



**ACS**  
**College of Engineering**  
Bangalore

**Department of Civil Engineering**



DEPT OF CIVIL ENGINEERING.

Cordially invites you to the

**Invited Technical Talk**  
On

***3R's in Civil Engineering***

By

**Er. RK Sunil**  
3E- Services, Bangalore

**Date:**13/10/2017 (Friday) **Time:** 10:30 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**

# ACS College of Engineering

Kambipura, Mysuru Road, Bengaluru 560074

## Department of Civil Engineering

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To

DATE: 14/10/2017

The Principal  
ACSCE, Bengaluru  
Respected Sir,


**Subject: Report on the Technical Seminar delivered on 13/10/2017 between 10:45 am and 12:45 pm – reg.**

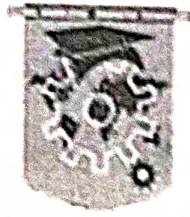
A guest lecture was delivered by Er. Sunil R K, CEO: 3E-Services, Bengaluru, on 13.10.2017 at Seminar Hall 2 between 10:45 AM to 12:45 PM on the topic - 3R's in Construction Engineering. The targeted group of audience was B.Tech. (IIIrd and IVth year) students and all faculties of Civil Engineering Department. He has covered the following sub-topics in his guest lecture and it is well taken by the targeted audience.

- Introduction: 3R's in Construction Engineering- Repair, Retrofitting and Rehabilitation.
- Types and Causes of different types of defects.
- Suitability and selection of a particular method.
- Method of retrofitting.
- New repair trends in Construction Engineering.
- Rehabilitation – methods and application.
- Scope for consultancy in the area of repairs and rehabilitation.

The event was coordinated by Prof. Vishwanath G

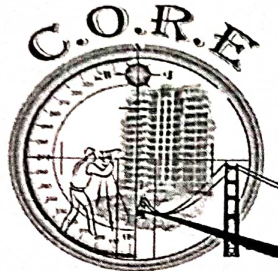
  
Coordinator

  
HOD  
Dept. of Civil Engg.  
ACS College of Engineering  
Bangalore - 560 074.



**ACS**  
**College of Engineering**  
Bangalore

**Department of Civil Engineering**



DEPT OF CIVIL ENGINEERING.

Cordially invites you to the

**Invited Technical Talk**  
On

***Advancement in concrete and construction***

By

**Er. Ganesh Kumar**  
Manager, Chettinad Cements

**Date:** 20<sup>th</sup> April 2018(Friday) **Time:** 10:30 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**



**ACS COLLEGE OF ENGINEERING, BENGALURU-74**

**DEPARTMENT OF CIVIL ENGINEERING**

**CIRCULAR**

We cordially invite all the students and staffs for a Technical Seminar  
scheduled on 20/04/2018 on the topic “**Advancement in concrete and  
construction**”

by

**Er. Ganesh Kumar**

**Manager, Chettinad Cements**

**Venue**

Seminar Hall – II

Department of Civil Engineering

ACS College of Engineering

Bengaluru-74

Timing: 10.00 AM to 12.00 PM

**“WE CORDIALLY INVITE YOU”**

  
**Coordinator**

  
**HOD-CIVIL**

HOD  
Dept. of Civil Engg.  
ACS College of Engineering  
Bangalore - 560 074.



# ACS College of Engineering

Kambipura, Mysuru Road, Bengaluru 560074

## Department of Civil Engineering

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To

DATE: 20-04-2018

The Principal

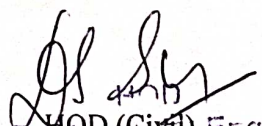
ACSCE, Bengaluru

Respected Sir,

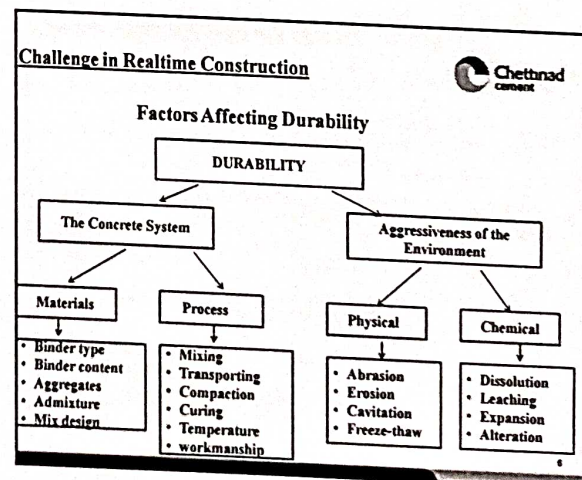
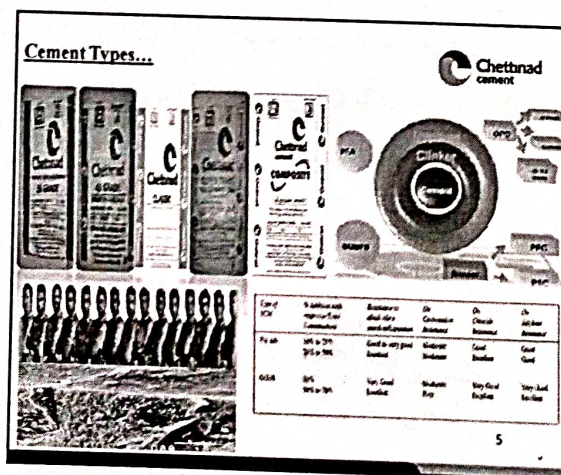
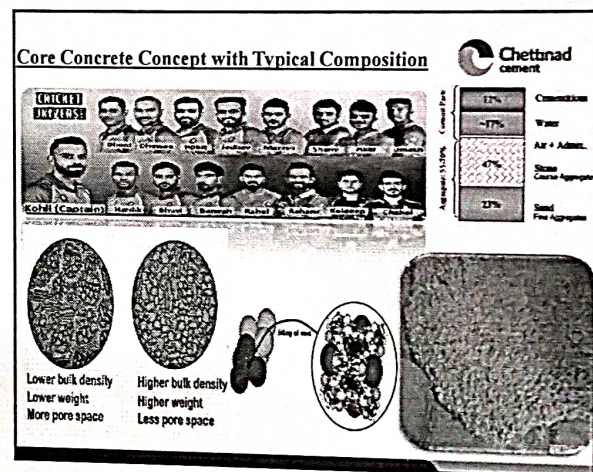
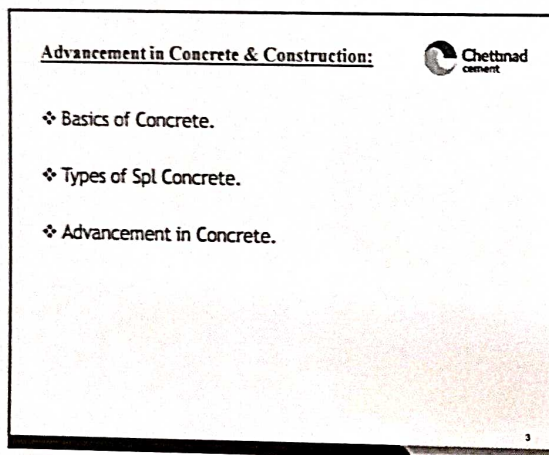
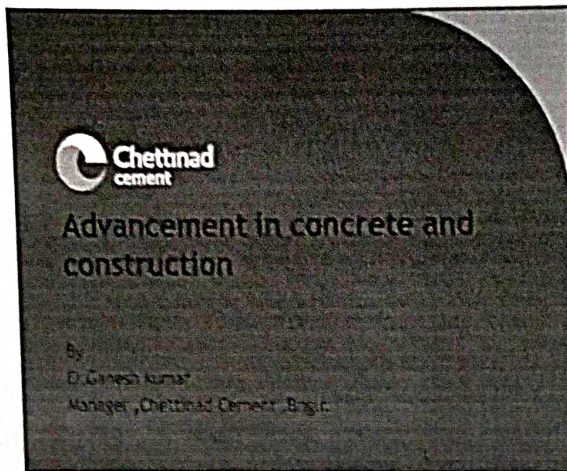
**Subject:** Report on the Technical Lecture delivered on 20-04-2018 between 11:00 am and 1:00 pm – reg.

The Department of Civil Engineering had arranged a technical lecture on “ Advancement in Concrete and construction” on 20-04-2018 between 11:00 am and 1:00 pm in Seminar Hall -2 under the auspices of Civil Engineering Association (CORE) for the benefit of the undergraduate students of Civil Engineering. The technical lecture was delivered by Er. Ganesh Kumar, Manager, Chettinad Cements, Bengaluru. The lecture dealt with the manufacture, properties, tests and applications of concrete. The current applications in the field were brought out nicely with the help of visuals. He stressed on the increased use of Ready Mix Concrete. This lecture was well attended and received by the second third and fourth year students and faculty members of the civil engineering department. Prof. Elangovan was kind enough to be present throughout the lecture and gave the memento to the speaker as a symbol of gratitude and appreciation on behalf of the Management, Principal and Department. This event was coordinated by Mrs. Umadevi R, Assistant Professor of Civil Engineering.

  
Coordinator

  
HOD (Civil) Engg  
ACS College of Engineering  
Bangalore - 560 074.







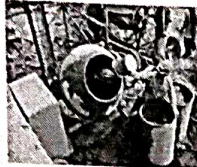
### Acceptance of Concrete :

Making concrete durable : Key factors to check at site



- ✓ Correct selection of RM (Cement, Grading, W/C Ratio, additive)
- ✓ Workability (slump)
- ✓ Time
- ✓ Vibration
- ✓ Cover
- ✓ Curing

Concrete mixing: The operator adding water at its will.



7

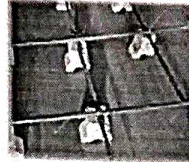
### Acceptance of Concrete :



#### COVER BLOCKS



|                      |                          |
|----------------------|--------------------------|
| 20 / 25 mm           | Slab, Wall               |
| 20 mm                | Slab                     |
| 10 / 15 mm           | Column                   |
| 30 / 40 mm           | Slab, Prestressing       |
| 30 / 35 / 40 / 45 mm | Slab, Wall, Prestressing |



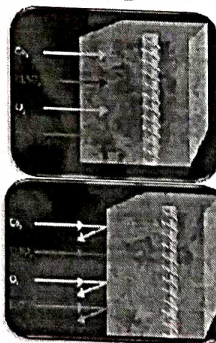
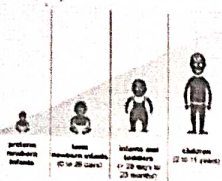
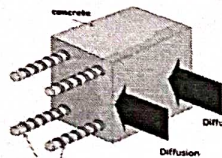
| Exposure Condition | Min Nominal cover (mm) |
|--------------------|------------------------|
| Mild               | 20                     |
| Moderate           | 30                     |
| Severe             | 45                     |
| Very Severe        | 50                     |
| Extreme            | 75                     |

Making concrete durable : Key factors

(IS 456 - 2000)

8

### Snap Shot of Understandings



### Guideline for durability...



The expected economic life of the building under normal occupancy and maintenance conditions is considered to be as below:

- |                                 |           |
|---------------------------------|-----------|
| (i) Monumental buildings        | 100 years |
| (ii) RCC framed construction    | 75 years  |
| (iii) Load bearing construction | 55 years  |
| (iv) Semi permanent structures  | 30 years  |
| (v) Purely temporary structures | 5 years   |

IS 456:2000, Bureau of Structural design

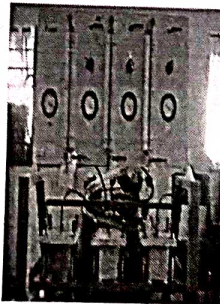
As per CPWD 2018

|   |             |
|---|-------------|
| Temporary structures                                    | 15 years    |
| Medium rise structural parts                            | 10-15 years |
| Lightweight and bridge structures                       | 15-30 years |
| Building structures and other concrete structures       | 30 years    |
| Monumental buildings, 8-10m, 10m engineering structures | 100 years   |

10

10

### Chettinad Cement – Composite concrete Durability test



Water Penetration Test – As per DIN 1048 standard

11

### Chettinad Cement – Composite concrete Durability test



Water Penetration Test (WPT) Values of various Concrete with and without Fly ash and Slag

| Concrete Type | OPC-43 | OPC-53 | PPC | PSC | CC |
|---------------|--------|--------|-----|-----|----|
| WPT (mm)      | 11     | 13     | 9   | 7   | 2  |

Curing Period : 14 Days

- |                          |            |
|--------------------------|------------|
| OPC Concrete             | : 13-11mm  |
| PPC/PSC Concrete         | : 7 – 10mm |
| CC Concrete with FA/GGBS | : 0 – 2mm  |



all purpose cement

12



**ACS COLLEGE OF ENGINEERING**

**BENGALURU – 74**

**Feedback form For Seminar on**

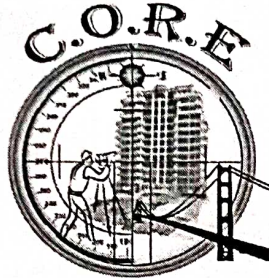
***“Advancement in concrete and construction ”***

| Sl No. | Questionare  | Very good(5) | Good(4) | Satisfactory(3) | Unsatisfactory(2) | Poor(1) |
|--------|--|--------------|---------|-----------------|-------------------|---------|
| 1      | Was the technical talk/seminar interesting?            | ✓            |         |                 |                   |         |
| 2      | Was it helpful for improving your technical knowledge? |              | ✓       |                 |                   |         |
| 3      | Was the topic relevant to your subject area?           | ✓            |         |                 |                   |         |
| 4      | Was the presenter able to reach you?                   | ✓            |         |                 |                   |         |
| 5      | What concept did you grasp from this talk?             | ✓            |         |                 |                   |         |
| 6      | Comment  |              | ✓       |                 |                   |         |



**ACS**  
**College of Engineering**  
Bangalore

**Department of Civil Engineering**



DEPT OF CIVIL ENGINEERING.

Cordially invites you to the

**Invited Technical Talk**

On

***Analysis of structural system by element approach method***

By

**Prof. Mohan K ,**

Dept of Civil Engg,  
EWIT, B'lore

**Date:** 09<sup>th</sup> Feb 2018 (Friday) **Time:** 10:30 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**



# ACS College of Engineering

Kambipura, Mysuru Road, Bengaluru 560074

## Department of Civil Engineering

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To

DATE: 10/02/2018

The Principal

ACSCE, Bengaluru

Respected Sir,

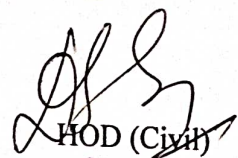
**Subject:** Report on the Technical Seminar delivered on 9/02/2018

A one day technical lecture was delivered by Prof. Mohan.K, East west institute of technology, Bangalore on topic **Analysis of structural system by element approach method**. The audience were 4th , 6th , 8th sem students.

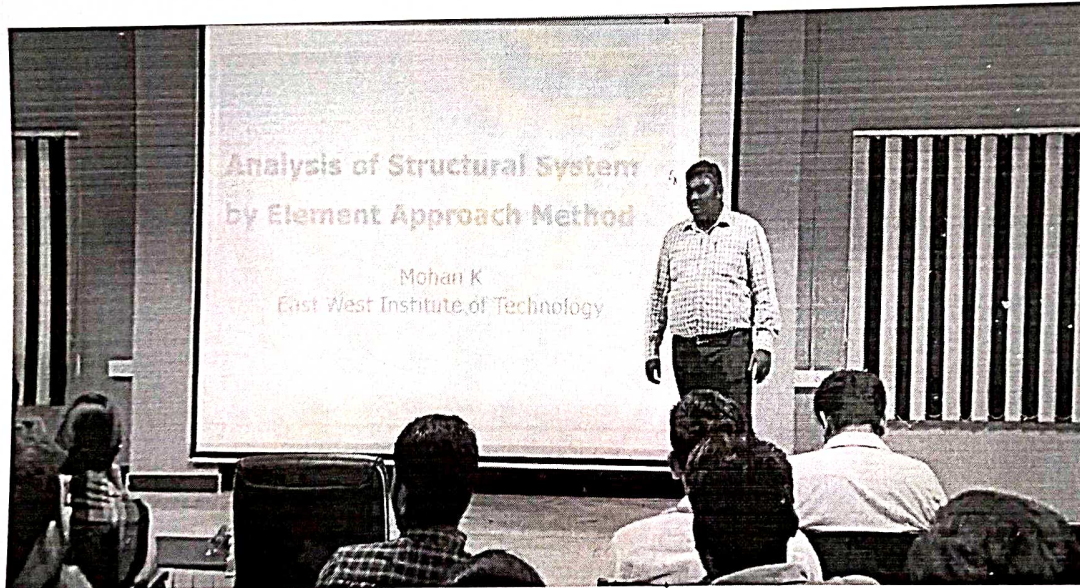
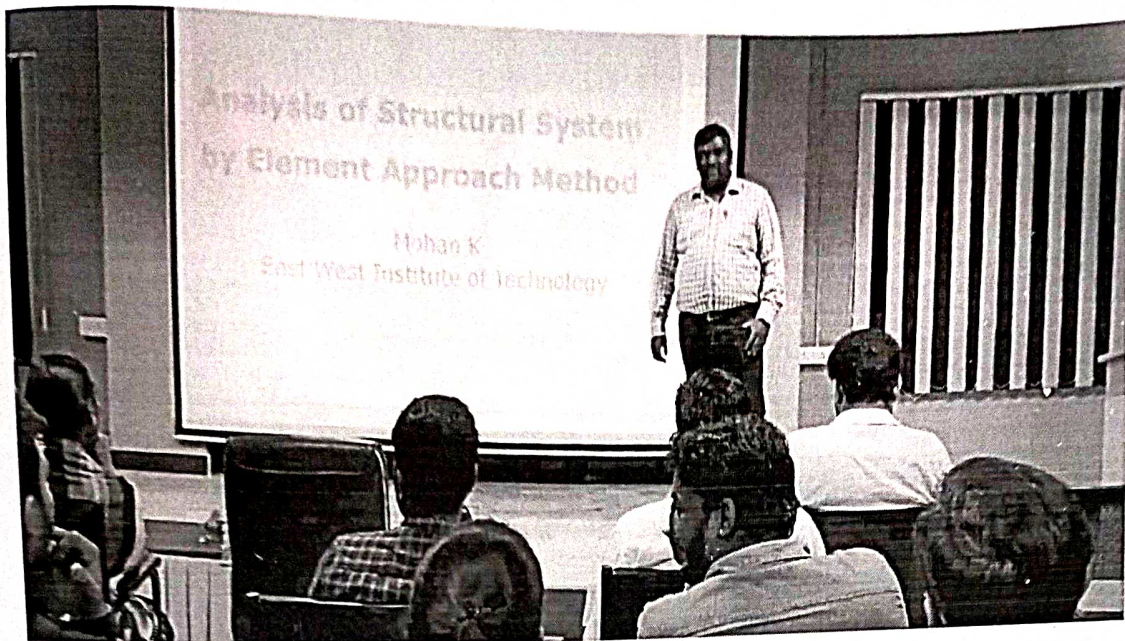
This focused on most commonly used approaches to formulate element matrices such as direct approach, variational approach, energy approach and weighted residual approach.

The event was coordinated by Prof. Umadevi R

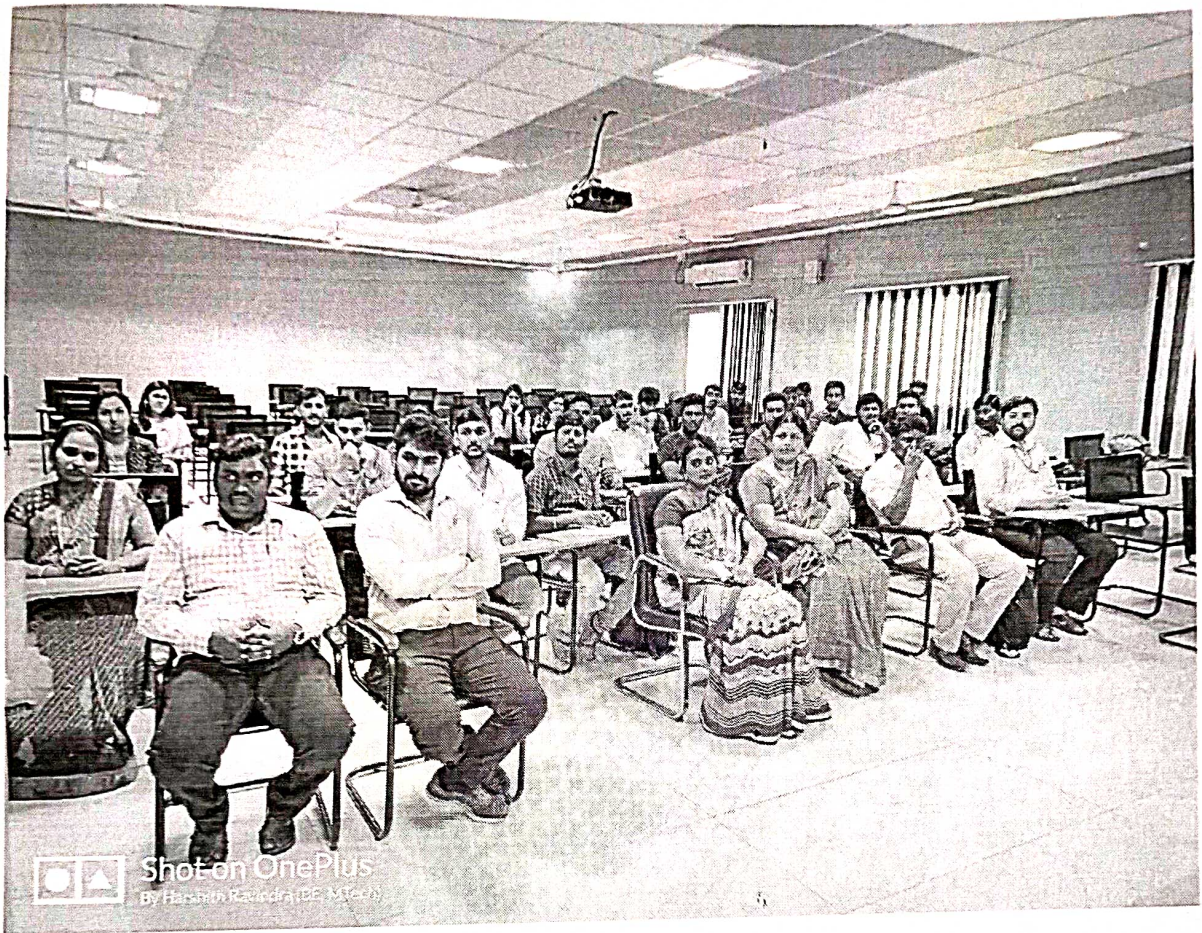
  
Coordinator

  
HOD (Civil)  
HOD  
Dept. of Civil Engg.  
ACS College of Engineering  
Bangalore - 560 074.











# ACS COLLEGE OF ENGINEERING

BENGALURU – 74

Feedback form For Seminar on

*“Analysis of Structural System by Element Approach Method”*

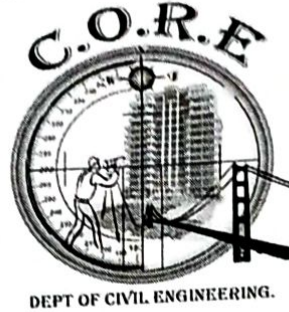
| Sl No. | Questionare  | Very good(5) | Good(4) | Satisfactory(3) | Unsatisfactory(2) | Poor(1) |
|--------|--|--------------|---------|-----------------|-------------------|---------|
| 1      | Was the technical talk/seminar interesting?            | ✓            |         |                 |                   |         |
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| 3      | Was the topic relevant to your subject area?           | ✓            |         |                 |                   |         |
| 4      | Was the presenter able to reach you?                   |              | ✓       |                 |                   |         |
| 5      | What concept did you grasp from this talk?             | ✓            |         |                 |                   |         |
| 6      | Comment  |              | ✓       |                 |                   |         |





**ACS**  
College of Engineering  
Bangalore

**Department of Civil Engineering**



Cordially invites you to the

**Invited Technical Talk**  
On

***Application of Analysis and Design Software***  
By

**Bharathkumar BV**

7 craft groups, Bengaluru

**Date:** 08-11-2017 (Wednesday)

**Time:** 10:00 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**

# ACS College of Engineering

Kambipura, Mysuru Road, Bengaluru 560074

## Department of Civil Engineering

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To

DATE: 09/11/2017

The Principal

ACSCE, Bengaluru

Respected Sir,

**Subject: Report on the One day workshop delivered on 08/11/2017 between 10:45 am and 12:45 pm – reg.**

A guest lecture was delivered by **Bharathkumar BV**, on 08/11/2017 at Seminar Hall 2 between 10:45 AM to 12:45 PM on the topic - Application of Analysis and Design Software. The targeted group of audience was all students and faculties of Civil Engineering Department.

The advantage of Software analysis and design was focused and conveyed that it includes all activities, which help the transformation of requirement specification into implementation. Requirement specifications specify all functional and non-functional expectations from the software. These requirement specifications come in the shape of human readable and understandable documents, to which a computer has nothing to do.

It was made clear that Software analysis and design is the intermediate stage, which helps human-readable requirements to be transformed into actual code.

The event was coordinated by Prof. Tanuja MR.

Coordinator

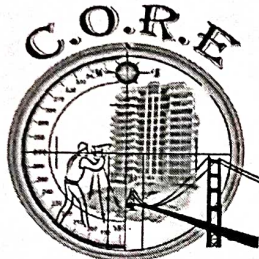
HOD (Civil)  
HOD

Dept. of Civil Engg.  
ACS College of Engineering  
Bangalore - 560 074.



**ACS**  
**College of Engineering**  
Bangalore

**Department of Civil Engineering**



DEPT OF CIVIL ENGINEERING.

Cordially invites you to the

**Invited Technical Talk**  
On

***“Career Orientation on Civil Software’s”***  
By

**Mr. Bikram Rana<sup>(1)</sup> & Mr. Mohan Praveen<sup>(2)</sup>**

(1) Business Development Manager, Cyber Metric Services Pvt. Ltd  
(2) Trainer

**Date:** 26<sup>th</sup> March 2018 (Monday)

**Time:** 11.45 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**



# REPORT ON TECHNICAL SEMINAR

DEPARTMENT OF CIVIL ENGINEERING

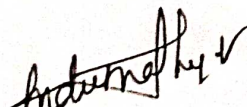
**“Career Orientation on Civil  
Softwares”**

**Mr. Bikram Rana  
Business Development Manager**

Cyber Metric Services (I) Pvt. Ltd.

&

**Mr. Mohan Praveen  
Trainer**

  
Coordinators

Mrs. Indumathy. V

  
HOD-CIVIL

HOD  
Dr. D. L. Venkatesh Babu  
Dept. of Civil Engg.  
ACS College of Engineering  
Bangalore - 560 074.





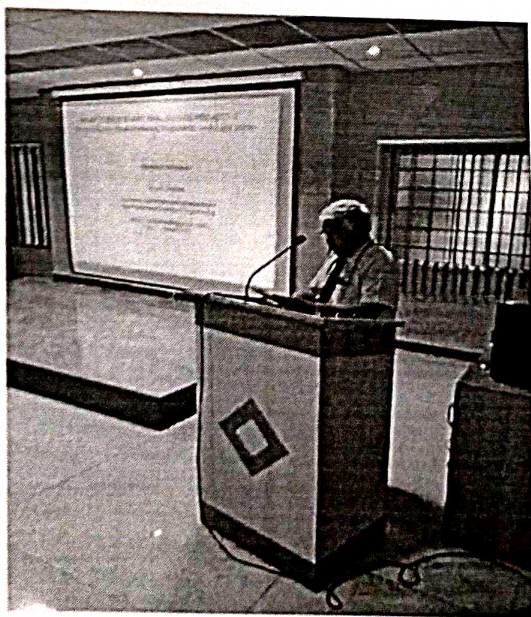
**ACS COLLEGE OF ENGINEERING, BENGALURU**  
Kambipura, Mysore Road, Bengaluru – 74  
**DEPARTMENT OF CIVIL ENGINEERING**

**REPORT OF TECHNICAL SEMINAR**  
**BY Mr. Bikram Rana and Mr. Mohan Praveen**

**INTRODUCTION**

Department of Civil Engineering organized a Technical Seminar on March 26<sup>th</sup>, 2018, at 11.45am to 12.45pm at Seminar Hall, on the topic “Career Orientation on Civil Softwares”. The Tech – talk was delivered by Mr. Bikram Rana, Business Development Manager, Cyber Metric Services (I) Pvt. Ltd. This event was coordinated by Indumathy V, Assistant professor, Civil engineering Dept. On this event all the UG 2<sup>nd</sup> and 3<sup>rd</sup> year students were invited to participate in the Technical Seminar.

This event started at 11.45 am by welcoming the chief guest by Head of Civil Department Dr.D.L.VenkateshBabu, followed by Technical Seminar from Chief Guest Mr. Bikram Rana and Mr. Mohan Praveen and ended up with conclusions of the talk.



**Fig: HOD-CIVIL Introducing the Chief Guest**



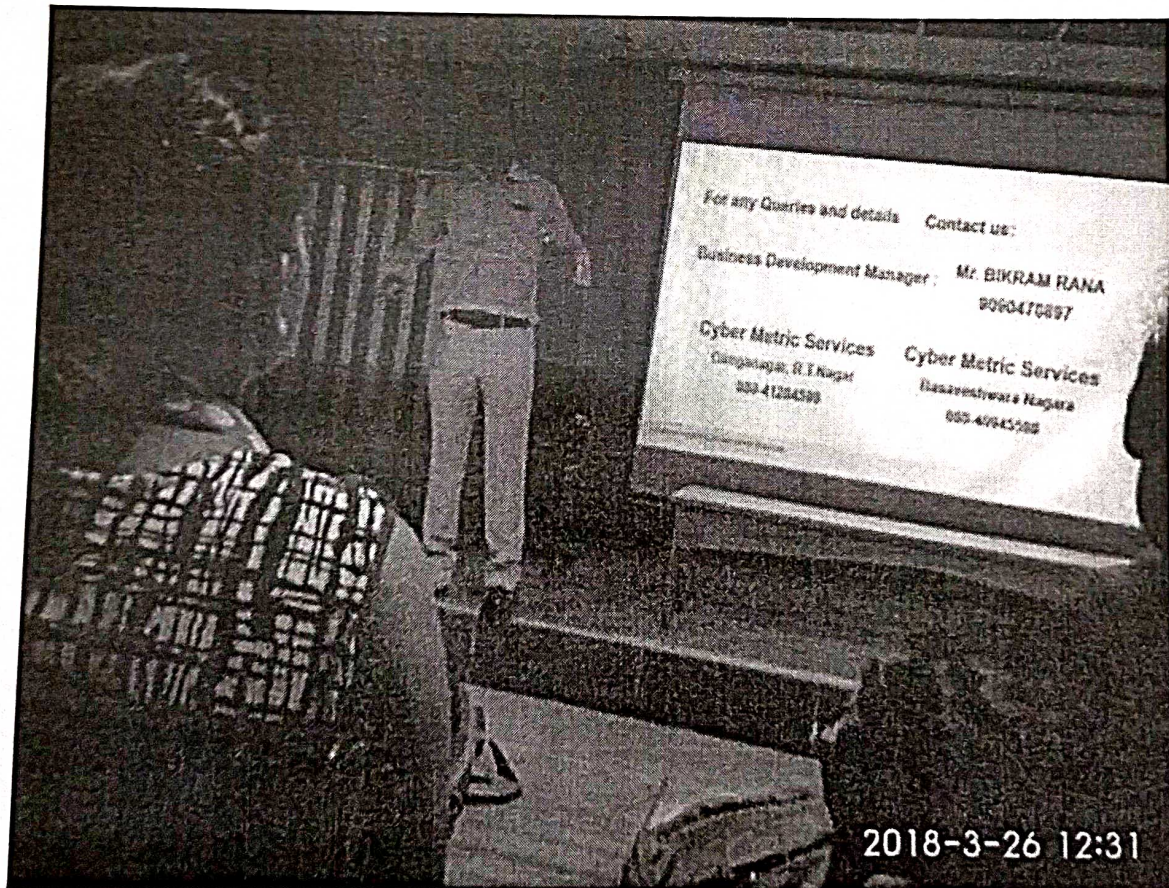


**ACS COLLEGE OF ENGINEERING, BENGALURU**  
Kambipura, Mysore Road, Bengaluru – 74  
**DEPARTMENT OF CIVIL ENGINEERING**

**SUMMARY:**

The technical seminar was on the topic “Career Orientation on Civil Softwares”

A brief talk on CAD tools like Revit, 3ds Max and AutoCAD and their usage in Civil engineering Industry was given. Introduction to BIM concept, Revit Architecture, Introduction to 3ds MAX was briefed and also made a promotional activity on their training centre. A real time scenario's of Real estate Project was visualized and Role of Civil & Engineers was introduced with some quality real time case studies along with software application was focused.



**Fig: Technical Seminar By Mr. Bikram Rana**



**ACS COLLEGE OF ENGINEERING**

**BENGALURU – 74**

**Feedback form For International Seminar on  
“Career Orientation on civil Softwares”**

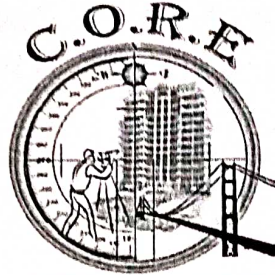
| SlNo. | Questionare  | Very good(5) | Good(4) | Satisfactory(3) | Unsatisfactory(2) | Poor(1) |
|-------|--|--------------|---------|-----------------|-------------------|---------|
| 1     | Was the technical talk/seminar interesting?            |              | ✓       |                 |                   |         |
| 2     | Was it helpful for improving your technical knowledge? | ✓            |         |                 |                   |         |
| 3     | Was the topic relevant to your subject area?           |              | ✓       |                 |                   |         |
| 4     | Was the presenter able to reach you?                   | ✓            |         |                 |                   |         |
| 5     | What concept did you grasp from this talk?             | ✓            |         |                 |                   |         |
| 6     | Comment  | ✓            |         |                 |                   |         |





**ACS**  
**College of Engineering**  
Bangalore

**Department of Civil Engineering**



DEPT OF CIVIL ENGINEERING.

Cordially invites you to the

**Invited Technical Talk**  
On

*Design of bridges*

By

**Er. Nagaraj VK**

**Date:** 09<sup>th</sup> April 2018 (Monday) **Time:** 10:30 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**

# ACS College of Engineering

Kambipura, Mysuru Road, Bengaluru 560074

## Department of Civil Engineering

---

To

DATE: 09-04-2018

The Principal


ACSCE, Bengaluru

Respected Sir,

**Subject:** Report on the Technical Lecture delivered on 09-04-2018 between 1:45 am and 2:45 pm – reg.

The Department of Civil Engineering had arranged a technical lecture on “Design of bridges” on 09-04-2018 between 1:45 am and 2:45 pm in Seminar Hall -2 under the auspices of Civil Engineering Association (CORE) for the benefit of the undergraduate students of Civil Engineering. The technical lecture was delivered by Er. Nagaraj VK, Enstructura, Bengaluru. The lecture dealt with the Design and Detailing of Bridges. The current Design Software applications in the field were brought out nicely with the help of visuals. He stressed on the use of Codal provision's. This lecture was well attended and received by the third and fourth year students and faculty members of the civil engineering department. Our Beloved Vice Principal was kind enough to be present throughout the lecture and gave the memento to the speaker as a symbol of gratitude and appreciation on behalf of the Management, Principal and Department. This event was coordinated by Mrs. Pranathi B Reddy, Assistant Professor of Civil Engineering.

  
Coordinator

  
HOD - Civil  
Dept. of Civil Engg.  
ACS College of Engineering  
Bengaluru - 560 074.

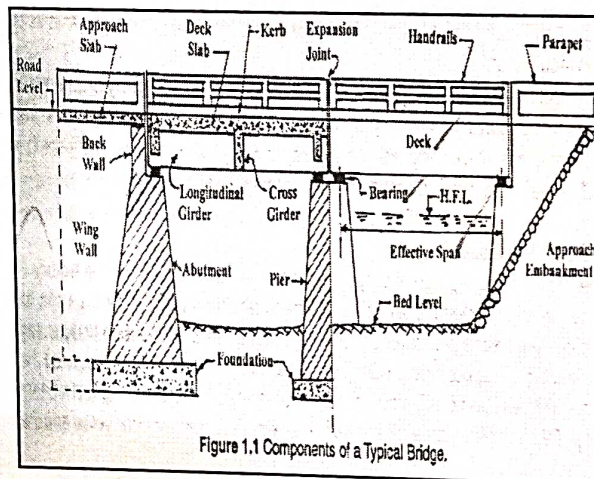


## Design of Bridges

### Purpose of bridge IRC:5-1998 (sec-I)-cls101)

- A bridge is a structure providing passage over an obstacle without closing the way beneath.
- The required passage may be for a road, a railway, pedestrians, a canal or a pipeline.
- The obstacle to be crossed may be a river, a road, railway or a valley.

## Component of Bridge Structures



### 1. Classification of Bridges (According to form (or) type of superstructures)

- Slab bridge
- Beam bridge
- Truss bridge
- Arch bridge
- Cable stayed (or) suspended bridge

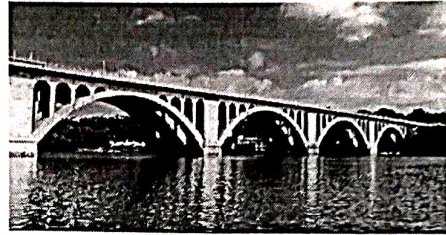
### 2. Classification of bridges (According to material of construction of superstructure)

- Timber bridge
- Concrete bridge
- Stone bridge
- R.C.C bridge
- Steel bridge
- P.C.C bridge
- Composite bridge
- Aluminum bridge

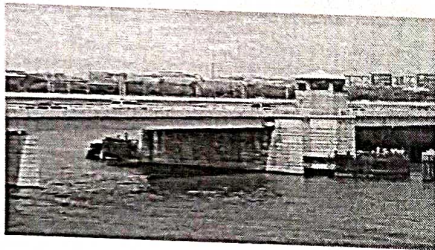
Stone masonry arch bridge



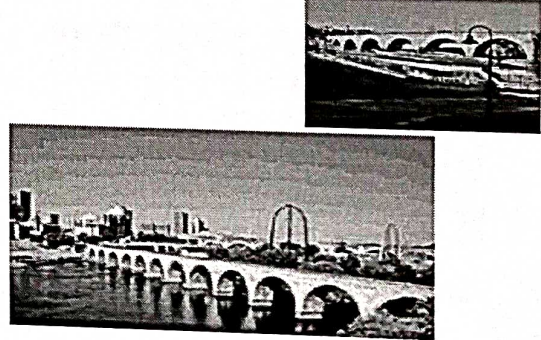
R.C.C Arch bridge



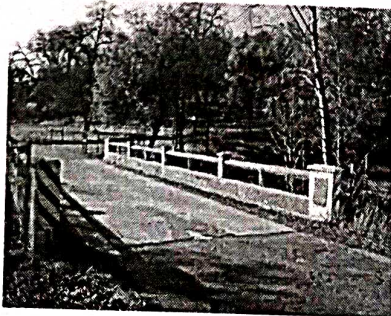
Slab and T beam Continuous span bridge



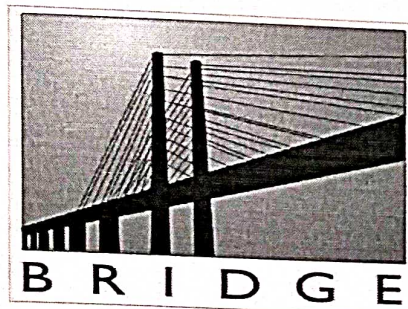
ARCH BRIDGE



R.C.C Slab culvert



Cable stayed bridge





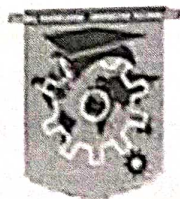
# ACS COLLEGE OF ENGINEERING

## BENGALURU – 74

### Feedback form For Seminar on

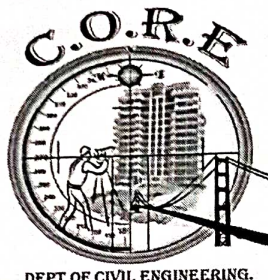
### *“Design of bridges ”*

| Sl No. | Questionare  | Very good(5) | Good(4) | Satisfactory(3) | Unsatisfactory(2) | Poor(1) |
|--------|--|--------------|---------|-----------------|-------------------|---------|
| 1      | Was the technical talk/seminar interesting?            |              | ✓       |                 |                   |         |
| 2      | Was it helpful for improving your technical knowledge? |              |         | ✓               |                   |         |
| 3      | Was the topic relevant to your subject area?           |              | ✓       |                 |                   |         |
| 4      | Was the presenter able to reach you?                   |              | ✓       |                 |                   |         |
| 5      | What concept did you grasp from this talk?             |              | ✓       |                 |                   |         |
| 6      | Comment  |              | ✓       |                 |                   |         |



**ACS**  
**College of Engineering**  
Bangalore

**Department of Civil Engineering**



Cordially invites you to the

**Invited Technical Talk**  
On

***“Industrial Requirements on Structural Engineering”***  
By

**Mr. Syed Faizuddin**

Proprietor & Principal Engineer – Structures, Civilsoft

**Date:** 6<sup>th</sup> March 2018 (Tuesday)

**Time:** 11.00 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**



# **REPORT ON TECHNICAL SEMINAR**

DEPARTMENT OF CIVIL ENGINEERING

**“Industrial Requirements on  
Structural Engineering”**

**Mr. Syed Faizuddin  
BE, M.Tech**

**Proprietor & Principal Engineer – Structures, Civilsoft**

**Coordinators**

*N/Sastry*  
**Mr. Nikhil S Sastry**

*Dr. D. L Venkatesh Babu*  
**HOD-CIVIL**

**Dr. D. L Venkatesh Babu  
HOD**

**Dept. of Civil Engg.  
ACS College of Engineering  
Bangalore - 560 074.**





**ACS COLLEGE OF ENGINEERING, BENGALURU**  
Kambipura, Mysore Road, Bengaluru – 74  
**DEPARTMENT OF CIVIL ENGINEERING**

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**REPORT OF TECHNICAL SEMINAR BY Mr. Syed Faizuddin**

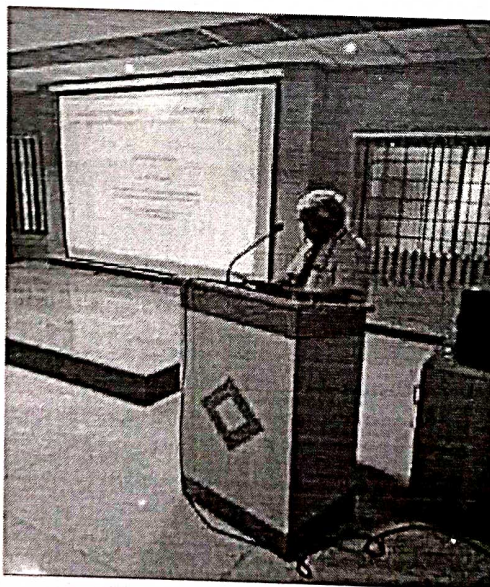
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**INTRODUCTION**

Department of Civil Engineering organized a Technical Seminar on March 6<sup>th</sup>, 2018, at 11.00 am at Seminar Hall, on the topic “Industrial Requirements on Structural Engineering”. The Tech – talk was delivered by Mr. Syed Faizuddin Proprietor & Principal Engineer – Structures, Civilsoft. This event was coordinated by Head of Civil Department Dr.D.L.Venkatesh Babu.

On this event all the Professors, Associate Professors and Assistant Professors along with 8<sup>th</sup>, 6<sup>th</sup> Semester UG and M.Tech 2<sup>nd</sup> and 4<sup>th</sup> semester students were invited to participate in the Technical Seminar.

This event started at 11.00 am by welcoming the chief guest by Head of Civil Department Dr.D.L.Venkatesh Babu, followed by Technical Seminar from Chief Guest Mr. Syed Faizuddin and ended up with conclusions of the talk.



**Fig: HOD-CIVIL Introducing the Chief Guest**





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**DEPARTMENT OF CIVIL ENGINEERING**

**SUMMARY:**

The technical seminar was on the topic "Industrial Requirements on Structural Engineering". A clear understanding was given by differentiating with academic and professional technical aspects. Initial steps in construction activity, detailing in Auto CAD and an understanding of how the constructions have to be made with respect to Building codes, norms and Environmental norms was briefed. A real time scenario's of Real estate Project was visualized and Role of Civil & Engineers was introduced with some quality real time case studies.



**Fig: Technical Seminar By Mr. Syed Faizuddin**

*SS Sy*  
*HOD (Civ)*



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**BENGALURU – 74**

**Feedback form For Seminar on**

**“Industrial Requirements on Structural Engineering”**

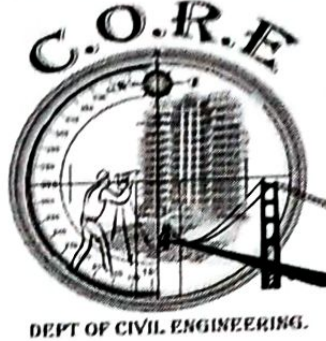
| Sl No. | Questionare  | Very good(5) | Good(4) | Satisfactory(3) | Unsatisfactory(2) | Poor(1) |
|--------|--|--------------|---------|-----------------|-------------------|---------|
| 1      | Was the technical talk/seminar interesting?            | ✓            |         |                 |                   |         |
| 2      | Was it helpful for improving your technical knowledge? | ✓            |         |                 |                   |         |
| 3      | Was the topic relevant to your subject area?           | ✓            |         |                 |                   |         |
| 4      | Was the presenter able to reach you?                   | ✓            |         |                 |                   |         |
| 5      | What concept did you grasp from this talk?             |              | ✓       |                 |                   |         |
| 6      | Comment  |              |         |                 |                   |         |





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Bangalore

**Department of Civil Engineering**



Cordially invites you to the

**Invited Technical Talk**  
On

***Real Estate Project – An Overview For Government Clearance***

By

**Dr.D.C.Sharma**

Environmental Engineer, RRG, Bengaluru

**Date:** 23th Oct 2017 (Monday)

**Time:** 10:00 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**

# **REPORT ON TECHNICAL SEMINAR**

**DEPARTMENT OF CIVIL ENGINEERING**

**“ REAL ESTATE PROJECT – AN OVERVIEW  
FOR GOVERNMENT CLEARANCE”**

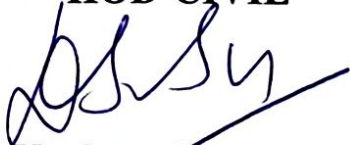
**DR. D. C. SHARMA**  
**Professor, RRGIT,**  
**Bengaluru**

**Coordinators**

  
**Prof. Gayathri G**

  
**Prof. Shruthi S Kannur**

**HOD-CIVIL**

  
**Dr. D. L Venkatesh Babu**  
**HOD**  
**Dept. of Civil Engg.**  
**ACS College of Engineering**  
**Bangalore - 560 074.**



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**DEPARTMENT OF CIVIL ENGINEERING**

**REPORT OF TECHNICAL SEMINAR BY Dr. D. C. Sharma**

**INTRODUCTION**

Department of Civil Engineering had Organized a Technical Seminar on October 23<sup>rd</sup>, 2017, at 11.00 am at Seminar Hall II, Monday on the topic “Real Estate Project – An Overview for Government Clearance”. The Tech – talk was delivered by Dr. D. C. Sharma Professor RRGIT Bengaluru. This event was coordinated by Prof. Gayathri G and Prof. Shruthi S Kannur.

On this event all the Professors, Associate Professors and Assistant Professors along with 7<sup>th</sup> semester and 5<sup>th</sup> Semester Engineering Students were invited to participate in the Technical Seminar.

This event started at 11.00 am with an invocation song, followed by welcome of the chief guest by Head of Civil Department Dr.D.L.Venkatesh Babu , the Technical Seminar by the Chief Guest Dr. D. C. Sharma and ended up with Vote of thanks by Prof. Shruthi S. Kannur.



**Fig: HOD-CIVIL Introducing the Chief Guest**



# ACS COLLEGE OF ENGINEERING, BENGALURU

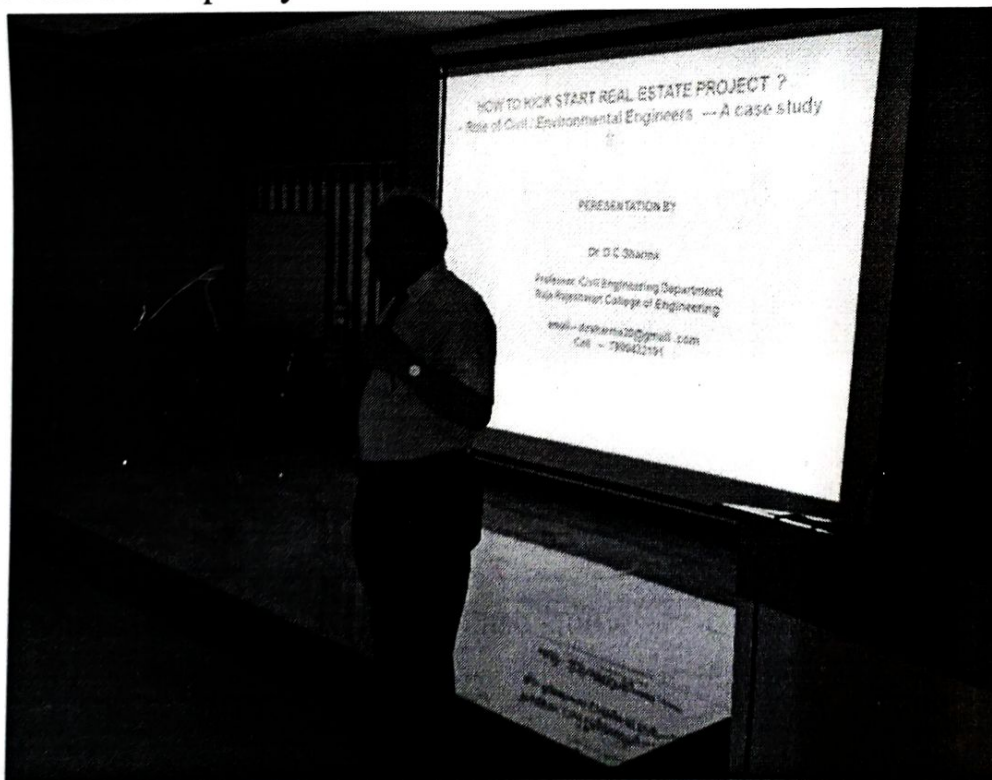
Kambipura, Mysore Road, Bengaluru – 74

## DEPARTMENT OF CIVIL ENGINEERING

### SUMMARY:

The technical seminar was on the topic “Real Estate Project – An Overview for Government Clearance”. A clear understanding was made on the concepts of Government clearance with respect to the Real Estate Project. An understanding was made so as to how the constructions have to be made with respect Building norms and Environmental norms. Many of the concepts were discussed on Land Areas, Treatment Flow Charts, New Technologies on Treatment, Garbage Management Plans, Greenbelt Layout and many more.

A complete understanding was made on the entire Environmental assessment for pre Project/Construction and Post Construction/Project with respect to technical specifications and budgetary. A real time scenarios of Reat estate Project was visualized and Role of Civil & Environmental Engineers was introduced with some quality real time case studies.



**Fig: Technical Seminar By Dr. D. C. Sharma**



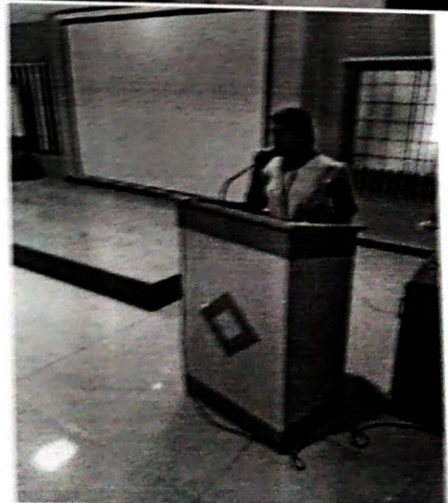
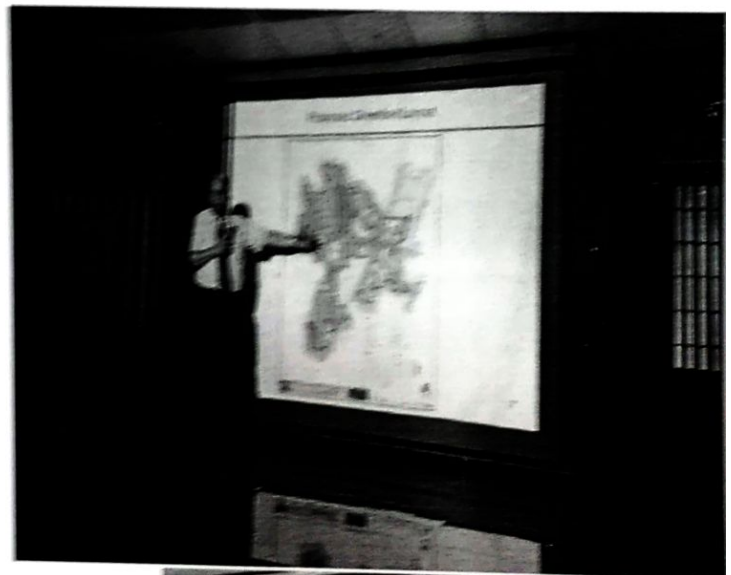


# ACS COLLEGE OF ENGINEERING, BENGALURU

Kambipura, Mysore Road, Bengaluru - 74

## DEPARTMENT OF CIVIL ENGINEERING

### TESTIMONIALS





**ACS**  
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**Department of Civil Engineering**



DEPT OF CIVIL ENGINEERING.

Cordially invites you to the

**National Seminar**  
On

***Stability of Structures***

By

|                           |                          |
|---------------------------|--------------------------|
| <b>Dr. Beulah</b>         | <b>Prof. Abdul Razak</b> |
| Dept. of Civil Engg       | Dept. of Civil Engg      |
| Christ University, B'lore | JSSATE, B'lore           |

**Date:** 09<sup>th</sup> Jan 2018 (Tuesday) **Time:** 10:30 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**



# ACS College of Engineering

Kambipura, Mysuru Road, Bengaluru 560074

Department of Civil Engineering

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To

DATE: 10/01/2018

The Principal

ACSCE, Bengaluru

Respected Sir,

**Subject: Report on the Technical Seminar delivered on 09/01/2018 at 10:00AM**


A technical lecture was delivered by Dr. Beulah, Dept. of Civil Engg, Christ University, Prof. Abdul Razak, Dept of Civil Engg, JSSATE on topic **Stability of Structures**.

The targeted group of audience was all students and faculties of Civil Engineering Department.

A crucial element of structural and continuum mechanics, stability theory has limitless applications in civil engineering. This technical talk presented a comprehensive exposition of the principles and applications of stability analysis.

The event was coordinated by Prof. Kavitha S

  
Coordinator

  
HOD(Civil)  
HOD  
Dept. of Civil Engg.  
ACS College of Engineering  
Bangalore - 560 074

## Introduction to Structural Stability

### STABILITY OF STRUCTURES

Prof. Abdul Razak  
Dept of Civil Engg  
JSSATE

## Chapter 1. Introduction to Structural Stability

### OUTLINE

- › Definition of stability
- › Types of instability
- › Methods of stability analyses
- › Examples – small deflection analyses
- › Examples – large deflection analyses
- › Examples – imperfect systems
- › Design of steel structures

## METHODS OF STABILITY ANALYSES

- › Bifurcation approach – consists of writing the equation of equilibrium and solving it to determine the onset of buckling.
- › Energy approach – consists of writing the equation expressing the complete potential energy of the system. Analyzing this total potential energy to establish equilibrium and examine stability of the equilibrium state.
- › Dynamic approach – consists of writing the equation of dynamic equilibrium of the system. Solving the equation to determine the natural frequency ( $\omega$ ) of the system. Instability corresponds to the reduction of  $\omega$  to zero.

## STABILITY ANALYSES

- › Each method has its advantages and disadvantages. In fact, you can use different methods to answer different questions
- › The bifurcation approach is appropriate for determining the critical buckling load for a (perfect) system subjected to loads.
  - The deformations are usually assumed to be small.
  - The system must not have any imperfections.
  - It cannot provide any information regarding the post-buckling load-deformation path.
- › The energy approach is the best when establishing the equilibrium equation and examining its stability
  - The deformations can be small or large.
  - The system can have imperfections.
  - It provides information regarding the post-buckling path if large deformations are assumed
  - The major limitation is that it requires the assumption of the deformation state, and it should include all possible degrees of freedom.

## STABILITY ANALYSIS

- › The dynamic method is very powerful, but we will not use it in this class at all.
- Remember, it though when you take the course in dynamics or earthquake engineering
- In this class, you will learn that the loads acting on a structure change its stiffness. This is significant – you have not seen it before.



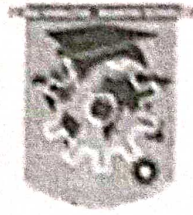
$$M_s = \frac{4EI}{L} \theta_s \quad M_f = \frac{2EI}{L} \theta_f$$

- › What happens when an axial load is acting on the beam.
  - The stiffness will no longer remain  $4EI/L$  and  $2EI/L$ .
  - Instead, it will decrease. The reduced stiffness will reduce the natural frequency and period elongation.
  - You will see these in your dynamics and earthquake engineering class.

## STABILITY ANALYSIS

- › **FOR ANY KIND OF BUCKLING OR STABILITY ANALYSIS – NEED TO DRAW THE FREE BODY DIAGRAM OF THE DEFORMED STRUCTURE.**
- › **WRITE THE EQUATION OF STATIC EQUILIBRIUM IN THE DEFORMED STATE**
- › **WRITE THE ENERGY EQUATION IN THE DEFORMED STATE TOO.**
- › **THIS IS CENTRAL TO THE TOPIC OF STABILITY ANALYSIS**
- › **NO STABILITY ANALYSIS CAN BE PERFORMED IF THE FREE BODY DIAGRAM IS IN THE UNDEFORMED STATE**





**ACS**  
College of Engineering  
Bangalore

Department of Civil Engineering



Cordially invites you to the

Invited Technical Talk  
On

*Sustainable materials in Civil Engineering*

By

**Prof. Shashi Kumar,**  
Dept of Civil Engg.  
JSSATE, B'lore

**Date:** 20<sup>th</sup> Feb 2018 (Tuesday) **Time:** 10:30 AM

**Venue:** Seminar Hall 2 (Second Floor)

**HOD, Faculty Members, Staff and Students**  
**Department of Civil Engineering**

# ACS College of Engineering

Kambipura, Mysuru Road, Bengaluru 560074

## Department of Civil Engineering

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To

DATE: 20-02-2018

The Principal

ACSCE, Bengaluru

Respected Sir,

**Subject:** Report on the Technical Lecture delivered on 20-02-2018 between 11:45 am and 12:45 pm – reg.

The Department of Civil Engineering had arranged a technical lecture on “sustainable materials in civil engineering” on 20-02-2018 between 11:45 am and 12:45 pm in Seminar Hall - 2 under the auspices of Civil Engineering Association (CORE) for the benefit of the undergraduate students of Civil Engineering. The technical lecture was delivered by Mr. Shashikumar, Department of Civil Engineering, JSSATE, Bengaluru. The lecture dealt with the Different materials which is durable and can be used in concrete. The current applications in the field were brought out nicely with the help of visuals. He stressed on the increased use of Sustainable materials in present civil engineering applications. This lecture was well attended and received by second, third and fourth year students and faculty members of the civil engineering department. Our Beloved Principal was kind enough to be present throughout the lecture and gave the memento to the speaker as a symbol of gratitude and appreciation on behalf of the Management and Department. This event was coordinated by Mrs. Pranathi B Reddy, Assistant Professor of Civil Engineering.

Coordinator

HOD (Civil)  
HOD  
Dept. of Civil Engg.  
ACS College of Engineering  
Bangalore - 560 074.



**ACS COLLEGE OF ENGINEERING**

**BENGALURU – 74**

**Feedback form For Seminar on**

***“Sustainable materials in Civil Engineering”***

| Sl No. | Questionare  | Very good(5) | Good(4) | Satisfactory(3) | Unsatisfactory(2) | Poor(1) |
|--------|--|--------------|---------|-----------------|-------------------|---------|
| 1      | Was the technical talk/seminar interesting?            |              | ✓       |                 |                   |         |
| 2      | Was it helpful for improving your technical knowledge? |              | ✓       |                 |                   |         |
| 3      | Was the topic relevant to your subject area?           |              | ✓       |                 |                   |         |
| 4      | Was the presenter able to reach you?                   |              | ✓       |                 |                   |         |
| 5      | What concept did you grasp from this talk?             |              | ✓       |                 |                   |         |
| 6      | Comment  |              | ✓       |                 |                   |         |