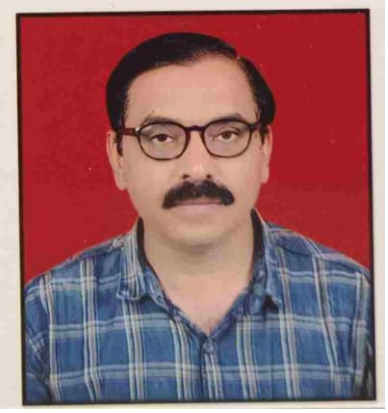
Curriculum - Vitae

Name: **Dr. Shyam Arjun Sonawane**
Designation: Head of the Department and Associate Professor (Mechanical Engg.)
Department: Mechanical Engineering
E-Mail: shyamsonawane@gmail.com, shyam@geca.ac.in hodmech@geca.ac.in
Mobile: +91-94213 04832, 80809 51808
Teaching Experience: 24 Years



Educational Qualification:

S.No.	Degree	Institute	Date
1	S. S. C.	Kendriya Vidyalaya, CRPF, Avadi, Madras	26/05/1992
2	H. S. C.	Kendriya Vidyalaya, CRPF, Barkas, Hyderabad	27/05/1994
3	B. E. (Mechanical)	Shri Tulja Bhavani College of Engineering, Tuljapur	28/07/1998
4	Diploma in Total Quality Management & ISO 9000	All India Institute of Management Studies, Chennai	10/10/2000
5	M. E. (Mechanical Design)	Government College of Engineering, Aurangabad	27/04/2005
6	Ph. D. (Mechanical)	Government College of Engineering, Aurangabad	03/10/2013

Experience:

S. No	Position Held	Organization	Period of Service	Nature of duties
1	Associate Professor Mechanical Engineering	Government College of Engineering Aurangabad, Chhatrapati Sambhajinagar	01/06/2023 to Till Date	Steering department for development as Head, Support to institute for administration and Development, AICTE DTE work, Implementation of academic autonomy, Teaching, Curriculum Development
2	Associate Professor Mechanical Engineering	Government College of Engineering & Research, Avasari (Kh), Dist.-Pune	01/09/2017 to 31/05/2023	Steering department for development as Head, NBA accreditation work, AICTE, DTE work, Teaching, Curriculum Development
3	Assistant Professor Mechanical Engineering	Government College of Engineering, Aurangabad	13/01/2011 (Before Noon) to 31/08/2017	Implementation of academic autonomy, Support to institute for administration, Implementation of TEQIP – II, Teaching, Lab

				Establishment, Curriculum Development
4	Lecturer in Mechanical Engineering	Government College of Engineering, Aurangabad	02/08/2000 to 13/01/2011 (Before Noon)	Implementation of academic autonomy, Implementation of TEQIP – I, Teaching, Lab Establishment, Curriculum Development
5	Lecturer in Mechanical Engineering	Government College of Engineering, Aurangabad	18/10/1999 to 31/05/2000	Teaching, Lab Establishment, Curriculum Development

Nature of work:
More than 20+ years of teaching, research and administrative, that includes –

- Institutional development and administration, Policy framing and implementation.
- Curriculum design, modifications as per NEP, CBCS and OBE of autonomous college.
- Design, implementation and administration of training programs to the Engineering students, according to industry demand.
- Design, implementation and administration of laboratories
- Worked as member in AICTE / DTE / university committees for inspection, intake variation of colleges
- Guided more than 200+ under graduates and postgraduate dissertations
- Empanelled on AICTE, DTE Maharashtra for various assignment
- Chairman of BOS, DRC at GEC Aurangabad
- Effective implementation of rules for smooth conduction and evaluation of examinations

Teaching Responsibility:
Subjects Taught at Under Graduate level: Mechatronics, Composite Materials, Solid Modeling and Drafting, Numerical Methods and Optimization, Machine Drawing, Machine Tools, Basics of Mechanical Engineering, Engineering Graphics,

Subjects Taught at Post Graduate level: Advanced Mathematical Methods, Production Management

Additional Responsibility:

1. Working as **Head of Mechanical Engineering Department** of Government College of Engineering Aurangabad, Chhatrapati Sambhajinagar since 01st June 2023.
2. Worked as **Head of Mechanical Engineering Department** of Government College of Engineering Avasari (Kh), Dist.- Pune.
3. Recognized **Ph.D. Research Guide** at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad vide Ref No. PG/Ph.D./2018/20999 Dated 24th January 2018.
4. Recognized **Post Graduate Teacher** at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
5. Recognized **Post Graduate Teacher and Ph.D. Research Guide** at Savitribai Phule Pune University, Pune vide Ref No. BOD/Sci & Tech/101/851 Dated 13th August 2018.
6. Chaired session in **National Conference on Recent Developments in Mechanical Engineering (RDME – 2022)** organized by Modern Education Society's College of Engineering Pune on 15th September 2022.
7. Chaired session in **International Conference & Exposition on Advances in Mechanical Engineering (ICAME – 2022)** organized by College of Engineering Pune during 23rd – 25th June 2022.

8. Worked as Convener in the **National Conference on Energy and Environment for Sustainable Development (NCEESD – 2022)** organized by Government College of Engineering and Research Avasari (Kh) during 5th – 06th July 2022.
9. Chaired session in **International Conference on Emerging Trends in Engineering and Sciences (ICETES – 2019)** organized by Jaihind College of Engineering Kuran during 26th – 27th February 2019.
10. Chaired session in **National Conference on Sustainable Development in Mechanical Engineering (NCONSDME – 2018)** organized by Zeal College of Engineering and Research, Pune during 16th – 17th February 2018.
11. Coordinator for the one week short term training program under Technical Education Quality Improvement Programme on **Computational Fluid Dynamics: Development, Application Analysis** at *Government College of Engineering, Aurangabad* from 08th – 12th March 2017.
12. Chaired session on Metallurgy and Materials in **International Conference on Advances in Engineering and Technology (ICAET – 2013)** organized by SPJ Centre for Multidisciplinary Research, SCMR's Association of Researchers, SKN Sinhgad Institute of Technology and Science Lonavala during 15th – 17th May 2013.
13. Conducted a workshop on **CGPA system** at *Maharashtra Institute of Technology, Aurangabad* on 05th November 2011.
14. Coordinator for the eight weeks short term course under Technical Education Quality Improvement Programme on **PRO / ENGINEER (Wildfire-2.0)** at *Government College of Engineering, Aurangabad* from 20th March – 07th May 2007.
15. Coordinator for the one week short term training programme under Technical Education Quality Improvement Programme on **Modeling and Simulation of Engineering Sytems in Multi Energy Domains: A Bond Graph Approach** at *Government College of Engineering, Aurangabad* from 9th to 15th January 2006.
16. Worked as member of **College Development Committee** at Government College of Engineering and Research, Avasari.
17. Worked as **Registrar (Academics)** at Government College of Engineering, Aurangabad from 19/07/2011 to 09/09/2015
18. Worked as **Joint Controller of Examinations** at Government College of Engineering, Aurangabad from 23/09/2015 to 30/08/2017.
19. Worked as **Assistant Controller of Examinations** at Government College of Engineering, Aurangabad from 16/06/2006 to 11/09/2007 and 30/07/2008 to 18/07/2011.
20. Worked as **Inspection Committee Member** for the Engineering college Inspections constituent by Regional Directorate Technical education, Aurangabad.
21. Worked as **Chief Coordinator** of External Examination Like UPSC, MPSC Examination.
22. Worked as **Member of Affiliation Committee** for the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
23. Worked as **faculty advisor** for competition SAE BAJA.
24. Worked as **portfolio in charge / member** in state level FE admission counselling round, state level direct second year admission, state level ME / MBA admissions.
25. Worked as **member of different committees** at college and departmental level like Laboratory / stock / document verification / tenders etc.
26. Worked as member of District Vehicle Management cell, Zonal Officer, Technical Zonal, Master Trainer, Presiding Officer and counting assistance for national parliamentary elections, state legislative election, Teachers Constituency, Municipal Corporation, Gram Panchayat elections.
27. Worked as **member** for the state level training programme under DTE / TEQIP funds.
28. Worked as **paper setter** and **evaluator** for UG / PG courses at University / Institute level.
29. Working / Worked as evaluator of PhD thesis.

30. Arranged many industrial tours for the student.
31. Design and development of learning resources.
32. Planning and delivering class room and laboratory instructions
33. Effective implementation of curricula for the concerned courses.
34. Students' assessment and evaluation including tasks related with mid-term tests and end term examinations.
35. Working as laboratory in charge for facilities development and maintenance of laboratories.
36. Planning and execution of student's development activities.
37. Guidance and counseling to students.
38. Participate in professional activities through interaction with industries, consultancy, testing, continuing education and training, industry sponsored project, research.
39. Keep abreast of the newer knowledge, skill and technology through self up graduation and dissemination of knowledge through books, journals and seminars.

Short Term Training Program:

1. Participated in **One Week** Virtual Faculty Development Program on "**Enhancing Teaching-Learning Pedagogy using Hands on ICT Tools**" organized by *SNJB's LSKBJ College of Engineering, Chandwad*, 22nd – 27th April 2024.
2. Participated in **One Week International** Virtual FDP on "**Global Conversations in Mechanical Engineering: Bridging Innovation and Sustainbility**" organized by *Madanapalle Institute of Technology & Science, Andhra Pradesh*, 19th – 23rd February 2024.
3. Participated in **One Week** Short Term Training Programme on "**Optimum Design: Principles & Applications**" organized by *National Institute of Technology, Agartala*, 01st – 05th May 2023.
4. Participated in **Five Weeks** of study course on **"Autodesk Fusion 360 Integrated CAD/CAM/CAE"** an online non-credit course authorized by *Autodesk and offered through Coursera*, Course Completion 25th July 2020.
5. Participated in **Four Weeks** of study course on **"Intro to Digital Manufacturing with Autodesk Fusion 360"** an online non-credit course authorized by *Autodesk and offered through Coursera*, Course Completion 11th July 2020.
6. Participated in **One Week** Multi-Disciplinary Faculty Development Program under **TEQIP-III** on **"Product Development & Industrial Research -2020"** at *Government College of Engineering, Aurangabad (M.S.) in association with ANKUR-AICF*, 6th – 10th July 2020.
7. Participated in **One Week DTE** approved and sponsored Training Programme on "**Recent Scenario and Future Trends in Automotive Industry**" organized by *Government College of Engineering and Research, Avasari (Kh)*, 17th – 21st December 2018.
8. Participated in **One Week AICTE** sponsored FDP on "**Faculty Development Program for Student Induction (FDP-SI)**" organized by *All India Council for Technical Education at Christ Institute of Management, Pune*, 09th – 15th July 2018.
9. Participated in **Two Weeks** FDP on "**Mentoring Educators in Educational Technology (FDP301x)**" conducted by *Indian Institute of Technology, Bombay*, 17th May – 05th July 2018 (Online activity from Thursday 17th May 2018 to Thursday 05th July 2018 and participation in the face-to-face interactions on 17th, 18th, 24th, 25th, 31st May and 01st, 12th June 2018, together considered as a two-week equivalent FDP course).
10. Participated in **One Week AICTE** sponsored FDP on **"Best Academic Practices in Engineering Colleges: From Quality to Excellence – [A COEP Case Study]"** conducted by *College of Engineering, Pune*, 10th – 14th October 2017.
11. Participated in **Two Weeks AICTE** approved FDP (FDP201x) on **"Pedagogy for Online and Blended Teaching-Learning Process"** conducted by *Indian Institute of Technology, Bombay*, 14th September – 12th October 2017 (Online activity from Thursday 14th

September 2017 to Thursday 12th October 2017 and Physical participation at Remote Center on 16th, 17th September 2017 and 07th, 08th October 2017, together considered as a two-week equivalent FDP course).

12. Participated in **Two Weeks AICTE** approved FDP (FDP101x) on **"Foundation Program in ICT for Education"** conducted by *Indian Institute of Technology, Bombay*, 03rd August – 07th September 2017 (Online activity from Thursday 03rd August 2017 to Thursday 07th September 2017 and Physical participation at Remote Center on 19th and 20th August 2017, together considered as a two-week equivalent FDP course).
13. Participated in **Three Days** CEP course under **TEQIP-II** on **"3D Printing: A Disruptive Technology of this Era"** conducted at *Government College of Engineering, Aurangabad* by *Indian Institute of Technology, Bombay*, 20th – 22th March 2017.
14. Participated in **One Week** CEP course under **TEQIP-II** on **"Computational Fluid Dynamics: Development, Application & Analysis"** conducted at *Government College of Engineering, Aurangabad* by *Indian Institute of Technology, Bombay*, 08th – 12th March 2017.
15. Participated in **One Week** CEP course under **TEQIP-II** on **"Fuels and Combustion"** conducted at *Government College of Engineering, Aurangabad* by *Indian Institute of Technology, Bombay*, 20th – 24th February 2017.
16. Participated in **Two Weeks** short term training programme under **AICTE** on **"Computations and Optimization with MATLAB"** at *National Institute of Technical Teachers' Training and Research, Kolkata*, 26th December 2016 – 06th January 2017.
17. Participated in **Two Weeks** short term training programme under **AICTE** on **"AutoCAD"** at *National Institute of Technical Teachers' Training and Research, Kolkata*, 06th– 17th June 2016.
18. Participated in **One Week "Management Capacity Enhancement Programme"** under **TEQIP** at *Indian Institute of Management, Udaipur*, 04th – 09th April 2016.
19. Participated in **Two Weeks** short term training programme under **AICTE** on **"Exposure on MATLAB"** at *National Institute of Technical Teachers' Training and Research, Kolkata*, 28th December 2015– 08th January 2016.
20. Participated in **One Week** short term training programme under **TEQIP-II** on **"Pedagogy to Synergogy"** at *Government College of Engineering, Aurangabad*, 07th – 11th December 2015.
21. Participated in **Three Days** workshop sponsored by **TEQIP-II** on **"Computer Aided Product Design and Development"** at *Government College of Engineering, Aurangabad*, 13th – 15th October 2015.
22. Participated in **One Week** faculty development programme on **"Technology Enabled Teaching and Learning"** at *Indian Institute of Management, Kozhikode*, 19th – 23rd August 2015.
23. Participated in **Two Weeks** summer school programme sponsored by **AICTE** on **"Computer Aided Product Design"** at *SSN College of Engineering, Chennai*, 15th – 27th June 2015.
24. Participated in **One Week** short term training programme under **TEQIP** on **"Maintenance Management in Industries"** at *National Institute of Technology, Hamirpur*, 25th – 29th December 2014.
25. Participated in **Two Days** training program sponsored by **DTE, Mumbai** on **"Big Data Analysis-Foundation"** at *Government College of Engineering, Aurangabad*, 10th – 11th December 2014.
26. Participated in **One Week** short term course/workshop under **TEQIP** on **"Fundamentals of Tribology"** at *National Institute of Technology, Hamirpur*, 26th – 30th May 2014.
27. Participated in **Three Days** workshop on **"Outcome Based Accreditation"** at *Government College of Engineering, Aurangabad*, 22th – 24th February 2014.

28. Participated in **One Week** training programme on **"Modern Curriculum Design Strategy & Evolution of Professional Ethics"** conducted by Gyanteerth at *Goa,* 16th – 20th February 2014.
29. Participated in **Two Weeks** short term course under **TEQIP Phase-II** on **"ANSYS"** at *Indo German Tool Room, Aurangabad,* 30th January – 15th February 2014.
30. Participated in **One Week** short term training programme under **TEQIP** on **"Computer Aided Design and Analysis of Machine & Structural Elements"** at *Malaviya National Institute of Technology, Jaipur,* 23rd – 27th December 2013.
31. Participated in **Two Weeks** short term course under **TEQIP Phase-II** on **"CATIA"** at *Indo German Tool Room, Aurangabad,* 02nd – 17th December 2013.
32. Participated in **One Day** Acrex Workshop on **"Problem Solving in HVAC Commissioning"** organized by *Indian Society for Heating, Refrigerating and Air Conditioning Engineers (ISHRAE), Mumbai,* 09th March 2013.
33. Participated in **One Day** Acrex Workshop on **"Efficient & Sustainable Ammonia Heat Pump Technology"** organized by *Indian Society for Heating, Refrigerating and Air Conditioning Engineers (ISHRAE),* 09th March 2013.
34. Participated in **One Week** short term course sponsored by **AICTE** on **"Product Design and Development"** at *Indian Institute of Technology Madras, Chennai,* 21st – 26th January 2013.
35. Participated in **One Week** short term training programme under **TEQIP** on **"Genetic Algorithm and Neuro Fuzzy Applications in Engineering"** at *Government College of Engineering, Aurangabad,* 17th – 21st December 2012.
36. Participated in **One Week** short term course under **TEQIP** on **"Flight Mechanics and Recent Developments"** at *PEC University of Technology, Chandigarh,* 03rd – 07th December 2012.
37. Participated in **One Day** workshop under **TEQIP** on **"Self Management & Team Management for Success-Breaking the Barriers"** at *Government College of Engineering, Aurangabad,* 18th September 2012.
38. Participated in **One Week** short term training programme under **TEQIP** on **"Engineering Optimization and its Applications"** at *Government College of Engineering, Aurangabad,* 25th – 29th June 2012.
39. Participated in **Two Weeks** short term training program sponsored by **ISTE** on **"Engineering Optimization Techniques and its Application in Research"** at *Government College of Engineering, Aurangabad,* 02nd – 12th January 2012.
40. Participated in **One Week** short term training program under **TEQIP** on **"Effective Teaching Methodologies"** at *National Institute of Technology, Goa,* 13th – 17th June 2011.
41. Participated in **Two Weeks** training program organized by **DTE, Mumbai** on **"AutoCAD Training"** at *Government Polytechnic, Aurangabad,* 29th November – 10th December 2010.
42. Participated in **Two Weeks** short term training programme sponsored by **ISTE** on **"Engineering Optimization, EO-2010"** at *Government College of Engineering, Aurangabad,* 28th June – 09th July 2010.
43. Participated in **One Day** workshop on **"Optimization Methods for Research and Industrial Problems"** at *College of Engineering, Pune,* 21st March 2009.
44. Participated in **One Day** IIM workshop on **"Heat Treatment, Casting and Surface Engineering"** at *Marathwada Institute of Technology, Aurangabad,* 28th November 2008.
45. Participated in **One Week** short term training programme under **TEQIP** on **"Efficient Usage of Laboratory and Laboratory Equipment for Students"** at *Government College of Engineering, Aurangabad,* 21st – 27th January 2008.
46. Participated in **Eight Weeks** short term course under **TEQIP** on **"Pro / Engineer (Wildfire-2.0)"** at *Government College of Engineering, Aurangabad* conducted by *Indo German Tool Room, Aurangabad,* 20th March – 07th May 2007.

47. Participated in **Two Days** workshop under **TEQIP** on **"Implementing Outcomes-based Engineering Curricula through Networked Participatory Action Research"** at *Government College of Engineering, Aurangabad*, 09th – 10th September 2006.
48. Participated in **One Day** workshop under **TEQIP** on **"Designing Student Conducted Studies"** at *Government College of Engineering, Aurangabad*, 30th July 2006.
49. Participated in **Three Days** short term training programme under **TEQIP** on **"Product Lifecycle Management"** at *SGGS Institute of Engineering and Technology, Nanded*, 10th – 12th March 2006.
50. Participated in **Two Days** workshop under **TEQIP** on **"Research Methodologies and Report Writing"** at *Government College of Engineering, Aurangabad*, 18th – 19th February 2006.
51. Attended a **Three Days** International Seminar on **"Automotive Standards ISO TS 16949: 02, APQP, FMEA, MSA & SPC"** at *Hotel Taj Residency, Aurangabad*, 07th – 09th February 2006.
52. Participated in **Three Days** short term training program under **TEQIP** on **"Recent Trends in Instrumentation and Control"** at *SGGS Institute of Engineering and Technology, Nanded*, 27th – 29th January 2006.
53. Participated in **One Week** training program on **"PC Maintenance, Networking & Server Administration"** at *Government College of Engineering, Aurangabad*, 07th – 11th December 2005.
54. Participated in **One Week** short term training program sponsored by **ISTE** on **"Applications of MATLAB"** at *Government College of Engineering, Aurangabad*, 16th – 20th August 2005.
55. Participated in **Two Weeks** short term training programme under **QIP** on **"Introduction to Computer Aided Engineering"** at *Indian Institute of Technology Madras, Chennai*, 27th June – 08th July 2005.
56. Worked as **Organizer** of **MECH FEST-05** (National Level Technical Symposium) at *Government College of Engineering, Aurangabad*, 02nd – 3rd April 2005.
57. Completed **One Week** comprehensive training course on **"CNC Turning"** at *MTAB-DENFORD Technology Centre, Chennai*, 04th – 08th August 2003.
58. Participated in **One Week** short term course under **QIP** sponsored by **AICTE** on **"Mathematical Modeling: Concepts & Applications"** at *Indian Institute of Technology Delhi, New Delhi*, 23rd – 27th June 2003.

Publications:

1. Published paper on **"Design and Development of Multipurpose Land Rover",** 2nd International Conference on Vision Towards Emerging Trends in Communication and Networking Technologies (ViTECoN), Vellore, India, 2023, pp. 1-6, IEEEXplore, doi: 10.1109/ViTECoN58111.2023.10157748.
2. Published paper on **"Design and Optimization of FSAE Wheel Assembly Using Finite Elemental Analysis"** in International Journal of Scientific Development and Research, ISSN: 2455-2631, Vol. 8, Issue 06, June 2023, pp. 422-427.
3. Presented paper on **"A Review paper on Analysis and Development of Real Time Simulation of End Milling Cutter to Avoid Tool Breakdown"** in National Conference on "Energy and Environment for Sustainable Development" organized by *Government College of Engineering & Research, Avasari (Kh)*, 05th – 06th Jul 2022, pp. 150-155.
4. Presented paper on **"Review on Data Acquisition and Monitoring of CNC machine Tools using Smart Manufacturing Tools"** in National Conference on "Energy and Environment for Sustainable Development" organized by *Government College of Engineering & Research, Avasari (Kh)*, 05th – 06th Jul 2022, pp. 104-108.

5. Published paper on **"Optimization of Process Parameters in TIG Welded Joints for Austenitic Stainless Steel"** in International Journal for Scientific Research & Development, ISSN (online): 2321-0613, Vol. 5, Issue 05, 2017, pp. 120-125.
6. Published paper on **"Wear Analysis of Aluminium - Zinc Alloys under Dry Lubrication"** in Journal of Advances in Science and Technology, ISSN 2230-9659, Vol. 13, Issue 01(Special Issue), 2017, pp. 267-272.
7. Published paper on **"Tribological Behaviour of PTFE and its Composites"** in Journal of Advances in Science and Technology, ISSN 2230-9659, Vol. 13, Issue 01 (Special Issue), 2017, pp. 259-266.
8. Presented paper on **"Study of Electric Arc Welding Processes on Stainless Steel: A Review"** in International Conference on "Advanced and Agile Manufacturing and Agile Software Development" organized by *Shri Guru Gobind Singhji Institute of Engineering & Technology, Nanded*, 06th – 07th October 2016, pp. 138-142.
9. Published paper on **"Study of Dry Sliding Wear Behaviour of Aluminium-Silicon Alloy with Silicon Carbide (SiC) and Fly Ash Metal Matrix Composite"** in International Journal for Scientific Research & Development, ISSN (online): 2321-0613, Vol. 4, Issue 06, 2016, pp. 688-692.
10. Published paper on **"Experimental Investigation of Wear Properties of Aluminium LM6 Al_2O_3 Fly ash Metal Matrix Composite"** in International Journal for Scientific Research & Development, ISSN (online): 2321-0613, Vol. 4, Issue 06, 2016, pp. 683-687.
11. Published paper on **"Investigations in to Wire Electro Discharge Machining of Ti Alloys VT20 (BT20)"** in International Journal of Science and Research, ISSN (online): 2319-7064, Vol. 5, Issue 07, July 2016, pp. 246-251.
12. Published paper on **"Elimination of Sporadic Defects in Polyurethane Lining Process by using Quality Maintenance Methodology"** in International Journal of Engineering Research & Technology, ISSN: 2278-0181, Vol. 5, Issue 05, May 2016, pp. 649-653.
13. Published paper on **"Optimization of Surface Roughness in CNC Turning of Aluminum Alloy ENAC 43400 using Taguchi Method"** in International Journal for Scientific Research & Development, ISSN (online): 2321-0613, Vol. 4, Issue 03, 2016, pp. 308-310.
14. Published paper on **"Experimental Investigation of Wear Properties of Aluminium LM25 Red Mud Metal Matrix Composite"** in International Journal for Scientific Research & Development, ISSN (online): 2321-0613, Vol. 3, Issue 10, 2015, pp. 691-695.
15. Published paper on **"Investigation of Tribological Behaviour of GF Filled Peek Composite under the Harsh Operating Conditions"** in International Journal of Engineering Research and Applications, ISSN: 2248-9622, Vol. 5, Issue 11 (Part - 5), November 2015, pp. 01-06.
16. Published paper on **"Comparative study of effect of Cryogenics heat treatment and Case hardening on the Wear Property of 20MnCr5"** in Applied Mechanics and Materials, Trans Tech Publications, Switzerland, ISSN: 1662 – 7482, Vol. 798, 2015, pp. 435-439.
17. Published paper on **"Wear Behaviour of Cryogenic Treated M2 Tool Steel under Dry Sliding Condition"** in Applied Mechanics and Materials, Trans Tech Publications, Switzerland, ISSN: 1662 – 7482, Vol. 798, 2015, pp. 395-401.
18. Published paper on **"Wear Resistance Enhancement of AISI D3 Tool Steels by Cryogenic Treatment"** in International Journal of Current Engineering and Technology, ISSN (Online): 2277 – 4106, ISSN (Print): 2347 – 5161, Vol. 5, No. 3, June 2015, pp. 1777-1780.
19. Published paper on **"Engine Assembly & Testing Process Quality Improvement Using DMAIC Approach (Six-Sigma) - Case Study"** in International Journal of Engineering and Technical Research, ISSN: 2321-0869, Vol. 3, Issue 6, June 2015, pp. 140-146.

20. Published paper on **"Improving Production Performance with Overall Equipment Effectiveness (OEE)"** in International Journal of Engineering Research & Technology (IJERT) ISSN: 2278-0181, Vol. 4, Issue 02, February 2015, pp. 700-704.
21. Published paper on **"Analysis of Wear Resistance of Tool Steel after Deep Cryogenic Treatment"** in International Journal of Mechanical and Production Engineering Research and Development, ISSN (online): 2249-8001, ISSN (Print): 2249-6890, Vol. 5, Issue 1, February 2015, pp. 11-24, Impact Factor (JCC): 5.3403, pp. 11-24.
22. Published paper on **"Experimental Study and Optimization of Leaf Spring"** in International Journal of Engineering Research & Technology, ISSN: 2278-0181, Vol. 4, Issue 1, January 2015, pp. 532-536.
23. Presented paper on **"Effect of Cryogenics Heat Treatment and Case Hardening on the Wear Property of 20MnCr5"** in "International Conference on Innovative Materials and Structures Technologies in Metallurgical Engineering, (METECH'14)" organized by *DAKAM, Istanbul, Turkey,* 17th – 19th November 2014, Conference Handbook p. 219.
24. Presented paper on **"Effect of Cryogenic Treatment on Wear Behaviour of M35 Tool Steel under Dry Sliding Condition"** in "International Conference on Innovative Materials and Structures Technologies in Metallurgical Engineering (METECH'14)" organized by *DAKAM, Istanbul, Turkey,* 17th – 19th November 2014, Conference Handbook p. 221.
25. Published paper on **"A Paper on Plunge Grinding Cycle Time Optimization Without Hampering Surface Quality of Deep Groove Ball Bearing's Outer Ring's Inner and Outer Races"** in International Journal of Research in Engineering & Advanced Technology, ISSN: 2320-8791, Vol. 2, Issue 5, October – November 2014, pp. 1-9, Impact Factor: 1.479, pp. 1-9.
26. Published paper on **"Optimization of Boring Process Parameters by using Taguchi Method"** in International Journal of Engineering Research & Technology, ISSN: 2278-0181, Vol. 3, Issue 8, August 2014, pp. 717-721.
27. Published paper on **"Analysis and Optimization of Boring Process Parameters by using Taguchi Method on SAE 1541"** in International Journal of Engineering Science Invention, ISSN (online): 2319-6734, ISSN (Print): 2319-6726, Vol. 3, Issue 8, August 2014, pp. 59-63.
28. Published paper on **"Failure Analysis of Machined Component Using Statistical Control Tools"** in International Journal of Engineering Research & Technology, ISSN: 2278-0181, Vol. 2, Issue 12, December 2013, pp. 1903-1909.
29. Presented paper on **"Optimum Design of Different Systems Using Principles of Optimization"** in "7th Asian Conference on Fixed Point Theory and Optimization (ACFPTO)", University of Kasetsart, Thailand, 18th – 20th July 2013, Conference Handbook, pp. 85-86.
30. Published paper on **"Effect of Cryogenic Treatment on Wear Behaviour of M2 Tool Steel"** in International Journal of Engineering Science, Vol. 3, Issue 2, 2013, pp. 26-33.
31. Published paper on **"Dry Sliding Wear Behaviour of Cryogenic Treated M2 Tool Steel"** in International Review of Applied Engineering Research, ISSN: 2248-9967, Vol. 3, Number 1, 2013, pp. 87-96.
32. Presented paper on **"Effect of Cryogenic Treatment on Wear Behaviour of M2 Tool Steel"** in "International Conference on Advances in Engineering and Technology (ICAET-2013)" organized by *SCMR and Sinhgad Institute of Technology and Science, Lonavala, Pune,* 15th – 17th May 2013.
33. Published paper on **"Wear Behaviour of T-42 Tool Steel"** in International Journal of Multidisciplinary Research, ISSN: 2277-9302, Vol. 1, Issue 12 (X), March 2013, pp. 65-68.
34. Published paper on **"Validation of Eatonite Grade Hard Facing Material in place of Satellite Grade for 150cc Engine Exhaust Valve"** in International Journal of

Engineering & Innovative Technology, ISSN: 2277-3754, Vol. 2, Issue 4, October 2012, pp. 44-50.

35. Presented paper on **"Wear Analysis of Aluminium-Zinc Alloys using Taguchi Method"** in "National Conference on Recent Advances in Mechanical Engineering (NCRAIME 2011)" organized by *College of Engineering, Osmanabad,* 28th – 29th January 2011.

36. Presented paper on **"Hybrid Synergy Drive: Achieving the best of both Worlds (Electric Motor and IC Engine)"** in National Conference on "Recent Trends in I. C. Engines and Automobiles (RICA 2010)" organized by *Amrutvahini College of Engineering, Sangamner,* 03rd – 04th March 2010.

37. Presented paper on **"Quality Function Deployment"** in National Conference on "Advances in Mechanical Engineering (AME-09)" organized by *Don Bosco Institute of Technology, Bangalore,* 30th – 31st March 2009.

38. Presented paper on **"An Energy Paradigm Pragmatism: Waste Management Approach"** in "National Conference on State of the Art of Technologies in Mechanical Engineering (NCSAME-2006)" organized by *JNTU College of Engineering, Hyderabad,* 05th – 06th May 2006.

39. Presented paper on **"Application of Alternative Energy: Biomass, Gas and Oil"** in All India Seminar on "Alternative sources of Energy and Quality Power Vision-2020" organized by *Rajasthan State Centre, The Institution of Engineers (India), Jaipur,* 24th – 25th February 2006.

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