

Deepak K. Kamde

Doctoral Research Scholar
Department of Civil Engineering (BTCM division)
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Earned Degrees

Degree	Institution	Year of Passing
Ph.D.	Indian Institute of Technology Madras (IIT Madras), Chennai	Pursuing
M. Tech. (Structural Engineering)	SVNIT, Surat	2014
B. E. (Civil Engineering)	Shri Ramdeobaba College of Engineering and Management, Nagpur	2012
12 th (AISSCE)	Kendriya Vidyalaya Chhindwara	2007
10 TH (AISSE)	Kendriya Vidyalaya Chhindwara	2005

Publications

Journals:

1. Kamde D., Radhakrishna G. Pillai “Effect of surface preparation on the performance of Cement Polymer Composite (CPC) coatings for steel in concrete structures”, **Corrosion Journal, NACE (Final stage of writing)**
2. Kamde D., Kondraivendam B., Desai S. “Service life prediction model for reinforced concrete structures under chloride ingress”, Journal of Advances in Structural Engineering, **Springers Publication**, DOI 10.1007/978-81-322-2187-6_145, Jan 2015
3. Kamde D., Hulagabali A. “Comparative Study for the Design of single span bridge using AASHTO LRFD and Indian Standard Method”, IOSR Journal of Mechanical and Civil Engineering (**IOSR-JMCE**) e-ISSN: 2278-1684, p-ISSN: 2320-334X PP 40-44.

Conferences

International Conferences

1. Kamde D., Radhakrishna G. Pillai, and George Sergi “8 - year long natural exposure and short-term test method to assess the performance of sacrificial anode for cathodic protection of concrete structures.”, **3rd R. N. Raikar Memorial International Conference**, Mumbai, India, December 2018 (**To be communicated**)
2. Kamde D., and Radhakrishna G. Pillai “Effect of Corrosion Level on Bond Performance of Cement Polymer Composite (CPC) Coated Rebar.”, **ICCRRR**, Cape Town, South Africa, November 2018 (**Accepted**)
3. Dyana Joseline, Kamde D., Rengaraju S., and Radhakrishna G. Pillai, “Residual Service Life Estimation and its Importance for Pretensioned Concrete (PTC) Bridges in Coastal Cities.”, **Sixth International Conference on the Durability of Concrete Structures**, University of Leeds, Leeds, United Kingdom

4. Kamde D., and Radhakrishna G. Pillai "Electrochemical response and service life estimation of Reinforced Concrete Structures with FBEC rebars.", **CORSYM 2018**, IIT Madras, NACE, Chennai, March 2018.
5. Kamde D., and Radhakrishna G. Pillai "Short term test methods to evaluated chloride threshold of CPC coated rebars.", **CORCON 2017**, NACE, Mumbai, Sept 2017.
6. Kamde D., and Radhakrishna G. Pillai "Corrosion performance of Fusion Bonded Epoxy Coated steel rebars.", **ICACMS 2017**, RILEM, Chennai, Sept 2017.
7. Kamde D., and Radhakrishna G. Pillai "Effect of surface preparation on the performance of Cement Polymer Composite (CPC) coatings for steel in concrete structures.", **CORROSION 2017**, NACE, New Orleans, USA, March 2017.
8. Kamde D., and Radhakrishna G. Pillai "Effect of surface treatment on the performance of Cement Polymer Composite (CPC) coatings for steel in concrete structures.", **CORCON 2016**, NACE, Delhi, Sept 2016.
9. Kamde D., Kondraivendhan B, and Satish N. D. "Service life Prediction model for reinforced concrete structures under chloride ingress.", 13th biannual **Structural Engineering convention 2014**, Indian Institute of Technology, Delhi, Dec 2014.
10. Kamde D., and Hulagabali A., "Comparative Study for the Design of single span bridge using AASTHO LRFD and Indian Standard Method." International Conference on Advances in Engineering and Technology, Nagpur, Maharashtra, India, 2014.
11. Kamde D., Hulagabali A., and Sharan Basava P, "Three-Dimensional Steady State Finite Difference Flow Model- A Case Study.", International Conference on Emerging Trends in Civil and Mechanical Engineering, Siliguri West Bengal, India, 2013.

Book

1. Kamde D., B. Kondraivendhan, and Desai N. "Service life prediction model for reinforced concrete structures in marine environment.", **LAP Lamberts Academic publication group**, (ISBN 978-3-659-55017-1), June 2014.

Awards and Achievements

- 1) Served as Convener of an international symposium CORSYM 2018
- 2) Received best oral presentation award to present research entitled 'Electrochemical response and Service life estimation of RC structure with FBEC rebars'.
- 3) Selected for a Fully funded internship program by JASSO during December 2017 to January 2018

Professional Memberships

1. NACE International (Student member - 930208)
 - a) Served as Convener for an international symposium on corrosion prevention and control - CORSYM 2018.
 - b) Technical editor of proceedings of CORSYM 2018.
 - c) Active volunteer in organising team of NACE events like CORCON 2015, CORCON 2016, C3S 2016, CORROSION 2017, CORCON 2017.
 - d) I was involved in Technical review of conference papers of CORCON 2016, CORCON 2017, and CORCYM 2018.
 - e) Volunteered for running the technical session and a mini camp for 55 high school students during CORROSION 2017, New Orleans, USA.
 - f) Volunteered for running the technical session during CORCON 2017 held at Mumbai, INDIA during September 2017.
2. Indian Concrete Institute (Life time member – 11316)

3. American Society of Civil Engineers (Student member)
4. American Concrete institute (Student member - 1278127)

Industrial Interaction and Site visit

1. Present work
 - i. Research-oriented project 'Assessment, prevention, and protection of RC structure with coated rebars' funded by Department of Science and Technology.
 - ii. Industry oriented research project 'Evaluation of Sacrificial Anode Cathodic Protection (SACP) systems for reinforced concrete applications' sponsored by Vector Corrosion Technology, Canada.
 - iii. Performance evaluation of commercially available inhibitors on corrosion resistance of steel concrete systems
 - iv. Working in a joint research project with Vector Corrosion Technologies for long term assessment of performance of Reinforced concrete slab with premixed chloride under natural exposure (Mumbai).
2. Past work
 - i. Corrosion assessment and health monitoring of Rashtrapati Bhavan.
 - ii. Estimation of service life of a reinforced concrete bridge with CPC coated rebars, exposed to severe environment in Mumbai, India
 - iii. Corrosion assessment and field testing of IDBI Building for building in Chennai.
 - iv. Involved in a project for repair of reinforced concrete structures using cathodic protection systems.

Certification Programmes

1. Attended 1st global meet on Cathodic Protection during January 23 -24, 2018, organised by NIGIS, held at Delhi, India
2. Attended workshop on Corrosion control in concrete structures and Textile reinforced concrete (International workshop as a part of Rilem 2017 week)
3. Organised and attended 1st workshop on 'Corrosion control in concrete structures (C3S)' during Aug 2016 held at IITM, Chennai, India.
4. Attended Gian course on 'Advanced design of bridge design and construction' during June 2016 held at IITM, Chennai, India.
5. Attended a short-term course on 'Advanced Concrete Technology (ACT)' organised by IITM and secured 'A' grade, held at Chennai during Dec 2015.
6. Attended workshop on 'Recent advances in civil engineering material' organised at SVNIT Surat held at Surat during September 30 – October 02, 2014.
7. Attended International workshop on 'Emerging trends in Earthquake Engineering and structural Dynamics' organised by IIT Delhi held at Delhi during 20-21st December 2014.
8. Attended a workshop on Finite Element Analysis using MATLAB held at SVNIT Surat, India.
9. Participated in A Short-Term Training Program On 'Structural Diagnosis, Repair and Retrofitting of RCC Structures' (Under TEQIP-II) from 24th to 28th June' 2013 held in SVNIT, Surat, India.
10. Attended a workshop on "Introduction to Fundamentals of SAP" held in SVNIT, Surat, India.
11. Attended a workshop on the basics of Staad Pro at RKNEC Nagpur India.

Technical Skill Sets

Software : Life-365, AutoCAD, SAP, Matlab, MS-Office, and visual basics
Operating system : Windows

Internships:

- 45 days (December 1, 2017 to January 15, 2018) fully funded winter internship by JASSO at **Nagaoka University of Technology at Nagaoka, Niigata, JAPAN**.
- 45 days of the Vacation Training with **Gujarat Maritime Board (GMB)** under **Mr. A. K. Mehta** during May – June 2011. I worked on construction Offshore Structures with couple of onshore Structures at **RO RO Terminal, Dahej, Gujarat**. I was involved in execution work of offshore Piling, Deck slab, stone bund construction, and some of onshore construction like three (G+1) commercial building, overhead water tank, and marshalling yard. I had also participated in proof checking of structural designs of some of the structures.
- One-month summer training under Mr. Madhusudan Agrawal during June 2011 for the construction work of G+2 Residential building.

B. E. Project Work

Title Comparison of design of deck slab using is method with or without t girder and lrfd method (academic project)
Guide Prof. P. D. Pachpore

Description

In this project, a bridge deck of various lengths was designed by using Piegaurt's Chart. The bridge was considered as two lanes and was designed as two-way slab. Later, a C programme was developed for the design. Also, the same bridge was designed using LRFD Method. The designed bridge was then modelled in STAAD PRO and subjected to the dynamic earthquake loads. The results with obtained were compared with the results obtained from PWD department, Nagpur. The bridge deck of less than 25 m was found to be safe under dynamic loads. However, the one designed with IS code was failed for the deck length more than 25 m. In addition, the designed provided by PWD, Nagpur was 20% economical then the one designed using LRFD method.

M. Tech. Project:

Topic Service life Prediction Model for RC Structure under chloride ingress.
Guide(s) Prof. S. N. Desai, Dr. B. Kondraivendhan

Description:

In this Project, Service life prediction model was developed by using many mix variables (such as, w/c, cover depth, chloride threshold, rebar diameter, % of replacement with SCMs, etc.). A new simplified mathematical formula was developed with the data available in literature. Later, the same was modelled in Matlab to obtain number of data; to obtain the variation of service life and its component with respect to variables involved. Monte-Carlo simulation was used to obtain number of data in different Exposure condition. Advantage of use of percentage replacement of Fly Ash and Silica Fume on service life of RC structures was also studied.

Experience

Research Experience

- Project Associate in IIT, Madras, Chennai during Sep 23, 2015 to Dec. 31, 2015.

During this time, I was involved in research work related to service life estimation of a bridge with coated rebars.

Academic Experience

- Assistant Professor in RK University Rajkot, Gujarat, June 23, 2014 to September 17, 2015

Academic Responsibilities

- Undertaken courses for UG and PG subjects related to structural Engineering.
- Voluntarily handled administrative posts and responsibilities.
- Modified syllabus for Structural analysis II, Advanced structural Analysis, Repair and Rehabilitation of RC structures at the RK University.
- Guided two under graduate group and one post graduate student for their academic projects

Volunteering Experience

- Volunteered in number of Art of living courses during 2010 - 2011.
- 5 years of Teaching Experience as a part time tutors during 2007 - 2012.

LinkedIn Profile

- <http://in.linkedin.com/pub/deepak-kamde/62/229/7a5>

Extra - Curricular Activities

- Actively participated in various professional bodies activities as organiser of Structural Engineering Convention (SEC) 2012, GANGA (IGC) 2013, CORCON 2015, CORCON 2016, C3S 2016, RILEM ICACMS 2017, CORCON 2017, CORSYM 2018, and other national and international level events.
- Participated in the event 'Construct' (bridge construction) at S.R.K.N.E.C., in Technovision 2011.
- Organized Techno-vision, a national level technical program, conducted annually by the Shri Ramdeobaba College of Engineering and Management, Nagpur, India.
- Head of Design and Layout committee in Colosseum 2011.
- Received 2nd prize in Best Student competition at district level, organised by Rotary Club and ACC CEMENT.
- Participated in National level Jawaharlal Nehru National Science Exhibition in the 2005.
- Participated in High Altitude Trekking Programme held in Himachal Pradesh in the year 2004.
- Successfully completed 'Youth Empowerment and Skills' (YES!+) workshop conducted by the World Alliance for Youth Empowerment (WAYE), Art of Living Foundation.

Personal Details

Date of birth	September 15, 1989
Gender	Male
Language(s) known	English, Hindi, and Marathi
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Interest	Teaching, Travelling, Trekking, Dance, and Music

References

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