



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

Faculty Research papers

The following table shows the details of faculty research papers of Civil Engineering Department to address UN-17 SDG Goals.

CAY 2024-25

FACULTY PUBLICATIONS - ACADEMIC YEAR 2024-2025				
S.No	Name of the Faculty	Title of the Paper	SDGs Addressed	SCI/Scopus/Conference
1	Sri. B. Sai Laxman	Experimental and empirical shear modulus reduction curves for a wide range of strains.	SDG 9 (Infrastructure), SDG 11	SCI
2	B. Sravanthi	Comparative study on the performance of cement treated base layer materials and fly ash-based geopolymer base layer materials.	SDG 9, SDG 12 (Sustainable Materials)	Scopus
3	K.S. Bhargavi	Development of lightweight high-strength engineered geopolymer composites using slag waste and vermiculite powder: mechanical, durability and microstructural assessments.	SDG 9, SDG 12	Scopus
4	L. Sudheer Reddy	Selection of Building Materials Using Fuzzy Analytical Hierarchy Process.	SDG 9, SDG 11, SDG 12	Scopus
FACULTY PUBLICATIONS - ACADEMIC YEAR 2023-2024				
S.No	Name of the Faculty	Title of the Paper	SDGs Addressed	SCI/Scopus/Conference
1	Dr. L. Sudheer Reddy	Selection of building materials using Fuzzy analytical Hierarchy process	SDG 9, SDG 11, SDG 12	Scopus
2	Dr. M. Srikanth	Selection of building materials using Fuzzy analytical Hierarchy process	SDG 9, SDG 11, SDG 12	Scopus
3	Dr. M. Andal	Minimum flexural reinforcement of fly ash and GGBS based geopolymer concrete members	SDG 9, SDG 12	Scopus
4	Dr. M. Andal	Strength Characteristics of GGBS and Fly Ash Based Geopolymer Concrete using Overburnt Bricks as Coarse aggregate	SDG 9, SDG 12	Scopus



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

5	Dr. D. Harikrishna	Strength and microstructural characterization of silica fume blended concrete with increased curing period	SDG 9, SDG 12	Scopus
6	Dr. S. Sunil Pratap Reddy	Selection of building materials using Fuzzy analytical Hierarchy process	SDG 9, SDG 11, SDG 12	Scopus
7	Dr. S. Sunil Pratap Reddy	Influence of Carbon Nanotubes on Building Materials	SDG 9, SDG 12	Scopus
8	Dr. A. Suchith Reddy	Mitigating the environmental impacts of conventional concrete – a quantitative sustainable concrete approach	SDG 9, SDG 12, SDG 13 (Climate Action)	Book Chapter
9	Dr. A. Suchith Reddy	Development of Framework for Achieving Optimum Thermal Insulation for Building Infrastructures	SDG 9, SDG 11, SDG 13	Book Chapter
10	Dr. A. Suchith Reddy	Effect of Window Glazing Materials on Life Cycle Energy Performance of Building: A Case Study	SDG 9, SDG 11, SDG 13	Book Chapter
11	Dr. A. Suchith Reddy	Evaluation of Operational Energy for Institutional Building - A Case Study	SDG 9, SDG 11, SDG 13	Book Chapter
12	Dr. A. Suchith Reddy	A decision making framework for selection of coarse aggregate for achieving sustainable concrete	SDG 9, SDG 12	Book Chapter
13	Dr. G. Shravan Kumar	Utilization of Recycled Concrete Aggregate Stabilized with Lime Fly Ash as for Low Volume Road Flexible Pavement.	SDG 9, SDG 11, SDG 12	Conference
14	Dr. G. Shravan Kumar	Recycled Concrete Aggregate Stabilized with Lime-Fly Ash and Cement for Utilization as a Semirigid Base Course of Low-Volume Roads.	SDG 9, SDG 11, SDG 12	SCI
15	Sri. B. Sai Laxman	Comprehensive Geophysical Assessment of Complex Geological Terrain in Kadapa Basin, India	SDG 9, SDG 15 (Life on Land)	Conference
16	Smt. S. Bhavani	Strength and durability properties of scc developed using lime stone calcined clay cement (LC3)	SDG 9, SDG 12	Scopus
17	Smt. S. Bhavani	A low carbon cement (LC3) as a sustainable material in high strength concrete: green concrete	SDG 9, SDG 12, SDG 13	SCI



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

18	Smt. Sree Laxmi Pavani	Effects of Urbanization on Land Use Land Cover of Warangal Region Using RS and GIS	SDG 11, SDG 15	Springer/Book Series
19	Smt. Sree Laxmi Pavani	CII Education Conference Innovation in Learning	SDG 4 (Quality Education)	Conference
FACULTY PUBLICATIONS - ACADEMIC YEAR 2022-2023				
S.No	Name of the Faculty	Title of the Paper	SDGs Addressed	SCI/Scopus/Conference
1	Dr. M. Veera Reddy	Fragility Comparison for Soft Storey Infill Reduced Structures by Incremental Dynamic Analysis	SDG 9, SDG 11	Book Chapter
2	Dr. L. Sudheer Reddy	Durability Studies on Bacterial Concrete Embedded with Bacillus Subtilis	SDG 9, SDG 12	Scopus
3	Dr. L. Sudheer Reddy	Durability Studies on Self Compacting Recycled Aggregate Concrete Using GGBS	SDG 9, SDG 12	Scopus
4	Dr. L. Sudheer Reddy	Performance of Cement Composite with GGBS and Alccofine as Partial Replacement	SDG 9, SDG 12	Scopus
5	Dr. M. Srikanth	Durability Studies on Self Compacting Recycled Aggregate Concrete Using GGBS	SDG 9, SDG 12	Scopus
6	Dr. M. Srikanth	Performance of Cement Composite with GGBS and Alccofine as Partial Replacement	SDG 9, SDG 12	Scopus
7	Dr. M. Andal	Microstructure and Mechanical Properties of Flyash & GGBS Based Alkali Activated Concrete	SDG 9, SDG 12	Conference
8	Dr. M. Andal	Split Tensile Strength and Workability Characteristics of GGBS, Fly Ash, Over Burnt Bricks based Geo-Polymer Concrete	SDG 9, SDG 12	Scopus
9	Dr. M. Andal	Examining the use of Lime and Gypsum in GGBS based alkali activated concrete	SDG 9, SDG 12	Scopus
10	Dr. D. Hari Krishna	Comparative study on Shear performance of Blended Pozzolonic R.C beams with Fly Ash & Recycled Aggregates	SDG 9, SDG 12	Scopus



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

11	Dr. D. Hari Krishna	Mechanical and durability studies on blended pozzolonic concretes with fly ash & recycled aggregates	SDG 9, SDG 12	Scopus
12	Dr. D. Hari Krishna	Durability Studies on Self Compacting Recycled Aggregate Concrete Using GGBS	SDG 9, SDG 12	Scopus
13	Dr. S. Sunil Pratap Reddy	Performance of Cement Composite with GGBS and Alccofine as Partial Replacement	SDG 9, SDG 12	Scopus
14	Dr. S. Sunil Pratap Reddy	Recent Advances In Self-Healing Concrete For Sustainable Construction Sector	SDG 9, SDG 12	Scopus
15	Dr. A. Suchith Reddy	Role of National Building Code in Fostering the Transition to Sustainable Construction	SDG 9, SDG 11, SDG 13	Conference
16	Dr. A. Suchith Reddy	Entropy-based fuzzy TOPSIS framework for selection of a sustainable building material	SDG 9, SDG 12	Scopus
17	Dr. A. Suchith Reddy	Development of frame work for achieving optimum thermal insulation for building instruments	SDG 9, SDG 11, SDG 13	Conference
18	Dr. B. Sumanth Kumar	Experimental Study on Fly Ash and GGBS based Geopolymer Corbels	SDG 9, SDG 12	Scopus
19	Dr. B. Sumanth Kumar	Experimental Investigation on Fly Ash and Ground Granulated Blast Furnace Slag-Based Geopolymer Corbels	SDG 9, SDG 12	Book Chapter
20	Dr. B. Sumanth Kumar	Study on fly ash and GGBS based geopolymer corbels	SDG 9, SDG 12	Scopus
21	Dr. G. Shravan Kumar	Characteristics of Recycled Concrete Aggregate and Its implementation for Pavement Base Applications: A Review	SDG 9, SDG 12	Scopus
22	Dr. G. Shravan Kumar	Strength and Durability Characteristics of Lime Fly Ash Stabilized Recycled Concrete Aggregate for Use in Low Volume Rural Roads	SDG 9, SDG 11, SDG 12	Scopus
23	Md. Shakeel Abid	Bearing Capacity of Annulus Stone Column Double-Encapsulated with Geotextiles	SDG 9, SDG 15	SCI
24	Smt. B. Sravanthi Reddy	Experimental study on partial replacement of structural fiber in porous pavements	SDG 9, SDG 11, SDG 12	Scopus



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

25	Ms. K. Manasa	Microstructure and Mechanical Properties of Flyash & GGBS Based Alkali Activated Concrete	SDG 9, SDG 12	Conference
26	Dr. N. Gangadhara Reddy	Review of the Utilization of Plastic Wastes as a Resource Material in Civil Engineering Infrastructure Applications	SDG 9, SDG 12, SDG 14 (Life Below Water)	WoS/Scopus
27	Dr. N. Gangadhara Reddy	Geoenvironmental characterization of bauxite residue ameliorated with different amendments	SDG 9, SDG 12, SDG 15	WoS/Scopus
28	Dr. N. Gangadhara Reddy	Utilisation of Red Mud (Bauxite Residue) in Environmental and Geotechnical Engineering Applications - An Overview	SDG 9, SDG 12, SDG 15	Conference
29	Dr. M. B. Sushma	Development of intelligent decision system for optimized highway corridor planning: an integrated GIS and heuristic approach	SDG 9, SDG 11	Scopus
30	Dr. M. B. Sushma	A framework on Understanding the Barriers of Smart cities and Intelligent Transportation System in India.	SDG 9, SDG 11	Conference
31	Dr. M. B. Sushma	Optimizing Points of Intersection for Highway and Railway Alignment – Using Path Planner Method and Ant Algorithm-Based Approach	SDG 9, SDG 11	Scopus Conference



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

Entrepreneurial activities and outreach programs

The following table shows the details of Entrepreneurial activities and outreach programs of Civil Engineering Department to address UN-17 SDG Goals.

ACADEMIC YEAR 2024-2025				
S.No	Details of the activity	Resource persons and organized by	Duration and dates	Mapped SDGs
1	Faculty Upskilling-Faculty Development Program on Fundamentals of AI & ML	Blackbuds, Hyderabad	30th June 2025 to 12th July 2025 (14 Days)	SDG4, SDG 9
2	Extensive training in Staad pro and Auto CAD to Final Year students	Expert team from CADD Centre	10.12.24 to 12.12.24 (3 days)	SDG 4, SDG 9, SDG 8
3	Guest Lecture: Innovative Technologies in Construction	Sri. Prakash Hegde, Senior Planning Manager, T&T Constructions, Hyderabad	19.09.2024	SDG 9, SDG 12
4	Guest Lecture: District R&B office, Telangana Avenues in Civil Engineering	Sri. P Suresh Babu, Executive Engineer, District R&B Office	10.02.2025	SDG 9, SDG 11, SDG 8
5	Workshop: "Architectural Innovations using Revit" - Pre-Sumshodini Workshop	Revit Expert Speakers from CADD Centre Hyderabad	19th October 2024	SDG 4, SDG 9, SDG 11
ACADEMIC YEAR 2023-2024				
S.No	Details of the activity	Resource persons and organized by	Duration and dates	Mapped SDGs
1	Faculty Development Program on Drone Technology, GIS, MCDM, IoT and Spatial Data Acquisition	Dr Pranav, Dr Harish, Dr Rajiv Dey, Dr Rupesh - VAXIS Learnings Pvt. Ltd	18th June 2024 to 30th June 2024 (14 days)	SDG 4, SDG 9, SDG 11



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

2	Civil Engineering Association: Word Building Event	CEA Student Organizers	18.12.2023 (1 hour)	SDG 4, SDG 16 (Peace, Justice & Strong Institutions)
3	Visit to Innovation, Incubation, Research and Entrepreneurship (I2RE)	CEA Student Organizers	28.08.2023 (1 hour)	SDG 9, SDG 8
4	Meet with XCEL Global Services: Abroad Education Awareness	XCEL Global Services Representatives	25.09.2023 (1 hour)	SDG 4, SDG 8
5	Industrial Expert Talk: Emerging Technologies in Construction	Sri. Ch. Ravikumar, National Academy of Construction	05.03.2024 (2 hours)	SDG 9, SDG 11, SDG 12
6	From Waste to Resource: Trip to a Sewage Treatment Plant	CEA Student Organizers	11.03.2024 (1 hour)	SDG 6 (Clean Water & Sanitation), SDG 9, SDG 12
7	Mike Drop Mania: Student Well-being & Positivity Session	CEA Student Organizers	04.03.2024 (1 hour)	SDG 3 (Good Health & Well-being), SDG 4
8	Awareness on Digital Construction & BIM Project Management using Bixel Manager	Ms. Supriya Gade, Bixel Manager Consultant	26.02.2024 (1 hour)	SDG 9, SDG 11, SDG 12
ACADEMIC YEAR 2022-2023				
S.No	Details of the activity	Resource persons and organized by	Duration and dates	Mapped SDGs
1	Skill development program on construction project management and REVIT	Dr. B. Sumanth Kumar, Dr. A. Suchith Reddy - CED, KITSW	07.01.2023 to 11.01.2023 (5 days)	SDG 4, SDG 9, SDG 8



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

2	Guest Lecture: Ready Mix Concrete - Academic Leader Talk	Prof. N. V. Ramana Rao, Director, NIT Warangal	05.01.2023	SDG 4, SDG 9, SDG 12
3	Engineer's Day Celebration	Prof. V. Jaya Kumar, Professor NIT Warangal	15.09.2022	SDG 9, SDG 11
4	Career opportunities after graduation	Representatives from ACE Engineering Academy, Hyderabad	20.03.2023	SDG 4, SDG 8
5	Awareness on scholarships for abroad studies	Global Tree Consultants, Hyderabad	04.04.2023	SDG 4, SDG 8
6	Presentation on planning for abroad studies	Final Year Students of Civil Engineering	27.03.2023	SDG 4, SDG 8
7	Application of various software in designing Infrastructure	Managing Director, Canter CADD, Warangal	12.09.2022	SDG 4, SDG 9, SDG 8
8	Application of Geo-Spatial Technology in Civil Engineering	Yogesh Karyakarte, Senior Manager of GIS	19.09.2022	SDG 9, SDG 11, SDG 15 (Life on Land)
9	Field Visit to proposed convention center, KITSW	Students of KITS Warangal	26.09.2022	SDG 9, SDG 11
10	Session by Rudra Constructions	Phani Charan & Yeshwanth, Managing Partners, Rudra Constructions	28.11.2022	SDG 9, SDG 11, SDG 8
11	Higher Education Guidance by IMFS	Managing Director, IMFS Consultancy, Hyderabad	21.11.2022	SDG 4, SDG 8



KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE

Opp : Yerragattu Gutta, Hasanparthy (Mandal), WARANGAL - 506 015, TELANGANA, INDIA

काकतीय प्रौद्योगिकी एवं विज्ञान संस्थान, वरंगल - ५०६०१५, तेलंगाना, भारत

కాకతీయ సాంకేతిక విజ్ఞాన శాస్త్ర విద్యాలయం, వరంగల్ - ౫౦౬ ౦౧౫ తెలంగాణ, భారతదేశము

(An Autonomous Institute under Kakatiya University, Warangal)

(Approved by AICTE, New Delhi; Recognised by UGC under 2(f) & 12(B); Sponsored by EKASILA EDUCATION SOCIETY)

website: www.kitsw.ac.in

E-mail: principal@kitsw.ac.in

☎ : +91 9392055211, +91 7382564888

DEPARTMENT OF CIVIL ENGINEERING

12	Workshop on RIVET - Pre-Sumshodhini 2022	Expert Team, CADD Centre Warangal	18.11.2022 (1 day)	SDG 4, SDG 9, SDG 8
----	---	---	-----------------------	---------------------------