# **Kings College of Engineering**

Department of Civil Engineering

Departmen	it of Civil Engineering
Name: D. NANDAKUMAR	
Designation:	Assistant Professor
Qualification:	M.E., (PhD)
Area of Specialization:	Structural Engineering.
	Teaching: 6 Yrs.
	UG: -5 yrs
Experience:	PG: -1 yrs
	Industry: -NIL
No. of workshop / Conferences / FDP attended :	11/11/30
	Journal
	National: NIL
	International: 07
Publication :	Conference
	National: 03
	International:08
Marsharghin	ISTE Life member, IEI Associate Member
Membership:	Published Books and Patents.
Achievements	i ublished books and fatents.

Workshop / Conferences / FDP attended : 11 / 11 / 30 WORKSHOP

- Attended a workshop on "FORENSIC ENGINEERING OF STRUCTURES" heldat Coimbatore Institute of Technology, Coimbatore (Mar 2015).
- Attended a workshop on "PRECAST CONCRETE CONSTRUCTION-

- **OPPORTUNITIES AND CHALLENGES**" held at **Sona college of technology, Salem** (Mar 2016).
- Attended a workshop on "ENHANCING DURABILITY OF CONCRETE&DRYWALL CONCEPT "held at M.kumarasamy college of engineering,(feb 2016)
- Attended a workshop on "EARTHQUAKE RESISTANT STRUCTURES,
  APPLICATION FERROCENT ON STRUCTURES AND DEMONSTRATION OF
  HANDHELD GPS AND TOTAL STATION" held at Government college of
  engineering (march 2016)
- Attended a workshop on "SELECTION TOPICS FOR B.E.,M.E.,& Ph.D.
  PROJECTS IN CIVIL ENGINEERING" held at Bannari amman Institute of
  technology(July 2016)
- Attended the "Earthquake Engineering Literature Survey Workshop" for Post graduate students from Engineering colleges across India held at IIT Kanpur (June 7-june 16 2018)
- Attended a Two days workshop on "COMPUTATIONAL STRUCTURAL ENGINEERING USING MIDAS" held at AMIRTA Vishwa Vidyapeetham School Of Engineering (July 2018)
- Attended a workshop on "Special considerations of seismic analysis-Unreinforced masonry wall modelling" held at Bentley institute (May 2020)
- Attended a workshop on "Recent advances in science and technology of concrete" held at Indian Institute Of Technology, Madras (May 2020)
- Attended a workshop on "Role of Assessment and Accreditation towards Improving the Quality of Education and National Educational Policy Implementation in Higher Educational Institutions" held at KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY, Virudhunagar (Feb 2023

# NATIONAL CONFERENCE

- Attended a National conference on "INNOVATIVE TECHNOLOGIES AND DEVELOPMENTS IN CIVIL ENGINEERING "held at sri sakthi engineering college (march 2016)
- Attended a National conference on "INNOVATIONS IN CONCRETE AND CONSTRUCTION" held at Sona College of Technology. (March 2018).
- Presented a paper entitled "Development Of Low cost Bio Mineralised steel slag bricks" in the National conference on "INNOVATIONS IN CONCRETE AND CONSTRUCTION" held at Sona College of Technology. (March 2019)

### INTERNATIONAL CONFERENCE

Presented a paper entitled "STRENGTH DEVELOPMENT IN STEEL SLAG BRICKS
 USING MICP PROCESS" in the international conference "Industry 4.0

- Advancements in civil engineering (I4ACE'19)" held at PSG Institute of Technology and Applied Research (March 2019)
- Presented a paper entitled "STUDY ON STRENGTH PARAMETERS OF LIME CONCRETE WITH SILICA FUME AND FLYASH" in the international Virtual conference "ASER-2020" held at Al-Ameen Engineering College. (March 2020)
- Presented a paper entitled "STUDY ON COMPRESSIVE STRENGTH OF LIME MORTAR WITH ADMIXTURE AND TILES POWDER" in the international Virtual conference "ASER-2020" held at Al-Ameen Engineering College. (March 2020)
- Presented a paper entitled "STUDY ON EFFECT OF GREEN CORROSION INHIBITORS USED IN STEEL REINFORCED CEMENT CONCRETE" in the international Virtual conference "ICON 2021" held at Sona College of Technology.(June 2021)
- Paper presented in my Research Topic "Prediction of Inhibition Efficiency of Organic Inhibitor on Mild Steel Corrosion Using Artificial Intelligence" at International conference on Climate Resilient Construction and building materials organized by NIT, Surathkal on 3rd to 5th March 2023.
- Paper presented in my Research Topic "Experimental study on effect of
  Dracaena trifasciata as green corrosion inhibitor in steel reinforced cement
  concrete" at International conference on Climate Resilient Construction and
  building materials organized by NIT, Surathkal on 3rd to 5th March 2023.
- Paper presented in my Research Topic "Prediction of Inhibition Efficiency of Plant extract in Limonia Acidissima on Mild Steel Corrosion Using Artificial Intelligence" at International conference on Sustainable Innovative Practices (SIP-2023) organized by Kumaraguru college of Technology, Coimbatore on 19&20th April 2023.
- Participated International conference Program and delivered seminar talk on Study
  on effect of Dracaena Trifasciata as Green corrosion inhibitor in steel
  reinforced cement concrete under sea water medium on 16<sup>th</sup> April 2025,
  Organized by Sona College of Technology, Salem.

# **JOURNAL PUBLICATION**

 D.Nandakumar, M.Arivoli. " Eco friendly Bio Mineralised Steel slag bricks using Micp Process" Journal of Applied Science and Computations, Volume VI, Issue IV, April 2019

- **D.Nandakumar**,M.Arivoli. "Strength Development In Bio Mineralised Steelslag Bricks Using Micp Process" International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9 Issue-4, Feb. 2020.
- B.Prabu, D.Nandakumar, A.Aejaz Ahamed, M.Gnana Sundar, N.Javeeth Khan, T.V. Kishore Kumar, R.Akash. "Mapping Of Institutional Building Using UnmannedAerial Vehicle And Post Processing By Photogrammetry Software" Journal of xidian university, Vol. 14, Issue. 5, April 2020.
- Monisha M, Suganthi B, Nandakumar D, Henry Richard J, Divya M, Namasivayam R, Lokesh C,Raveen Kumar R. "Utilization of Treated Industrial Effluent water(TIEW) In concrete technology For construction purpose instead of using Tap/Fresh water (TW)"Vol.14, Issue.5, April2020.
- D.Nandakumar, M.Arivoli, S. Priscil Nidhu. "Development of Lowcost bio mineralised steel slag bricks using micp process" International Journal of advanced Research in Engineering and technology, Volume XI, Issue XI, November 2020
- Arivoli Masilamani, Nandakumar Durairaj, Malathy Ramalingam. "A Novel Way To Exploit Steel Industry Waste: Microbial Mineralized SlagBlocks" Environmental Engineeringand management Journal, Volume 20,
- D. Nanda Kumar, S. Tamil Selvi, M. Sandeep Kumar. "Optimization of Pozzolime Concrete with Silica Fume and Brick Dust" International Journal of Research in Engineering, Science and Management, Volume-3, Issue-4, April-2020
- Ms. C. Priyadharshini , Mr. S. Gokul, Mr. D. Nandakumar. "Study On Strength Parameters Of Lime Concrete With Silica Fume And Fly Ash" International Journal of Advanced Science and Engineering Research, Volume: 5, Issue: 1, 2020
- D. Nanda Kumar, A. Aejaz Ahamed, M. Gnana Sundar. "Surveying using drones and providing results by using Photogrammetry software" International Research Journal of Engineeringand technology, Volume VII,Issue IV, April2020

## INTERNATIONAL FACULTY DEVELOPMENT PROGRAMME

S.No	Institute	Title	Date
1.	AVIT&Vinayaga mission Research	Introduction to	08.05.2020
	foundation&Industry academia cell	AR/VR & Its	
		Enterprise use	
		cases	
2.	AVIT&Vinayaga mission Research foundation&Industry academia cell	Techtonic IOT	09.05.2020

3.	AVIT & Vinayaga mission Research foundation &I ndustry academia cell	Artificial intelligence in 4 <sup>th</sup> dimensional approach	10.05.2020
4.	AVIT & Vinayaga mission Research foundation & Industry academia cell	Electric vehicles on grid challenges and opportunies	11.05.2020
5.	AVIT&Vinayaga mission Research	Demystifying process automation	12.05.2020
6.	AVIT & Vinayaga mission Research foundation & Industry academia cell	Drone industry insights	14.05.2020
7.	AVIT & Vinayaga mission Research foundation & Industry academia cell	Opportunites in marine field	15.05.2020
8.	AVIT & Vinayaga mission Research foundation & Industry academia cell	UAV Communication	16.05.2020
9.	Anand International college of engineering and Technology	Future developments in civil engineering	06.02.2023- 10.02.2023

# NATIONAL FACULTY DEVELOPMENT PROGRAMME

S.No	Institute	Title	Date
1.	AICTE- NITTTR	Defect free Construction Repair	16-09-19 to 20-
	CHANDIGAR	and Maintenance	09-19
			(One Week)
2.	AICTE- NITTTR	Application of Auto CAD in Engineering	04-11-19 to 08-
	CHANDIGAR		11-19
			(One Week)
3.	AICTE- NITTTR	Low cost Housing Techniques	23-09-19 to 27-
	CHANDIGAR		09-19
			(One Week)
4.	Kongu engineering college	Advancements in concrete technology	12.05.2020-
			16.05.2020
5.	Mohamed sathak AJ college	Behaviour of structural systems- Bridging	22.05.2020-
	of engineering	the gap between theory and real time	24.05.2020
		practice.	
6	AICTE- ATAL-FDP	Artificial Intelligence	05.10.2020-
			09.10.2020
7.	ANNA UNIVERSITY	CE8502 Structural Analysis-I	14.6.2021 -
			19.6.2021

8	AICTE Inculcating Universal Human Values in		27.09.2021-
		Technical Education	01.10.2021
9.	AICTE-ATAL	Digital Transformation Trends in	04.10.2021-
		Construction Industry	08.10-2021
10.	Quality Circle Forum of	Formation and Implementation of Lean	07.10.2022-
	India	Quality Circles.	08.10.2022
11.	AICTE- NITTTR	Recycling Materials in Highway	06.03.2023-
	CHANDIGAR	Construction	10.03.2023
12.	Naan Mudhalvan in	Digital Productivity and Al Fluency	06.10.2023-
	partnership with Microsoft		14.10.2023
13.	Ballari Institute of	Advancements in	02.11.2023-
	Technology & Management	Concrete Technology (AICT-2023	07.11.2023
14.	Vardhaman College of	Research and innovations in structural	12.02.2024-
	engineering, Hyderabad.	engineering	17.02.2024
15.	Coimbatore Institute Of	Recent Advances in Forensic Analysis of	23.02.2024-
	Technology	Substructures and Superstructures.	29.02.2024
16.	AICTE- NITTTR	NAAC and Internal Quality Assurance	26.02.2024-
	CHANDIGAR		01.03.2024
17.	Adichankara Institute of	Environmental Pollution: Monitoring &	02.07.2024-
	engineering and	Control	03.07.2024
	Technology		
18.	AICTE	Universal Human Values-II	26.07.2024-
			02.08.2024
19.	National Institute Of	Field Oriented Challenges In Civil	05.08.2024-
	Technology, Jamshedpur	Engineering	09.08.2024
20	AICTE-ATAL	8 - 8 - 1	
		Materials in Infrastructure and Industry	11.01.2025
21.	AICTE-ATAL	Artificial intelligence for Science and	17.02.2025-
		Engineering	22.02.2025

## **NPTEL & SHORT TERM COURSES**

- Have completed the NPTEL 4 week course (Jan-Feb 2020) in the topic of Advanced topics in science and concrete technology.
- Have completed the NPTEL 8 week course (Feb-April 2020) in the topic of Digital Land Surveying and Mapping.
- Have completed the AICTE- NITTTR Module course (Feb 2021) in the topic of Orientation towards Technical Education.
- Have completed the AICTE- NITTTR Module course (SEP 2021) in the topic of Professional Ethics and Sustainability.
- Have completed the AICTE- NITTTR Module course (SEP 2021) in the topic of Communication Skills Modes and Knowledge Dissemination.

### **BOOK PUBLICATIONS**

- Published a book in titled of Engineering mechanics by Charulatha Publications, Chennai in the March 2025.
- Published a book in titled of Basics Civil and Mechanical Engineering by Charulatha Publications, Chennai in the March 2025.

### **PATENT PUBLICATIONS**

S.No	Patent Id	Patent Name	Year of Publication
01.		IDENTIFICATION ON ANTI CORROSIVE	2023
	202341044743	PROPERTY OF LIMONIA ACIDISSIMA	
		PLANT EXTRACT USING ANN	
02.	202541039680	AI BASED SMART GOGGLES FOR	2025
	202341039000	CONSTRUCTION LABOURS	

#### **ORGANIZED EVENTS**

- Webinar on Applications of Drone Technology in Advance Surveying 29<sup>th</sup> and 30<sup>th</sup> June 2020.
- Webinar on Sustainability in Civil Engineering on 30<sup>th</sup> July 2020.
- Webinar on Analysis &Design of Framed structures Using E tabs 19<sup>th</sup> August to 21<sup>st</sup> August 2020.
- Webinar on Gear Up for higher studies at International Universities challenges and Opportunities on 04.09.2020.
- Webinar on Basics of Revit Architecture cum structures on 24.08.2020 to 25.08.2020
- Webinar on Career Opportunities in Civil Engineering on 18.05.2021
- Webinar on 3D Modelling using Sketch up Software on May 31st to June 2nd 2021.
- Webinar on Career Opportunities after B.E/B.Tech Civil on 28.09.2021.
- Workshop on "Smart city- construction Perspective" on 17.02.2023.
- Paper Presentation event as a department ISTE Coordinator through the ISTE STUDENTS CHAPTER (TN 217) on 04.10.2023.
- Guest lecture on "Quantity Surveying- Billing & Tendering" as a department ISTE Coordinator through the ISTE STUDENTS CHAPTER (TN 217) on 20.03.2024.
- Kings project expo'24 organized as a coordinator on 03.05.2024