

ORGANIZED BY



IC-ACI STUDENTS' ESSAY COMPETITION-2024

FOR CIVIL ENGINEERING STUDENTS

TOPIC

IMPORTANT ASPECTS FOR DURABILITY OF
STRUCTURAL AUDIT OF CIVIL ENGINEERING
STRUCTURES: AN OVERVIEW

CALL FOR SUBMISSIONS

DEADLINE: 2nd December 2024

COMPETITION GUIDELINES ENCLOSED

SUBMISSION PROCEDURE

Draft an email to infoicaci@gmail.com and attach your essay as a .doc, .docx, or .pdf file format. Include the following information in the body of the email:

- #
- Writer's Name:
- Name of Institute/Polytechnic:
- Course:
- Semester and Year essay was written:
- Email Address:
- Phone 1:
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CONTACT US:

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INVITATION

ESSAY COMPETITION ON

STRUCTURAL AUDIT OF CIVIL ENGINEERING STRUCTURES: AN OVERVIEW

Dear Sir/Madam,

India Chapter of American Concrete Institute [IC-ACI] cordially invites civil engineering students to participate in the 2023 Edition of its very popular annual Essay Competition. The competition which has no entry fee and this year is themed *Important Aspects for Durability of Reinforced Concrete Construction*. The last date for submission of entries is **26th December, 2023**.

The competition is open to all student members of the IC-ACI Student Chapters, as well as students of Accredited Civil Engineering Colleges. Any institute not having an IC-ACI Students Chapter is also welcome to participate.

Winnies, who will be individually notified of the results by email, will be awarded attractive trophies and Cash Incentive Prizes of Rs.10,000/- for 1st position, Rs.7,000/- for 2nd position, Rs.3,000/- for 3rd position and given publicity on all India Chapter communication platforms such as the India Chapter Journal, Concrete India, and the Chapter website.

Furthermore, for this year's competition, the winning Students will also be felicitated appropriately at the Important Event of *International Conference* to be held in Mumbai on 12th, 13th and 14th December 2024. At this prestigious conference, encouraging participation by renowned International & National industry experts and prominent members of the concrete technology, construction and engineering fraternities will be in attendance. Detailed information of the conference will be intimated in due course.

We look forward to your participation.

Thanking you and Yours faithfully,

Er. Satish C. Dhupelia
Past President and Principal Co-ordinator India
Chapter of American Concrete Institute

About American Concrete Institute

Initially formed as 'National Association of Cement Users' in 1904, it was renamed as 'ACI' nine years later. ACI is a leading authority and resource worldwide for the development and distribution of consensus-based standards, technical resources, educational and training programs, certification programs, and proven expertise for individuals and organizations involved in concrete design, construction and materials who share a commitment to pursuing the best use of concrete.

The Institution functions to improve the 'Design, Construction, Manufacture, and use of Concrete Products and Structures with the motto of *Progress through knowledge*.

With 98 actively working Chapters and about 20,000 direct members spread across 112 nations all over the world, ACI has attained the stature of an international organization and is acclaimed as a *Treasure Trove on Concrete*. It offers more than 500 technical documents related to concrete and concrete technology and regular up gradation on the subject. These publications are unique and exclusive. With its Headquarters at Farmington Hills, Michigan, USA, it is encouraging engineering education, scientific investigation, and research by organizing the efforts of its members on a non-profit public service basis, in gathering, correlating and disseminating information.

Even before there was ACI, Indian Professionals have exchanged information and disseminated knowledge about concrete technology with the USA from the early days of the 20th century. The India Chapter, established on 26th December, 1979, has today an All India membership of over 2000 individual and organizational members.

Through its continued and tireless services in organizing seminars, workshops, symposia, technical meetings with professional bodies, special lectures by experts on selected topics and site visits, the Chapter has been bestowed the several Chapter Awards from ACI, USA for successive years. It was also awarded the 'Outstanding International Activity' status in 1984 and 'Excellent Chapter Award' in 2000 and up to 2021.

The Chapter has a rich technical library for professionals and research scholars; conducts certification course for *Construction Supervisors* and publishes quality journal and special technical publications to provide up-to-date information on concrete technology. Previously, it has held annual competition for excellence in concrete through tests of concrete cubes, given away Annual Awards to outstanding concrete structures and held interactive meetings with BIS for updating of codes. It is always striving to improve the practice of concrete technology and to take it to new heights in the country.

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COMPETITION GUIDELINES

1. OBJECTIVES

Since beginning of 1940's, most of the High-Rise Structures/Buildings, World Over, used to be constructed in Structural Steel Framework as the Principal Load Transferring and Load Resisting Systems. Since about 1980's, World Over, the trends are now seen to be adoption of Reinforced Concrete Framework for most of the High-Rise Buildings, Tall Buildings, and even Super-tall Buildings. In the case of Structural Steel Framed Constructions, besides the structural stability & sustainability, Fire Resistance of aspects of structure were well established, for Structural Steel Framework. However, much of Research are ongoing as to various parameters for evolving due and desired endurance for High-Rise Buildings, in Reinforced Concrete Construction, as to their Resistance to effects Fire. As related to the measures for Fire Resistance & Fire endurance to Main Structural Reinforced Concrete Framework, Study and Research is an ongoing process. Needless to mention that there are basic fundamentals for Fire Resistance as related to Structural Design, for R.C.C. framed Structures, like, but not limited to the minimum Grade of Concrete, the use and selection of Coarse Aggregate, the cover to Reinforcement Bars, Detailing of Reinforcements Bars etc. etc., which are matters of importance. The Essay Competition aims at inculcating amongst Students of Civil Engineering, to have perception of some fundamentals, necessary and essential parameters as related Fire Safety of R.C.C. Framed Structures. The Essays are expected to concentrate on these and other related aspects, as related to "Structural audit of Civil Engineering Structures: An overview".

2. THE COMPETITION

The Competition encourages the adoption of innovation. The contestant's knowledge and depth of understanding about the issues being addressed will be demonstrated by the quality of their essays. One goal of the contest is to encourage contestants to develop their own perspective on important issues. This perspective should be reflected in their analysis of a complex issue and presentation of clear, concise arguments to support their point of view.

3. ELIGIBILITY

The competition is only for students at any Civil Engineering college / Student's Chapter of ACI in the following categories.

- a. Members of Students Chapter of IC-ACI
- b. Students of Civil Engineering Discipline

4. RULES

- Essays must not be more than 2500 words in length, submitted in English, type-written in black ink and double-spaced, line and paragraph spacing 1, Font should be Times New Roman and of size 12. (No images / word art / clip art, etc. Only text)
- Only one entry per student per year, and each entry must be the work of only one student.
- Essay entries cannot have already been published.
- Entries after the due date will not be considered.
- Any essays found to be plagiarized will be automatically disqualified and the student will be prohibited from entering any future ICACI competitions.
- To be eligible, entries must be works of prose, from 800 to 2500 words in length.
- Winners will be individually notified of the results by email.
- The decisions of the judges are entirely their own and are final