction to Basic Vibrations			
	Introduction to Faecal Sludge Management			
	Introduction to GIS Mapping			
	Introduction to Household Water Treatment and Safe Storage			
	Water Resources Management and Policy			
	Intro to Scheduling with When I Work			
	Municipal Solid Waste Management in Developing Countries			
	Introduction to Project Management			
	Geospatial and Environmental Analysis			
	Water Supply and Sanitation Policy in Developing Countries Part 2:			
	Developing Effective Interventions			
	Water Supply and Sanitation Policy in Developing Countries Part 1:			
	Understanding Complex Problems			
	Autodesk Certified Professional: Revit for Architectural Design Exam			
	Prep			
	Global sustainability and corporate social responsibility: Be sustainable			
	Air Pollution – a Global Threat to our Health			

Mrs.K. Ranjitha	Air Pollution – a Global Threat to our Health			
, and the second	Applications in Engineering Mechanics			
	Autodesk Certified Professional: Revit for Architectural Design Exam			
	Preperation			
	Fundamentals of Fluid-Solid Interactions			
	Geospatial and Environmental Analysis			
	Global Environmental Management			
	Introduction to Environmental Law and Policy			
	Introduction to Faecal Sludge Management			
	Introduction to GIS Mapping			
	Introduction to Household Water Treatment and Safe Storage			
	Introduction to Project Management			
	Planning & Design of Sanitation Systems and Technologies			
	Renewable Energy and Green Building Entrepreneurship			
	Water Resources Management and Policy			
	Water Supply and Sanitation Policy in Developing Countries Part 1			
	Understanding Complex Problems			
	Water Supply and Sanitation Policy in Developing Countries Part 1			
	Understanding Complex Problems			
Ms.A.Dhanalakshmi	Air Pollution – a Global Threat to our Health			
	Climate Change and Water in Mountains: A Global Concern			
	Ecology: Ecosystem Dynamics and Conservation			
	Ecosystem Services: a Method for Sustainable Development			
	Introduction to Faecal Sludge Management			
	Fundamentals of Fluid-Solid Interactions			
	Geospatial and Environmental Analysis			
	Global Environmental Management			
	Global sustainability and corporate social responsibility: Be sustainable			
	Introduction to GIS Mapping			

	Introduction to Project Management		
	Mastering bitumen for better roads and innovative applications		
	Municipal Solid Waste Management in Developing Countries		
Mr.R.Manoj Guru	Air Pollution – a Global Threat to our Health		
	Applications in Engineering Mechanics		
	Climate Change and Water in Mountains: A Global concern		
	Ferrous Technology I		
	Introduction to Household Water Treatment and Safe Storage		
	Introduction to Environmental Law and Policy		
	Introduction to Basic Vibrations		
	Introduction to Project Management		
	Mastering bitumen for better roads and innovative applications		
	Mastering Statics		
Mr.M.Dhivakar	Psychological First Aid		
	Global sustainability and corporate social responsibility: Be sustainable		
	Evidence-based Toxicology		
	Market Research and Consumer Behavior		
	Introduction to Acoustics (Part 2)		
	Research Proposal: Initiating Research		
	Materials Data Sciences and Informatics		
	Research and Consumer Behavior		
	Water Supply and Sanitation Policy in Developing Countries Part 2:		
	Developing Effective Interventions		
	Ecosystem Services: a Method for Sustainable Development		
Mr. P. Rajesh	Air Pollution – a Global Threat to our Health		
	Climate Change and Water in Mountains: A Global Concern		
	Essentials of Global Health		
	Fundamentals of Fluid-Solid Interactions		
	Intro to Acoustics (Part 1)		
	Introduction to Engineering Mechanics		

	Mastering bitumen for better roads and innovative applications
	Materials Science: 10 Things Every Engineer Should Know
	Municipal Solid Waste Management in Developing Countries
Mr.R.Kumar	Advanced Manufacturing Process Analysis
	Advertising and Society
	API Design and Fundamentals of Google Cloud's Apigee API Platform
	API Development on Google Cloud's Apigee API Platform
	Autism Spectrum Disorder
	Avoid Overfitting Using Regularization in TensorFlow
	AWS Fundamentals: Going Cloud-Native
	Blockchain: Foundations and Use Cases
	Bridging the Gap between Strategy Design and Delivery
Ms.S.Sowmya	Introduction To Acoustics (Part 2)
	Intro To Acoustics (Part 1)
	Air Pollution – A Global Threat To Our Health
	Applications In Engineering Mechanics
	Introduction To Basic Vibrations
	Mastering Bitumen For Better Roads And Innovative Applications
	Climate Change And Water In Mountains: A Global Concern
	Ecology: Ecosystem Dynamics And Conservation
	Introduction To Engineering Mechanics

PROFESSIONAL DEVELOPMENT PROGRAMS ATTENDED BY FACULTY (2019-20)

S.No.	Number of Faculty	Title of the Professional Development Program	Date and Duration
1	Dr.M.Shahul Hameed	Six days FDP on" Instructional design and delivery system"	04-11-2019 to 09-11-2019
2	Dr.K.Subramanian	Five days FDP on "Moodle learning Management System"	30-04-2020 to 04-05-2020
3	Dr. R. Ilangovan	Five days FDP on "Renewable Energy Systems"	08-06-2020 to 12-06-2020
4	Mrs.R.Banu Priya	Five days FDP on "Global Trends in Civil & Infrastructural Engineering"	26-05-2020 to 30-05-2020
5	Mr.K.Mahendran	One day FDP on "IPR ETHICS & TRIALS IN RESEARCH"	3-5-2020
6	Mr.K.Mahendran	Five days FDP on "Renewable energy systems"	08-06-2020 to 12-06-2020
7	Mr.S.Karthikragunath	Five days FDP on "Moodle learning Management System"	30-04-2020 to 04-05-2020
8	Mr.L.Arunraja	Five days FDP on "Sustainable Planning & Construction"	25-05-2020 to 29-05-2020
9	Mrs.A.Dhanalakshmi	Five days FDP on "Moodle learning management system"	30-04-2020 to 04-05-2020
10	Mr.G.Baskar Singh	One day FDP on "Research Methodology"	27-04-2020
11	Mr.G.Baskar Singh	Three days FDP on "E- Content Development using open source Tools"	27-05-2020 to 29-05-2020
12	Mr.G.Baskar Singh	Five days FDP on "Deep Neural Networks and Expert systems"	25-05-2020 to 29-05-2020
13	Mr.G.Baskar Singh	Five days International FDP on "Emerging Research areas in Engineering"	05-06-2020 to 09-06-2020
14	Ms.A.Dhanalakshmi	Five days FDP on "Sustainable planning & Construction"	25-05-2020 to 29-05-2020
15	Ms.A.Dhanalakshmi	Three days FDP on "Recent advances in civil engineering"	22-06-2020 to 24-06-2020
16	Ms.A.Dhanalakshmi	One day FDP on "PYTHON 3.4.3"	09-04-2020 to 16-04-2020
17	Ms.A.Dhanalakshmi	Three days FDP on "Quality sustainability and Quality Enhancement Strategy"	02-07-2020 to 04-07-2020
18	Ms.A.Dhanalakshmi Mr.G.Baskar singh	Three day online FDP on "Analysis and modelling of pandemic scenarios using empirical and GIS techniques"	18-05-2020 to 20-05-2020
19	Ms.A.Dhanalakshmi Mr.G.Baskar singh	Five days FDP on "Global Trends in Civil & Infrastructural Engineering "	26-05-2020 to 30-05-2020
20	Ms.A.Dhanalakshmi Mr.G.Baskar singh	STP on "Innovation and upgradation in Infrastructural Technology"	27-05-2020 to 02-05-2020

S.No	Number of Faculty	Title of the Professional Development Program	Date and Duration
22	Ms.A.Dhanalakshmi	Five days FDP on "Renewable energy systems"	01-06-2020 to 05-06-2020
23	Mrs.K.Ranjitha	Six days FDP on "Instructional Design and Delivery system"	04-11-2019 to 09-11-2019
24	Mr.M.Venkatsubramanian	Six days FDP on "Instructional Design and Delivery system"	25-05-2020 to 30-05-2020
25	Mr.R.Manojguru	Six days FDP on "Civil Engineering Research-A step Forward"	25-05-2020 to 30-05-2020
26	Mr.S.Vijayabaskar	Five days FDP on "Global Trends in Civil & Infrastructural Engineering"	26-05-2020 to 30-05-2020
27	Ms.S.Barathi	Six days FDP on "Instructional Design and Delivery system"	04-11-2019 to 09-11-2019
28	Ms.K.Priyanka	Six days FDP on "Instructional Design and Delivery System"	04-11-2019 to 09-11-2019
29	Mrs. M. Chitra	Five days FDP on "Deep Neural Networks and Expert systems"	25-05-2020 to 29-05-2020
30	Mr.M.Dhivakar	Five days FDP on "Advances in civil Engineering"	26-05-2020 to 30-05-2020
31	Mr.M.Dhivakar	Six days FDP on "Civil Engineering Research- A step Forward"	25-05-2020 to 30-05-2020
32	Mr.M.Dhivakar	Three days FDP on "Current Research Avenues in Civil Engineering"	29-05-2020 to 31-05-2020
33	Mr.G.Baskar Singh Mr.M.Dhivakar Ms.A.Dhanalakshmi	Three days online FDP on "Academic process, measures and metrics for NAAC Accreditation"	25-05-2020 to 27-05-2020
34	Ms.A.Dhanalakshmi Mr.L.Arunraja Mr.S.Karthikragunath Mr.P.Rajesh	Three days FDP on "Online College Management & Online content creation tools"	30-04-2020 to 02-05-2020
35	Mr.M.Dhivakar Ms.A.Dhanalaksmi	Five days FDP on "Moodle learning Management System"	30-04-2020 to 04-05-2020
36	Shenbaganachiyar @ Jeyashree.D	Five days FDP on "Renewable Energy Systems"	08-06-2020 to 12-06-2020
37	Mr.P.Rajesh	Three days FDP on "Current Research Avenues in Civil Engineering"	29-05-2020 to 31-05-2020
38	Mr.R.Kumar	Five days FDP on "Deep Neural Networks and Expert Systems"	25-05-2020 to 29-05-2020

DEPARTMENT ACTIVITIES



Awareness Program on Fire Safety on 29.11.2019 by Mr. M. Navaneetha Ayyanar, Managing Director, Nambi Fire Association, Sivakasi.



Constitution Day Celebration on 26.11.2019 by Dr. C. Ramesh Babu, Associate Professor, HOD/Civil Engineering & Dean, SECT, Kalasalingam Academy of Research and Education, Krishnan Koil.



Ms. R. Banu Priya and Ms. Subhalakshmi, 2014-2018 Batch Alumnis, interacted with final year Students about Competitive Exam on 30.11.2019.

CENTER OF EXCELLENCE PROGRAMS

The Department of Civil Engineering has organized following Value Added course to our Students as follows:

Sl. No.	Year	Course Name	Training Dates	
1.	III	STAAD Pro	09.03.2020 to 14.03.2020	
2.	IV	MS Project	10.02.2020 to 15.02.2020	

NPTEL Course

S.No.	Name of the Students	Name of the Course	Date of
			Completion
1	M. Varalakshmi	Soil Mechanics / Geo technical	12 weeks
2	Venkada Subramanian	Engineering	1∠ weeks
3.	P. Shalini	Engineering	
4.	A. Priyanka	Applied Environmental Microbiology	12 weeks
5.	Venkada Subramanian	Electronic Weste Management Issues	4 weeks
6.	R. Jeevitha	Electronic Waste Management Issues and Challenges	4 weeks
7.	M. Jebamalar	and Chanenges	
8.	A. Dhanalakshmi	Introduction to Remote sensing	4 weeks
9.	A. Dhanalakshmi	Advanced Topics in the Science and Technology of Concrete	4 weeks

STUDENTS ACTIVITIES

EVENTS PARTICIPATED

ISTE Chapter

YEAR/SEM – II/IV

S.No.	Name	Price	Event	Date	Place
1.	V.Abarna	Awarded	ISTE Chapter- Best student Award	18.12.2019	PSG Institute of Technology,
2.	V.Abarna	Participated	ISTE Student Convention- 2019	18.12.2019 & 19.12.2019	Coimbatore

SYMPOSIUM

YEAR/SEM – III/VI

S.No.	Name	Price	Event	Date	Place
1.	M.Karthikeyan	1 st prize	Treasure Hunt	13.02.2020	Department of CSE in
2.	S.Matharamoorthy				PSREC
3.	Arun Kumar	2 nd prize	Diaturaqua	14.02.2020&	Department of CSE in
4.	Gokul Kanna	2 prize	Pictureque	15.02.2020	PSREC

CONFERENCE

YEAR/SEM - IV/VIII

S.No.	Name	Price	Event	Date	Place
1.	V.Abarna	Presented	International Conference on Latest trends in Science,	13.04.2020	Karpagam Institute of Technology,
1.	, ii Ioui iiu	110501100	Engineering and Technology	13.01.2020	Coimbatore
2.	V.Abarna	Presented	National Conference on Computer, Electrical and Electronics Engineering	06.03.2020	PSRCE

II Year

Name	COURSE NAME	
J. Anandhakumari	Fundamentals of fluid-solid interactions	
3. I mananakaman	Mastering bitumen for better roads and innovative	
	Material Behavior	
	Mechanics of material III-Beam bending	
P.Anitha	Fundamentals of fluid-solid interactions	
	Mastering bitumen for better roads and innovative	
	Material Behavior	
	Mechanics of material III-Beam bending	
J.Harini	Fundamentals of fluid-solid interactions	
	Mastering bitumen for better roads and innovative	
	Material Behavior	
	Mechanics of material III-Beam bending	
V.Jeevitha	Fundamentals of fluid-solid interactions	
	Mastering bitumen for better roads and innovative	
	Material Behavior	
	Mechanics of Material III-Beam bending	

III YEAR

Student Name	Course Name
V.MURUGAVENI	Material Processing
	Disaster Preparedness
	Essentials of Global Health
	Air Pollution – a Global Threat to our Health
	Mechanics of Materials III: Beam Bending
	Protecting the World: Introducing Corrosion Science and
	Engineering
	Introduction to Thermodynamics: Transferring Energy from
	Mastering bitumen for better roads and innovative applications
	International Water Law
	Corporate & Commercial Law I: Contracts & Employment Law
	Introduction to Household Water Treatment and Safe Storage

	Introduction to Environmental Law and Policy		
	Introduction to Engineering Mechanics		
	Material Behavior		
	Autodesk Certified Professional: Civil 3D for Infrastructure		
	Herbal Medicine		
	Introduction to International Criminal Law		
	Fundamentals of Fluid-Solid Interactions		
	Mechanics of Materials II: Thin-Walled Pressure Vessels and		
	Torsion		
	Introduction to Project Management		
	COVID-19 Contact Tracing		
	Autodesk Certified Professional: AutoCAD for Design and		
	Oceanography: a key to better understand our world		
	Municipal Solid Waste Management in Developing Countries		
S.NIRANJANA	Material Processing		
	Disaster Preparedness		
	Essentials of Global Health		
	Air Pollution – a Global Threat to our Health		
	Mechanics of Materials III: Beam Bending		
	Protecting the World: Introducing Corrosion Science and		
	Introduction to Thermodynamics: Transferring Energy from		
	Mastering bitumen for better roads and innovative applications		
	International Water Law		
	Corporate & Commercial Law I: Contracts & Employment Law		
	The Modern World, Part One: Global History from 1760 to 1910		
	Intro to Acoustics (Part 1)		
	Introduction to Household Water Treatment and Safe Storage		
	Introduction to Environmental Law and Policy		
	Introduction to Engineering Mechanics		
	Material Behavior		

	Fundamentals of Fluid-Solid Interactions	
	Introduction to Project Management	
	Municipal Solid Waste Management in Developing Countries	
	Autodesk Certified Professional: AutoCAD for Design and	
	Drafting	
N.KOWSIKA	Material Processing	
	Disaster Preparedness	
	Essentials of Global Health	
	Air Pollution – a Global Threat to our Health	
	Mechanics of Materials III: Beam Bending	
	Protecting the World: Introducing Corrosion Science and	
	Introduction to Thermodynamics: Transferring Energy from	
	Mastering bitumen for better roads and innovative applications	
	International Water Law	
	Corporate & Commercial Law I: Contracts & Employment Law	
	The Modern World, Part One: Global History from 1760 to 1910	
	Intro to Acoustics (Part 1)	
	Introduction to Household Water Treatment and Safe Storage	
	Introduction to Environmental Law and Policy	
	Introduction to Engineering Mechanics	
	Material Behavior	
	Autodesk Certified Professional: Civil 3D for Infrastructure	
	Version Control with GIT	
	Research Proposal: Initiating Research	
	Initiating and Planning Projects	
	Intro to Digital Manufacturing with Autodesk Fusion 360	
	Introduction to GIS Mapping	
	Ferrous Technology II	

Student Name	Course Name	
A.LAKSHMI	Material Processing	
PRABHA	Disaster Preparedness	
	Essentials of Global Health	
	Air Pollution – a Global Threat to our Health	
	Mechanics of Materials III: Beam Bending	
	Protecting the World: Introducing Corrosion Science and Engineering	
	Introduction to Thermodynamics: Transferring Energy from Here to There	
	Mastering bitumen for better roads and innovative applications	
	International Water Law	
	Corporate & Commercial Law I: Contracts & Employment Law	
	The Modern World, Part One: Global History from 1760 to 1910	
	Intro to Acoustics (Part 1)	
	Introduction to Household Water Treatment and Safe Storage	
	Introduction to Engineering Mechanics	
	Introduction to Household Water Treatment and Safe Storage	
M.K.SUVEKA	Building Custom Regional Reports with Google Analytics	
	Introduction to GIS Mapping	
	Introduction to Google Docs	
	Managing Asthma, Allergies, Diabetes, and Seizures in School	
	Building Candlestick Charts with Google Sheets	
	Computer Vision – Image Basics with OpenCV and Python	
	Spreadsheets for Beginners using Google Sheets	
	Mechanics of Materials IV: Deflections, Buckling,	
	Combined Loading & Failure Theories	
	Introduction to Project Management with Clickup	
	Mechanics of Materials I : Fundamentals of Stress & Strain and Axial	
	Loading	
	Mastering bitumen for better roads and innovative applications	
	Mechanics of Materials II: Thin-walled Pressure Vessels and Torsion	
	Introduction to International Criminal Law	
	Introduction to Engineering Mechanics	
	Fundamentals of Engineering Exam Review	
	Applications in Engineering Mechanics	
	Essentials of Global Health	
	Material Data Sciences and Informatics	

	Spreadsheets for Beginners using Google Sheets	
	Introduction to Household Water Treatment and Safe Storage	
S.SUREKA	Building Custom Regional Reports with Google Analytics	
	Introduction to GIS Mapping	
	Introduction to Google Docs	
	Managing Asthma, Allergies, Diabetes, and Seizures in School	
	Building Candlestick Charts with Google Sheets	

	Computer Vision-Object tracking with OpenCV with Python		
R.THENMOZHI	Analyze Box Office Data with Plotly and Python		
	Create a Buy Signal using RSI in R with the Quantmod Package		
	Unsupervised Machine Learning for Customer Market Segmentation		
	Improve Business Performance with Google Forms		
	Build a Deep Learning Based Image Classifier with R		
	Advanced Features with Relational Database Tables Using		
	SQLiteStudio		
	Travailler en ligne de commande sous Linux		
	University Admission Prediction Using Multiple Linear Regression		
	Analyze Stock Data using R and Quantmod Package		
	Building a Text-Based Bank in Java		
	Predict Employee Turnover with scikit-learn		
	Testing and Debugging Python		
	Image Denoising Using AutoEncoders in Keras and Python		
	Predict Future Product Prices Using Facebook Prophet		

PLACEMENT (2019-2020)

NAME OF THE STUDENT	NAME OF THE COMPANY
V.ABARNA	SURETI INSURANCE MARKETING PVT.LTD
ARUNKUMAR P	MMC INFOTECH SERVICES PVT LTD
CHANDHRU V	SURETI INSURANCE MARKETING PVT.LTD
CHANDRU.S	SURETI INSURANCE MARKETING PVT.LTD
DURKA G	MMC INFOTECH SERVICES PVT LTD
K.GOKILA	SURETI INSURANCE MARKETING PVT.LTD
ISWARYA. S	MMC INFOTECH SERVICES PVT LTD
JEYABHARATHI.V	MMC INFOTECH SERVICES PVT LTD
KARTHEESWARAN R	M.RAJKUMAR, RAILWAY & HIGHWAYS ENGINEERING CONTRACTOR
D.KARUPPASAMY	M.RAJKUMAR, RAILWAY & HIGHWAYS ENGINEERING CONTRACTOR
MAHESHPRIYA K	MMC INFOTECH SERVICES PVT LTD
S.MATHAN KUMAR	SURETI INSURANCE MARKETING PVT.LTD
A. MUNEESWARAN	S.R CONSTRUCTION, MADURAI
N NIVETHITHA	SURETI INSURANCE MARKETING PVT.LTD
PRAVEENKUMAR. P	M.RAJKUMAR, RAILWAY & HIGHWAYS ENGINEERING CONTRACTOR
RAJA GURU RAVI	ELITE RESTATE COMPANY
G.RAMBALAJI	M.RAJKUMAR, RAILWAY & HIGHWAYS ENGINEERING CONTRACTOR
RAMYA S	SURETI INSURANCE MARKETING PVT.LTD
RAVISANKAR R	M.RAJKUMAR, RAILWAY & HIGHWAYS ENGINEERING CONTRACTOR
RISHIKESAVALAKSHMI. A	SURETI INSURANCE MARKETING PVT.LTD
RUBA R	SURETI INSURANCE MARKETING PVT.LTD
SAKTHIGANESH.S	ELITE ESTATE
I.SANTHIYA	SURETI INSURANCE MARKETING PVT.LTD
SANTHOSH. K	ELITE ESTATE
SASIKUMAR.R	SURETI INSURANCE MARKETING PVT.LTD
C.SINDHU	SURETI INSURANCE MARKETING PVT.LTD
N.SRIDEVI	MMC INFOTECH SERVICES PVT LTD
M SRIDHAR	MMC INFOTECH SERVICES PVT LTD
V. SUBASHINI	MMC INFOTECH SERVICES PVT LTD
S.UTHAYANANTHA	SURETI INSURANCE MARKETING PVT.LTD
A.VIGNESH	SURETI INSURANCE MARKETING PVT.LTD
R.VIGNESH	SURETI INSURANCE MARKETING

P. VIGNESHWARAN	ELITE ESTATE
VIJAYARAGAVAN.K	ELITE ESTATE
KALIESWARAKARUPPASAMY S	SURETI INSURANCE MARKETING PVT.LTD
V. CINTHIYAVINISHA	ELITE ESTATE
R.DHANAPAL	M.RAJKUMAR, RAILWAY & HIGHWAYS ENGINEERING CONTRACTOR
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	ENGINEERING CONTRACTOR

BEST STUDENTS PROJECTS (2019-20)

Name of the Students	Name of the Supervisor	Title of the Project	Product
V.CHANDRU		STUDY OF	CONCRETE WITH GGBS
(16CE009),		CHARACTERISTIC	AND FLYASH
S.KALIESWARA		STRENGTH OF RED	
KARUPPASAMY	Dr.B.G.VISHNURAM, M.E., Ph.D.,	MUD BASED	
(16CE016), P.KARTHICK		GEOPOLYMER	
(16CE019)		CONCRETE WITH GGBS	
		AND FLYASH	
G.RAMBALAJI		STRENGTH AND	FLY ASH BASED
(16CE038),	Dr.B.G.VISHNURAM, M.E.,Ph.D.,	DURABILITY STUDY ON	GEOPOLYMER BRICKS
M.SARAVANAN	Dr.B.G. VISHINUKAWI, M.E.,Ph.D.,	FLY ASH BASED	
(16CE047)		GEOPOLYMER BRICKS	
S. CHANDRU (1607008),		EXPERIMENTAL	
V. GANESHA MOORTHY	Dr. M.SHAHUL HAMEED.,	INVESTIGATION OF	ROOF WEATHERING
(1607011)	M.E., Ph.D. M.B.A., Ph.D.	ECOFRIENDLY ROOF	TILES
		WEATHERING TILES	



RED MUD BASED GEOPOLYMER CONCRETE WITH GGBS AND FLYASH



FLY ASH BASED GEOPOLYMER BRICKS



ROOF WEATHERING TILES

KNOW YOUR ALUMNI

Vigneshraj Veeraprabakar (2011-2015 Batch)

Project Engineer (Infrastructure & Externals)

Mc Laren Constructions PLC

Dubai.

A Message from Alumni

Dear Juniors,

The life which you are having now and after finishing the course will be entirely different and you should always be ready to face the change off. Boys!!!!! Don't worry, very chill climatic site and with some interesting colleagues and workers are waiting for you. Most of you are supposed to work at site except a few. Those few please follow the procedures as said earlier. Site guys, the first thing you need to know is language. Our industry is having most of UP, Bihar, Rajasthan, Orissa, West Bengal and some other North Indian State workers. Even in Chennai, you can find this. They are going to be one in hundred and so they need not know your language. But you will be leading those all 100 workers and so you need to know a common language they all know. Just prepared to learn Hindi. Try to go out of Tamil Nadu and work anywhere to have a real-time experience. Learn languages, study people, feel different environments and food items - because this is going to be your whole life.



In case of girls, don't submit your CV anywhere without an additional certification course. Learn Quantity Surveying, Quality Assurance/Quality Control, Rebar designing, BIM, SAP, Primavera. Such courses will help you to join a related job. Before that, have a deep look into these courses and select which one will be opt for you. Join a well reputed institute in Chennai, Kerala or Delhi or anywhere because they can provide campus placements.

Apart from this, first respect your faculties, learn from them, feel them as your friends. Mark my words. One who is true and faithful to his/her faculty will achieve heights in his/her life. Enjoy your college life. I am missing my college life badly and that was the happiest part of my life. So live your life at College and shape your life there. Instead of having Face book, WhatsApp etc., have a clear LinkedIn account and have a proper professional follow-up.

STAFF ARTICLE

3D Printing in Construction

S. Karthikragunath
Assistant Professor, Dept. of Civil Engineering, PSR Engineering College, Sivakasi

Introduction

Approximately 2% of the world population comes under homeless category, whereas around 20% of people in the world lack adequate shelter. Most of the homeless people are in poor countries as compared to homeless people in the rest of the world. Conventional house building techniques are time consuming and sometimes exceed budget, due to mismanagement. Thus, work is delayed or paused leading people to be homeless for longer span of time.

To speed up civil construction within a small budget, the Printability Lab (IMPRINT) from the Indian Institute of Technology, Madras (IIT-M) and Tvasta Manufacturing, a start-up company, have come up with a new technology of printing homes instead of building them!

3-D printers have already grabbed a lot of attention and this technology can be used on construction sites to print homes. India, being one of the most populated, lacks in basic needs such as toilets and homes for people. Thus, India needs such a technology that provides hygiene and shelter, to the people. IMPRINT and Tvasta aim to develop 3D technology in such a manner that it can be used in the *Pradhan Mantri Awas Yojana* and also for the *Swachh Bharat Abhiyan*. The plan is to utilise the technology on a grand scale and reduce consumables in the construction with government's assistance.

3D printing (sometimes referred to as Additive Manufacturing (AM)) is the computer-controlled sequential layering of materials to create three-dimensional shapes. It is particularly useful for prototyping and for the manufacture of geometrically complex components.

It was first developed in the 1980s, but at that time was a difficult and expensive operation and so had few applications. It is only since 2000 that it has become relatively straightforward and affordable and so has become viable for a wide range of uses

including product design, component and tool manufacture, consumer electronics, plastics, metal working, aerospace engineering, dental and medical applications, and footwear.

The sales of AM machines or '3D printers' has grown rapidly and since 2005, the home use of 3D printers has become practical.

3D printing systems developed for the construction industry are referred to as 'Construction 3D Printers'.

A 3D digital model of the item is created, either by computer-aided design (CAD) or using a 3D scanner. The printer then reads the design and lays down successive layers of printing medium (this can be a liquid, powder, or sheet material) which are joined or fused to create the item. The process can be slow, but it enables almost any shape to be created.

Depending on the technique adopted, printing can produce multiple components simultaneously, can use multiple materials and can use multiple colours.

Accuracy can be increased by a high-resolution subtractive process that removes material from an oversized printed item. Some techniques include the use of dissolvable materials that support overhanging features during fabrication.

Materials such as metal can be expensive to print, and in this case it may be more cost-effective to print a mould, and then to use that to create the item.

3D Printing in Construction Industry

In the construction industry, 3D printing can be used to create construction components or to 'print' entire buildings. Construction is well-suited to 3D printing as much of the information necessary to create an item will exist as a result of the design process, and the industry is already experienced in computer aided manufacturing. The recent emergence of building information modelling (BIM) in particular may facilitate greater use of 3D printing.

Construction 3D printing may allow faster and more accurate construction of complex or bespoke items as well as lowering labour costs and producing less waste. It might also enable construction to be undertaken in harsh or dangerous environments not suitable for a human workforce such as in space.

Researchers and alumni at IIT Madras have developed the first 3D printer in India for use in building construction. Usually, a concrete layer will take minimum 28 days to 30 days for curing. But, in our innovative technology, the concrete will set in 3-5 hours.

In partnership with a private manufacturing company, the Civil Engineering Department of IIT Madras has set up the IIT Madras Printability Lab to develop the technology for mass production.



A 3D-printed building made using the newly developed technology. Image courtesy: IIT Madras

3-D printing technology is under development, but can be used even now. It can print various 3-D designs automatically, based on the input design. 3-D printing uses the additive manufacturing technique, where construction is done layer by layer to build a structure. As printing is completely digitized, only monitoring is required. Complex designs can be constructed as per the user demand without risk of defects in the construction. Such a technology makes project management easier and simpler.

Printing technology is economical, portable, flexible and easier once it's used for mass construction. It can easily compete with the existing methodologies. IMPRINT has a goal to contribute to the Indian construction industry as it will be the third largest construction market by 2021 and the fastest growing construction industry by 2025.

The technology of 3-D printing is accessible for inexpensive single floor constructions. Also, 3-D printing supports eco-friendly construction with limited resources and less carbon footprint due to reduced wastage in the workplace. No doubt, 3-D printing for construction will be the next big thing all over the world.

STUDENT ARTICLE

INTERLOCKING CONCRETE PAVER BLOCKS

M.K.Suveka, Final Year UG Student, PSREC

Interlocking Concrete Block Pavement (ICBP) has been extensively used in a number of countries for quite sometimes as a specialized problem-solving technique for providing pavement in areas where conventional types of construction are less durable due to many operational and environmental constraints. ICBP technology has been introduced in India in construction, a decade ago, for specific requirement viz. footpaths, parking areas etc. but now being adopted extensively in different uses where the conventional construction of pavement using hot bituminous mix or cement concrete technology is not feasible or desirable. This article dwells upon material, construction and laying of concrete block pavement as a new approach in construction of pavement using Interlocking Concrete Paver Blocks. There are many distinct features of ICBP as compared to the conventional methods of pavement construction and hence make it a suitable option for application in the specified areas. Some of these are:

- Mass production under factory conditions ensures availability of blocks having consistent quality and high dimensional accuracy. Good quality of blocks ensures durability of pavements, when constructed to specifications.
- ICBP does not require curing, and so can be opened for traffic immediately after construction.
- Construction of ICBP is labor intensive and requires less sophisticated equipment.
- The system provides ready access to underground utilities without damage to pavement.
- Maintenance of ICBP is easy and simple and it is not affected by fuel and oil spillage.
- Use of coloured blocks facilitates permanent traffic markings. ICBP is resistant to punching loads and horizontal shear forces caused by maneuvering of heavy vehicles
- Low maintenance cost and a high salvage value ensures low life cycle cost.

However, important limitations of the technique are the following:

- Quality control of blocks at the factory premises is a prerequisite for durable "ICBP"
- High quality and gradation of coarse bedding sand and joint filling material are essential for good performance.

 "ICBP" over unbound granular base course is susceptible to the adverse effects of poor drainage and will deteriorate faster. "ICBP" is not suited for high speed roads (speed above 60 km/h)

Applications of ICBP Technology:

- 1. **Non-traffic Areas:** Building Premises, Footpaths, Malls, Pedestrian Plaza, Landscapes, Monuments Premises, Premises, Public Gardens/Parks, Shopping Complexes, Bus Terminus Parking areas and Railway Platform, etc.
- 2. **Light Traffic:** Car Parks, Office Driveway, Housing Colony Roads, Office/Commercial Complexes, Rural Roads, Residential Colony Roads, Farm Houses, etc.
- 3. **Medium Traffic:** Boulevard, City Streets, Small Market Roads, Intersections/Rotaries on Low Volume Roads, Utility Cuts on Arteries, Service Stations, etc.
- 4. **Heavy and Very Heavy Traffic:** Container/Bus Terminals, Ports/Dock Yards, Mining Areas, Roads in Industrial Complexes, Heavy-Duty Roads on Expansive Soils, Bulk Cargo Handling Areas, Factory Floors and Pavements, Airport Pavement, etc.

Paving Blocks

The quality of materials, strength of cement concrete and durability as well as dimensional tolerances etc. are of great importance for satisfactory performance of block pavement. The recommended thickness of block and grades of concrete for various applications and specification for paving in which materials used for preparation of blocks, physical requirements, physical test methods, sampling and acceptance criteria has already been formulated in BIS Code .

Conclusion

- 1. ICBP technology can provide durable and sustainable road infrastructure where construction and maintenance of conventional pavements are not cost effective.
- 2. ICBP is much cheaper than rigid (concrete) pavement designed for identical conditions. Compared to bituminous pavement for low traffic volumes and high strength subgrade, the initial construction cost of ICBP is likely to be equal to or marginally higher. For high traffic volumes and low strength subgrade, ICBP will be cheaper than flexible pavement.

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