

## BIO-DATA



1. Name : **Dr. M. C. NATARAJA**
2. Date of Birth : 20-12-1960
3. Designation and Address : Professor, Civil Engineering Department,  
Sri Jayachamarajendra College of Engineering, Mysore-6
4. Degrees obtained, with field, institutions and dates

	University/College	Degree	Grade	Year	Field of specialization
a	Mysore / S.J.College of Engineering, Mysore	B.E.	First class with distinction	1983	Civil Engineering
b	Mangalore / Karnataka Regional Engineering College, Surthkal, Mangalore	M. Tech.	First class with distinction	1985	Industrial Structures
c.	Indian Institute of Technology, Kharagpur	Ph. D.	Excellent grades in all four qualifying subjects	1999	Civil Engineering (Fiber Composites)

Ph. D Topic: Toughness characterization of steel fiber reinforced concrete - Experimental, Empirical and Analytical methods – Published about 20 papers from Ph. D work. 8 papers in journals and 12 papers in conferences.

5. Employment record in Institution (in order starting from present position)

University/College	Designation	Period
VTU / S.J.College of Engineering, Mysore.	Professor (CAS)	Feb.2004 to till date
VTU / S.J.College of Engineering, Mysore.	Assistant Professor	Feb.2006 to till date
VTU / S.J.College of	Selection Grade Lecturer	Feb. 2000 to Feb. 2006

Engineering, Mysore.		
VTU / S.J.College of Engineering, Mysore.	Senior Scale Lecture	Jan 1993 to Feb. 2000
Mysore / S.J.College of Engineering, Mysore.	Lecturer	Jan 1987 to Jan 1993
Bangalore / S.S.Institute of Technology, Tumkur.	Lecturer	June 1985 to Jan 1987

## 6. Consultancy and Sponsored research activities

Offered Consultancy through the Department of Civil Engineering since 1987 in the area of Materials testing, Concrete Mix Design, Special concretes, Non Destructive Testing and evaluation of performance of concrete structures under distress, Structural Design, quality testing and auditing for Government and Private Organizations. Notable government organizations are PWD, CPWD, KEB, KLAC, KUWS & DB, KHB, KHPC, MUDA, MCC, Nirmiti Kendra, and others. Huge revenue is generated to SJCE, Mysore every year since 25 years.

## 7. (a) Number of research publications in the area of reserach

### Area of Research:

- Concrete Technology
  - Special concretes
    - High Strength concrete
    - Self compacting Concrete
    - Geo-polymer Concrete
    - Fiber Reinforced Concrete ( my PhD)
  - Concrete Materials – Cementitious materials, Unconventional aggregates
  - Concrete Mix Design
  - Non Destructive Testing of Concrete
  - Soft computing tools in Engineering
- Structural steel
  - Analysis and design

Papers in Referred Journal	Contributed papers in Conference or Symposium	Total papers	Technical talk to engineering professionals and industries through various organisations	Project reports prepared
45	85	130	About 250	Four

(b) List of publications with title, name of the authors, name of the Journal, year of publication, etc., with citation index

**Enclosed separately**

8 Membership in scientific and professional societies (list) with abbreviations

- Life Member of Indian Society for Technical Education (ISTE), New Delhi, India
- Life Member of The Institution of Engineers (LMIE), Calcutta, India
- Life Member of American Society for Civil Engineers (India Section) (ASCE-IS), Calcutta, India.
- Life Member of the Indian Society for Construction Materials and Structures, (LISCMS), Roorkee, India
- Life Member of the Indian Society for Rock Mechanics and Tunnelling Technology, (LISRMTT), New Delhi, India
- Life Member of the Indian Chartered Engineers, IEI, Calcutta, India
- Life Member of the Association of Consulting Civil Engineers (ACCE), India
  - Secretary for ACCE, Mysore Center 2007-2009
  - Secretary for ACCE, Mysore Center 2009-2011
  - Editorial Board Member: ACCE Bulletin 2007 to 2009, 2011 to 2013

9. Fellowship in scientific and professional societies with abbreviation

Fellow of the Indian Concrete Institute, (FICI), Chennai, India.

10. Honours and Awards (list)

Honoured by SJCE with certificates and a cash prize for having secured **highest marks** for the College in the BE University Examinations.

Honoured by many local bodies for securing **VIII Rank** in Mysore University BE Examination.

Honoured by the Indian Concrete Institute, Chennai, with a medal and certificate for the **best paper award**, for the paper published in the Indian Concrete Institute Journal.

Honoured with certificates for publishing best technical papers in the **Civil Engineering Society Journal, IIT, Kharagpur**. Honoured with certificate of Merit for actively participated in the Civil Engineering Society Journal activities at IIT, Kharagpur.

Honoured with a certificate of merit under best paper award scheme by the **International Council for Fibre Reinforced Concrete**, for best paper published in International Journal of Cement and Concrete Research, USA.

Honoured by the **Lions Club of Mysore and Lions Club of Mysore – Kuvempunagar**, for contribution to the field of Civil Engineering on 35<sup>th</sup> Engineer's day celebration, 13<sup>th</sup> September, 2002.

Honoured by the **Lions Club of Mysore –South** for contribution to the field of Civil Engineering on 45<sup>th</sup> Engineer's day celebration, 13<sup>th</sup> September, 2011

Honoured by Mysore Veerashiva Sajjana Sangha Mysore and Veerashiva Sajjana Sangha Hullahalli, Sajjana Sangha Youth Committee, Mysore, for contribution to the field of Civil Engineering 2007 and 2008

### **Distinctions and recognitions**

Designed the concrete mix of **Highest Strength**, which bagged the first prize in the Concrete Cube Test Competition organised by the **Maharashtra Chapter of ACI**. An award is given to the college (SJCE) for this achievement in 1983.

**Referee** for reviewing technical papers to **International Journal** of Cement and Concrete Research, Pergamon Press, USA.

**Referee** for reviewing technical papers to **International Journal** of Structural Engineering and Mechanics, Techno-press, Korea.

**Referee** for reviewing technical papers to **International Journal** of Computers and Concrete, Techno-press, Korea.

**Referee** for reviewing technical papers to **International Journal** of Steel and Composite Structure, Techno-press, Korea

**Referee** for reviewing technical papers to **International Journal** of Experimental techniques, Springer, USA

**Referee** for reviewing technical papers to **International Journal on** Journal of Civil Engineering and Construction Technology, USA.

**Refere** for revieing papers to Scientific Research and Essays, Academic journal, USA

**Refere** for revieing papers to Journal of Research in Environmental Science and Toxicology, USA

**Referee** for reviewing technical papers to Pakistan Journal of Engineering

**Referee** for reviewing technical papers to Indian Journal of Engineering and Materials Sciences, CSIR, India

**Referee** for reviewing technical papers to Indian Concrete Journal, India.

**Referee** for reviewing technical papers to *Institution of Engineers*, India.

**Technical committee member** and advisor to National Conference on Advances in Civil Engineering Materials and Construction Technology AMCT-04, at Siddhartha Institute of Technology, Tumkur, Karnataka.

**Technical and Advisory committee member** to National Conference -2007 at Siddhartha Institute of Technology, Tumkur, Karnataka.

**Chairman** of technical sessions in many national and international conferences

**Invited as a technical committee member** to the First International workshop on Performance, protection and strengthening of structures under extreme loading to be held at Whistler, Canada, August 20-22, 2007 by Professor Sidney Mindess, **The University of British Columbia, Canada**

**Invited as a technical committee member** to the Second International workshop on Performance, protection and strengthening of structures under extreme loading held at Hayama, Japan August 19-21, 2009.

**Invited as a technical committee member** to the Third International workshop on Performance, protection and strengthening of structures under extreme loading held at Lugano, Switzerland from August 30 to September 1, 2011.

**Invited as a technical committee member** to the Fourth International workshop on Performance, protection and strengthening of structures under extreme loading to be held at Mysore August 2013.

Visited Oxford Brookes University in Oxford to present a technical paper in July 2007

Visited Japan concrete Institute, Japan, June 2009

Delivered more than **250 technical talks** in workshops, seminars, conferences, short-term courses, etc.

11 Number of Ph.D., M.Phil., M.Tech. guided.

Guided one Ph. D and degree awarded

Guiding 3 Ph. D students

Guided 40 M.Tech. Dissertations

12. List of conferences, short term courses, etc., participated/organised, technical talks delivered

- Organised and coordinated workshop on Design of Steel structures- Limit State Approach as per IS:800-2009 for VTU faculty, SJCE, Mysore, 2009
- Organised and coordinated workshop on Technical control in construction Sites, July 2009, ICQM Certification India Pvt. Ltd. Mumbai at SJCE, Mysore
- Organised and coordinated Short term course for the faculty of Civil Engineering, VTU, Belgaum, on Design and Drawing of Steel Structures – 06CV82, 2010
- Organised and coordinated workshop on
- Attended about 25 short-term courses

- Attended about 50 workshops, national and international conferences and presented technical papers
- Delivered more than 200 technical talks on various topics to Engineering professionals from Government organisation: PWD, CPWD, KLAC, KUWS & DB, KERS, MUDA, etc organised by CEP authorities, IEI, INSTRUCT, KERS, QIP, Private Organisation: Birla Cement Company, ACC, Bharathi cements, Fosroc chemicals, ACC roofing, Dr. Fixit, etc.
- Delivered technical talks in many AICTE short-term courses organised by Engineering and diploma colleges.
- Technical committee member to coordinate the construction activities related to quality of materials for 250 crore speciality JSS hospital at Mysore, 2010 to 2012

#### Board of Studies membership

NITK, Surathkal, 2009  
 UVCE, Bangalore 2008, 2010, 2011, 2012  
 NIE, Mysore, 2010, 2011, 2012  
 SJCE, Mysore 2008, 2009, 2010, 2011, 2012  
 PESCE, Mandya, 2009  
 Dr. AIT, Bangalore 2009, 2010, 2011  
 SIT, Tumkur, 2009, 2010, 2012

#### Board of examiner membership

SJCE, NIE Mysore, UVCE, MSRIT, BMS, Dr. AIT, DSCE, Bangalore, SIT Tumkur, BIET, BDT Davanagere, NITK Surathkal, NITK Calicut

#### Ph D Thesis on concrete related subjects evaluated – 05

JNTU, Kakinada, Andra University, UVCE, Bangalore University, Bangalore, JNNCE, Kuvempu University, VTU, Belgaum

As coordinator and resource person conducted workshop on concrete mix design for working professions, teachers and students at many Engineering colleges organized by Grasim Industries-Cement division

- JNNCE Shimoga
- BDT Davanagere
- SJCE Mysore
- AIT Chickamagalore
- PDA Gulberga
- SIT Tumkur

- SJBIT Chikkaballpur

Subject expert on concrete technology and design

- VTU EDUSAT Programme- for 5 different subjects 2009, 2010, 2011, 2012  
Concrete technology, Advanced concrete technology, Design of steel structures, Advanced design of RCC and Design of RC structural elements
- AICTE Subject expert
- UGC subject expert for evaluating proposals – Few proposals evaluated
- VTU subject expert
- Subject expert for interview boards
- Invited for NPTEL programme for Advanced design of RCC by IIT Madras and VTU.  
Probable date of start - September 2012

International Exposure: Visited

- Japan- Japan Concrete Institute, RMC institute, Concrete Industries
- UK- England, Oxford University, Oxford Brookes University, concrete testing labs
- Oxford and Yorkshire Colleges, Industry visits
- Malaysia- Kaulalampur, University of Malaya, Concrete testing Lab
- Dubai – Technical visit to construction sites

**International Conferences and Seminars attended and presented papers**

- The International Symposium on Innovative World of Concrete, IWC-98, Indian Concrete Institute, 1988, Calcutta, India.
- The International Seminar on A Quest for Materials of Construction in the 21<sup>st</sup> Century, ASCE (India Section), September 1998, Calcutta, India.
- The International Conference on Theoretical, Applied, Computational and Experimental Mechanics, ITACEM-98, The Indian Institute of Technology, Kharagpur, India, December 1998.
- The Sixth NCB International Conference on Cement and Building Materials, National Council of Cement and Building Materials, November 1998, New Delhi, India.
- Fifth International Conference on Concrete Technology for Developing Countries, NCCBM, New Delhi, 17-19 Nov. 1999.
- EASEC-7, International Conference on Structural Engineering and Construction, Aug. 22-29, 1999, Kochi, Japan.
- International Conference, Civil and Environmental Engineering Conference, (C&EEC), New Frontiers and Challenges, AIT, Thailand, Nov. 1999.
- ICI\_Asian Conference on Ecstasy in Concrete, 20-22 Nov. 2000, Bangalore



- Structural Engineering Convention, SEC-2001, Oct. 2001, Indian Institute of Technology, Roorkee, India.
- The International Seminar on Industrial Structures, Association of Consulting Civil Engineers (India), 8 – 10 Jan 2003, Coimbatore, India.
- II CANMET-ACI International conference on Concrete Technology for Sustainable Development, Hyderabad, March 2005.
- International conference on Concrete, 2006, Kochi
- International Conference on Neural Network and Genetic Algorithm in Material Science and Engineering, Bengal Engineering College, Howrah, India, January 2006.
- Twentieth International Joint Conference on Artificial Intelligence, organized by American Association of Artificial Intelligence & International Institute of Information Technology, 09-12 January 2007, Hyderabad.
- International Seminar, Manipal Institute of Technology, Manipal, 2008, India.
- 6th International Conference on Steel and Aluminium Structures, ICSAS'07, 24-27 July 2007, Oxford Brookes University, Oxford, England.
- 8<sup>th</sup> International Conference on high strength and high performance concrete, Japan Concrete Institute, Tokyo, Japan, Oct. 27-29, 2008
- Participated in International colloquium on Architecture-Structure interaction for sustainable build environment, Bangalore, April 2010
- 3<sup>rd</sup> Asian Conference on Ecstasy in concrete-ACECON-2010, IIT Chennai, ICI India, December, 2010.
- Proceedings of the 7th Structural Engineering Convention SEC 2010, Annamalai University, Annamalai Nagar, 8-10 December, pp 558-556
- The International Conference Advances in Architecture and Civil Engineering – AARCV – 2012, 21<sup>st</sup> June- 23<sup>rd</sup> June 2012, School of Architecture and Department of Civil Engineering, MSRIT, Bangalore.

### **National Conferences and Seminars**

- National Seminar on Role of Building Materials in Construction Industry, July 18-19, 1997, ICI, Allahabad.
- National Seminar on Advances in Materials of Construction and Construction Materials, Department of Civil Engineering, S. V. University, Tirupati, India, Aug. 22-23, 1998
- National seminar on Special Concretes, The Indian Concrete Institute, Bangalore, India, January 1998.
- National Seminar on Construction Admixture: Present Status and Scope for Improvement, The Institution of Engineers (India), Calcutta, July 1998.
- National seminar on Cement Content and Parameters for Durability of Concrete, Maharashtra Chapter of ACI, Bombay, Sept. 1998.
- National workshop on testing and evaluation of concrete and concrete structures-Recent Developments, 19-20 May 2000, INSTRUCT, Bangalore.

- Workshop on IS:456 and Concrete Mix Design organised by Grasim Industries (Cement division) at Chikkaballapur, Bangalore.
  - Workshop on Concrete Mix Design organised by Grasim Industries (Cement division) at S.J. College of Engineering, Mysore, 29<sup>th</sup> August 2002.
  - Workshop on Role of Chemical Admixtures in Concrete Construction, August 2002, Department of Civil Engineering, Kumaraguru College of Technology, Coimbatore.
  - National Conference on Advances in Civil Engineering Materials and Construction Technology AMCT-04, at Siddhartha Institute of Technology, Tumkur.
  - One day workshop on Construction materials and rehabilitation organised ACCE, Bangalore at Mysore, 2005.
  - Attended Training Programme on “Repair and Rehabilitation of Masonry Concrete Structures” by Dr. Dixit Institute and INSTRUCT on 10.08.2004.
  - Attended Build Tech – 2004 – A National Seminar on Roads and Highways – Organised by Builder’s Association of India – Mysore Centre on 10th and 11th December 2004.
  - National seminar on alternate Building materials, MSRIT, Bangalore
  - Seminar on large span structures, Organised by Association of Consulting Civil Engineers, Mysore (Co-ordinated the programme from SJCE)
  - National seminar organised by Builders Association of India, Mysore, 2004
  - National seminar organised by Builders Association of India, Mysore, 2005
  - International seminar on NDT, BMS college of Engineering, Bangalore, 2006
  - Workshop - Bosch training programme on Use of Power tools, Bangalore, 2005
  - Workshop on Use of software packages, Under TEQIP, NIE, Mysore-2006
  - National seminar on Marginal Materials, RVCE, Bangalore, 2006
  - National conference on Applications of Recycled and Marginal Materials in Construction, May 2006, ARMICON-2006, Department of Civil Engineering, MSRIT, Bangalore.
  - ACCE National Resource meet on Sater and Waste treatment, Mysore 2009
  - National Seminar on Engineered Concretes, 28-29 March, 2009, Bangalore, organised by ICI Karnataka Bangalore Centre
- Proceedings of the National Conference on Advances in Materials and Structures, "AMAS - 2011", February 3-4, 2011, Pondicherry.

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### **LIST OF PAPER PUBLISHED (From 1993)**

**Dr. M.C. Nataraja**

**(Total: 130 papers: 45 in journals and 85 in conferences and 6 communicated)**

***Journals and Conferences (National and International)***

### 1993

- Sundara Raja Iyengar, K. T., **Nataraja, M. C** and Gangadhara, B. M., 'Workability of Concrete using Probe Tester', Proceedings of the International Symposium on Innovative World of Concrete, ICI-IWC-93, August 1993, India, Vol. 1, pp. 2-67 to 2-74
- **Nataraja, M. C** and Patil Gopal Reddy, 'Proportioning of High Strength Concrete Mixes', Proceedings of the International Symposium on Innovative world of Concrete, ICI-IWC-93, August 1993, India, Vol. 2, pp. 3-223 to 3-232.

### 1994

- **Nataraja, M. C** and Rajan Babu, 'Steel Fiber Reinforced Concrete Beams Subjected to Shear Force', Proceedings of the National Seminar on Fiber Reinforced Cementitious Products, ICI, KNIT, Sultanpur, India, January 1994, pp. 185-195.
- **Nataraja, M. C.**, Patil Gopal Reddy and Srinivasa, G, 'Design of High Strength Concrete Mixes, Association of Consulting Civil Engineers Seminar on Engineering beyond 2000, Madras, June 1994, pp. 71-74.
- **Nataraja, M. C.** and Srinivasa, G., 'A Study on the Behaviour of Cement Paste and Cement Mortar using Superplasticiser', National seminar on Construction Admixture, School of Building Science and Technology, Ahmedbad, Dec. 1994, pp. 57-63.

### 1995

- Sundara Raja Iyengar, K. T., **Nataraja, M. C** and Rehman, S. S., Recommendations for design of Reinforced Concrete Corbels', National Workshop on IS:456-1978, Proposal for Revision, Jan. 1995, Bangalore, India, pp. 9-1 to 9-4.

### 1997

- **Nataraja, M. C** and Muralidhara Rao, B. R., 'Ultrasonic Pulse Velocity and Rebound Hammer Studies on Steel Fiber Reinforced Concrete, Proceedings of the National Seminar on Advances in Materials of Construction and Construction Materials, Department of Civil Engineering, S. V. University, Tirupati, India, Aug. 22-23, 1997, pp. 165-171.
- **Nataraja, M. C** and Srinivasa, G., 'A Study on the Behaviour of Concrete with Superplasticiser', National Seminar on Role of Building Materials in Construction Industry, July 18-19, 1997, ICI, Allahabad, pp. I-49 to I59.

### 1998

- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., 'Steel Fiber Reinforced Concrete Subjected to Drop Weight Test', Proceedings of the national seminar on Special Concretes, The Indian Concrete Institute, Bangalore, India, January 1998, pp. 171-181.
- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., 'A Study on Steel Fiber Reinforced Concrete using Superplasticiser', The Proceedings of the National Seminar on Construction Admixture: Present Status and Scope for Improvement, The Institution of Engineers (India), Calcutta, July 1998, pp. 6-12.

- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., 'A Critical Study on Concrete Mix Design as per IS:10262-1982', The National seminar on Cement Content and Parameters for Durability of Concrete, Maharashtra India Chapter of ACI, Bombay, Sept. 1998.
- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., "Cube Splitting Test on Steel Fiber Reinforced Concrete for Toughness Characterisation, Proceedings of the International Seminar on A Quest for Materials of Construction in the 21<sup>st</sup> Century, ASCE (India Section), Calcutta, September 1998, pp. III-6 to II-12.
- **Nataraja, M. C.**, Julious David and Lakshmi Srinivasan, V., 'Experimental Studies on the Applicability of Truss Analogy on RCC Corbels Containing Vertical Stirrups as Secondary Reinforcement', Proceedings on the International Symposium on Innovative World of Concrete, IWC-98, ICI, Oxford and IBH Publishing Co. Ltd., Calcutta, pp. 7.21-7.29.
- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., 'Steel Fiber Reinforced Concrete Composite Under Splitting Test', The CD ROM Proceedings, The International Conference on Theoretical, Applied, Computational and Experimental Mechanics, ITACEM-98, The Indian Institute of Technology, Kharagpur, India, December 1998, Paper no. 99
- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., 'Drop Weight Test-A Simple test for Toughness of Steel Fiber Reinforced Concrete Subjected to Impact', The Proceedings of Sixth NCB International Conference on Cement and Building Materials, National Council of Cement and Building Materials, New Delhi, India, November 1998, Vol. 4, pp. XIII-151 to XIII-160.
- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., 'Steel Fiber Reinforced Concrete Composite in Compression', The proceedings of the International Symposium on Innovative World of Concrete, IWC-98, Calcutta, Oxford and IBH Publishing Co. Ltd., Nov. 1998, Vol. 1, pp. 4.3-4.8

## 1999

- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., 'Computerised Concrete Mixture Proportioning Based on BIS Method-A Critical Review, Fifth International Conference on Concrete Technology for Developing Countries, NCCBM, New Delhi, 17-19 Nov. 99.
- **Nataraja, M. C.**, Dhang, N and Gupta, A. P., 'Tensile Strength of Steel Fiber Reinforced Concrete Subjected to Flexure and Splitting Test, 'Fifth International Conference on Concrete Technology for Developing Countries, NCCBM, New Delhi, 17-19 Nov. 99.
- **Nataraja, M. C.** and Julious David, 'Behaviour of Reinforced Cement Corbels-An Experimental Study', EASEC-7, International Conference on Structural Engineering and Construction, Aug. 22-29, 1999, Kochi, Japan.
- **Nataraja, M. C** and Ashok Reddy, K., 'Reproportioning of Concrete Mixes with Quarry Wastes as Coarse Aggregate - A Composite Mechanics Approach, International Conference, Civil and Environmental Engineering Conference, (C&EEC), New Frontiers and Challenges, AIT, Thailand, Nov. 1999.
- **Nataraja, M. C** and Rahimulla, 'A Study on Reproportioning Concrete Mixes', International Conference, Civil and Environmental Engineering Conference, (C&EEC), New Frontiers and Challenges, AIT, Thailand, Nov. 1999.

## 2000

- **Nataraja, M. C.**, 'Testing on Hardened Concrete', National workshop on testing and evaluation of concrete and concrete structures-Recent developments', 19-29 May 2000, Institute for research and development and training on construction trades and management-Instruct, Bangalore, pp. C1 to C18.
- **Nataraja, M.C.**, 'Complete stress-strain curves for steel fiber reinforced concrete under compression, ICI-Asian Conference on Ecstasy in Concrete, 20-22 Nov. 2000, Indian Concrete Institute, Bangalore, pp. 349-358.

## 2001

- **Nataraja, M. C** and Harish Kumar., 'RCC Corbels- Comparision of Different Design Methods', Accepted for publication and presentation in Structural Engineering Convention, An International Meet to be held at UOR, Roorkee, India, Oct. 2001.

## 2002

- **Nataraja, M.C**, K.S. Manjunath and Shanu P. 'Behaviour of Concrete Using Waste Rubber Tyre Pieces as a Partial Replacement to Aggregate' National Symposium on Futuristics of Concrete Technology and Optimal Design of RCC Structures Organised by Department of Civil Engineering, Karunya Institute of Technology, Coimbatore on 20<sup>th</sup> -21<sup>st</sup> December 2002.

## 2003

- **Nataraja, M.C** and Anil Kumar T.V., "Computerised Fly ash Concrete Mix Design as per IS: 10262-1982 using Provisions of IS: 456-2000" INCONTEST-2003. CD-ROM Proceedings of the International Seminar on Industrial Structures, Association of Consulting Civil Engineers (India), Coimbatore, India. September 2003, pp 39-40.
- **Nataraja, M.C** and Girish Raje Urs, H.L. and Ramalinga Reddy, B.M., "A Study on Workability and Compressive Strength of Plain and Fly ash Concrete" INCONTEST-2003. CD-ROM Proceedings of the International Seminar on Industrial Structures, Association of Consulting Civil Engineers (India), Coimbatore, India. September 2003, pp 37-38.
- **Nataraja, M.C** and Ramalinga Reddy, B.M., "Metakaoline – A New Generation Admixture" CD-ROM Proceedings of the International Conference on Innovative World of Concrete, Indian Concrete Institute, Pune, India. October 2003.

## 2004

- **Nataraja, M.C** and Ramalinga Reddy, B.M., "Some studies on mortar containing metakaoline", National Conference on Advances in Civil Engineering Materials and Construction Technology AMCT-04, at Siddhartha Institute of Technology, Tumkur.
- **Nataraja, M.C** and Ramalinga Reddy, B.M., "Some Studies on Cement Concrete using Metacoline and Superplasticizer", International Conference on Advances in Concrete and Construction, Dec. 16<sup>th</sup> to 18<sup>th</sup> 2004 at Vasavi College of Engineering, Hyderabad.

- Jayaram M. A., **Nataraja M.C.** and Ravikumar C.N., “A Fuzzy-Neuro Approach to Design of Lightweight Concrete Mix Design”, International Conference on Cognitive Systems, New Delhi, December 2 – 3, 2004
- Jayaram M. A., **Nataraja M.C.** and Ravikumar C.N., “Fuzzy logic based design of Lightweight concrete, Conference on Concrete and Concrete Structures”, Hyderabad, December 14-16, 2004.
- **Nataraja, M.C** and Bavanishankar, S., “Analysis and Design of Laterally Supported and Unsupported Beams as per IS: 800 draft code”, National Conference on Futuristic Steel Structures and Application of GIS, 16<sup>th</sup> to 17<sup>th</sup> Dec. 2004, at Coimbatore.

## 2005

- M.A.Jayaram, **M.C.Nataraja**, C.N.Ravikumar., A Hybrid system for Design of Light Weight Concrete Mixes: *International Conference on Advances in Concrete Composites*, Structural Engineering Research Center, CSIR Campus, Jan 6-8,2005,Chennai.
- M.A.Jayaram, **M.C.Nataraja**, C.N.Ravikumar., A Data Driven Fuzzy Inference System Model for Characterization of High Strength Concrete, *International Conference on Recent Advances in Concrete and Concrete Technology*, SRM Institute of Science and Technology, 07-09 December 2005, Chennai.
- M.A.Jayaram, **M.C.Nataraja**, C.N.Ravikumar ., A Novel Method for Standard Concrete Mix proportioning using integrated AI Techniques, Asian Conference on Ecstasy in Concrete, Indian Concrete Institute, September 22-24,2005, Mumbai.
- M.A.Jayaram, **M.C.Nataraja**, C.N.Ravikumar ., An Integrated BPN and Layered Fuzzy Model for Concrete Mix design, Seventh International Conference on Cognitive Systems, December 14-16,2005, NIIT, New Delhi.
- **M.C. Nataraja**, “Analysis and design of laterally unsupported gantry girder as per IS 800 draft code”, **Insdag’s Journal of Steel in Construction**, Vol. 6, pp. 39-46 January 2005.
- **Nataraja, M.C** and Ramalinga Reddy, B.M, Bavanishankar, S and Barathraj Etigi., “Mix design and some properties of concrete containing Ground granulated Blast Furnace Slag”, pp. 491-500, II CANMET-ACI International conference on Concrete Technology for Sustainable Development, Hyderabad, March 2005.
- **Nataraja, M. C, Lelin Das and N. Richard Sandeep** “Comparison of Indian Standard Draft Method and ACI Method of Concrete Mix Proportioning”, Second National seminar on Advances in Materials and Structure, IIT, Chennai, India
- **Nataraja, M. C, Lelin Das, N. Richard Sandeep and B. M. Ramalinga Reddy**, “Optimum Dosage of Superplasticiser for Plain, Fly Ash and Silica Fume Cement Concrete”, International conference at Kanchi, Dec-2005, Madras, India.
- Nataraja, M. C, Nagaraj, T. S, and S. B. Basavaraj, “Reproportioning of Steel Fiber Reinforced Concrete and its Impact resistance”, Vol. 35, No.12, pp. 2350-2359, 2005, **International Journal of Cement and Concrete Research, USA.**
- M. C. Nataraja, “Mixture proportioning and properties of slag concrete’, **The Master Builder, India**, Vol., 2005, pp.23-31

## 2006

- **Nataraja, M. C.**, Jayaram, M. A, and C.N.Ravikumar, “An Integrated Soft Computing Techniques for proportioning Standard Concrete Mixes’, **New Building Materials and Construction World**, January 2006, Vol. 11, No 1, India.
- **Nataraja, M. C**, Nagaraj, T. S, Bavanishankar, S and B.M. Ramalinga Reddy, “Proportioning cement based composites with burnt coal”, **International Journal of Materials and Structures**, RILEM 2006 Online, DOI 10.1617/s11527-006-9142-8, Vol. 40, N0.6, July 2007, pp. 543-552.
- Girish Raj Urs, **Nataraja, M. C.**, and Nagaraj T. S, ‘Re-proportioning concrete mixtures for rapid production of pre-cast units’, **Indian Concrete Journal**, Vol. 80, No. 4, April 2006, pp. 40-44.
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4. International Journal of Materials and Structures, RILEM, France
5. International Journal of Resources, Conservation and Recycling, USA

6. International Journal of Geotechnical and Geological Engineering, France
7. International Journal of Waste Management, USA
8. International Journal of Materials and Manufacturing Processes, USA
9. International journal of Earth Sciences and Engineering, India
10. Journal of Intelligent Systems, USA
11. International Journal of Neural Systems, USA
12. International Journal of Mathematics, Computers & Computer Applications, USA
13. International Journal of Physical Systems, USA
14. International Journal of Civil Engineering – UAE
15. International Journal of Engineering Letters, Hong Kong
16. International Journal of structural Engineering
17. International Journal of 3R's (Repair, Restore and Rebuild) , India
18. Indian Concrete Journal – Bombay
19. Indian Concrete Institute Journal - Madras
20. Institution of Engineers Journal - Calcutta.
21. Journal of Scientific and Industrial Research, India
22. Journal of Engineering Materials and Sciences, Council of Scientific and Industrial Research, CSIR, India
23. Indian Journal of Constructional Steel and Development, INSDAG, Calcutta
24. Indian Geo-technical Journal, Madras
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# Design of steel structures 1

by

Prof. A. R. Shanta Kumar

and Prof S. R. Sathis Kumar

Department of Civil Engineering,

IIT, Chennai

email: [santhaar@iitm.ac.in](mailto:santhaar@iitm.ac.in)

phone: (91-44) 2257 4310

[satish@civil.iitm.ernet.in](mailto:satish@civil.iitm.ernet.in)

phone: (91-44) 2257 9310

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