

Dr. J. Raja Murugadoss Director, NSRIT

## **EDUCATION**

Ph. D. (2008)	Civil Engineering Thesis: Domain – Based Multiple Ant Colony Optimization for Discrete Structural Optimization Anna University, Chennai
M.E. (2003)	Structural Engineering Karunya Institute of Engineering & Technology Bharathiyar University, Coimbatore
B.E. (1999)	Civil Engineering Mepco Schlenk Engineering College, Sivakasi Madurai Kamarajar University, Madurai

# **PROFESSIONAL EXPERIENCE : 16 Years**

Director	Nadimpalli Satyanarayana Raju Institute of Technology (NSRIT) Visakhapatnam, Andhra Pradesh – 531 173	
Vice Principal	GMR Institute of Technology GMR Nagar, Rajam 532 127, Andhra Pradesh January 18, 2016 – April 28, 2021	
	GMRIT: Corporate Social Responsibility (CSR) Arm of GMR Group, New Delhi (Popular in Airport Sector, Infrastructure and Energy Sector   Accredited by NAAC   All Programs Accredited by NBA (Tier I)   Autonomous   NIRF (201 – 250)   ARIIA (51 – 75)   One among top 50 Institutions in the Country (Popular Education Magazines)   www.gmrit.org	
Professor & Head	Civil Engineering KPR Institute of Engg. & Tech., Coimbatore 641 407, TN February 27, 2014 – December 31, 2015	
Professor & Head	Civil Engineering Bannari Amman Inst. of Engg. & Tech., Coimbatore 641 407, TN June 20, 2005 – August 31, 2013	
TRA	Civil Engineering Karunya Institute of Engineering & Technology, Coimbatore May 1, 2003 – December 31, 2004	

# **UNIQUE SELLING POINTS**

- Good Administrator capable of running an Educational Institution in line with the Vision and Mission of the Institution empowering the faculty with Participative management and Inclusive Growth
- Team Player
- Excellent Proficiency in
  - Outcome Based Education and Accreditation
  - Accreditation Process (NBA and NAAC)
  - National Institute Ranking Framework (NIRF)
  - $\circ$  New transformational National Education Policy 2020
  - $\circ$  21<sup>st</sup> Century Skills
  - Education 4.0
  - o STEM and STEAM Education
  - Innovative Teaching Pedagogies and Experimenting
- Self-Driven
- Parental Care for the Internal Stakeholders, especially for the Students Youth Generation Transformation (Rural and Semi-urban)
- Strong in Faculty Capacity Building
- Good networking with academicians and other stakeholders

## **PUBLICATIONS (REFER ANNEXURE I)**

#### **MEMBERSHIP IN NATIONAL LEVEL COMMITTEE**

Programme Evaluator in National Board of Accreditation, New Delhi

#### **MEMBERSHIP IN PROFESSIONAL BODIES**

- Associate Member American Society of Civil Engineers (ASCE)
- Indian Society for Technical Education (ISTE)

#### **PROFESSIONAL ACTIVITIES**

#### Colleges Visited for Real Time & Mock Accreditation (NBA)

- ◆ National Institute of Engineering and Technology (NIT), Silchar, Assam
- National Institute of Engineering and Technology (NIT), Suratkal, Karnataka
- Vimal Jothi College of Engineering, Kerala
- Kings Engineering College, Chennai

#### NEW INITIATIVES AND ACCOMPLISHMENTS AT GMRIT

- Spearheaded the Program Level Accreditation (NBA) under TIER I (Cycle III)
- Spearheaded the Institute Level Accreditation (NAAC) (Cycle 3)
- Spearheaded and Implemented Open Book Examinations at GMRIT
- Spearheaded and Implemented the Concept of Flipped Learning at GMRIT
- Spearheaded and Implemented the New Innovative Teaching Pedagogy "Cohesive

   Teaching Learning Practices (CTLP)" at GMRIT and motivated the members of
   faculty to develop 200+ courses and floated online for the internal stakeholders

- Strengthened the process of Full Semester Internship which is a part of GMRIT Autonomous Curriculum
- Initiated SKILL GMRIT to nurture problem solving skills among students

## **PROGRAMMES ORGANISED**

- Organised online Webinar on "National Education Policy" taking the support of Dr. K. Kasturirangan, Shri Padma Vibhushan Awardee Chairman NEP 2020 during October 2020
- Organised a five-day AICTE Sponsored Short Term Training Programme on "Aligning Curriculum Design, Development, Delivery and Assessment in the Context of Outcome Based Education" during September 23-28, 2019
- Organised a three-day Management Development Programme (MDP) to enhance the Leadership Qualities for the Heads of Academic and Non-Academic Heads of GMRIT during July, 2017
- Organised a two-day National Level Workshop on "Outcome Based Education and Accreditation, GMR Institute of Technology during 17 – 18 May, 2017
- Organised an International Conference cum Preconference workshop on Sustainable Practices in Civil Engineering in association with University of Derby, UK during April 16-18 at KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu
- Organised a National Level Students Technical Symposium Lustrans 2015 during March 20-21, 2015 at KPR Institute of Engineering and Technology, Coimbatore
- Organised a One Day Regional Summit on Field Test Procedures of Soil and Concrete Samples on February 13, 2015 at KPR Institute of Engineering and Technology, Coimbatore in association with Indian Geotechnical Society of India, Coimbatore Chapter
- Organised a National Level Students' Technical Symposium and Project Design Contest for Diploma Engineers, Eureka 2015 in association with Indian Geotechnical Society, Coimbatore Chapter on February 20, 2015
- Organized an International Conference cum Preconference workshop on "Recent Trends in Engineering and Technology for Sustainable Development", in association with University of Derby, UK, during September 3-5, 2012 at Bannari Amman Institute of Technology, Sathyamangalam.
- Organized a two-day conference cum Pre-conference workshop on Water and Waste Water Management during 16-17 September 2011 at Bannari Amman Institute of Technology, Sathyamangalam
- Organized two-week FDP on Structural Optimization, at Bannari Amman Institute of Technology sponsored by Anna University, Chennai during December 2011
- Organized an International Conference on "Innovations in Building Materials, Structural Designs and Construction Practices (IBMSDCP-08)", May 15<sup>th</sup> – 17<sup>th</sup> 2008 at Bannari Amman Institute of Technology, Sathyamangalam.
- Organized a National Conference on "The State of Art about the Recent Theories, Techniques and Designs in Structural Engineering", April 27<sup>th</sup> – 28<sup>th</sup>, 2007.
- Organised a National Workshop on "Design of Earthquake Resistant Structure", 4<sup>th</sup> 5<sup>th</sup> May 2007

#### **PRPGRAMMES ATTENDED**

- Attended an International Conference on Internationalization of Higher Education and Quality Assurance – Trends and Challenges at VIT University during 09 – 10 January 2015
- Attended a two-day workshop on "Outcome Based Education & Accreditation" at NMIMS, Bangalore during 07 – 08 September 2013
- Attended a one day workshop on "Training of Evaluators / Resource Persons on Outcome Based Accreditation" at Bannari Amman Institute of Technology, Sathyamangalam during 9<sup>th</sup> May 2013
- Attended a two-day workshop on "Specialized Training for Evaluators in the aspect of eNBA and onsite visit procedure for accreditation" at SRM University, Chennai during 18-19<sup>th</sup> July 2013
- Attended One day workshop on "NBA Accreditation for Undergraduate Engineering Programmes" at Jaya Engineering College, Chennai, 14<sup>th</sup> July 2011
- Attended a one day workshop on outcome based education in the aspect of Tier I and Tier II format procedure at PSG College of Technology during December 2012
- National Workshop on "Effective Method of Doing M.E. and Ph.D. Research Projects in Structural Engineering" organized by Department of Civil Engineering, Bannari Amman Institute of Technology, Sathyamangalam
- National Workshop on "Recent Developments on Concrete Technology" on 29<sup>th</sup> November 2007, organized by Indian Concrete Institute (ICI), Chennai and the Department of Civil Engineering, Thiagarajar College of Engineering, Madurai.

## **GUEST LECTURES DELIVERED**

- Acted as a Resource Person for a 1-day workshop on "Outcome Based Curriculum Design", for the members of faculty of NSRIT, Vizag on December 12, 2020
- Delivered an online webinar to sensitize the members of faculty of NSRIT, Vizag on "Outcome Based Curriculum Design", December 2020
- Delivered an Online Webinar Series on "Outcome Based Education and Education 4.0" to the members of faculty of NGP, Coimbatore
- Delivered an online nano course on "Challenges in Curriculum Design in the context of Outcome Based Education" through IUCEE during November 2018
- As Resource Person: Delivered a guest lecture on "Outcome Based Education and Accreditation", at Saintgits Institute of Management, Saintgits College of Engineering during 3 – 5 October 2013
- As Resource Person: Delivered a guest lecture on "Outcome Based Education and Accreditation", at National Institute of Technology, Suratkal, Karnataka during 23
   - 25 August 2013
- Guest Lecture on Outcome Based Education & Accreditation Procedures at Kings Engineering College, Chennai on 22.02.2015
- Guest Lecture on "Ant Colony Optimization" in a Faculty Development Programme

   TEQIP on "Optimization Techniques" organized by the Department of Civil Engineering, Government College of Engineering, Tirunelveli during 3<sup>rd</sup> – 4<sup>th</sup> of April 2007.
- Delivered a lecture on "Modern Concepts of Aseismic Structural Design" in a National Workshop on "Design of Earthquake Resistant Structures" held at

Bannari Amman Institute of Technology, Sathyamangalam 638401 during  $4^{\rm th}$  –  $5^{\rm th}$  May 2007.

- Literature Survey Related to a Theoretical Research Problem Structural Optimization: A Review, in a National workshop on "Effective Method of Doing M. E. and Ph.D. in Structural Engineering" held at Bannari Amman Institute of Technology, Sathyamangalam on 20<sup>th</sup> to 21<sup>st</sup> of January 2006.
- Fundamentals of Computer, in a Entrepreneurship Development Programe on "Human Quality Enhancement" held at Bannari Amman Institute of Technology, Sathyamangalam

## **GRANTS RECEIVED**

- Received a grant of Rs. 15, 00, 000/- from AICTE under MODROB for Concrete Technology Laboratory from AICTE, New Delhi
- Received a grant of Rs. 159.54 Lakhs as a Co-PI for the project "Enhancing the Quality of Life of SC community in Rajam Block (Srikakulam District) of Andhra Pradesh through establishment of a Common Facility Centre for Bamboo Processing", under the scheme STI Hub for SC Community, DST, New Delhi
- AICTE has sanctioned a grant of Rs. 5.20 Lakhs towards organizing a faculty development programme titled "Curriculum Design, Delivery and Assessment in accordance with Outcome Based Education (OBE)" during Nov. 2018
- Received a grant of Rs. 10, 00, 000/- from AICTE under MODROB for Concrete Technology Laboratory from AICTE, New Delhi
- Received a grant of Rs. 60,000/- from Centre for Faculty Development, Anna University, Chennai for conducting a FDP on CE 038 Structural Dynamics during 19 – 26 December 2011
- Received a grant of Rs. 1, 72, 000/- for conducting a FDP on "Non-Traditional Techniques for Structural Optimization" from AICTE during 7<sup>th</sup> – 21<sup>st</sup> December 2010
- Received an amount of Rs. 15, 000/- from Department of Science and Technology, New Delhi, as travel grant to participate in an International Conference on "European Asian Civil Engineering Forum" at Indonesia.
- Received an amount of Rs. 15, 000/- from Council of Science and Industrial Research, New Delhi, as travel grant to participate in an International Conference on "European Asian Civil Engineering Forum" at Indonesia.
- Received an amount of Rs. 20, 000/- for conducting a National Workshop on "Earthquake Resistant Design of Structures" from CSIR, New Delhi.
- Received an amount of Rs. 20, 000/- for conducting a National Conference on "The State of Art about the Recent Theories, Techniques and Designs in Structural Engineering" from CSIR, New Delhi.

#### **PROJECTS GUIDED /ON GOING**

## Ph. D.

Guided two Ph.D. candidates

### **UG Projects**

- Cost comparison of Aseismic and Normal Masonry Residential Building
- ✤ Analysis and Design of Multi-storey Residential Apartment
- Optimal Design of Space Truss using Ant Colony Metaphor
- Topology Optimization of Space Truss using Ant Colony Metaphor
- TSP using Ant Colony Metaphor

## **PG Projects**

- Effect of Steel Fibre Types on the Mechanical Properties of Concrete for Semi Flexible Pavements
- Characterization and Feasible Applications of Waste Tyre Rubber Deposits in Airfield Runway
- Dynamic Buckling Analysis of Composite Shells with Cut-outs using General Shell Element
- Optimal Ply-Orientation of Axi-Symmetric Composite Shells using Ant Colony Optimization
- Optimal Design of Space Truss using Cost Minimization Algorithm and Ant Colony Optimization Algorithm

## **SUBJECTS TAUGHT**

- Theory of Elasticity and Plasticity
- Finite Element Method
- Structural Optimization
- Mechanics of Deformable Bodies
- Structural Dynamics
- Strength of Materials Laboratory
- Computer Aided Building Drawing Laboratory
- Principles of Environmental Science and Engineering
- Fluid Mechanics Laboratory
- Engineering Practice Laboratory.
- Civil Software such as STAAD-PRO, MATLAB, AUTOCAD etc..
- Computer Application in Civil Engineering ('C', Java and MS-Excel)

## **RESEARCH INTEREST**

- Engineering Education and Innovative Teaching. Learning (Students Centric) Pedagogies
- Structural Optimization using heuristic and metaheuristic approaches
- Parallel and Distributed Computing for Structural Optimization
- Vibration Analysis of Composite Shells
- Computer Aided Mode Simulation
- Civil Software Development
- Structural Modelling Markup Language

## **OTHER ACTIVITIES**

- Initiated Motivational Talk with Top 2% Scientists to encourage the members of faculty to enhance the research eco-system in the campus at GMR Institute of Technology, AP
- Initiated International Collaboration with Universities Abroad for all possible Academic and Research Collaboration at GMR Institute of Technology, AP
- Professor In-charge of Autonomous Affairs at Bannari Amman Institute of Technology, Sathyamangalam
- Professor in-charge of Accreditation (NBA) and NAAC, KPR Institute of Technology, Coimbatore.
- Undertaken many consultancy and testing services
- Undertaken many initiates to sign MoU with many leading industries
- Played a key role in the Autonomous Governance System at Bannari Amman Institute of Technology, Sathyamangalam

#### **PERSONAL DETAILS**

Wife	: Dr. R. Priya Vaijayanthi
Qualification	: A potential academician with Ph.D. Qualification in
	Computer Science and Engineering
Status of Employment	: Yes
Employee	: GMR Institute of Technology, Rajam, AP
Daughter	: Ms. J. R. Meenakshi, Pursuing Grade XI at Sivakasi
Parents	: Residing in Sivakasi.

# Annexure I

#### **PUBLICATIONS**

#### **Book Chapter**

1. **Raja Murugadoss J.** and Priya Vaijayanthi R., "Curriculum Design: An Indicative Guide", Print ISBN: 978-93-89816-98-3, eBook ISBN: 978-93-89816-99-0, DOI: 10.9734/bpi/etert/v2

## **International Journals**

- 1. GVSS Sharma, **Raja Murugadoss J**. and Rambabu V., "Fostering Higher Order Thinking Skills in Engineering Drawing", Journal of Engineering Education Transformations, Vol. 34, No. 1, July 2020 **(Indexed by Scopus)**
- Raja Murugadoss J. and Krishna Kishore K., "Effectiveness of E-Learning in Rural India and Significance of Self-Directed Learning" International Journal of Advanced Science and Technology", Vol. 29, No. 6, (2020), pp. 6015 – 6020 (Indexed by Scopus)
- 3. Sree Sandhya K., **Raja Murugadoss J.**, Ganesh Prabhu G., "Structural and Other Applications of Steel Fiber Reinforced Concrete - A Review", International Journal of Scientific & Technology Research, **Volume 8 - Issue 10, October 2019** (Indexed by Scopus)
- 4. Lakshmi Adothodi and **Raja Murugadoss J.**, Characterization and Feasible Applications of Waste Tyre Rubber Deposits in Airfield Runway", **Nature Environment and Pollution Technology (p-ISSN 0972-6268; e-ISSN 2395-3454). The paper is likely to come in Vol. 18, No. 2 (June), 2019 (Indexed by Scopus)**
- Priya Vaijayanthi R., and Raja Murugadoss J., "Effectiveness of Curriculum Design in the Context of Outcome Based Education (OBE)", International Journal of Engineering and Advanced Technology (IJEAT), Volume 8, Issue 6, pp. 648 – 651, August 2019. (Indexed by Scopus)
- Vijayakumar A., Raja Murugadoss J., and Praveen S., "Development of Sustainable Concrete Using Alternative Building Materials By Replacing Industrial Waste Steel Slag for Aggregates", International Journal of Engineering and Advanced Technology (IJEAT), Volume 8, Issue 6, pp. 2745 – 2749, August 2019. (Indexed by Scopus)
- Gokulan Ravindiran, Raja Murugadoss J., Jegan Josephraj and Avinash Alagumalai, "Comparative Desorption Studies on Remediation of Remazol Dyes Using Biochar (Sorbent) Derived from Green Marine Seaweeds", ChemistrySelect, Issue 4, Wiley Online Library, pp. 7437 – 7445, 2019. (SCI Indexed)
- Ganesh Prabhu G., Raja Murugadoss J., and Rajkumar K., "Performance Evaluation of Slag as a Cementitious Material in Concrete Production – Strength and Durability Properties", International Journal of Engineering and Advanced Technology (IJEAT), Volume 8, Issue 5, pp. 753 – 757, June 2019. (Indexed by Scopus)
- 9. Lakshmi Adothodi and **Raja Murugadoss J**., "Application of a Novel Adsorbent-Aircraft Tyre Rubber Ash for the removal of Chromium from Wastewaters", Rasayan Journal of Chemistry (RJC), Volume 11, Issue 3, pp. 1204-1210, August

2018. (Indexed by Scopus)

- Lakshmi Adothodi, Raja Murugadoss J. and Naveen Kumar Shanagam. "Recycling of Waste Tyre Rubber Deposits In Airfield Runway: A Review", International Journal of Civil Engineering and Technology (IJCIET), Volume 9, Issue 2, pp. 275– 285, February 2018. (Indexed by Scopus)
- 11. Lakshmi Adothodi, **Raja Murugadoss J.** and Kalyani Gaddam. "A Comparative Study on Vehicular Tyre Rubber and Aircraft Tyre Rubber: A Review Based on SEM, EDS and XrD Analysis", International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Volume 8, Issue 2, pp. 1227-1234, April 2018. **(Indexed by Scopus)**
- 12. Karthik K. and **Raja Murugadoss J.**, "Runway Rubber Deposition, Test and Removal Techniques", International Journal of Civil Engineering and Technology, Volume 9, Issue 2, pp. 63 - 75, February 2018. **(Indexed by Scopus)**
- 13.Raja Murugadoss J. and Saranya S., Soil Stabilization using Rubber Waste and Cement (Standard Proctor Test and CBR), International Journal of Civil Engineering and Technology, Vol. 8, Issue 6, pp. 630 – 639, 2017 (Scopus Indexed)
- 14. Anusha G. and Raja Murugadoss J., Feasibility Studies on the Removal of Iron and Fluoride from Aquaous Solution using Shells of Limonia Acidissma as Absorbent, Indian Journal of Geo-Marine Sciences, Volume 46, Issue 6, pp. 1226 - 1229, 2017 (Thomson SCI Indexed)
- 15. Vijayakumar A., Raja Murugadoss J. and Bharathi, Ecological Concrete : A Review, International Journal of Civil Engineering and Technology, Vol. 8, Issue 6, pp. 160 170, 2017 **(Indexed by Scopus)**
- 16. Raja Murugadoss J., Ganesh Prabhu G., Byung Jae Lee, Jin Wook Bang and Yun Yong Kim, Performance Analysis of CFRP Composite Strips Confined RC Columns under Axial Compression, Advances in Materials Science and Engineering, Volume 2015, pp. 1- 18, 2015, SNIP : 0.454, SJR : 0.226, impact factor : 0.879, H Index : 5, Citation Index : 0.61
- 17. Anusha G. and Raja Murugadoss J., Studies on Adsorption of Fluoride and Iron from Aqueous Solution using Limonia Accidissima as Adsorbent, Journal of Industrial Pollution Control, Volume 31, Issue 1, pp. 47-50, 2015, SNIP: 0.269, SJR : 0.151,H index : 9, Citation Index :0.1
- 18. Anusha G. and Raja Murugadoss J., Adsorption of Fluoride And Iron From Aqueous Solution Using Almond shell As Adsorbent, International Journal of Applied Engineering Research, Volume 10, Number 47 special issue, pp. 32437-32442, SNIP: 0.034, SJR :0.127, H index : 3, Citation Index : 0.03.
- 19. Saravanan M., Raja Murugadoss J. and Priya Vaijayanthi R., Evaluating Optimal Design of Trusses with the Aid of Cuckoo Search Algorithm, has been accepted for publication in the International Journal of Applied Engineering Research, Volume 10, Number 47 special issue, pp. 32327-32334, SNIP: 0.034, SJR :0.127,H index : 3, Citation Index : 0.03.
- 20. Anusha G. and Raja Murugadoss J., Adsorption of Fluoride from Aqueous Phase by Agro Based Adsorbent, Journal of Science and Research, Volume 3, Issue 9, pp. 2067 -2069, 2014.
- 21. Anusha G. and Raja Murugadoss J., Studies on Adsorption of Iron from Aqueous Solution using Almond Shell as Adsorbent, International Journal of scientific research, Volume 3, Issue 10, pp. 1-3, 2014.

- 22. Anusha G. and Raja Murugadoss J., Modeling for Removal of Nickel and Lead from Industrial Wastewater by Adsorption, Journal of Water pollution and Purification Research, Volume 1, Issue 3, pp. 13-17, 2014
- 23. Priya Vaijayanthi R., Yang X. S., Natarajan A. M. and Raja Murugadoss J., High Dimensional Data Clustering using Cuckoo Search Optimization Algorithm, International Journal of Advanced Computer Engineering and Communication Technology, Volume 3, Issue 3, pp. 2319 -2526, 2014
- 24. Priya Vaijayanthi R., Natarajan A. M. and Raja Murugadoss J., Ants for Document Clustering, International Journal of Computer Science Issues, Volume 9, Issue 2, No. 2, pp. 493 – 499, 2012, SNIP: 0.747, SJR : 0.670, H index : 7, Citation Index :0.98
- 25. Priya Vaijayanthi R., Natarajan A. M. and Raja Murugadoss J., High Dimensional Data Clustering using ant Based Algorithm, European Journal of scientific research, pp. 364 – 372, 2012, SNIP: 0.699, SJR : 0.15,Impact Factor :0.736, H index : 22, Citation Index :0.34
- 26. Anusha G., Raja Murugadoss J. and Raju P., Adsorption of Fluoride from Aqueous Solution Using Limonia Acidissima as Adsorbent, The Asian Review of Civil Engineering, Volume 1, Issue 1, pp. 15-18, 2012.
- 27. Anusha G., Raju P. and Raja Murugadoss J., Adsorption of Fluoride from Aqueous Solution using Emblica Officilanis Seeds as Adsorbent, Indian Journal of Engineering Science and Technology, Volume 5, Issue 1, pp. 16, 2011.
- 28. Priya Vaijayanthi R., Natarajan A. M. and Raja Murugadoss J., Document Clustering using Hybrid ACO -TS, International Journal on Recent Trends in Engineering and Technology, Volume 6, Issue 1, 2011.
- 29. Saravanan M., Raja Murugadoss J. and Jayanthi V., Optimum Design of Structures using Cuckoo Search, International Journal Civil, Structural, Construction and Architectural Engineering, Volume 8, Issue 6, pp 764 -767, Citation :01,I impact factor :0.063, SNIP :0.137, SJR : 0.143,H index :2, 2011.
- 30. Ravichandran A.T., Mohanasundaram K. M. and Raja Murugadoss J., Study on Optimal Order Picking in a Cross Aisle Warehouse using Enhanced Version of Ant Colony Algorithm, National Journal of Technology, Volume 5, Issue 4, 2009.
- 31. Ganesh Prabhu G., Jayaganesh, Jegan J. and Raja Murugadoss J., Behavior of Concrete Filled Steel Tubular (CFST) Column under Axial Compression, has been accepted for publication in the International Journal of Applied Engineering Research", Volume 10,Number 47 special issue, pp. 32262-32271, 2015, SNIP: 0.034, SJR :0.127,H index : 3, Citation Index : 0.03.
- 32. Raja Murugadoss J., Lee B. J., Bamg J. W., Ganesh Prabhu G. and Kim Y. Y. Performance analysis of CFRP composite strips confined RS columns under axial compression, Advances in material Science and Engineering, SNIP : 0.454, SJR : 0.226, impact factor : 0.879, H Index : 5,Citation Index : 0.61.
- 33. Raja Murugadoss J., Rajendran M.G. and Justin S. (2007). "DB-MACO: Domain Based Multiple Ant Colony Optimization Algorithm for Optimal Ply Orientation", Advances in Vibration Engineering, Vol. 6, No. 2, 2007.
- 34. Raja Murugadoss J., Rajendran M.G. and Justin S. (2006) "A New Paradigm on Cost Minimization of Pin Jointed Structures using Natural Metaphor", Journal of Civil Engineering Research and Practice (JCERP), Vol. 3, No.2, pp. 1-13, Kenya, South Africa

#### **National Journals**

- 1. Raja Murugadoss J., Anusha G., Raju P., "Adsorption of Fluoride from Aqueous solution using Emblica Officinalis sees as adsorbent", Indian Journal of Engineering, Science Vol.5 No.1 Jan June 2011
- Raja Murugadoss J., Anusha G., Raju P., "Adsorption of Fluoride from Aqueous solution using Limonia Acidissima as Adsorbent", TARCE Vol.1 No.1Jan – June 2011
- 3. Raja Murugadoss J., Ravichandran A. T. and Mohannasundaram K. M. (2009), "Study on order Picking Distance of a Multiple Cross Aisle warehouse using an Enhanced ant colony Algorithm", National Journal of Technology, Vol.5 No.4 December 2009 PSG College of Technology Polytechnic College, Coimbatore
- 4. Raja Murugadoss J., Ravichandran A. T. and Mohannasundaram K. M. (2008), "Statistical Analysis on the Effect of Item Distribution and Pick Loads on Order Picking Time in a Multiple Cross Aisle Capacitated Warehouse", Indian Journal on Manufacturing Technology and Management (MT & T), Scheduled to be published.
- Raja Murugadoss J., Ravichandran A. T. and Mohannasundaram K. M. (2008), "An Improved Version of Ant Colony Metaphor for Order Picking Time in a Warehouse", Indian Journal of Engineering, Science and Technology (IJEST), Vol. 2, No. 2, pp. 43 – 47.
- 6. Raja Murugadoss J., Ravichandran A. T. and Mohannasundaram K. M. (2008), "Study on Order Picking Distance of a Multiple Cross Aisle Warehouse using an Enhanced Ant Colony Algorithm", Technology Journal, PSG College of Technology, Communicated.
- 7. Raja Murugadoss J., Rajendran M.G. and Justin S. (2008), "Finite Element Formulation of Multilayered Axi-symmetric Degenerated Shell Element", Journal of Engineering, Science and Technology, Vol. 2, No. 1.
- 8. Raja Murugadoss J., Rajendran M. G. and Priya Vaijayanthi R. (2007). "Parallelisation of Multiple Ant Colonies using Master-Slave Approach for Structural Optimization", Journal of Engineering Science and Technology, Volume 1, No 2, pp.12-19.
- 9. Raja Murugadoss J., Rajendran M.G. and Justin S. (2006). "Optimal Design of Space Truss using Ant Colony Metaphor and Genetic Algorithm – A Comparative Study", Journal of Structural Engineering, Vol. 33, No. 3, pp. 215-224.
- 10. Raja Murugadoss J., Rajendran M.G. and Justin S. (2003). "Dynamic Buckling Analysis of RC Circular Cylindrical Shell Using Layered Shell Element", published in Engineering Today Journal, Issue 11, Volume V.
- 11. Raja Murugadoss J., Arunachalam N. and Freeda Christy. (2007). "comparative Study of Base Shear using Response Spectrum Method and Seismic Coefficient Method", Journal of Engineering, Science and Technology, Vol. 1, No.1, pp. 29-34

#### **International Conferences**

- Raja Murugadoss J. and Prasad CLVRSV., "Present Scenario and Practical Challenges with Curriculum Design in OBE", 4th World Summit on Accreditation (WOSA) on Challenges and Opportunities in Outcome Based Education (OBE), NBA during September 7 – 9, 2018
- 2. Lakshmi Adothodi., **Raja Murugadoss J.** and Gopala Krishna Kakumanu. "Using of Aircraft Tyre Rubber Waste for the Partial Replacement of

Bitumen: A Review", International Journal for Modern Trends in Science and Technology (IJMTST), Volume 4, Special Issue 4, pp. 36-39, July 2018

- 3. Raja Murugadoss. J, Dhanabalakrishnan. M, "Development of High Strength Self Compacting Concrete Using Silicafume and Chemical Admixtures" International Conference on IETSD 2012 Bannari Amman Institute of Technology, Sathymangalam 3- 5 May 2012 pp. 25- 31
- 4. Raja Murugadoss. J, Anusha. G, "Adsorption of Iron from Aqueous Solution using Prunus Dulcis as Adsorbent" International Conference on IETSD 2012 Bannari Amman Institute of Technology, Sathymangalam 3- 5 May 2012 pp. 58 – 60
- Raja Murugadoss. J, Dhanabalakrishnan. M, Ravi Prakash. T, Satheesh. V. S, "Development of High Strength Self Compacting Concrete Using Mineral and Chemical Admixtures", International Conference on Sustainability Challenges & Advances in Concrete Technology, PSG College of Technology, Coimbatore 2- 4 May 2012
- 6. Raja Murugadoss .J, Priya Vaijayanthi .R and Natarajan .A .M, , "Hybrid ACO-TS for Document Clustering", International Conference on PSG College of Technology, Coimbatore
- Raja Murugadoss. J, Lokesh. T, Sankareshwaran. R, "Effectiveness of Geofabric in Bearing Capacity on Cohesionless soil" International Conference on Advances in Construction, Manufacturing and Automation Research, Kongu Engineering College, Perundurai, Erode 30-31 March 2012
- 8. Raja Murugadoss. J, Priya Vaijayanthi. R, Natarajan A.M., " Combined Aco-Ts for Document Clustering" International Conference on ICICIC-2012 PSG College of Technology, Coimbatore, pp 220
- 9. Raja Murugadoss. J, Anusha. G and Raju. P, "Removal of Iron from aqueous solution using almond shell as adsorbent" International Symposium on Environmental Risk Assessment, Bharathiyar University, pp 154.
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