



KINGS
COLLEGE OF ENGINEERING
An Autonomous Institution
Affiliated to Anna University, Chennai, Approved by AICTE, New Delhi



DEPARTMENT OF CIVIL ENGINEERING
ACADEMIC YEAR 2023 - 2024
CIRCULAR

DATE: 12.03.2024

This is to inform our department faculty that there will be an internal staff seminar. The details of the staff seminar are given below.

Name of the faculty : Mr. K.ARUN, AP/CIVIL

Date : 14.03.2024

Venue : Smart classroom (Hall no 236)

Time : 12:30 PM


D. Nandakumar
12/03/24
DRC MEMBER


R. Suresh
12/03/24
HOD/CIVIL

DEPARTMENT OF CIVIL ENGINEERING
ACADEMIC YEAR 2023-2024/EVEN SEMESTER
INTERNAL STAFF SEMINAR – REPORT

14/03/2024

Background & Objective

Department of Civil Engineering had organized an Internal Seminar for the Department staff members for accessing online journals. The purpose of this seminar is to equip the faculty in new techniques through accessing online journals like MAT, Springer etc.

Seminar Session

A Seminar was held in the Department of Civil Engineering on 14th March, 2024 at 01:10 PM. Mr.K.Arun /AP delivered his seminar talk on “Advancements in sensors and actuators technologies for smart cities: A comprehensive review”. The paper was referred from SPRINGER Journal, Smart Construction and Sustainable Cities (November 2023).



Internal Seminar Session by Mr.K.Arun /AP CIVIL

Theme:

This review explores advancements in sensors and actuator technologies for smart cities, highlighting the importance of precision and longevity in infrastructure. The dynamic role of actuators in real-time adjustments facilitates responsive urban management. Data security within these systems is crucial, and robust information-sharing mechanisms are needed. The case study on Bengaluru's Smart Traffic Management System demonstrates how the fusion of actuator technology and sensor arrays can enhance urban transportation and sustainability efforts. Prospects include blockchain technology and AI-driven urban management. The objective of this review is to provide a comprehensive analysis of recent developments in sensors and actuators for smart cities, with a particular emphasis on their implications for urban planning, data security, legal issues, and the potential for transformative innovation in urban management.

Scope for future work:

- Here, the author has proposed the framework for smart transportation using sensors and actuators. In addition the review can be extended for waste management and energy efficiency also.
- On the proposed review, blockchain technology has been explained. More clarifications can be given on AI and ML technologies for smart cities.

Outcome:

The Seminar clearly highlighted the importance of sensors and actuators in the Internet of Things (IoT) connections that serve as the framework for smart cities. Additionally, it sheds light on the wide range of sensors designed for different IoT applications as well as the variables affecting their service life, highlighting how crucial precision and durability are. This review discusses data security in big data exchange among actuators, legal foundations for smart city development, and key elements for creating a smart city. It highlights the benefits of advanced actuator technology and sensor integration, and emerging trends like AI driven urban management and block chain-enhanced data security.


Q. Sandaran
14/03/2024.
HOD/CIVIL


J. Praveen
14/3/2024.
PRINCIPAL



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DEPARTMENT OF CIVIL ENGINEERING

14/03/2024

INTERNAL STAFF SEMINAR - ATTENDANCE AND FEED BACK

S.NO	NAME	FEEDBACK	SIGN
1	Dr.R.Saravanan	Excellent presentation.	R. Saravanan 14/03/2024.
2	Mr.R.Sundharam	Innovative Presentation	R. Sundharam 14/03/24
3	Ms.A.Suganya	Nice & effective present - altern	A. Suganya 14/03/24.
4	Mr.A.Sagaya Albert	Excellent presentation Trendy topic	Sagaya Albert 14/03/24
5	Mr.K.Sriram Gopal	Innovative Topic, Nice Presentation	K. Sriram Gopal 14/03/24
6	Ms.K.Kanimozhi	Excellent Presentation with detailed content.	K. Kanimozhi 14/3/24.