	F	ACULTY PRO	FILE	
Name	Dr. VIJAY PRATAPSING RATHOD			
Address	Government Polytechnic Ratnagiri			
Date of Birth	N.A.			
Designation	Lecturer in Mechanical Engineering (Selection Grade)			6310
Date of Joining	01-12-2001			
Mobile No.	N.A.			V
E-Mail ID	vprathod@gpmumbai.ac.in			
Educational Qualifications		U.G.	P.G.	PhD.
	Degree	B.E	M. E.	
	Specialisation	Production Engineering	Production Engg. (Advanced Mfg.)	Mechanical Engineering.
	Institution Name	SGGS C&T, Nanded	Fr. CRCE, Mumbai	MNIT, Jaipur
	University/Board	Dr. BAMU, Aurangabad	University of Mumbai	MNIT, Jaipur
	Percentage	66%	63%	-
	Remark	Distinction	First Class	-
	Year of Passing	1997	2006	2011
Experience	Institution Name			No. of Years
	Fr. CRCE, Bandra, Mumbai			1
	Government Polytechnic Thane			10
	Government Polytechnic Mumbai			6
	Government Polytechnic Ratnagiri			3
Subjects Taught Machine Design, Theory of Machines				

#### Attended Workshop/ Trainings:

- 1. Image processing using MATLAB (2 Week), NITTTR, Kolkata
- 2. Outcome based Education: A step towards excellence (1 Week), GEC, Karad
- 3. MATLAB Application in engineering and Science (1 Week), GEC, Karad
- 4. Machine Learning and Deep learning application in Engg. and Secience (1 Week), GEC, Karad
- 5. Internet of things (IoT) (1 Week), Dr. BATU, Lonere

**Publications & Research Papers: (Please see next page)** 

Membership & Social Activities: Indian institute of industrial Engg. Senior Member No: SMIIE 9892

# Publications (International Journals/ Conferences)

- Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2011), "Probabilistic modeling of fatigue damage accumulation for reliability prediction", *International Journal of Quality, Statistics,* and Reliability, Vol. 2011, ID 718901, 10 pages. (DOI:10.1155/2011/718901)
- 2. Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2011), "Reliability-based design optimization considering probabilistic degradation behavior", *Quality and Reliability Engineering International*, Vol.28, pp. 911-923. (DOI: 10.1002/qre.1281)
- 3. Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2013), "Optimizing Reliability-based Robust Design Model Using Multi-Objective Genetic Algorithm", Computers and Industrial Engineering. Vol. 66 (2), pp. 301-310. (http://dx.doi.org/10.1016/j.cie.2013.06.018)
- 4. Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2010), "Reliability Based Design Optimization by Integrating Degradation to Improve Reliability of the Product for a Given Life Target", *International Conference on Frontiers in Mechanical Engineering (FIME-2010)*, May 20-22, 2010, National Institute of Technology, Surathkal, India.
- 5. Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2010), "Capturing Life Cycle Issues by Incorporating Degradation Behavior in Reliability Based Design Optimization", *IIE* 60<sup>th</sup> Annual Conference Proceedings, June 05-09, 2010, Cancum, Mexico.
- 6. Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2010), "Capturing life cycle issues by incorporating degradation behavior in RBRDO", 2<sup>nd</sup>International Conference on Production and Industrial Engineering (CPIE-2010), December 03-05, 2010, Dr B R Ambedkar NIT, Jalandhar, India.
- 7. Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2011), "Reliability-based robust design optimization: A comparative study", *Industrial Engineering and Engineering Management (IEEM-2011)*, December 06-09, 2011, Singapore. (DOI: 10.1109/IEEM.2011.6118179).
- 8. Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2011), "Multi-Objective Genetic Algorithm for Priority-Based Robust Design", *Second International Conference on Simulation Modeling and Analysis (COSMA-2011)*, December 14-16, 2011 Coimbatore, India.
- 9. Rathod, V., Yadav, O.P., Rathore, A. and Jain, R., (2012), "An Evolutionary Optimization Approach to Reliability-based Robust Design Model", *Industrial and System Engineering Research Conference (ISERC-2012)*, May 19-23, 2012, Orland, FL, USA.
- 10. Rathod, V., Rathore, A., and Yadav, O.P., (2012), "Pareto Filter For Dual RSM-based Robust Design Models", *International Conference on Innovations in Design and Manufacturing (InnDem-2012)*, December 5-7, 2012, PDPM IIITDM, Jabalpur, India.
- 11. Rathod, V., Yadav, O.P., and Rathore, A., (2013), "Multi-Response Surface Optimization Using Axiomatic design", *Industrial Engineering and Engineering Management (IEEM-2013)*, December 10-13, 2013, Bangkok, Thailand. (DOI: 10.1109/IEEM.2013.6962457).
- 12. Rathod, V., shaikh, U., Yadav, O.P., and Rathore, A., (2013), "Swine Influenza Model Based Optimization using Seasonal Flu Shots (SIMBO-SS)", 4<sup>th</sup> International Conference on Reliability, Infocom Technologies and Optimization (ICRITO-2015), September 2-4, 2015, Delhi, India. (DOI: 10.1109/ICRITO.2015.7359367).

### **Expert Lectures Delivered**

- 1. Expert lecture delivered on "Genetic Algorithm: An Evolutionary Optimization Technique" for Master's Students on March 28, 2012 at Veermata Jijabai Technological Institute (VJTI), Matunga, Mumbai.
- 2. Expert lecture delivered on "Reliability based Robust Design & Optimization" in one-week MSBTE sponsored FDP on "Quality Improvement Techniques", Jan 14-18, 2013 at Government Polytechnic, Thane (Jan 18, 2013).
- 3. Expert lecture delivered on "Quality, Reliability & Optimization Techniques" for Faculties of Mechanical Engineering Department on March 22, 2013 at Sandip Institute of Technology & Research Centre, Nashik.
- 4. Expert lecture delivered on "Statistics & Response Surface Methodology" in one-week BCUD, Savitribai Pule Pune University (SPPU) sponsored STTP on "Research Methodology & IPR", Nov 17-24, 2015 at Sandip Institute of Technology & Research Centre, Nashik (Nov 22, 2014).
- 5. Expert lecture delivered on "Statistics and Optimization Techniques" in one-week STTP on "Research Methodology & Innovations", Nov 20-24, 2015 at Sandip Institute of Technology & Research Centre, Nashik (Nov 21, 2015).
- 6. Expert lecture delivered on "Mathematical Modeling" in two days SPPU sponsored State Level seminar on "Mathematical Modeling in Engineering Projects", Jan 18-19, 2016 at Sandip Institute of Engineering and Management (SIEM), Nashik (Jan 19, 2016).
- 7. Expert lectures delivered and conducted two days FDP on "Mathematical Modeling & Modern Optimization Tools" on Jan 21-22, 2016 at M.I.T. Academy of Engineering, Alandi (D), Pune.
- 8. Expert lecture delivered on "Regression Analysis & RSM" in one-week STTP on "Design of experiments & Optimization Techniques", May 09-13, 2016 at Deogiri Institute of Engineering and Management Studies, Aurangabad (May 12, 2016).
- 9. Expert lecture delivered on "Swine Influenza Model Based Optimization using Seasonal Flu Shots (SIMBO-SS)" in two-days' workshop on "Optimization Techniques for Engineering Applications", on Jan 08-09, 2018 at Sinhagad College of Engineering, Vadgoan, Pune (Jan 08, 2018).
- 10. Expert lecture delivered on "Evolutionary Techniques from perspective of CAE" in AICTE-ISTE sponsored one-week STTP on "Recent Advances in Computer aided Engineering", on Jun 25-30, 2018 at Rajendra Mane College of Engineering & Technology, Ambav Devrukh, Ratnagiri (June 30, 2018).
- 11. Expert lecture delivered on "Fuel Saving Approaches and habits" in MSRTC sponsored "Fuel saving Campaign (Indhan Bachat Mohim)", on Jan 16-feb 15, 2019 at MSRTC Workshop, Lanjaa, Ratnagiri (Jan16, 2019).
- 12. Expert lecture delivered on "I-Scheme: Need of an Hour" in MSBTE sponsored workshop on "Curricula Development of food Technology", on February 11, 2019 at Government Polytechnic Malwan (Feb 11, 2018).
- 13. Expert lecture delivered on "Genetic Algorithms and its applications" in TEQIP-III sponsored one-week STTP on "Applications of Computing Techniques in Research",

- on Feb 25- March 1, 2019 at Government College of Engineering, Jalgoan (February 27, 2019).
- 14. Expert lecture delivered on "Response Surface Methodology based Optimization" for 3<sup>rd</sup> year students of Mechanical Engg on March 06, 2019 at Finolex Academy of Management and Technology, Ratnagiri.
- 15. Expert lecture delivered on "Capturing life Cycle Issues in an Early Design Optimization Through Degradation Modeling" in AICTE-ISTE approved one-week STTP on "Product Lifecycle Management", on June 24- June 29, 2019 at Shivajirao S. Jondhle College of Engg. and Technology, Asangoan, Dist. Thane (June 27, 2019).
- 16. Expert lecture delivered on "Reliability based design" in AICTE-ISTE approved one-week STTP on "Reliability Engineering", on July 01- July 05, 2019 at Shivajirao S. Jondhle College of Engg. and Technology, Asangoan, Dist. Thane (July 01, 2019).

### Session Chaired & Events Judged

- 1. A session chaired in a MSBTE sponsored State Level paper presentation "**Technocratz 2012**" in Mechanical Engineering Group organized on Sept 15, 2012 at Agnel Polytechnic, Navi Mumbai.
- A session chaired in a State Level Conference on "Advanced Computational Techniques (ACT-2013)" on March 29-30, 2013 organized by SKN-Sinhgad Institute of Technology & Science, Lonavala under QIP Scheme of University of Pune.
- 3. A session chaired in a MSBTE sponsored National Conference on "Evolutionary Optimization: Techniques and Applications (NCEOTA-2014)" on March 11-12, 2014 at Government Polytechnic Mumbai.
- 4. Judged a Project Exhibition cum Competition "**Technofest 2015**" in Mechanical Engineering Group organized on Feb 17, 2015 at Thakur Polytechnic, Mumbai.
- 5. A session chaired in a MSBTE sponsored State Level paper presentation "Technocratz 2015" in Mechanical Engineering Group organized on Sept 15, 2015 at Agnel Polytechnic, Navi Mumbai.
- 6. A session chaired in "Conference on Technologies for Future Cities 2019" on Systems and Control track organized on January 8-9, 2019 at Pillai College of Engineering, Panvel, New Mumbai.

#### **Professional Contributions**

- 1. Worked as **Asst. Project Officer** and Later on as Project Officer for **Community Polytechnic scheme** sponsored by Ministry of Human Recourses Development (MHRD) and contributed in various activities such as Manpower development, Transfer of technology, Information Dissemination and Community Services etc.
- 2. Worked as **In-charge Head of Department (HOD)** of **Information Technology** for 3 years at Government Polytechnic Thane.
- 3. Initiated Yashawantrao Chavan Maharashtra Open University (YCMOU) study centre at Government Polytechnic Thane for Diploma/Degree in Mechanical Engineering.
- 4. Conducted one week "**Trainers Training Program**" for Community Polytechnic staff at Government Polytechnic Thane.

- 5. Worked as **Coordinator** for **Community College scheme** sponsored by Ministry of Human Recourses Development (MHRD) and successfully launched "**Electronics Security**" course in collaboration with Zicom Electronic Security Systems Limited at Government Polytechnic Mumbai.
- 6. Organized a MSBTE sponsored National Conference on "Evolutionary Optimization: Techniques and Applications (NCEOTA-2014)" on March 11-12, 2014 and worked as Convener for the conference at Government Polytechnic Mumbai.
- 7. Working as **Coordinator** for development of outcome-based **I Scheme Curricula for Diploma in Production Engineering** of Maharashtra State Board of Technical Education, Mumbai.
- 8. Working as **Mentor** for development of outcome-based **I Scheme Curricula for Diploma in Food Technology** of Maharashtra State Board of Technical Education, Mumbai.

## Member of Professional Body

1. Indian Institute of Industrial Engineering. (Senior Member No: SMIIE 9892)