



Suhas Sakharam Mohite

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Date of Birth: 5th February 1968

Education:

Sr. No.	School/University /Institution	Qualifying Exam.	Year
1	City High School, Sangli www.cityhighschoolsangli.com	S.S.C.	1982
2	Willingdon College, Sangli	H.S.C.	1984
3	Walchand College of Engineering, Sangli www.walchandsangli.org	B.E. (Mech.)	1988
4	Indian Institute of Technology, Madras www.iitm.ac.in	M. Tech. (Mech.)	1990

Highlights:

- **Joint Entrance Examination (IIT-JEE 1985):** All India Rank-1518
- **Graduate Aptitude Test in Engineering (GATE-89):** Percentile score - 97.05
- **Deputation for Ph.D. at the Indian Institute of Science, Bangalore.**
 - **Period:** 01/08/2003 - 31/07/06
 - **Research Topic:** Study of Squeeze Film Effects in Modeling Dynamic MEMS Devices

Industrial Experience:

Sr. No.	Designation	Name of the Organization	Duration	
			From	To
1*	Graduate Engineer	Bajaj Auto Ltd., Pune www.bajajauto.com	01/08/1988	10/07/1989
2#	Sr. Engineer (Production)	Wipro Fluid Power Ltd., Bangalore. www.processregister.com/Wipro_Fluid_Power_Ltd	10/02/1991	19/07/1991

***Additional job offer from:** Hindustan Organic Chemicals Ltd. (HOCL), Rasayani.

Additional job offer from: TELCO, Jamshedpur.

Teaching Experience:

Sr. No.	Designation	Name of the college/ institute	Duration	
			From	To
1	Lecturer	RIT's College of Engg., Sakharale. www.ritindia.edu	09/08/1991	06/07/1992
2	Lecturer	KIT's College of Engineering, Kolhapur. www.kitcoek.org	18/08/1992	09/03/1993
3	Lecturer	D.Y. Patil College of Engg. and Tech., Kolhapur. www.dypatil.com	10/03/1993	08/07/1993
4	Asst. Professor	Government College of Engineering, Karad. www.gcekarad.ac.in	09/07/1996	24/10/2004
5	Professor	Government College of Engineering, Karad. www.gcekarad.ac.in	25/10/2004	till date

Publications in International Journals:

- 1) "Analytical solutions for the stiffness and damping coefficients of squeeze films in MEMS devices with perforated back plates", S.S.Mohite, H. Kesari, V.R.Sonti and Rudra Pratap, *Journal of Micromechanics and Microengineering* (UK), (15), 2005, pp 2083-2092. www.iop.org/EJ/article/0960-1317/15/11/013
- 2) "A comparative study of the equivalent circuits for MEMS capacitive microphones and a critical evaluation of the equivalent parameters", S.S.Mohite, V.R.Sonti and Rudra Pratap, *Advances in Vibration Engineering*, The Scientific Journal of the Vibration Institute of India, Oct-Dec 2005 Vol. (4) pp 337-349.
- 3) "Squeeze Film Effects in MEMS Devices", Rudra Pratap, Suhas Mohite, Ashok Kumar Pandey, *Journal of the Indian institute of Science*, Vol 87:1, Jan-Mar 2007. <http://journal.library.iisc.ernet.in>.
- 4) "A compact squeeze-film model including inertia, compressibility and rarefaction effects for perforated 3D MEMS structures", Suhas Mohite, Venkata Sonti and Rudra Pratap, *Journal of Microelectromechanical Systems*, (accepted).
- 5) "Analytical model for squeeze film effects in perforated MEMS structures including open border effects", S.S.Mohite, V.R.Sonti and Rudra Pratap, *Sensors and Actuators-A* (under review).

Publications in International Conferences:

- 1) "Performance evaluation of an industrial goods supply chain", M. R. Dhanvijay, S. S. Mohite, *International Conference on Logistics and Supply Chain Management (ILSCM) 2004 Conference* held during 3-5 August 2004 at PSG College of Technology, Coimbatore, India.

- 2) "Vibration analysis of a collapsed MEMS microbeam for measuring the work of adhesion", Haneesh K., S. S. Mohite, *MME-IV, 15th Micro Mechanics Europe Workshop*, 5-7 September 2004, Leuven, Belgium. pp (88-91)
- 3) "A comparative study of the equivalent circuits for MEMS capacitive microphones and a critical evaluation of the equivalent parameters", S.S.Mohite, V.R.Sonti and Rudra Pratap, *Vibration Engineering and Technology of Machinery (VETOMAC-3) and Asia-Pacific Conference on System integrity and Maintenance (ACSIM-2004)*, Jointly organized by Australian Cooperative Research Center for Integrated Engineering Asset Management (CIEAM), Dec.6-9, 2004, New Delhi. pp (893-903)
- 4) "Modelling and simulation of a MEMS microphone", S.S.Mohite, V.R.Sonti and Rudra Pratap, International Conference on MEMS and Semiconductor Nanotechnology (MEMSNANO), Dec. 20-22, 2005, IIT Kharagpur, India. Abstracts(pp 11), soft proceedings\MemsNano\pdf\MEMS\TM1\TM1_6.pdf.
- 5) "Analytical solution of squeeze film forces in perforated MEMS structures - including inertial, compressibility and gas rarefaction effects", S.S.Mohite, V.R.Sonti and Rudra Pratap, International Conference on MEMS and Semiconductor Nanotechnology (MEMSNANO), Dec. 20-22, 2005, IIT Kharagpur, India. Abstracts (pp128), soft proceedings\MemsNano\pdf\MEMS\TM7\TM7_1.pdf
- 6) "Design, Modelling and Simulation of Vibratory MEMS Gyroscope", Suhas Mohite, Nishad Patil and Rudra Pratap, International MEMS Conference (iMEMS-2006), Biopolis, Singapore, Journal of Physics: conference series 34 (2006) 757-763. www.iop.org/EJ/abstract/1742-6596/34/1/125
- 7) "Analytical model for squeeze-film effects in perforated MEMS structures including open border effects", S.S.Mohite, V.R.Sonti and Rudra Pratap, Proceedings of the Euroensors-XX conference, Gothenburg, Sweden, Sept. 2006.

Publications in National Conferences:

- 1) "Computer Aided Analysis of Cam Profile And Graphical Simulation of 3- Axes Cam Milling Operation", 19th AIMTDR Conference, I.I.T. Madras, December 2000, pp (373-376)
- 2) "Computer Assisted Production Planning and Control for a Small Scale Fruit Processing Unit", XVI National Convention of Mechanical Engineers University of Roorkee & The Institution of Engineering (India), September 2000, pp (585-590).

- 3) "Computer Aided Analysis of CAM profile And Graphical Simulation of 3- Axes CAM Milling operation", XVI National Convention of Mechanical Engineers University of Roorkee & The Institute of Engineers (India), September 2000, pp (483-487)
- 4) "Scheduling And Simulation Decisions In Two Machine Flexible Manufacturing Cell (FMC)", 20th AIMTDR BIT MESRA, December 2002, pp (496-500).
- 5) "Optimization of Turning Process Parameters Using ANN", N V Lakal and S S Mohite, 20th AIMTDR, BIT MESRA, December 2002, pp (83-88).
- 6) Computer Aided design of Blanking dies with Optimization of Strip Layout Using Simulated Annealing". Symposium on Manufacturing Excellence, IIT Madras. January 2002. pp (135-136).
- 8) "Analysis of squeeze-film damping in electrostatically actuated MEMS devices", 2005 ANSYS India Conference, Nov. 29-30, (2005), I.I.Sc. Bangalore, softproceedings \convergence-05\MBU\CoupledFieldAnalysis \IISC_MEMS_Presentation.pdf

Short term courses/Workshops attended:

- 1) Computer Aided Manufacturing, 2nd to 14th December 1996, organized by Government College of Engineering, Pune.
- 2) Industrial Problems in Machines and Mechanisms (IPROMS), 15th and 16th March 1997, Walchand College of Engineering, Sangli.
- 3) Role of Internet in Placement Activity, 9th July 2001, Government College of Engineering, Pune.
- 4) One-day workshop on Research Methodologies, Ferguson College, Pune, August 2002.
- 5) Short-term course on Engineering Pedagogy - 30th and 31st July 2004, Sponsored by AICTE, New Delhi, Organized by Center for Continuing Education, I.I.Sc., Bangalore.
- 6) National Symposium on Engineering Education (NSEE 05), Organized by Center for Continuing Education, I.I.Sc., Bangalore.

Past P.G. Students M.E. (Mech.) Dissertation title/Student:

- 1) "Computer Aided Optimization of cutting parameters By Analysis Metal Cutting Data Acquired Experimentally", Mr. A.A. Mankapure, W/S Supdt., GP, Miraj.

- 2) "Design Development and Testing of Nitrogen Gas Spring for Die Cushioning Application", Mr.S.P. Langade, Sankul Industries, M.I.D.C., Satara.
- 3) "Failure Mode And Effects Analysis (FMEA) of RKB Pump", Mr. Birage, Asst. Manager, Kirlosker Brothers Ltd. Kirloskarwadi.
- 4) "Design And Development of Computer Integrated production Management, System", Mr. M.V. Kavde, Sr. Lecturer, RIT's COE, Sakharde.
- 5) "Deformation Zone Geometry Approach For Stage Reduction Calculation for Continuous Wire Drawing Process", Prof. V. B. Pathak, Lecturer, BVCOE, Pune.
- 6) "Computer Aided Design of Master With Graphical Simulation of Theoretically Expected W/P Profile and Experimental Verification of the same for Hydraulic Copying Lathe", Prof. Y.B Kulkarni, Head (Mech.), GP, Karad.
- 7) "Computer Aided Simulation of 3- Axes Cam Milling Operation", Mr.Gujar A.J., Lecturer, TKIET, COE, Warnanagar.
- 8) "Design and development of 3 Axes P.C based Bench Drilling Machine", Mr. D.S. Patil, Engineering, L & T Mumbai.
- 9) "Simulation and Scheduling of Flexible Manufacturing Cell", Mr .V.B Savant Sr. Lecturer, Rajiv Gandhi Institute of Technology, Mumbai.
- 10) "Computer Aided Design of Blanking Dies with Optimization of Strip Layout Using Simulated Annealing Technique", Mr. Pawar P. J., Sr. Lecturer, K.K. Wagh COE, Nasik.
- 11) "Optimization of Turning Process Parameters Using Artificial Neural Network (ANN)", Mr. Lakal N.V., Lecturer, College of Engineering, Usmanabad.
- 12) "Condition Monitoring of Single Point Cutting Tool of CNC Lathe", Machine Mr. Jadhav A.V., Engineer, T.K. Cooperative Sugar Industry, Warananagar.
- 13) "Gear-box Vibration Analysis and Fault Diagnosis of Gear Teeth by Application of Condition Monitoring Technique", Mr. Salunke. S.Y., Lecturer COE, Sakharale.
- 14) "Modelling and Simulation Automated Storage & Retrieval system (ASRS)", Mr. Sachin Shinde, Lecturer, D.Y. Patil College of Engg. and tech. Kolhapur.
- 15) "Supply chain Management: An industrial goods perspective", Mr. Maneet Dhanvijay, Asst. Professor, Army Institute of Technology, Pune.
- 16) "Tool path optimization and automatic cutter selection on a Machining center", Mr. Atul Kumbhar, Design Engineer, Gas turbines Pvt. Ltd., Ahmednagar.

17) “Design and Development of computer assisted heat treatment furnace”, Mr. S. J. Mulani. Engineer Production, JCB Ltd., Pune

Portfolios held at the institute level and tasks accomplished:

- **Work-Shop Superintendent** (from November 96 to July 2001)
 - A systematic layout of the entire machinery and equipments was carried out
 - A scheme for providing workshop tools to the students was started
 - Provision of permanent drawing boards is made in the drawing halls
 - Vehicle In-charge (from December 2000 to July 2003)

- **Vice president Gymkhana** (from March 99 to July 2003)
 - Set up a full-fledged gymnasium in the college premises.
 - Organized and participated in blood donation camp in the college.
 - Organized Zonal Sports Meet of Shivaji University, 2002-03.

- **Training and Placement Officer** (from June 2001 to July 2003)
 - Organized lectures on personality development, communication skills, etc.,
 - Project Coordinator, Industry Institute Partnership Cell (IIPC).

- **Rector Hostels**

Memberships:

Indian Society for Technical Education (ISTE), LM 18331.