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# Prof. Dr. M.R.S. SATYANARAYANA

Cell:9493637939, Email: rssmunukurthi@yahoo.com

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## EDUCATION:

Ph.D.(Mechanical Vibrations),2001,Mechanical Engineering Department,  
College of Engineering, Andhra University, Visakhapatnam

M.E(Machine Design),1993,Ist Class, Mechanical Engineering Department,  
College of Engineering, Andhra University, Visakhapatnam.

B.Tech(Mechanical Engineering),1991,Ist Class, V R Siddhartha Engineering  
College, Vijayawada, Acharya Nagarjuna University  
(Formerly Nagarjuna University)



## AREAS OF EXPERTISE:

Mechanical Vibrations, Condition Monitoring, Machine Design, Finite Element Analysis, CAD

## Employment:

- Professor, Department of Mechanical Engineering, GITAM University (2007 to Till date)
- Associate Professor, Department of Mechanical Engineering, GITAM University (2003 to 2007)
- Asst. Professor (Sr. Scale), Department of Mechanical Engineering, GITAM University (2001 to 2003)
- Asst. Professor, Department of Mechanical Engineering, GITAM University (1995 to 2001)
- Design Engineer in Comsat Systems Pvt. Ltd, Hyderabad (1994 to 1995)

## RESEARCH PROJECTS& CONSULTANCY WORKS:

- Completed DST project, Co-Principal Investigator, “Experimental investigation of Nano metallic fuel additives on combustion performance and engine vibrations of variable C.I. Engines fuelled with diesel and bio-diesel diethyl ether blends” worth Rs. 49.32428 lakhs (2013-2016)
- Completed NSTL Consultancy work, “Modeling and Analysis of Acoustic Transducer with PU material for decoys” worth Rs 4.20 lakhs during 2011-2013.
- Completed UGC Major Research Project work on “Machinery Faults and Modern Diagnostic Approaches” under UGC Major Research Project worth of Rs.6, 27,100/-during 2004-2007.
- Completed Consultancy project, Principal Investigator, “FEM Analysis of Machinery Foundation Structures” under Reveillie Allied Engineers Pvt. Ltd. worth of Rs. 3.00 lakhs (2015-16)

## PATENT:

- *AUTOMATIC SIDE KICKSTAND RETRIEVAL SYSTEM FOR TWO WHEELERS*  
(Patent Filed: NRDC/FA/17004/2017), 2016

## CREDENTIALS:

- ✓ Coordinated the activities for the NAAC Peer Committee Visit during 19- 21 February on 2017 as a Head of the Department, Mechanical Engineering of NAAC Institutional Committee and was Accredited with "A+" Grade
- ✓ Key role for Got Technical Education Quality Improvement Programme Phase –II (Worth of Rs. 4 Crores)
- ✓ Key role for Department of Mechanical Engineering, GITAM Institute of Technology, GITAM University Signed MoU With Central Institute of Tool Design, Hyderabad (CITD-Hyderabad) on May 2016
- ✓ Key role for Department of Mechanical Engineering, GITAM Institute of Technology, GITAM University Signed MoU With Central Institute of Plastics Engineering &

Technology | Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Government of India, Vijayawada on December 2016

- ✓ Coordinated the activities for the NAAC Peer Committee Visit during 1 – 3 May on 2011 as a Vice Principal of NAAC Institutional Committee and was Accredited with "A" Grade
- ✓ Coordinated the activities for the UGC Committee Visit during 28th & 29th September on 2011 for sanction of 12B Status.

#### **Administration :**

- Head of the Department of Mechanical Engineering, GITAM University (2016-till date)
- Coordinator, TEQIP Phase II, GIT, GITAM University (Dec2012 - Dec2017)
- BoS-Chairperson, Department of Mechanical Engineering, GIT, GITAM University (Nov 2015- Feb 2016)
- Director, GITAM School of Technology, Bangalore (July 2012 – Dec 2012)
- Coordinator, TEQIP Phase II, GIT, GITAM University (2011-July 2012)
- Vice principal , GITAM Institute of Technology(2009 to 2011)
- Member, Academic counsel, GITAM University(2007-2010)
- Director, GITAM School of Technology, Hyderabad(2009)
- Convener, Departmental Research committee, Departments of mechanical and Industrial Production Engineering.(2007-2010)
- Member, Advisory committee, GITAM University.(2007-2010)
- Chairman, Board of Studies of Mechanical Engineering, GITAM University(2007-2010)
- Head of the Department of Mechanical Engineering, GITAM University(2007-2010)

#### **AWARDS/RECOGNITIONS**

- Life time Fellowship in Condition Monitoring Society of India
- BEST TEACHER AWARD 2015 by GITAM University, Visakhapatnam
- Keynote speaker on CEP course on "Structural Design of Composites using FEM" on 06-01-2015 at NSTL, Visakhapatnam
- Keynote speaker on International conference on "Applications and Design in Mechanical Engineering (ICADME-2012)" at Penang, Malaysia (27-28 Feb 2012).
- INAE Summer fellowship 2006 by Indian national Academy of Engineering, New Delhi
- "YOUNG ENGINEER AWARD OF THE YEAR 2003" by the Institution of Engineers (India)

#### **PROFESSIONAL INSTITUTIONS:**

- Life Fellow of Condition Monitoring Society of India (LFCMSI), 2017
- Fellow of Institute of Engineers (India) (FIE), 2012
- Member of Condition Monitoring society of India (MCMSI), 2003
- Member, Acoustical Society of India (MASI), 1998
- Member, Indian society for Technical Education (MISTE), 1997

#### **Organized Programmes:**

- Convener for National Conference on Materials & Manufacturing (NCMM-2017 ) during 22-23 December 2017
- Convener for International Conference on Condition Monitoring (ICCM-2016 ) during 26-27 October 2016
- Convener for Six days Workshop on Gating systems during 16-23 July 2016
- Convener for Workshop on Autodesk (Fusion 360) Design on 19-07-2016

- Co-Chairmen for International Conference on Micro-Electronics, Electromagnetics and Telecommunications (ICMEET -2015) from 18-12-2015 to 19-12-2015
- Convener for One Day International Workshop on Quality Research Writing and Research Impact measures on 04-01-2016
- Convener for Faculty Development Programme on Outcome Based Education on 09-01-2016
- Convener for Two day National Workshop on Vibration Monitoring and Analysis of Mechanical Systems from 14-10-2015 to 15-10-2015
- Convener for Three Days workshop on Research Design and Methodology from 14-03-2015 to 16-03-2015
- Organizing committee member in International Conference on Professional Engineers: Challenges In Disaster Management (ICPECDM-2014) (18<sup>th</sup> – 19<sup>th</sup> Dec 2014)
- Convener for Workshop on Advances in Vibration Monitoring from 23-08-2014 to 24-08-2014
- Organizing Secretary for One day Workshop on Condition Monitoring and Rotating Machinery on 15-2-2014
- Convener for Non-Teaching refresh course on Usage of National Language (Hindi) In Professional Environment.
- Convener for Three days Training Programme on Corporate behavior Skills from 27-05-2013 to 29-05-2013
- Convener for Five days Training Programme on Effective Office Management and advanced Computer Skills from 20-05-2013 to 24-05-2013
- Keynote speaker in International conference on Applications and Design in Mechanical Engineering (ICADME-2012) at Penang, Malaysia (27-28 Feb 2012)
- Co-chairman for international conference on condition monitoring-ICCM 2011 (24-25 Feb 2011) GITAM, Visakhapatnam-45.
- Coordinator for AICTE-ISTE STTP on Condition monitoring from 16-03-2009 to 21-03-2009.
- Coordinator for AICTE-SDP on FEA and its applications from 16-02-2009 to 28-02-2009.
- Secretary for international conference on advances in structural dynamics and its applications (7-9 Dec2005) GITAM, Visakhapatnam-45.
- Guided 150 students at U.G and 31 students at M.Tech (CAD/CAM) and M.Tech (Machine Design) and 5 students awarded their Ph.D. programme and remaining 5 students are pursuing research.

### **Programmes Attended:**

- Partnership summit 2018 organised by Confederation of Indian Industry (CII), Visakhapatnam Zone during 24<sup>th</sup> -26<sup>th</sup>, Feb 2018
- 2nd Batch of Management Capacity Enhancement Programme for Administrators Organized by IIM-Trichy (Chennai) during 09th -13th February 2015
- Seminar on Vibration, Condition Monitoring & Sensors Calibration Concepts and Applications organized by Hotel Best western Ramachandra, Gajuwaka, Visakhapatnam on 19th August 2014
- Short-term course on " FRP Composites :Overview, characterization, Analysis, Design and Applications" Organized by IIT- Hyderabad during 10th - 11th July 2014
- Training programme on "Conclave on Operational Excellence" Organized by Confederation of Indian Industry, Visakhapatnam on 26th July 2013
- National Conference on Condition Monitoring Organized by IISc , Bengaluru during 04th-05<sup>th</sup> October 2013
- QIP short term Programme on Advanced Structural Mechanics during 4-8, Jan 2010 at IISC Bangalore
- Workshop on Finite Element Analysis at TEAMTECH, 2006 on 28 Feb 2006 at Bangalore Engineering college
- Work shop on optimization methods for engineering design by S.S.Rao, USA, 5-10, July, 2004.
- Work shop on ANSYS software by CAAM technologies, Visakhapatnam during 16th-20th Jan 2002.
- Work shop on Optimization Methods for Engineering Design by S.S.Rao, USA, 5-10, Mar 2002.
- A short-term course on "FINITE ELEMENT ANALYSIS" at NSDRC in 2001.
- A short-term course on "COMCON2K" at A.U.
- A short-term course on "FINITE ELEMENT ANALYSIS" at A.U Aug-Sep 2000.
- AICTE short-term course on "ROTOR BEARINGS" at IIT Kharagapur in 1998.

### **Ph.D Awarded:**

- Dr. G. Divakar, Professor, Dept. of Mechanical Engineering, KL University, Guntur
- Dr. B. Kishore, Assoc. Professor ,GITAM University (Bengaluru Campus)
- Dr. K. Srividya, Assoc. Professor, Dept. of Mechanical Engineering, PVPSIT, Vijayawada
- Dr. V.Srinivasa Sai, Professor, Dept. of Mechanical Engineering, DVR & Dr. HS MIC College of Technology, Kanchakacharla, Andhra Pradesh
- Dr. M. Ram Mohan Rao, Asst. Professor, Dept. of Mechanical Engineering, GIT, GITAM University, Visakhapatnam

### **Research scholars Pursuing:**

- Mr. Nadimpalli Chaintanya, Raghu Engineering College, Visakhapatnam
- Mr. P.R.K. Narsimhacharyulu, Mechanical Industry, Visakhapatnam
- Mrs. Kavita, Asst. Professor, Dept. of Mechanical Engineering, PVPSIT, Vijayawada
- Mr. P.R.P. Apparao, M/s RVR Constructions, Visakhapatnam
- Mr. Yarlagadda Venu Babu , HOD-Mechanical Engineering ,Chirala Engineering College

**PG Students:**

|         |   |
|---------|---|
| 2001-03 | Manoj Kumar Sahu, Infotech, Hyderabad<br>“Design & analysis of Constrained layer damping”                                       |
|         | J. Uma Maheswara Rao, GITAM University<br>“Static and Dynamic analysis of cam & follower mechanism”                             |
|         | Ch. V.M. Prasad, Gayatri Vidya Parishad<br>“Automatic generation of design data and analysis of a spur gear”                    |
| 2002-04 | Ch. V.R.S.P. Somayaji, Infotech, Hyderabad<br>“Analytical investigations on axial clearance in steam turbine”                   |
|         | Jagadeesh, Honeywell, Pune<br>“Design and analysis of motor flange”   |
| 2003-05 | G. Bhanukiran, GITAM University<br>Design and analysis of Isotropic and composite shell structure for under water applications” |
|         | G. Madhu, Software, Bangalore<br>“Design and analysis of telfer”  |
| 2004-06 | T. Saraswathi, HAL, Bangalore<br>“Optimum design of filament wound multy-layer submersible pressure hull”                       |
|         | M.Siva Satyanarayana<br>“Error analysis of involute spur gears using finite element method”                                     |
|         | I.Deepthi Ganesh, USA<br>“Design and analysis of Pressure vessel ”  |
| 2006-08 | M.Santosh Kumar<br>“NSGA based algorithms for design optimization of composite structures”                                      |
|         | Veera Raju Maddela<br>“Study and CFD analysis of a Carburetor venture”  |
| 2007-09 | Srinivasa Rao M<br>“Design and analysis of gearing systems for cone crusher”  |
| 2008-10 | Chaitanya Panidapu<br>“Design and Analysis of Turbine blades using FEA”   |
|         | VELAGATLA DURGA VANI<br>“Studies of engine foundation for optimization of vibration damping treatment”                          |
| 2009-11 | Narashimamurthy Tammineni<br>“Rotor Dynamic Considerations in refurbishing Turbo Machinery”                                     |
| 2010-12 | J R Ravi kiran Kopelli<br>“Design, Mathematical Modeling and controls of an Autonomous Under water vehicle”                     |
| 2012-14 | G.Sunil<br>“Design and dynamic analysis of acoustic transducer with hyper elastic”  |
|         | B.S.S.Harinadh<br>“Modelling and analysis of acoustic transducer with polyurethane material”                                    |
| 2013-15 | Gopa Dinesh Reddy<br>“Design and analysis of transducer “   |
|         | Kombathula Joseph Noel<br>“Fatigue analysis of FRP composites”  |
|         | M.Manoj<br>“Design and Analysis of FRP Composites”  |
| 2014-16 | Manish Yadav<br>“Static and Vibration analysis of Machinery Test bed”   |
|         | Chintada Hema Sree<br>“Static analysis of Hyper Elastic Material”   |
|         | Y. Sudhakar<br>“Vibration analysis of Steel component”  |
|         | Chikkala S V Vamsi Chaitanya<br>“Static analysis of Steel component”  |
|         | Chinnam Pranay Babu<br>“Static and vibration analysis of Elastic material”  |

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| 2015-17 | Eddam Venkata Kiran<br>“Noise prediction of Marine propeller using computational fluid dynamics and acoustic analysis” |
|         | V. Harish Kumar<br>“Modelling and analysis of double stage raft mounting”  |
|         | Aman Chauhan<br>“Modelling and analysis of Topman emergency escape system in a land drilling rig”                      |
|         | Vegi Varun<br>“Modelling analysis and simulation of 120 KG capacity of pneumatic mount with different air pressures”   |
| 2016-18 | B. Manoj<br>“Propeller Noise Control by Geometrical Modification”  |
|         | D. Kiran Kumar<br>“Hyperelastic Material”  |
|         | M. Monica Sree<br>“Structural Analysis of isotropic pressure hull under external hydraulic pressure”                   |
|         | K. Jayasree<br>“Buckling Analysis of Composite Pressure hull”  |

**Awarded : 35 M.Tech Students  
04 M.Tech Students (Pursuing)**

**Persons who are familiar with the Applicant’s work:**

- **Dr. V. Bhujanga Rao**, DG (Naval Systems & Materials), DRDO, New Delhi
- **Dr. K. Ramji**, Vice-Chancellor, Dr. B.R. Ambedkar University, Srikakulam

**PUBLICATIONS:**

**Monographs:**

1. **Marine Propeller Noise Control (Modelling and Analysis)** published by Lambert Academic Publications, Germany, ISBN No. 978-613-9-86317-4, 2018
2. **Buckling Analysis of composite Pressure Hull (MATLAB and ANSYS)**, published by Lambert Academic Publications, Germany, ISBN No. 978-613-9-90544-7, 2018

**International Journals**

| S.No. | Title  | Authors  | Journal Name  | Volumes/<br>Page   | Indexed<br>in<br>(Scopus<br>/ Indian<br>citation<br>index) | Year |
|-------|--|--|---|--|--|------|
| 1     | Dynamic Analysis of Elastomers   | Dr M R S Satyanarayana<br>M Rama Mohan Rao,<br>Dr V.V.S.Bhaskara Raju<br>Y.Venubabu                      | Elsevier:<br>Journal of<br>Materials today                            |  | Scopus   | 2018 |
| 2     | Diagnosis of Misalignment in Overhung Rotor using the K-S Statistic and A <sup>2</sup> Test  | Dr. M R S Satyanarayana<br>G Diwakar<br>P. Ravi Kumar  | Springer:<br>Journal of The<br>Institution of<br>Engineers<br>(India) | ISSN 2250-<br>0545<br>DOI<br>10.1007/s40<br>032-017-<br>0347-0 | ICI  | 2017 |
| 3     | Effect of Zinc Oxide nanoparticle fuel additive on the emission reduction of a hydrogen dual-fuelled engine with jatropa methylester | Dr. M.R.S. Satyanarayana<br>Syed Javed<br>Dr. Y.V.V.S.N. Murthy<br>Dr.R. Rajeswara Reddy<br>K. Rajagopal | Journal pf<br>Cleaner<br>Production                                   | Vol 137,<br>pp490-506  | Scopus   | 2016 |

|    |  |   |  |   |        |      |
|----|--|---|--|---|--------|------|
|    | biodiesel blends   |   |  |   |        |      |
| 4  | Biodiesel reduction from degummed jatropha curcas oil using constant temperature ultrasonic water bath   | Dr. M.R.S. Satyanarayana<br>Dr. Y.V.V.S.N. Murthy   | Energy Sources, Part A: Recovery, Utilisation, and environment                 | Vol. 38 (17):1556-7036 SCI pp2610-2616  | Scopus | 2016 |
| 5  | Transesterification of Degummed Jatropha curcas Oil Using Tri-potassium Phosphate as Base Catalyst   | M. R. S. Satyanarayana<br>Y. V. V. Satyanarayana<br>Murthy<br>Rajeswara R. Resapu<br>Ramakrishna Jogi | Int. J. Chemical Reactor Engineering 2015                                      | DOI 10.1515/ijcre-2015-00004            | Scopus | 2015 |
| 6  | Efficient Fault Detection using Support vector machine based hybrid expert system  | M. R. S. Satyanarayana<br>Buddha Kishore<br>K. Sujatha  | Springer-International Journal of System Assurance and Management (IF-0.640)   | DOI 10.1007/s13198-014-0281-y           | ICI    | 2014 |
| 7  | Effect of Boundary Conditions on Free Vibration Analysis of Thick Fiber Reinforced Plastic Skew Laminate with Circular Cutout                  | M. R. S. Satyanarayana K. Sridhya,<br>V. Bala Krishna Murthy,   | International Journal Of Engineering Sciences & Research Technology            | Vol 3(6) pp 292-297                     | ICI    | 2014 |
| 8  | An Experimental Simulation to validate FEM to predict Transverse Young's Modulus of FRP Composites   | M. R. S. Satyanarayana,<br>V. S. Sai,<br>V. B. K. Murthy,<br>G. S. Rao,<br>A. S. Prasad               | Advances in Materials Science and Engineering                                  | Volume 2013, Article ID ID:648527       | Scopus | 2013 |
| 9  | Adaptive Particle swarm optimization with Neural Network for Machinery Fault Detection   | M.R.S.Satyanarayana, B. Kishore,<br>K.Sujatha   | International Journal of SOFT Computing and Engineering (IJSCE) (IF-1.0)       | ISSN :2231-2307.Vol. 3,Issue- 4         | ICI    | 2013 |
| 10 | Adaptive Genetic Algorithm with Neural Network for Machinery Fault Detection   | M.R.S.Satyanarayana, B. Kishore,<br>K.Sujatha   | International Journals of Advances in Engineering &Technology(IJAET) (IF-0.86) | ISSN :2231-1963.Vol. 6,Issue- 4         | ICI    | 2013 |
| 11 | Mechanical properties of hybrid elliptical fiber reinforced lamina with equal fiber volume fractions   | MRS Satyanarayana V. Srinivasa Sai ,<br>V. Bala Krishna Murthy,<br>G. Sambasiva Rao                   | International Journal Current Engineering and Technology (IJCET)               | Vol. 3(1), ISSN 2277-4106, pp. 102-107  | ICI    | 2013 |
| 12 | Effect of geometric parameters on free vibration analysis of thick fiber reinforced plastic (FRP) skew cross-ply laminate with circular cutout | M. R. S. Satyanarayana V. Bala Krishna Murthy, K. Sridhya,<br>G. Sambasiva Rao                        | International Journal of the Physical Sciences (IJPS)                          | Vol. 8(7), ISSN 1992 - 1950 pp. 264-271 | ICI    | 2013 |

|    |  |  |  |  |        |      |
|----|--|--|--|--|--------|------|
| 13 | Effect of fiber size on elastic constants of hybrid elliptical fiber reinforced lamina                                       | M. R. S. Satyanarayana<br>V. Srinivasa Sai<br>V. Bala Krishna Murthy<br>G. Sambasiva Rao   | International Journal of Physical Sciences   | Vol. 8(21), pp. 1161-1165,                   | ICI    | 2013 |
| 14 | Prediction of Micromechanical behavior of hybrid elliptical fiber reinforced lamina for in- plane transverse load            | M. R. S. Satyanarayana<br>V. Srinivasa Sai<br>V. Bala Krishna Murthy<br>G. Sambasiva Rao   | International Journal of Mathematical Sciences and Engineering applications (IJMSEA) | Vol. 7 (1), ISSN 0973-9424 pp. 91-100        | ICI    | 2013 |
| 15 | Mechanical Properties of Hybrid Elliptical Fiber Reinforced Lamina with Equal Fiber Volume Fractions                         | M. R. S. Satyanarayana<br>V. Srinivasa Sai,<br>V. Bala Krishna Murthy,<br>G. Sambasiva Rao | International Journal of Current Engineering and Technology                          | Vol.3, No.1 Pp 102-107                       | ICI    | 2013 |
| 16 | Detection of Gear fault using vibration analysis   | Dr. M R S Satyanarayana<br>G Diwakar<br>P. Ravi Kumar                                      | International Journal of Emerging Technology and Advanced Engineering                | ISSN 2250-2459<br>Vol. 2(9), pp. 123-137     | ICI    | 2012 |
| 17 | Detection of Gear ratio and current consumption using Motor current signature analysis                                       | Dr. M R S Satyanarayana<br>G Diwakar<br>MVH Satish Kumar                                   | International Journal of Mechanical Engineering and Technology                       | ISSN 0976-6340<br>Vol. 3(2), pp. 643-652     | Scopus | 2012 |
| 18 | Prediction of interfacial stresses in a hybrid elliptical fiber reinforced lamina subjected to out-of-plane transverse load  | M. R. S. Satyanarayana<br>V. Srinivasa Sai,<br>V. Bala Krishna Murthy,<br>G. Sambasiva Rao | International Journal of engineering research & Industrial applications (IJERIA)     | Vol.5 (IV), ISSN 0974-1518 pp. 71-81         | ICI    | 2012 |
| 19 | Determination of Unbalance in Rotating Machine Using Vibration Signature Analysis  | Dr. M. R. S. Satyanarayana<br>G. Diwakar<br>B. Kiran Kumar                                 | International Journal of Modern Engineering Research (IJMER)                         | Vol.2, Issue.5, ISSN: 2249-6645 pp-3415-3421 | ICI    | 2012 |
| 20 | Determination Of Misalignment Using Motor Current Signature Analysis In Rotating Machine                                     | Dr. M. R. S. Satyanarayana<br>G. Diwakar,<br>K.Venkata Siva rao,                           | International Journal of Engineering Research & Technology (IJERT)                   | Vol. 1 Issue 8, ISSN: 2278-0181              | ICI    | 2012 |
| 21 | Detection of Unbalance in Rotating Machines Using Shaft Deflection Measurement during Its Operation                          | Dr. M.R.S. Satyanarayana<br>Md. Abdul Saleem<br>G. Diwakar                                 | IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE)                         | Vol. 3 Issue 3, ISSN: 2278-1684 PP 08-20     | ICI    | 2012 |
| 22 | Effect of stacking sequence on free vibration analysis of thick FRP skew specially orthotropic laminate with circular cutout | M.R.S. Satyanarayana, K. Sridhya,<br>V. Bala Krishna Murthy,<br>G.Sambasiva Rao            | International Journal of Engineering Research & Technology (IJERT)                   | Vol. 1 Issue 7, ISSN: 2278-0181              | ICI    | 2012 |



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|----|---|---|---|---------------------------------------|----------------------------|------|
| 23 | Intelligent Condition Monitoring of AIRBLOWER using Artificial Neural Network with Genetic Algorithm                  | M.R.S.Satyanarayana<br>B.Kishore, K.Sujatha   | International Journal of Engineering Research & Technology (IJERT)    | Vol. 1 Issue 6,<br>ISSN:<br>2278-0181 | ICI                        | 2012 |
| 24 | Vibration monitoring of crusher in Coal Handling Plant of Dr. NTPS  | Dr. M R S Satyanarayana,<br>G Venu Padmavathi,<br>G DIWAKAR,  | International Journal of Engineering Science and Technology(IJEST)    | ISSN:<br>0975-5462<br>Vol.3 No.8      | ICI                        | 2011 |
| 25 | Damping behavior of AlSi7Mg/SiCp composites   | Dr. M.R.S. Satyanarayana,<br>D. Siva Prasad<br>Dr. A. Ramakrishna   | International Journal on Mechanicals & Automobile Engineering (IJMAE) | ISSN 0974-231X,<br>Vol.12<br>No.1     | ICI                        | 2011 |
| 26 | Prediction of micromechanical behavior of Hybrid elliptical Fibre reinforced lamina For longitudinal Load             | MRS Satyanarayana<br>V. Srinivasa Sai, V. Bala<br>Krishna Murthy,<br>G. Sambasiva Rao and P.<br>Phani Prasanthi | International Journal of Applied Engineering Research(IJAER)          | Vol.5 No.2<br>pp. 293-304             | Scopus –<br>2011 -<br>2017 | 2010 |
| 27 | Dynamic Response of Cam- Follower Mechanism   | M.R.S. Satyanarayana,<br>Rao V. Dukkipati   | SAE International   | 1416                                  | Scopus                     | 2009 |
| 28 | Free vibration analysis of thick skew composite plate with a circular cut out   | M.R.S. Satyanarayana K.<br>Srividya,<br>V. Bala Krishna Murthy,<br>G. Sambasiva Rao<br>K. Mohana Rao            | International Journal of Applied Engineering Research(IJAER)          | Vol.3,no.12<br>pp. 1697-<br>1703      | Scopus –<br>2011 -<br>2017 | 2008 |
| 29 | Experimental Frequency Analysis of Tapered Thin Walled Beams of Open Section resting on Continuous Elastic Foundation | M.R.S. Satyanarayana,<br>Rao V. Dukkipati   | SAE International   | 1373                                  | Scopus                     | 2008 |

#### National Journals

|    |  |  |  |                    |                         |      |
|----|--|--|--|--------------------|-------------------------|------|
| 01 | Diagnosis of Misalignment in Overhung Rotor using the K-S Statistic and A <sup>2</sup> Test                          | Rama Satya<br>Satyanarayana<br>Munukurthi<br>Diwakar Garikapati<br>RaviKumar Pacharu | Journal of Institution of Engineers      | Series C<br>pp 1–8 | ICI                     | 2017 |
| 02 | Performance and evaluation of single cylinder DI Diesel engine using solar generated steam with fungmia methyl ester | Dr. M.R.S.<br>Satyanarayana<br>Dr. YVVSSN Murthy                                     | Indian Journal of science and Technology | Vol.1 No.1         | Scopus<br>2012-<br>2016 | 2011 |

|    |   |   |   |                                 |     |      |
|----|---|---|---|---------------------------------|-----|------|
| 03 | Free Vibration Analysis of A Thick Five-layered angle ply Skew Frp Composite Plate with A Circular Cutout | M.R.S. Satyanarayana<br>K. Srividya<br>V. Bala Krishna Murthy<br>G. Sambasiva Rao | ANU Journal of Engineering and Technology | Vol. 3 No.1 &2, ISSN :0976-3414 | ICI | 2011 |
| 03 | Free Vibration Analysis of A Thick three-layered Skew Frp Composite Plate with A Circular Cutout          | M.R.S. Satyanarayana<br>K. Srividya<br>V. Bala Krishna Murthy<br>G. Sambasiva Rao | ANU Journal of Engineering and Technology | Vol. 1 No.1,                    | ICI | 2009 |
| 04 | Optimum Design of Multi-layer Submersible Sandwich Pressure Hull  | Dr. RSS Munukurthi,<br>S. Talatam   | Journal of Institution of Engineers       | Vol 89 pp 1-8                   | ICI | 2008 |
| 05 | Analysis of axial clearance of steam turbine using axisymmetric strip model                               | Dr. M.R.S. Satyanarayana,<br>Ch. V.R.S.P. Somayaji                                | Journal of Institution of Engineers       | Vol.88                          | ICI | 2007 |
| 06 | Trajectory tracking control of flexible manipulators Using inverse dynamic analysis                       | M R S Satyanarana,<br>M.A. Rao, J Srinivas  | Journal of Institution of Engineers       | Vol 87                          | ICI | 2006 |
| 07 | Torsional Behavior of Tapered Cantilever beam using Finite Element Analysis                               | M.R.S.Satyanarayana,<br>Dr. M. Ananda Rao   | Journal of Acoustical society of India    | Vol. XXVI (384),                | ICI | 1998 |
| 08 | Condition monitoring and diagnostic studies of slurry Pumps   | M.R.S.Satyanarayana,<br>Dr. M. Ananda Rao   | Journal of Acoustical Society of India    | Vol.XXV,                        | ICI | 1997 |

#### PEER REVIEWED CONFERENCE PAPERS:

##### a) International conferences

| S. No. | Title   | Journal Name   | Year |
|--------|---|--|------|
| 1.     | Fault Detection and Classification of Rotating Machinery using Hybrid Expert Systems through pattern recognition approach | International Conference on Condition Monitoring (ICCM 2014)   | 2014 |
| 2.     | Free Vibration Analysis of A Skew angle-ply FRP Composite Plate with A Circular Cutout                                    | International conference on Applications and Design in Mechanical Engineering (ICADME), Penang, Malaysia | 2012 |
| 3.     | Knock detection in single cylinder DI-diesel Engine using vibration signature analysis                                    | International conference on condition monitoring   | 2011 |

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| 4.  | Rotor Dynamic Considerations in Refurbishing Turbo machinery   | International conference on condition monitoring  | 2011 |
| 5.  | Condition monitoring of crusher in coal handling plant of Dr NT Thermal Power station                                    | International conference on multi body dynamics   | 2011 |
| 6.  | Free Vibration Analysis of A Skew angle-ply FRP Composite Plate with A Circular Cutout                                   | International conference on multi body dynamics   | 2011 |
| 7.  | Detection of Bearing Fault using Motor Current Signature Analysis  | International conference on multi body dynamics   | 2011 |
| 8.  | Prediction of Mechanical Properties of Hybrid elliptical fiber reinforced Lamina   | International Conference on Futuristic Trends in Materials and Energy systems   | 2011 |
| 9.  | Condition Monitoring of system using vibration analysis for BCW PUMP in VTPS   | International Conference on Digital Factory   | 2008 |
| 10. | Frequency Analysis Of Tapered Thin-Walled Beams Of Open Section Resting On Continuous Elastic Foundation                 | International Conference on Vibration Engineering and Technology of Machinery (VETOMAC-IV)  | 2007 |
| 11. | Coupled fluid-structure interaction analysis of a ring stiffened cylindrical shell subjected to underwater explosion     | International conference on Computational Mechanics and simulation- IIT-Gauwathi  | 2006 |
| 12. | Analysis and optimization of number of teeth on Involute gear  | International conference on Total Engineering, Analysis and manufacturing Technologies at Indian Institute of science, Ban galore | 2006 |
| 13. | Design and analysis of Truncated conical structures for underwater application made of isotropic and composite materials | International conference on advances in structural dynamics and its applications  | 2005 |
| 14. | Condition monitoring of air blower using artificial neural network   | International conference on advances in structural dynamics and its applications  | 2005 |

*a) National conferences*

| S. No. | Title   | Journal Name   | Year |
|--------|---|--|------|
| 1.     | Experimental Study and Analysis of Crushing Erosion Wear of Manganese Material on Heavy duty Cone Crusher                 | National Conference on Materials & Manufacturing (NCMM 2017), Dept. of ME, GIT, GITAM Deemed to be University, Visakhapatnam | 2017 |
| 2.     | Characterization of Hyper Elastic Materials   | National Conference on Materials & Manufacturing (NCMM 2017), Dept. of ME, GIT, GITAM Deemed to be University, Visakhapatnam | 2017 |
| 3.     | Prediction of Mechanical Properties of Hybrid FRP Composite for Longitudinal Loading Using Micro Mechanical Approach      | National Conference on Materials & Manufacturing (NCMM 2017), Dept. of ME, GIT, GITAM Deemed to be University, Visakhapatnam | 2017 |
| 4.     | Fault Detection and Classification of Rotating Machinery using Hybrid Expert Systems through pattern recognition approach | National Conference on Condition Monitoring 2014 organized by CVRDE, DRDO, Chennai   | 2014 |
| 5.     | Harmonic analysis of acoustic transducers   | National Conference on Condition Monitoring (NCCM), Bangalore  | 2013 |
| 6.     | Detection of Misalignment in Overhung Rotor using Motor Current Signature Analysis  | National Conference on Condition Monitoring  | 2013 |

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| 7.  | Intelligent condition monitoring of AIRBLOWER using hybrid Expert Systems                           | National Conference on Condition Monitoring (NCCM)   | 2013 |
| 8.  | Particle Swarm Optimization Based Back propagation Neural Network Hybrid System For Fault Detection | National Conference on Condition Monitoring of Engineering Systems and Structures, (NCCM-2012)   | 2012 |
| 9.  | Torsional and transfers vibrations of Rotor bearing system  | National Symposium on Rotor Dynamics (NSRD- 2011), IIT-Madras                                    | 2011 |
| 10. | Condition monitoring of pedestal fan  | National conference on condition monitoring  | 2009 |
| 11. | Condition monitoring of feed pump   | National conference on condition monitoring  | 2009 |
| 12. | Feature selection for artificial neural networks using Genetic algorithms in Condition Monitoring   | National conference on condition Monitoring, Visakhapatnam                                       | 2006 |
| 13. | Faulty diagnosis of Rotating machinery using Artificial Neural network                              | National symposium on Acoustics  | 2006 |
| 14. | Under Water Recovery system of a torpedo,   | National symposium on Acoustics, National Physical Laboratory New Delhi                          | 2006 |
| 15. | Machine Condition Monitoring and Diagnostics  | National Level Workshop on CMMS at GITAM University, Visakhapatnam                               | 2005 |
| 16. | Condition Monitoring of Air Blower  | National Level Workshop on CMMS at GITAM University, Visakhapatnam                               | 2005 |
| 17. | Analysis on axial clearance of Steam Turbine  | Industrial Problems on Machines and Mechanisms IPROMM-2005, IIT Kharagpur                        | 2005 |
| 18. | Automated Design and Finite Element Analysis of a Spur Gear   | National conference at JNTU, Hyderabad   | 2004 |
| 19. | Response of undamped SDOF Cam Follower System   | National Conference during at JNTU, Hyderabad National Seminar on Design                         | 2004 |
| 20. | Dynamic Analysis of Motor Flange  | Optimization and Condition Monitoring, Andhra University, Visakhapatnam                          | 2004 |
| 21. | Simulation of Stationary Vehicle Vibrations   | National seminar on Vehicle dynamics, Andhra University, Visakhapatnam                           | 2003 |
| 22. | Condition Monitoring of Air Blower in Fertilizer Industry   | National Convention of IIIIE, Visakhapatnam  | 2003 |
| 23. | Mitigation of IC Engine Valve stem using artificial neural networks                                 | National conference on "Instrumentation society of India at Visakhapatnam                        | 2002 |
| 24. | Innovation in manufacturing for global competitiveness  | 33rd Engineers day celebrations  | 2000 |
| 25. | Recent strategies in failure diagnosis  | National Workshop On role of condition monitoring in controlling noise pollution COMCON2K at A.U | 2000 |