

## Bibhuti Bhusan Das

Department of Civil Engineering, National Institute of Technology Karnataka, Surathkal, Mangalore-575025  
91-8050765791 (M), Fax No: +91-824-2474033|  
E-mail: [bibhutibhusan@gmail.com](mailto:bibhutibhusan@gmail.com), [bdas@nit.edu.in](mailto:bdas@nit.edu.in)

---

### EDUCATION

---

#### Doctor of Philosophy, Civil Engineering

Indian Institute of Technology (IIT) Bombay, India

Graduation: 2007

Dissertation: Some Studies on Determination of Pore Characteristics of Concrete

#### Master of Technology, Civil Engineering (Construction Engineering and Management)

Indian Institute of Technology (IIT) Delhi, India

Graduation: May 2004

Thesis: Effect of Age, Curing Period and Strength on Chloride Migration in Concrete

#### Bachelor of Engineering, Civil Engineering

Orissa University of Agriculture and Technology, Orissa, India

Graduation: May 2001

Senior Year Project: Software Solutions for some Civil Engineering Problems

### WORK EXPERIENCE

---

- Assistant Professor, National Institute of Technology Karnataka, Surathkal Since May 2015
- Center Head, NICMAR INDORE Campus, Indore 2014-2015
- Sr. Associate Professor, NICMAR INDORE Campus, Indore 2014-2015
- Center Head, NICMAR Goa Campus, Ponda, Goa 2012-2014
- Sr. Associate Professor, NICMAR Goa Campus, Ponda, Goa 2012-2014
- Associate Professor (I), KIIT Deemed University, Bhubaneswar, India 2011-2012
- Adjunct Faculty, Lawrence Technological University, Michigan, USA 2009-2011
- Post-Doctoral Research Associate, Lawrence Technological University, USA 2009-2011
- Technical Manager, E. I. DuPont India Pvt. Ltd 2008-2009
- Assistant Manager, Central R&D-Cement Business, Grasim Industries 2007-2008
- Research Assistant, Indian Institute of Technology (IIT), Bombay 2004-2007
- Graduate Research Assistant, Indian Institute of Technology (IIT), Delhi 2002-2004

### PUBLICATIONS

---

#### Peer Reviewed Published Journals:

1. Sanjukta Sahoo, **B. B. Das**, S. Mustakim, "Acid, Alkali and Chloride Resistance of Concrete Made up of Low Carbonated Fly Ash", *Communicated to Journal of Materials in Civil Engineering, ASCE*.
2. Sanjukta Sahoo, **B. B. Das**, S. Mustakim, "Mechanical Properties of CO<sub>2</sub> Sequestered Fly Ash Concrete", *Communicated to Construction and Building Materials*.
3. Abhishek Shrivastava, **B. B. Das**, Sachin Batra, "A Step by Step Method for Carrying Out Earned Value Analysis: Case Study of a Road Project", *Journal of Construction Engineering, Technology and Management*, Vol 5 (3), pp. 1-7, 2015.
4. Sanjukta Sahoo, **B. B. Das**, A. K. Rath, B. B. Kar, "Acid, Alkali and Chloride Resistance of High Volume Fly Ash Concrete", *Indian Journal of Science and Technology*, Vol 8 (19), 72266, August 2015.
5. K.M.Godbole, P.H.Sawant, **B.B.Das**, J.R. Dhanuskar, "Prediction of service life of concrete structure from half-cell potentiometer data – validation based on case study", *International Journal of Applied Engineering Research*, Vol. 10, No. 14 (2015), pp 34420-34427.
6. A. Shetti, and **B. B. Das**, "Acid, Alkali and Chloride Resistance of Early Age Cured Silica Fume Concrete", *Advances in Structural Engineering*, Springer India 2015. **A Book Chapter**.
7. Sachin S Patil, Suraj S Barbade, Sujit D Pund, SanjuktaSahoo and **B B Das**, "Properties of Light Weight Aggregate Concrete produced by Pelletization and Sintering Process", *Journal of Advanced Research in Construction and Architectural Engineering*, **Accepted** for Publication.

8. K. M. Godbole, P. H. Sawant, **B. B. Das**, “Corrosion Assessment of Reinforced Steel Bars in Concrete Structures Exposed to Marine Environment - A Bridge Case Study”, *Journal of Advanced Research in Civil and Environmental Engineering*, Vol.1 (2), pp. 1-16, 2015.
9. **B. B. Das**, D. N. Singh, S. P. Pandey, “Influence of Initial Curing Humidity on Ultrasonic Properties and Compressive Strength of Concrete”, *Indian Concrete Journal*, Vol. 88 (2), February 2014, pp. 48-56.
10. **B. B. Das**, and ArkadeepMitra, “Nanomaterials for Construction Engineering-A Review”, *International Journal of Materials, Mechanics and Manufacturing*, Vol. 2, No. 1, February 2014.
11. **B. B. Das**, and ArkadeepMitra, “Some Sustainable Materials for Energy Efficient Building Design”, "Civil/ Construction Engineering" of the *Vol. Set-IX, NANOTECHNOLOGY*, Stadium Press LLC 2013. **A Book Chapter**.
12. **B. B. Das**, and S. K. Rout, “Assessment of Compressive Strength of OPC and PPC Based Concretes Combined by Ultrasonic Pulse Velocity and Rebound Hammer”, *Journal of Construction Engineering, Technology and Management*, Vol.2 (2), Page 1-16, 2012.
13. **B. B. Das**, “Closure to Discussions on Some Studies on the Effect of Carbonation on the Engineering Properties of Concrete”, *Indian Concrete Journal*, Discussion Forum, June 2012 issue.
14. **B. B. Das**, S. Rout, D. N. Singh, S. P. Pandey, “Some Studies on Effect of Carbonation on Engineering Properties of Concrete”. *Indian Concrete Journal*, Vol. 86 (3), March 2012, pp. 7-12.
15. **B. B. Das**, D. N. Singh, and S. P. Pandey, “Rapid Chloride Ion Permeability of OPC and PPC Based Carbonated Concretes”. *Journal of Materials in Civil Engineering, ASCE*, Vol. 24 (5), May 2012, pp. 1-5.
16. **B. B. Das**, and Kondraivendhan.B, “Implication of Pore Size Distribution Parameters on Compressive Strength, Permeability and Hydraulic Diffusivity of Concrete”, *Construction and Building Materials, Elsevier Publications*, Vol. 28 (1), Pages, 382-386, March 2012.
17. **B. B. Das**, D. N. Singh, S. P. Pandey, “Pore-structural Parameters of Concrete, their Inter-Relationship and Correlation to Compressive Strength”. *Journal of Recent Trends in Civil Engineering and Technology*, Vol. 2 (1), 2012, pp. 20-30.
18. **B. B. Das**, and S. P. Pandey, “Studies on Influence of Fineness of Fly Ash on the Carbonation and Electrical Conductivity of Concrete”, *Journal of Materials in Civil Engineering, ASCE*, Vol. 23 (9), Pages 1365-1368. 2011.
19. **B. B. Das**, D. N. Singh and S. P. Pandey, “A Comparative Study for Determining Pore Volume of Concrete”, *Indian Concrete Journal*, Vol. 84 (12), Pages 7-12, 2010.
20. **B. B. Das**, D. N. Singh, S. P. Pandey, “Experimental Revalidation of Certain Durability Design Provisions for Concrete with Reference to Indian Code of Practice”, *Cement WapnoBeton*, Vol. XIII/LXXV, 2008 (1). Pages 9-18.
21. **B. B. Das**, D. N. Singh and S. P. Pandey, “Some Investigations for Establishing Suitability of Watson’s Strength-porosity Model for Concrete”, *Journal of ASTM International (JAI)*, Vol. 5(1), 2008.
22. A. Dalinaidu, **B. B. Das**, D. N. Singh, “Methodology for Rapid Determination of Pozzolanic Activity of Materials”, *Journal of ASTM International (JAI)*, Vol. 4(6), 2007.

## Conferences:

23. A. Shetti, and **B. B. Das**, “Acid, Alkali and Chloride Resistance of Early Age Cured Silica Fume Concrete”, in Structural Engineering Convention 2014, IIT Delhi.
24. S. Haji, A. P. Shetti and **B. B. Das**, “Bridge Management Practices through Life Cycle Cost Analysis”, presented in All India Seminar on Advances in Construction Technology, organized by Institute of Engineers, Odisha State Chapter, Bhubaneswar, February 09-10, 2014.
25. A. P. Shetti, S. Haji and **B. B. Das**, “Application of Risk and Sensitivity Analysis in Life Cycle Cost Assessment”, presented in All India Seminar on Advances in Construction Technology, organized by Institute of Engineers, Odisha State Chapter, Bhubaneswar, February 09-10, 2014.
26. **B. B. Das**, and ArkadeepMitra, “Nanomaterials for Construction Engineering”, Presented in International Conference on Nano Science and Technology (ICNST), held in New Delhi, September 2013.
27. **B. B. Das** and D. N. Singh, “A Comparative Study on the Determination of Porosity of Concrete by Mercury Intrusion Porosimetry and Diffusion Characteristics”, presented in IWMSID, IIT Bhubaneswar, February 2013.
28. R. Sasapu and **B. B. Das**, “A New Dimension and Design of Airport Terminal Building”, presented in 5<sup>th</sup> NCES (National Civil Engineers Symposium) at IIT Bombay, 8<sup>th</sup>-9<sup>th</sup> March 2013.
29. K. Vijay Krishna and **B. B. Das**, “Concepts and Materials Used in Energy Efficient Buildings”, presented in 5<sup>th</sup> NCES (National Civil Engineers Symposium) at IIT Bombay, 8<sup>th</sup>-9<sup>th</sup> March 2013.
30. **B. B. Das**, D. N. Singh, “A Comparative Study on Determining Porosity of Concrete by Mercury Intrusion Porosimetry and Diffusion Characteristics” 2<sup>nd</sup> Workshop on Indian Water Management in 21<sup>st</sup> Century (IWM) & Symposium on Sustainable Infrastructure Development (SID), 7<sup>th</sup>-9<sup>th</sup> February 2013.

31. **B. B. Das**, Arkadeep Mitra, Anuja Agrawal, "A Review on Green Materials for Energy Efficient Building Design", International Conference on Advances in Architecture and Civil Engineering, Bangalore, India, 21-23 June 2012.
32. **B. B. Das**, "Corrosion Initiation to Corrosion Cracking" Participating Speaker at 22<sup>nd</sup> Annual NIST Computer Modelling Workshop, held at NIST Premises, Gaithersburg, Washington DC, July 20-22, 2011.
33. **B. B. Das**, and S. P. Pandey, "Effect of Temperature of Mixing Water on the Mechanical, Microstructure and Ultrasonic Properties of Concrete". 7th International Congress, "Concrete: Construction's Sustainable Option", Dundee, Scotland. July 2008 (paper accepted but not attended).
34. **Bibhuti Das**, "Correlation between Mechanical, Pore structure and Nondestructive Characteristics of Concrete" 4<sup>th</sup> MENDT Conference, December 2007 (paper accepted but not attended).
35. **Das B. B**, Valluri S and Singh D. N, "Determination of Porosity, Pore Size and Pore Distribution of Compacted Soils", First Sri Lankan Geotechnical Society (SLGS) International Conference on Soil and Rock Engineering, Colombo, August 7-11, 2007.

## **INVITED TALKS/PRESENTATIONS**

1. Keynote Speaker, Advanced Construction Technology, Samarth Group of Institutions, Himmatnagar, Gujarat, 2015.
2. Keynote speaker, Structural Engineering Convention 2014, IIT Delhi.
3. "Development of Innovative CFRP Decked Bulb-T Beam Highway Bridge System", Indian Institute of Technology Hyderabad, 12 April 2011. <http://civil.iith.ac.in/seminar.html>
4. "Preventing Falling Concrete from Bridge Decks", National Institute of Technology, Rourkela, 19<sup>th</sup> April 2011.
5. "Corrosion Cracking in Reinforced Concrete Structures", National Institute of Standards and Technology (NIST), Gaithersburg, Maryland, USA, July 2011.
6. "Investigate Causes and Develop methods for Preventing Falling Concrete from Bridge Decks", Goa Engineering College, Farmagudi, Goa, 22<sup>nd</sup> February 2013.

## **COURSES TAUGHT**

### *Post Graduate Level*

#### **(at National Institute of Technology Karnataka)**

1. Construction Planning and Control (Fall 2015)
2. Project Management Software-Primavera (Spring 2016)

#### **(at NICMAR Campus, India)**

1. New Technologies and Materials (Fall 2012, 2014)
2. Construction Practice Workshop (Fall 2012, Spring 2013, Fall 2014)
3. Building Maintenance and Management (Spring 2013)
4. Construction Methods and Technologies (Fall 2013)
5. Project Management Software-Primavera (Spring 2015)
6. Construction Quality Management (Spring 2014, 2015)

#### **(at Lawrence Technological University, USA)**

1. Advance Steel Design (Summer 2010)
2. Finite Element Analysis (Fall 2010)

#### **(at KIIT Deemed University, India)**

1. Advanced Concrete Structures (Spring 2012)
2. Construction Engineering Practices (Spring 2012)
3. Civil Engineering Materials Laboratory (Spring 2012)

### *Graduate Level*

#### **(at KIIT Deemed University)**

1. Transportation Engineering (Spring 2012)
2. Highway Materials Laboratory (Spring 2012)
3. Concrete Technology (Fall 2012)

## **STUDENT GUIDANCE**

### **Doctorate Level (Total 02)**

1. Mr. K. M. Godbole, “Prediction of Reinforcement in Under Water of Concrete Structures”, Mumbai University. (Defense-03/02/2016).
2. Mrs. Sanjukta Sahoo, “Study on the Relevance of Carbonated Fly ash in Concrete and its Performance Assessment with respect to Control Concrete and Fly ash Concrete”, registered with KIIT University in July 2012. (Defense is scheduled in April 2016).

## **Masters Level (Total 20 groups)**

### **HONORS / AWARDS / ACHIEVEMENTS**

- **Chaired a Session** at the Structural Engineering Convention-2014, New Delhi, December 2014.
- **Keynote Speech** on the topic “ACID, ALKALI AND CHLORIDE RESISTANCE OF EARLY AGE CURED SILICA FUME CONCRETE”, at the Structural Engineering Convention-2014, New Delhi, December 2014.
- **Advisory Board Member**, Civil Engineering Department, IPS Academy, Rajendra Nagar, A. B. Road, Indore-751012 for the year 2015.
- **Advisory Board Member**, Structural Engineering Department, Vikrant Group of Institutions, Harshola, Indore, since 2014.
- **Faculty Co-ordinator** of the 1<sup>st</sup> established student chapter of Indian Green Building Council in the state of Goa, at NICMAR Goa Campus Since October 2013.
- **Technical Committee Member** of 2014 International Conference on Mechatronics and Mechanical Engineering held from September 6<sup>th</sup> to 8<sup>th</sup>2014 at Chengdu, China.
- **Best paper** presentation award to our paper “Nanomaterials for Construction Engineering”, Presented in the International Conference on Nano Science and Technology (ICNST), held in New Delhi, September 2013.
- **Chaired a Session** at the International Conference on Nano Science and Technology (ICNST), New Delhi, September 2013.
- Associate Member of **International Faculty Network** of American Concrete Institute (ACI), since February 2012.
- **CIMR Post-Doctoral Fellowship** awarded by the Center for Innovative Materials Research, Lawrence Technological University, Southfield, Michigan, USA, from 2009-2012.
- **Industrial PhD scholarship** from Central R&D-Cement Business, Grasim Industries Ltd., from 2004-2007.
- **Fully Funded Teaching Assistantship** in the year 2002-2004 (to carry out research activities in department of civil engineering, Indian Institute of Technology, Delhi while pursuing Master of Technology in Civil Engineering).
- **University Gold Medal** for securing highest position in the branch during the undergraduate study, 2001.

### **MEMBERSHIP**

- **Editor-in-chief** of the Journal of “Advance Research in Construction and Architectural Engineering”, an international journal from the ADR Publications, Since December 2013.
- **Editorial board member** of the Journal of “Advance Research in Civil and Environmental Engineering”, an international journal from the ADR Publications, Since December 2013.
- **Editorial board member** of the Journal of “Journal of Advance Research in HR & Organizational Management”, an international journal from the ADR Publications, Since December 2013.
- **Editorial Board Member** of the Journal of “Construction Engineering (CE)”, an International Journal from the Science and Engineering Publishing Company, since November 2012.
- **Editorial Board Member** of “Recent Trends in Civil Engineering and Technology (RTCET)”, an International Journal from STM Publications, since September 2012.
- **Editorial Board Member** of “Journal of Construction Engineering, Technology and Management (JOCETM)”, an International Journal from STM Publications, since June 2012.
- Associate Member, American Concrete Institute, USA, No: 01052699
- Associate Member, American Society of Civil Engineers, ASCE, USA. No: 475206
- Associate Member of International Association for Computer Methods and Advances in Geomechanics, USA
- Member, American Society for Testing and Materials, ASTM, USA, No: 1045511
- Member of Prestressed Concrete Institute, Chicago, IL, USA
- Senior Member, International Association of Computer Science and Information Technology (IACSIT, www.iacsit.org), Singapore, Member No: 80347145.

- Senior Member, Universal Association of Civil, Structural and Environmental Engineers (UACSE, <http://uacse.org>), Member Id:SNM101000523.

## **REVIEWER**

- Journal of Materials in Civil Engineering, ASCE
- Canadian Journal of Civil Engineering
- Construction and Building Materials, Elsevier Publications
- International Journal of Recent Trends in Civil Engineering and Technology
- International Journal of Construction Engineering, Technology and Management
- Journal of Construction Management, published from NICMAR
- PMI India Research and Academic Conference 2013
- Construction Materials, Elsevier Publications
- Structural Engineering Convention 2014.

I hereby declare that all the above mentioned things are true to the best of knowledge and belief.

(Dr. Bibhuti Bhusan Das)