

The Kammavari Sangham, established in the year 1952, is a non-profit oriented voluntary service organization. The organization was created with the objective of providing charitable service to the community and society. The Sangham has diversified its activities since its establishment over seven decades ago. Now it has expanded its horizons to include community- strengthening ventures, providing education and financial support to the society. With a firm belief that quality education only can lay a strong foundation for bringing about economic and social changes to the lives of millions, the Sangham established educational institutions, starting with K.S. Polytechnic in 1992. Enthusied with this success of its foray into technical education, the Sangham then started the K.S Institute of Technology (KSIT), its first Engineering College in the year 1999. In the following years both these institutions have carved an enviable niche through academic excellence achieved in a very short span of time. Following the success of KSIT, the Sangham ventured to start yet another technical institution, oriented towards advanced studies and research, and thus, the K S School of Engineering & Management was born in 2010. K S School of Architecture was established in the year 2015. K S Pre-University College was recently established in 2022.



### About the Department

The Department of Civil Engineering is committed towards excellence and innovation in education and research. Presently the Dept. of civil engineering has 6 research students who are encouraged to build a firm foundation by opting core courses & progress towards specialized topics like Building performance studies, Earthquake resistance structures, Structural health monitoring etc. The R&D also encourages writing research proposals, scientific papers leading to publications & also filing patents.

Department of Civil Engineering helps to facilitate the overall development of students and faculty by organizing Seminars, Workshops and Industrial tours to upgrade with recent trends and developments. The department also offers Consultancy services in testing of materials, Non-destructive testing & Soil-testing.

### Chief Patrons

1. Sri. R Rajagopal Naidu, President, Kammavari Sangham
2. Sri. R Leela Shankar Rao, Hon. Secretary, Kammavari Sangham
3. Sri. T Neerajakshulu Naidu, Treasurer, Kammavari Sangham

### Academic Advisory Board

1. Dr. H P Khincha, Chairman, KSGI
2. Dr. K N Balasubramanya Murthy, Member, KSGI
3. Dr. Y N Srikanth, Member, KSGI
4. Dr. Shyam Vasudeva Rao, Member, KSGI
5. Dr. K V A Balaji, CEO & Member Secretary, KSGI

### Advisory Committee

1. Dr. K Rama Narasimha, Principal, KSSEM
2. Dr. B K Raghu Prasad, Formerly Professor, IISC

### Conference Chair & Convener

Dr. Vijayalakshmi Akella  
Professor & Head, Dept. of Civil Engg., KSSEM, Bengaluru

### Co- Convener:

1. Mr. Naveena M P, Asst. Prof., Civil Engg., KSSEM
2. Mr. Shashi Prasad N, Asst. Prof., Civil Engg., KSSEM

### Organizing Committee

1. Dr. Arekal Vijay, Professor, Civil Engg., KSSEM
2. Mr. Veerendra Kumar M, Associate Prof. Civil Engg., KSSEM
3. Dr. Rashmi H R, Associate Prof. Civil Engg., KSSEM
4. Ms. Sushma M, Asst. Prof., Civil Engg., KSSEM
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7. Mr. Manjunath B, Asst. Prof., Civil Engg., KSSEM
8. Ms. Saisushma B A, Asst. Prof., Civil Engg., KSSEM

## Department of Civil Engineering

Organizes

## A One Day National Conference

ON

## Emerging Trends in Sustainable Built Environment (NCESBE)

03 February 2023

In Collaboration with



**TRISHNAAH**  
quench your thirst for knowledge

Journal for Recent Advances  
in Built Environment (JRABE)  
ISSN 2583 - 3901

Sponsored by



**KAMMAVARI SANGHAM (R) - 1952**  
**K.S SCHOOL OF ENGG. & MGMT.**  
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#15, Malasandra, off Kanakapura Road, Bengaluru - 560109  
Tel: 080 - 2842501/2/3 Web : www.kssem.edu.in

60 Years  
Kammavari Sangham (R) - 1952



## About Conference

The objective of this conference is to create a platform for collaborative links between academicians and professional practitioners for the dissemination of knowledge, innovative ideas, and experiences in the various fields of Sustainable Built Environment. The conference seeks contributions from all the stake holders in planning and securing a sustainable built environment for the future. Prospective authors are kindly encouraged to contribute and support the conference through submission of their research papers.

## Call for Papers

It is indeed a pleasure for us to invite you to submit original and unpublished research outcomes in the form of technical paper to present and publish in NCSBE-2023. Authors are requested to submit only full length papers through e-mail to [ncesbe2023@kssem.edu.in](mailto:ncesbe2023@kssem.edu.in)

**Note** - Selected papers will be published in the peer-reviewed **Journal for Recent Advances in Built Environment (JRABE)** with ISSN 2583-3901.

## About the Journal

Journal for Recent advances in Built Environment (JRABE) is a new peer-reviewed journal. JRABE publishes original papers resulting from research in Civil and Architectural engineering in the built environment.

JRABE will strive to offer you the fastest possible speed of publication, without compromising on the quality of our peer-review process. The eminent persons on editorial board are from reputed institutions, IIT's, CSIR Labs etc. It is a publication of TRISHNAAH Group.

## Important Dates

|   |            |
|---|------------|
| Last Date for Submission of Abstract              | 05-11-2022 |
| Abstract Acceptance                               | 20-11-2022 |
| Full Paper Submission along With Registration Fee | 15-12-2022 |
| Submission of Camera Ready Full Length Paper      | 10-01-2023 |
| Conference Date                                   | 03-02-2023 |

## Awards

- ★ Certificate of Appreciation for Best Paper presented in each track
- ★ Certificate of Participation for all Registered Participants

## Main Theme

Emerging Trends in Sustainable Built Environment

## Sub Themes

- ◆ Sustainable Materials and Constructions
- ◆ Analysis and Design of Structural Elements
- ◆ Structural Health Monitoring
- ◆ Fracture Mechanics
- ◆ Climatic Responsive Buildings
- ◆ Construction Management, Information modelling in BIM
- ◆ Disaster Risk Management
- ◆ Virtual and Augmented Reality
- ◆ Computational Methods
- ◆ Geotechnical Applications
- ◆ Water Resources Management
- ◆ Environmental Pollution and Waste Management
- ◆ Remote Sensing and GIS Application
- ◆ Urban and Regional Planning
- ◆ Transportation Systems

## Registration

Delegates should complete the registration form and send soft copy by email along with the transaction receipt to [ncesbe2023@kssem.edu.in](mailto:ncesbe2023@kssem.edu.in)

## Registration Fee

| Category                                       | Students / Research Scholar | Academician / Researcher | Industry  |
|--|-----------------------------|--------------------------|-----------|
| Conference Registration + Publication in JRABE | Rs.1500/-                   | Rs.2500/-                | Rs.3500/- |

## Payment

Registration fee to be paid through online mode



SCAN & PAY WITH ANY UPI APP

For registration, template, author guidelines and further details access the following link

<https://journals.trishnaah.com/conference-ncesbe-2023/>

## Contact Details

Ms. Sushma M - 9740775417

Mr. Manjunath B - 8217828727

## Venue

Seminar Hall,  
KSSA, Bengaluru - 109.



A  
Report of  
ONE DAY  
NATIONAL CONFERENCE

on

**“EMERGING TRENDS IN  
SUSTAINABLE BUILT ENVIRONMENT”  
(NCESBE)**

**03<sup>RD</sup> FEBRUARY 2023**

**IN ASSOCIATION WITH**

**Journal for Recent Advances in Built  
Environment (JRABE)**

**ISSN 2583 – 3901**

Organized by

**Department of Civil Engineering**

**K.S.SCHOOL OF ENGINEERING AND  
MANAGEMENT**

**#15, Near Vajrahalli, Mallasandra, Kanakapura road,  
Bengaluru-560109**

### **Summary of the Conference:**

The one day "National Conference on Emerging Trends in Sustainable Built Environment" (NCESBE 2023) with the theme "Emerging trends in Sustainable Built Environment" was organized by the Department of Civil Engineering, K. S. School of Engineering and Management (KSSEM), Bengaluru on February 03<sup>rd</sup> 2023 in association with Journal for Recent Advances in Built Environment (JRABE) with the aim of creating a platform for collaborative links between academicians and professional practitioners for the dissemination of knowledge, innovative ideas and experiences in the various fields of Sustainable Built Environment. Prospective authors were encouraged to contribute and support the conference through submission of their research papers.

There were twenty technical presentations in various themes related to sustainability and built environment. The Chief Guest for NCESBE 2023 was Shri. R. Sundaram, Chairman and Managing Director, Sundaram Architects Pvt. Ltd., who is renowned in the field of shell structures. The Conference was presided by Sri. R Rajagopal Naidu, President, Kammavari Sangham. Honorable Secretary of Kammavari Sangham Sri. R. Leela Shankar Rao; Treasurer Sri. T. Neerajakshulu Naidu; Dr. K V A Balaji, CEO, KSGI, Dr. K Rama Narasimha, Principal, KSSEM CEO, KSGI; Prof. B K Raghu Prasad, Formerly Professor, IISc; Department Heads, KSGI; Prof. Suresh K, Principal, KS Polytechnic, Dr. Sangappa, Director, Admissions and Public Relations; Dr. Harish R, Training and Placement Officer; Ar. Thrivikram N.B., Principal, K. S. School of Architecture were present for the inaugural function after which the technical sessions were continued for the day.

The book of abstracts unveiled contained the abstracts of peer-reviewed papers presented at NCESBE 2023 under various themes namely sustainable materials and construction, structural health monitoring climatic responsive building, construction management, disaster risk management, environmental pollution, waste management and urban and regional planning.

The process of building a structure has a substantial impact on the environment. It accounts for almost half of the global energy use, about a third of greenhouse gas emissions and about a tenth of our water use. With increased urbanization, these environmental impacts are expected to increase globally. Therefore, there is an urgent need for construction industry to follow a sustainable trajectory so that a balance is maintained between Environment and Performance of buildings. This conference provided a platform for researchers to share their insights, experiences and exchange ideas related to sustainable built environment. Emerging technologies and scientific advancements in various themes related to sustainable built environment were discussed.

Dr. G. Narayana, Professor & Head, Civil Engineering Department, SJC Institute of Technology and Dr. N. S. Kumar, Professor & Head, Civil Engineering Department, Ghousia College of Engineering were invited as the Session Chairs for the Conference.



Valedictory session was held after the end of the technical sessions, for which the Dr. K. V. A Balaji, Chief Executive Officer, K. S. Group of Institutions, Dr. Vijayalakshmi Akella, Prof. and Head of Civil Dept. and Dr. Arekal Vijay, KSSEM were present to address the gathering and issue certificates for the best paper as well as to all the participants of the conference. A few participants volunteered to express their gratitude to the organizers for conducting this Conference and thanked all the fellow participants for their valuable contributions.

**PHOTOS OF NCSBE 2023**



INAUGURATION



UNVEILING OF BOOK OF ABSTRACTS





PAPER PRESENTATION



GROUP PHOTO WITH PARTICIPANTS

*W. Kelle*  
(Convener Signature)  
Professor & Head  
Dept. of Civil Engineering  
K.S. Group of Institutions  
Dept of Engineering & Managemen  
Bangalore-560 062



# K S SCHOOL OF ENGINEERING AND MANAGEMENT

(Approved by AICTE, Affiliated to VTU & Accredited by NAAC)  
#15, Mallasandra, Off. Kanakapura Road, Bangalore- 560109

## DEPARTMENT OF CIVIL ENGINEERING

This is to certify that

Mr/Ms/Dr. RASHMI. H.R......has

presented a paper on AN INDUSTRIAL & AGRICULTURAL BY-PRODUCTS ON SELF CURING CONCRETE - A REVIEW

in a One-Day National Conference on

"Emerging Trends in Sustainable Built Environment" (NCESSBE)

held on 3rd of February 2023

W. Kelle

CONVENER

S. Sone

PRINCIPAL

CHIEF EXECUTIVE OFFICER



**K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BANGALORE - 560109**  
**DEPARTMENT OF CIVIL ENGINEERING**  
**A ONE DAY NATIONAL CONFERENCE ON EMERGING TRENDS IN SUSTAINABLE BUILT**  
**ENVIRONMENT (NCESBE-2023) ON 3<sup>RD</sup> FEBRUARY 2023**

**FEEDBACK FORM**

Name of the Delegate: *Shrujana-N*

Contact Number: *9740838091*

E-mail Id: *shrujana98@gmail.com*

College/ Organization: *JSS STU*

1. Was the Conference well organized?

Excellent

Good

Fair

Poor

2. Was the work presented by Delegates relevant to the theme of the Conference?

Excellent

Good

Fair

Poor

3. Was there dissemination of knowledge in the Conference?

Excellent

Good

Fair

Poor

4. Did the Conference provide a good platform for networking with Researchers, Industry Professionals and Academicians?

Excellent

Good

Fair

Poor

5. Would you be interested to attend other future programs organized by us?

Excellent

Good

Fair

Poor

*Shrujana N*  
Signature of the Delegate



K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BANGALORE - 560109  
 DEPARTMENT OF CIVIL ENGINEERING



A ONE DAY NATIONAL CONFERENCE ON EMERGING TRENDS IN SUSTAINABLE BUILT ENVIRONMENT (NCESBE-2023) ON 3RD FEBRUARY 2023

DETAILS OF DELEGATES

| SL.NO | NAME OF THE DELEGATES<br>IN CAPITAL LETTERS                    | TITLE OF THE PAPER  | INSITUATION/ COMPANY              | Signature          |
|-------|--|---|-----------------------------------|--------------------|
| 1     | BHAVAN KASHYAP K   | An Investigation on the mechanical Properties of concrete structures with Low Carbon Steel - Industrial waste | KSIIT                             | <i>[Signature]</i> |
| 2     | SUSHMITHA A. (Bentha)<br>DHANUSH.M.K.<br>TANUSH.P<br>SHESHADRI | Utilization of Silica - Manganese Slag as Coarse Aggregate in Concrete  | PES University                    | <i>[Signature]</i> |
| 3     | THEERASIMY   | Size. effects of Recycled Aggregates on Properties of SCC   | RVITM                             | <i>[Signature]</i> |
| 4     | NANDANA P.   | Parametric Study on Behaviour of Rectangular and Trapezoidal box girder bridge using FEM & Classical method   | Government Polytechnic Ramanagara | <i>[Signature]</i> |



|    | AJAY DAS   | FORM WORK PRESENTATION   | SOBHA DEVELOPERS |
|----|--|--|------------------|
| 5  | Dr. Rashmi. H. R.<br>SALMAN BASHIR (P)<br>SUHAIL ALTAJ DAR.                        | Studies on early age characteristics of Self cured coconut shell ash based concrete mixes. | KSSEM            |
| 7  | HRITHIK. R   | Retrofitting with Boralt Fiber<br>Is gramer than ever...!! A review                        | BIT              |
| 8  | V. Silaksha  | Delay analysis.  | VICMAR           |
| 9  | CHETAN<br>KUMAR. S   | Jagoucku Based Grey<br>Relational Analysis of<br>Bond strength in CFST column              | DSE              |
| 10 | NAPUSA L. K HONGJEE<br>Geethanjali. H. L., Praveen<br>Kumar. N. V., Yashwanthreddy | REVIEW ON SUPPLEMENTAR MATERIALS<br>ON THE DEVELOPMENT OF HIGH<br>PERFORMANCE CONCRETE     | SJCIT            |



|    |                   |   |  |
|----|-------------------|---|--|
| 11 | Ar. Deepali Patil | Planning strategies for peri urban area development near PCMC<br>Energy efficient strategies for midrise bldg.                      | Dayanandsagar College of Architecture. |
| 12 | Shoujanya . N     | Comparative analysis of compressive of masonry units with Geopolymer and concrete Blocks with and without Horizontal Reinforcement. | JSS Science and Technology University  |
| 13 |                   |   |  |
| 14 |                   |   |  |
| 15 |                   |   |  |
| 16 |                   |   |  |

h/d

Shoujanya