

## **Curriculum Vitae**



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### **Brief Profile**

Dr. Karthikeyan Jayakumar was born on 12.12.1980 at Coimbatore, INDIA. He graduated his B.E (Civil Engineering) from Kumaraguru College of Technology- Coimbatore during the year 2002, M.E in Structural Engineering from V.L.B. Janakiammal College of Engineering and Technology-Coimbatore during the year April 2004 and Ph.D. in Structural Engineering from IIT-Roorkee in the year November 2008. He started his career as an Asst.Professor in the Department of Civil Engineering, NIT-Trichy, India from February 2009. His research interests include High Performance concrete materials and High Performance Prestressed Concrete Bridges. He is an active member in various professional bodies related to structural engineering & materials.

He has secured the Young Faculty award, awarded by Venus International Foundation, Chennai, July 2015. He was awarded twice for the International Travel Grant Scheme for Young Scientist awarded by SERB-DST, New Delhi during August 2011 and September 2015. He won a National Award for the Innovative Students Best Project Award at Bachelors Level awarded by Indian National Academy of Engineers, New Delhi. He has been awarded as the Best Outstanding and Best Outgoing Student during his undergraduate and postgraduate study. He has presented 27 Technical papers during his UG and PG studies in the

students symposium/events conduct by various institutes and secured won many prizes.

He has been to USA, Canada, Europe (France, Switzerland & Czech Republic), New Zealand and Sri Lanka: presented technical papers, visited various universities, and professional bodies related towards his profession. He has published nearly 50 Research Papers in credit [in various Journals and International Conferences].

### **Objective**

To attain a suitable position in an institute dedicated to teaching and research work in the field of structural engineering that utilizes my technical, experimental and analytical skills.

### **Academic Qualifications**

- Ph.D. in Structural Engineering, Department of Civil Engineering, Indian Institute of Technology, Roorkee, India. (Degree awarded on November 2008) “Long-term Deformation of High Performance Prestressed Concrete Bridges”.
- M.E. in Structural Engineering, Department of Civil Engineering, V.L.B. Janakiammal college of engineering and technology, Coimbatore, India. (August 2002 to June 2004 passed in First class with 80%) “Experimental Studies on Ultra High Performance Concrete”- M.E. Dissertation.
- B.E. Civil Engineering, Kumaraguru College of Technology, Coimbatore, India. (August 1998 to May 2002 passed in First class with 80.61%) “Effect of Partial Replacement of Cement with Silicafume on Properties of High Performance Concrete”-Project.
- 12<sup>th</sup> Standard (State Board Syllabus), St.Pauls Matriculation and Higher Secondary School, Coimbatore, India. (Passed out in May 1998).

### **Teaching Experience**

- Presently working as an Assistant Professor in the Department of Civil Engineering, National Institute of Technology – Tiruchirappalli from 23.02.2009
- Worked as a Lecturer (on Consolidated Basis) in Civil Engineering Department, Anna University – Coimbatore from 25.11.2008 to 18.02.2009
- Worked as a Lecturer (on Hourly Basis) in Civil Engineering Department, Anna University – Coimbatore from 01.09.2008 to 24.11.2008

### **Professional Experience**

- Seven years and nine months experience in teaching.
- Sixteen years of experience in concrete technology field (High Performance Concrete and other special type of concrete) like development of concrete mix designs, material property studies, mechanical property studies and durability studies viz. corrosion, acid/salt attack, chloride penetration, permeability, sorptivity (Both destructive and non-destructive techniques) Chemical & Mineral Admixtures.
- Thirteen years of experience and knowledge in various aspects of bridge engineering (Prestressed concrete bridges), related to experimental techniques and analytical tools related to analysis and design.
- Conducted creep and shrinkage experimental studies for High performance concrete and have been continuously monitored for 850 days.
- Developed a model for creep and shrinkage in High performance concrete using artificial neural network (ANN).
- In depth knowledge of long-term deformation analysis in High performance prestressed concrete bridges.

### **Areas of Interest in Research**

High Performance Prestressed Concrete Bridges: Analysis and design, High Performance Concrete and materials, Microstructure in HPC, Cement and its hydration chemistry, Effects of Chemical admixtures, Special Concrete, Structural analysis and design.

### **Teaching Area**

Curriculum Development: Introduced a new course “Special Concrete” for PG/Ph.D.

UG Level: Concrete Technology, Mechanics of Solids, Prestressed Concrete structures.

PG Level: Advanced Concrete Technology, Prestressed Concrete, Finite Element Methods.

Projects Guided at PG Level: 20

1. Shaheer Ali. K (2010) “Comparative Studies on Mechanical Properties in High Performance Concrete” & “Microstructural Studies on High Performance Concrete”
2. Praveen. V.F. (2010) “Effect of Mineral Admixtures on Self-Compacting Concrete” & “Long-term Effects due to Creep and Shrinkage in Prestressed Concrete Bridge Girders using SCC”
3. ChittiBabu. K (2011) “Durability Studies on High Performance Concrete” & “Modulus of Elasticity, Poisson’s ratio and Durability Studies on High Performance Concrete”
4. Balachander. T (2012) “Properties of High Performance Concrete as Partial Replacement of Cement with Ground Granulated Blast Furnace Slag”
5. Naresh Prasad Kesari (2012) “A Comparative Study on Long-term Deformation of High Performance Prestressed Concrete Bridges” & “Long-term Deformation of Long-span High Performance Prestressed Segmental Concrete Bridge”

6. Alaguvel.S (2013) “Long-term Studies in Pre-tensioned Concrete Bridge Girders” & “A Comparative Study on Long-term Deformation of Segmental and Cable-stayed Bridges”
7. Pratap. K.V (2013) “Permeability of High Performance Concrete” & “Effect of Various Curing Conditions on Compressive Strength of HPC”
8. Arunkumar. C (2013) “Behavior of Self Compacting Concrete on its Fresh and Hardened State” & “Mathematical Modelling of Self Compacting Concrete”
9. Ramesh. K (2013) “Durability Studies on HPC” & “Permeability Studies on High Performance Concrete”
10. Mahendra Kalet (2014) “ Durability Studies on High-Performance Concrete” & “Acid and Salt Resistance Studies on High Performance Slag Concrete”
11. Amit Chandrakant Pardhe (2014) “Safety Analysis of Concrete Structures” & “Experimental Investigations on Fire Resistant Light Weight Concrete”.
12. Krishna Prasanth (2014) “Mechanical Behavior of Ultra High Performance Fibre Reinforced Concrete” & “Behavior of Ultra High Performance Concrete exposed to Acid, Sulphate and Marine water attack”
13. Karthikeyan. G (2014) “Flexural Behavior of Reinforced Concrete Slab for Low Cost Housing” & “Flexural Behavior of Ferrocement Slab for Low Cost Housing”.
14. Venu. B (2015) “Comparative Study on High Performance Mortars using Alccofine and Silicafume” & “Mechanical Properties of High Performance Concrete using Alccofine and Silicafume”
15. Pavan Kumar Reddy. P (2015) “Influence of GGBFS on Workability and Compressive Strength of Geopolymer Concrete” & “Effect of Flyash aggregate on Workability and Compressive strength of Geopolymer Concrete”

16. Bhanu Prakash Reddy. M (2015) “ Fresh and Hardened Properties of Self Compacting Concrete using Glass Powder Waste” & “Fresh and Hardened Properties of Self Compacting Concrete using Glass Powder Waste, Flyash and GGBFS”
17. Viswa Kireeti. K.V (2016) “Effect of curing on Compressive and Bond Strength of Light-Weight Aggregate Geopolymer Concrete”
18. Rahul (2016) “Strength Characteristics of High Performance Concrete with Rice husk ash and GBF Slag” & “Sustainability Characteristics of High Performance Concrete with Rice husk ash and GBF Slag”
19. Akhil. G (2016) “Mechanical Properties of Concrete incorporating Copper slag as Fine aggregate” & “Durability Performance of Copper slag Admixed Concrete”
20. Afsal. C (2016) “Strength Characteristics of Lightweight Aggregate Concrete and Geopolymer Concrete” & “Effect of Vermiculate in Concrete and Mortar on Compressive strength and Thermal conductivity”

### **Scholarships, Awards and Other Achievements**

- Received SERB International Travel grant for Young Scientist to present a technical paper in an International Conference held on 10-11 September 2015 at Czech Republic.
- Young Faculty Award awarded by Venus International Foundation, Chennai on 5<sup>th</sup> July 2015.
- Awarded DST-Travel grant under Young scientist scheme in August 2011.
- Awarded Ministry of Human Resources and Development (MHRD), Government of India, Fellowship during doctoral program (July 2004 to July 2008)

- Second Ranking in 12<sup>th</sup> Concrete Cube Testing Competition conducted by Indian Chapter of ACI, Mumbai (June 2004).
- Best Outgoing Student during M.E. Degree awarded by V.L.B. Janakiammal College of Engineering and Technology, Coimbatore (June 2004).
- INAE award winner for the Innovation potential of best project award at Bachelors level, awarded by Indian National Academy of Engineers (INAE), New Delhi (December 2002).
- Best Project award and outstanding student award during B.E. Degree awarded by Kumaraguru College of Technology, Coimbatore (June 2002).
- Presented 27 Technical papers and won prizes in various students symposiums conducted in both state and national levels at different engineering institutions during my UG and PG Programme.

**No. of Ph.D.'s Guided (Co-guided – Nil)**

1. Allam Lingam, “Mechanical and Durability Studies on High Performance Concrete Containing Quaternary Blends”, December 2014.
2. Ananthi .A, “Effect of Weldslag as Fine Aggregate in High Performance Fibre Reinforced Concrete”, September 2016.

**No. of M.S. by Research Guided**

1. Aaruyir Yoga, “Weld Slag Waste as a Partial Substitute for Fine Aggregate in Concrete” December 2012.
2. Rajiv Gandhi “Comparative Study of Structural Design and Cost Analysis for Storage Container-Circular and square shapes” December 2013.

### **Short-term Course/Workshops Organised**

1. C. Natarajan and J. Karthikeyan, “Forensic Engineering practices for Kerala PWD Engineers” at Kerala State Highway Research Institute, Trivandrum, 19<sup>th</sup> to 21<sup>st</sup> December 2014.
2. K. Baskar and J. Karthikeyan, “Introduction to Finite Element Methods and its applications” Department of Civil Engineering, NIT-Trichy, 23<sup>rd</sup> and 24<sup>th</sup> January 2015.
3. J. Karthikeyan and K. Baskar, “Advancement in Concrete Technology” Department of Civil Engineering, NIT-Trichy, 27<sup>th</sup> and 28<sup>th</sup> March 2015.
4. R. Jayasankar and J. Karthikeyan, “Concrete Mix Proportioning” Department of Civil Engineering, NIT-Trichy and jointly organized with Ultratech Cement Ltd., 29<sup>th</sup> February 2016.

### **Workshops and Training Programmes Attended**

1. International workshop on Concrete Construction Chemicals for Enduring Structures by CCMA, Kolkatta on February 6<sup>th</sup> and 7<sup>th</sup>, 2015.
2. Training programme on Struds software basic and advance course conducted by CSCWORLD, Pune on February 20<sup>th</sup> to 22<sup>nd</sup>, 2013.
3. Short-term course on “Advancement in Finite Element Methods” Conducted by the Department of Civil Engineering, IIT-Kanpur on February 4-8, 2013.
4. Three days short course on “Teaching and learning e-Resources”, IIT-Madras, Chennai, August 2012.
5. Short-term course on "Testing of Concrete in Structures" Conducted by Continuing Education Center IIT-Roorkee on Dec 19-23, 2011.
6. Short-term Course on “Earthquake Resistant structures – Analysis, Design and Construction” conducted by the Institution of Engineers (India) Roorkee centre on 21<sup>st</sup> September to 24<sup>th</sup> September 2010.



7. Short-term Course on “Offshore Structures – Analysis and Design” held at the Department of Ocean Engineering, IIT-Madras on 14<sup>th</sup> December to 18<sup>th</sup> December 2009.
8. One month summer in-plant training at M/s Darmalingam Associates, Coimbatore during June-July 2003.
9. One month Training programme on Rural Energy Entrepreneurship organised by Energy department, Kumaraguru College of Technology, Coimbatore during August 2002.
10. Four weeks Summer training programme at Bharat Nivas, Auroville during May 2001.
11. Workshop on Good Concrete Construction Practices organized by Department of Civil Engineering, Kumaraguru College of Technology, Coimbatore during September 2000.

#### **Guest Lectures Delivered (Invited Talks)**

1. “High Performance Concrete Using Condensed Silica fumes” The Institution of Engineers – Tiruchirappalli local centre on 16<sup>th</sup> June 2009.
2. “Material Characterization” PMGSY Short-term course for Executive Engineers – NIT-Tiruchirappalli on 9<sup>th</sup> February 2010.
3. “Methods of Bridge Construction” PMGSY Short-term course for Executive Engineers – NIT-Tiruchirappalli on 12<sup>th</sup> February 2010.
4. “Testing and Strengthening of Bridges” PMGSY Short-term course for Executive Engineers – NIT-Tiruchirappalli on 12<sup>th</sup> February 2010.
5. “Special Concretes” One day workshop on Concrete Mix Design, NIT-Tiruchirappalli on 10<sup>th</sup> March 2010.
6. “Self-Compacting Concrete” Annai Engineering College – Kumbakonam on 4<sup>th</sup> April 2011.
7. “Recent Trends in Concrete Technology”, Institution of Engineers (India) Trichy local Centre on June 2012.

8. "Recent Trends in Prefabricated Constructions" Dhanalakshmi Srinivasan College of Engineering – Perambalur on 4<sup>th</sup> October 2013.
9. "Thermal Stresses" Agni college of Technology-Chennai on 16<sup>th</sup> June 2014.
10. "Thin Cylinders and Shells" Agni college of Technology-Chennai on 17<sup>th</sup> June 2014.
11. "Importance of Ductility-Methods of Introducing Ductility into R.C. Structures" Anna University of Technology, Dindigul on 22<sup>nd</sup> June 2014.
12. "Testing of Cement, Concrete, Aggregates, Timber & Steel" Kerala State Highway Research Institute, Trivandrum on 19<sup>th</sup> to 21<sup>st</sup> Decemeber 2014.
13. "Application of Plane truss, Beam and Frame problems using FEM" NIT-Trichy on 24<sup>th</sup> January 2015.
14. "Sustainability in Concrete Construction for the present Era" Care Group of Institution, Trichy on 13<sup>th</sup> March 2015.
15. "Modern Concreting Techniques" The Gandhigram Rural Institute, Gandhigram, Dindigul on 26<sup>th</sup> March 2015.
16. "Concreting under Special Circumstances", NIT-Trichy on 27<sup>th</sup> March 2015.
17. "Testing of Fresh and Hardened Properties of Concrete", NIT-Trichy on 27<sup>th</sup> March 2015.
18. "Special Concrete", NIT-Trichy on 28<sup>th</sup> March 2015.
19. "Hot weather and Cold weather Concrete", Government Polytechnic College, Nalgonda, Telengana state on 2<sup>nd</sup> April 2015.
20. "Flexural Members-Working stress method", Knowledge Institute of Technology, Salem on 23<sup>rd</sup> May 2015.
21. "Concrete Mix Proportioning and Durability", Care Group of Institution, Trichy on 2<sup>nd</sup> March 2016.
22. "Concrete Sustainability", Government College of Technology, Coimbatore on 22<sup>nd</sup> April 2016.

23. “Prefabricated Structural Elements”, Anna university of Technology, Tiruchirappalli on 22<sup>nd</sup> June 2016.
24. “Forensic Engineering and Rehabilitation of Structures”, Coimbatore Institute of Technology, Coimbatore on 15<sup>th</sup> September 2016.

### **Memberships in Professional Bodies**

- Member – The International Association of Bridge and Structural Engineers, Zurich, Switzerland (IABSE) 434504.
- Life Member- Indian Concrete Institute (ICI) LM-10486.
- Member – The Institution of Engineers, India (IE-I) M-150593-3.

### **Academic Foreign Visits**

<b>Country</b>	<b>Duration</b>	<b>Programme</b>
San Antonio, Texas, USA	September 2009	PCI/NBC Conference
Niagara Falls, Canada	June-July 2010	8 <sup>th</sup> SMSB Conference
Rotorua, New Zealand	August – 2011	9 <sup>th</sup> HPC Symposium
Kandy, Sri Lanka	December-2011	ICSECM Conference
Paris, France	September-2013	7 <sup>th</sup> RILEM Conference
Johannesburg	November – 2014	ICCMS Conference
Lausanne, Switzerland	June-2015	Sustainability Conf.
Prague, Czech Republic	September- 2015	FC2015 Conference

### **List of Publications**

#### **Patents**

1. Filed a patent on 27/12/2012 “A process for producing concrete that utilizes weld slag as a partial replacement to fine aggregate by blending with fine aggregate in concrete” Application number: 1471/KOL/2012 awaiting for the examination reports.

## **International and National Journals**

- 1. J. Karthikeyan, Upadhyay. A and N. M. Bhandari, "Artificial Neural Network for predicting creep and shrinkage in HPC", Journal of Advanced Concrete Technology, 6(1), March 2008, pp. 135-142.**
2. J. Karthikeyan and Praveen.V.F. "Long-term effects of creep and shrinkage on prestressed concrete Bridge girders using SCC ", International Journal of Structural Engineering, Vol. 2, No. 4, 2011. (pg. 390-403)
- 3. J. Karthikeyan, Upadhyay. A and N. M. Bhandari, "Long-term Deformation of a Simply Supported HPPC Twin-cell Box Girder Bridge", The Bridge and Structural Engineer, Vol. 42 No.2, June 2011. (pg.1-25)**
4. Rajiv Gandhi. K and J. Karthikeyan, "Comparative Study of Structural Design and Cost Analysis for Storage Container Circular and Square Shapes", International Journal of Scientific Research, Vol. 1 No. 6, November 2012. (Pg. 52 – 54)
5. Alaguvel. S and Karthikeyan. J, "Long-term Behavior of Simply Supported Pretensioned Concrete Bridge Girders", The Bridge and Structural Engineer, Vol. 43 No.1, March 2013 (pg.49-72)
- 6. J. Karthikeyan, Upadhyay. A and N. M. Bhandari, "Long-term Deformation of a Simply Supported HPPC Single-cell Box Girder Bridge", The Bridge and Structural Engineer, Vol. 43 No.2, June 2013. (pg.7-29)**
7. J.Karthikeyan and K.V.Pratap, "Effect of various Curing Conditions on Compressive strength on HPC", Elixir Cement and Concrete Composites, Vol. 61, August 2013. (pg.16705-16708)
8. Allam Lingam and J.Karthikeyan, "Flow Behavior of Freshly Mixed Quaternary Blended High Performance Concrete using Modified Slump Cone test", Elixir Cement and Concrete Composites, Vol. 61, August 2013. (pg.16709-16717)

9. J.Karthikeyan and C. Arunkumar, "Effect of Silicafume and flyash on fresh and hardened state of Self Compacting Concrete", *Elixir Cement and Concrete Composites*, Vol. 61, August 2013. (pg.16718-16722)
- 10. Karthikeyan Jayakumar, Akhil Upadhyay and Navrathan M. Bhandari, "Creep and Shrinkage behavior of HPC", *The Indian Concrete Journal*, Vol. 87 No 10, October 2013. (pg.39-45)**
11. Allam Lingam and J.Karthikeyan, "Rheological Behavior of Binary and Quaternary Blended High Performance Concrete using Modified Slump Cone test", *International Journal of Advanced Engineering Applications*, Vol. 2, Issue 5, October 2013. (pg.116-131)
12. Allam Lingam and J.Karthikeyan, "Prediction of Compressive Strength for HPC mixes containing different blends using ANN", *Computers and Concrete*, Vol. 13, No. 5, May 2014. (pg.581-592)  
1.015 IF
13. J. Karthikeyan and K. Shaheer Ali, "Comparative Studies on Mechanical Properties in High Performance Concrete", *The Indian Concrete Journal*, Vol. 88, No. 9, September 2014. (pg. 35-45)
14. A. Ananthi and J. Karthikeyan, "A Review on the Performance of Fibre and Industrial Slag in Concrete", *International Journal of Advanced Concrete Technology*, Vol. 1, No.1, March 2015. (Pg.16-31).
15. A.Ananthi and J.Karthikeyan, "Performance of polypropylene fibre in high-performance concrete", *Proceedings of the ICE-Construction Materials, London Vol.168* (5), 2015,  
DOI: [10.1680/coma.15.00004](https://doi.org/10.1680/coma.15.00004)
16. A.Ananthi and J.Karthikeyan, "Properties of Industrial Slag as Fine Aggregate in Concrete". *International Journal of Engineering and Technology Innovation*, Vol-5, 2015, 132-140.

17. A.Ananthi and J.Karthikeyan, “Mechanical properties of HPC with weld slag as fine aggregate”, *Institution of Civil Engineering Journal, Waste and Resource Management*, 2015, London.  
DOI: 10.1680/jwarm.15.00002
18. J.Karthikeyan, “Material Advantage: Small, Strong and Resistant”, *Construction world*, Vol. 17, No. 12, September 2015, (Pg. 94-96)
19. A.Ananthi and J.Karthikeyan, “A Review on the effect of Industrial waste in Concrete”, *Indian Concrete Journal*, Vol. 89, No. 11, November 2015. (Pg.73-80)
20. G.Venkata Suresh and J. Karthikeyan, “Influence of GGBFS on the Mechanical Properties of the Water Cured Fly Ash Aggregate-Based Geopolymer Concrete”, *International Journal of Advanced Concrete Technology*, Vol. 1, No.2, 2015. (Pg.1-12).
21. A.Ananthi and J.Karthikeyan, “Combined Performance of Polypropylene fibre and Weldslag in High Performance Concrete”, *Indian Concrete Journal of The Institution of Engineers (India): Series A, Springer Journals- under review*.
22. J.Karthikeyan, “Material Advantage: The Next Smart Building Material”, *Construction world*, Vol. 18, No. 6, March 2016, (Pg. 90-92)
23. G. Venkata Suresh and J. Karthikeyan, “Performance enhancement of Green Concrete” Proceedings of the Institution of Civil Engineers – Engineering Sustainability, May 2016.  
DoI: 10.1680/jensu.15.00066
24. G. Venkata Suresh, P. Pavan kumar Reddy and J.Karthikeyan, “Effect of GGBFS & Fly ash aggregates on Properties of Geopolymer Concrete”, *Journal of Structural Engineering* (in press)
25. G. Venkata Suresh and J. Karthikeyan, “Influence of Chemical Curing Technique on the Properties of Flyash Aggregates prepared

- without Conventional Binders”, Journal of Structural Engineering Vol.43, No.4, 2016, Chennai, P.381 to 389.
26. G.Akhil and J.Karthikeyan, “Durability aspects of Copper slag admixed Concrete”, International Journal of Fracture and Damage Mechanics, Vol.1, No.2, Pg.40-46, June 2016.
27. Allam Lingam and J.Karthikeyan, “Compressive strength properties of HPC mixes containing binary and quaternary blends”, Indian Concrete Journal, Vol.90, No.10, Pg.32-43 October 2016.

### **National and International Conference Proceedings**

2. Ananthi. A and J. Karthikeyan (2015) Influence of polypropylene fibres on the mechanical and durability properties of high performance concrete, CD Proceedings of International Conference on Fibre Concrete 2015, 10-11 September 2015, Prague, Czech Republic.
3. Karthikeyan.J, Shaheer Ali.K and Chittibabu.K (2015) “Durability Aspects in High Performance Metakaolin Concrete” CD Proceedings on the 1<sup>st</sup> International Conference on Clay and Calcinated clays for Sustainable concrete, June23–25, 2015, Lausanne, Switzerland.
4. Karthikeyan.J and Ananthi.A (2014) “Material Properties of Bottom Ash and Welding Slag as Fine aggregates in Concrete” Proceedings on the International Conference on Construction Materials and Structures, November 24- 26, 2014, Johannesburg, South Africa, pg no. 311-319.
5. Allam Lingam and J.Karthikeyan (2013) “Strength Evaluation of HPC mixes containing Binary and Quaternary blends” Proceedings on the International Conference on Innovation in Concrete (ICI-IWC 2013), October 23-26, 2013, Hyderabad, India, pg no.507-515.
6. J.Karthikeyan and C. Arunkumar (2013) “Influence of Silicafume in SCC under its fresh and hardened state”, CD

Proceedings of the 7<sup>th</sup> RILEM conference on Self Compacting Concrete, September 2 – 4, 2013, Paris, France.

7. T.Aaruyir Yogaa and J.Karthikeyan (2012) “Using weld slag waste as a partial substitute for sand in concrete”, Proceeding of National Conference on Advances in Concrete and Construction Technology (NCACCT-12), Page No 150 to 154, organized by K.S.R College of Engineering, Tiruchengode.
8. Balachandar.T and Karthikeyan.J (2012), “Properties of High Performance Concrete as a Partial Replacement of Cement with Ground Granulated Blast Furnace Slag”, CD Proceedings of CCERP-12, Manipal University –Mangalore.
9. Karthikeyan.J. and Karthik.R (2011). “Effect of Consistency and setting time of cement using silicafume and metakaoline” Proceedings of International Conference on Structural Engineering, Construction and Management" (ICSECM) 2011, Kandy, Srilanka
10. Karthikeyan, J. and V.F Praveen (2011). "Effect of Metakaolin on Self-Compacting Concrete" Proceedings of the 9th International Symposium on High Performance Concrete, Rotorua, New Zealand.
11. **Karthikeyan. J, Bhandari. N.M. and Akhil Upadhyay (2010) “Long-term Deformation of a HPPC Bridge using Incremental Time-step Method” CD Proceedings 8<sup>th</sup> International Conference on Short and Medium Span Bridges, Niagara Falls, Canada.**
12. **Karthikeyan, J., Upadhyay, A. and Bhandari, N. M. (2009). “Incremental Time-Step Method for Predicting Long-term Deformation of a HPPC Bridge.” CD Proceedings of PCI/NBC, San Antonio, Texas, USA.**
13. **Karthikeyan, J., Upadhyay, A. and Bhandari, N. M. (2008). “Long-term behavior of a prestressed concrete bridge built with HPC.” Proceedings of NBRDC, Hyderabad, India.**



14. **Karthikeyan, J., Upadhyay, A. and Bhandari, N. M. (2007).  
“Deflection of a box girder bridge built with HPC.” Proceedings of national conference on recent advances in civil engineering (RACE 2007), 59-62, Bhubaneswar, India.**
15. **Karthikeyan, J., Upadhyay, A. and Bhandari, N. M. (2006).  
“Comparison of creep and shrinkage behavior of normal and high performance concrete.” Proceedings of 2<sup>nd</sup> CUSAT national conference on recent advances in civil engineering (RACE 2006), 1-3, Cochin, India.**
16. **Karthikeyan, J., Bhandari, N. M. and Upadhyay, A. (2006).  
“Prediction models of creep and shrinkage in High performance concrete.” Proceedings of the national conference on high rise buildings: materials and practices, 285-292, New Delhi, India.**
17. Karthikeyan, J., Natesan, S. C. and Bhandari, N. M. (2005). “Acid resistance test in High performance concrete.” Proceedings of National seminar on structures and earthquake engineering – ICI – Allahabad Centre, I-29, India.
18. Karthikeyan, J. and Natesan, S. C. (2004). “Role of High performance silica fume concrete.” International seminar on ultra high performance concrete (CD ROM), University of Kassel, Kassel, Germany.
19. Karthikeyan, J. and Natesan, S. C. (2004). “Experimental Investigations on High performance concrete.” National Conference on Materials and structures, NIT, Warangal.
20. Karthikeyan, J. and Natesan, S. C. (2004). “Influence of silica fumes on the properties of OPC and PPC with super plasticizers.” National Conference on Materials and structures, NIT, Warangal.
21. Karthikeyan, J. and Natesan, S. C. (2003). “Mechanical Properties of High Performance Silica fume Concrete.” Proceedings of the 3<sup>rd</sup> International PCI/FHWA symposium on High performance concrete (CD-ROM), Orlando, USA.

22. Karthikeyan, J. and Natesan, S. C. (2003). "Effects of condensed silica fumes on the properties of HPC." Proceedings of the International conference on 3<sup>rd</sup> millennium, 21<sup>st</sup> Biennial Conference, Brisbane, Australia.
23. Karthikeyan, J. (2003). "Investigations on mechanical properties of High performance concrete." Proceedings of the national seminar, CBIT, Hyderabad.

**Any other Information**

Currently authoring a text book on "Concrete Technology" informative for UG, PG and Research Students. Hopefully, this should get published/released in the next year.