


## ACADEMIC PROFILE

Name	Dr. Arvind V. Deshpande	
Date of Birth	3-1-1976	
Date of Joining	15-11-1999	
Designation at the time of Joining	Lecturer	
Current designation	Associate Professor	
Personal Homepage		
Phone (Office)	+91-22-24198217	
Mobile	7045279345	
Email	<a href="mailto:avdeshpande@me.vjti.ac.in">avdeshpande@me.vjti.ac.in</a>	
<b>Academic Qualifications</b>		
<ul style="list-style-type: none"> <li>• Ph.D.(Mechanical), IIT Bombay, 2016</li> <li>• M.E.(Mechanical), Mumbai University, 2004</li> <li>• B.E.(Mechanical), Shivaji University, 1997</li> </ul>		
<b>Career History</b>		
<ul style="list-style-type: none"> <li>• Associate Professor, Mech. Engg. Dept., VJTI Mumbai, From 15-11-2012</li> <li>• Assistant Professor, Mech. Engg. Dept., VJTI Mumbai, From 28-12-2010 to 14-11-2012</li> <li>• Lecturer, Mech. Engg. Dept., VJTI Mumbai, From 15-11-1999 to 27-12-2010</li> <li>• Lecturer, Mech. Engg. Dept., Fr. C. R. I. T., Navi Mumbai, 18-1-1999 to 13-11-1999</li> <li>• Lecturer, Mech. Engg. Dept., L.T.C.O.E., Navi Mumbai, From 15-8-1998 to 11-1-1999</li> <li>• Graduate Trainee Engineer, Mahindra &amp; Mahindra (Automotive Division), Mumbai, 1-8-1997 to 31-7-1998</li> </ul>		
<b>Areas of Academic Interest</b>		
<ul style="list-style-type: none"> <li>• Fluid Dynamics</li> <li>• Computational Fluid Dynamics</li> <li>• Fluid Machinery</li> <li>• Gas Dynamics</li> </ul>		
<b>Membership in Academic Bodies / Board of Studies / Editorial Board (Journals)</b>		
<ul style="list-style-type: none"> <li>• National Society of Fluid Mechanics and Fluid Power (NSFMFP)</li> </ul>		
<b>Major Academic Publications</b>		
<ul style="list-style-type: none"> <li>• Deshpande, A., Puranik, B. (2017). A Numerical Investigation of Shock Propagation in Three-Dimensional Microducts. <i>Shock Waves</i>, 27(4), 565-582.</li> <li>• Deshpande, A., Puranik, B. (2016). Effect of viscosity and wall heat conduction on shock attenuation in narrow channels. <i>Shock Waves</i>, 26(4), 465–475.</li> <li>• Subramnian, S., Swain, P.K., Deshpande, A.V., &amp; Satyamurthy, P. (2015). Effect of Hartmann layer resolution for MHD flow in a straight, conducting duct at high Hartmann numbers. <i>Sadhana</i>, 40(3), 851-865.</li> <li>• Swain, P.K., Satyamurthy, P., Bhattacharyay, R., Patel, A., Shishko, A., Platacis, E., Ziks, A., Ivanov, S., &amp; Deshpande, A.V. (2013). 3D MHD lead–lithium liquid metal flow analysis and experiments in a Test-Section of multiple rectangular bends at moderate to high Hartmann numbers. <i>Fusion Engineering and Design</i>, 88(11), 2848–2859.</li> </ul>		
<b>Paper Presentations in National / International Journals (In last 5 years)</b>		
<ul style="list-style-type: none"> <li>• Swain, P.K., Koli, P., Ghorui, S., Mukherjee, P., &amp; Deshpande, A.V. (2020). Thermofluid MHD studies in a model of Indian LLCB TBM at high magnetic field relevant to ITER. <i>Fusion Engineering and Design</i>, 150(2020), 1-14.</li> <li>• Deshpande, A., Puranik, B. (2017). A Numerical Investigation of Shock Propagation in Three-Dimensional Microducts. <i>Shock Waves</i>, 27(4), 565-582.</li> <li>• Rawat, R.S., Swain, P.K., Rai, P.K., Tiwari, V., Satyamurthy, P., &amp; Deshpande, A.V. (2016). Design of a Heavy Liquid Metal Neutron Spallation Target for Experimental Accelerator driven Sub-critical Reactor. <i>Journal of Nuclear Energy Science &amp; Power Generation Technology</i>, 5(1), 1-11.</li> <li>• Deshpande, A., Puranik, B. (2016). Effect of viscosity and wall heat conduction on shock attenuation in narrow channels. <i>Shock Waves</i>, 26(4), 465–475.</li> </ul>		

Paper Presentations in National / International Conferences / Seminars (In last 5 years)
<ul style="list-style-type: none"> <li>Patil, N., Kumar, A., Sinha, S.K., &amp; Deshpande, A. (2020, December). Dynamic Wind Load Analysis on Heliostat. In <i>Proceedings of the 8<sup>th</sup> International and 47<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power (FMFP)</i>. IIT Guwahati, Guwahati, India</li> <li>Yadav, A., Atkuri, N., &amp; Deshpande, A. (2019, December). Optimization of Simulation Time for Transient CFD Analysis of Tractor Radiator Fan. In <i>Proceedings of the 46<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power</i>. PSG College of Technology, Coimbatore, India.</li> <li>Bhore, S., Deshpande, A., Tendolkar, M., &amp; Singh, V. (2019, December). Numerical Investigation of Natural Convection Heat Transfer from a flat plate inside an enclosed pressure chamber. In <i>Proceedings of the 46<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power</i>. PSG College of Technology, Coimbatore, India.</li> <li>Deshpande, A., Puranik, B. (2019, July). Numerical Investigation and Analysis of Post-Shock Flow in Microducts. In <i>Proceedings of the 32<sup>nd</sup> International Symposium on Shock Waves (ISSW32)</i>. National University of Singapore, Singapore</li> <li>Bhore, S., Deshpande, A., Tendolkar, M., &amp; Singh, V. (2019, February). Numerical Investigation of Natural Convection inside a cube at sub-atmospheric pressure. In <i>Proceedings of the 12<sup>th</sup> International Conference on Thermal Engineering: Theory and Applications</i>. PDPU Gandhinagar, India</li> <li>Jobanputra, R.A., Sanjay, M. G, &amp; Deshpande, A.V. (2019, February) Development of Optimum Power Point equations for variable Speed HAWT on Complex plane. In <i>proceedings of the 12<sup>th</sup> International Conference on Thermal Engineering: Theory and Applications</i>. PDPU Gandhinagar, India.</li> <li>Chaudhari, A., Borkar, M., Deshpande, A., Tendolkar, M., &amp; Singh, V.K. (2018, December). Parametric Analysis of Cylindrical Heat Pipe Performance using CFD. In <i>Proceedings of the 7<sup>th</sup> International and 45<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power</i>. IIT Bombay, Mumbai, India</li> <li>Chaudhari, A., Borkar, M., Deshpande, A., Tendolkar, M., &amp; Singh, V.K.. (2019, January). Numerical Investigation of Cylindrical Heat Pipe Performance. In <i>Proceedings of the ICIF 2018</i> (pp. 295-306). IITRAM, Ahmedabad, India: Springer</li> <li>Chaudhari, A. S, Borkar, M. D., Deshpande, A. V., Tendolkar, M.V., &amp; Singh, V.K., (2017, December). Effect of Wick Microstructures on Heat Pipe Performance - A Review. In <i>Proceedings of the International conference on Advances in Thermal Systems, Materials and Design Engineering</i>. VJTI, Mumbai, India: SSRN</li> <li>Shindekar, O., Inamdar, T., Jadhav, A., Wachche, S., &amp; Deshpande, A. (2016, December). Numerical Investigation of Flow Over Three Cylinders with Equal and Unequal Diameters in Tandem Arrangement. In <i>Proceedings of the 6<sup>th</sup> International and 43<sup>rd</sup> National Conference on Fluid Mechanics and Fluid Power</i>. MNNIT, Allahabad, India.</li> <li>Khanadalkar, P., Iyer, K., &amp; Deshpande, A. (2016, December). Characterisation of Full Cone Pressure Swirl Nozzle Using Image Processing. In <i>Proceedings of the 6<sup>th</sup> International and 43<sup>rd</sup> National Conference on Fluid Mechanics and Fluid Power</i>. MNNIT, Allahabad, India.</li> </ul>
Attendance in Conferences / Seminars / Workshops (In last 5 years)
<ul style="list-style-type: none"> <li>8<sup>th</sup> International and 47<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power (FMFP). IIT Guwahati, Guwahati, India, December 9-11, 2020</li> <li>46<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power. PSG College of Technology, Coimbatore, India, December 9-11, 2019</li> <li>32<sup>nd</sup> International Symposium on Shock Waves (ISSW32). National University of Singapore, Singapore, July 13-19, 2019</li> <li>7<sup>th</sup> International and 45<sup>th</sup> National Conference on Fluid Mechanics and Fluid Power. IIT Bombay, Mumbai, India, December 10-12, 2018</li> </ul>
Participation in Professional Development Programmes (In last 5 years)
<ul style="list-style-type: none"> <li>Introduction to Data Science in Python, Coursera, July 2020</li> <li>Introduction to Thermodynamics: Transferring Energy from Here to There, Coursera, May 2020</li> <li>Programming for Everybody (Getting started with Python), Coursera, April 2020</li> <li>Data Science &amp; Analytics, IIT Indore, March 2-12, 2020</li> <li>Digital Transformation in Teaching Learning Process, IIT Bombay, February 14-March 6, 2020</li> <li>Computational Fluid Dynamics: Development, Application and Analysis, IIT Bombay, May</li> </ul>

<p>29-June 2, 2017</p> <ul style="list-style-type: none"> <li>Application of Numerical Heat Transfer to Industrial Problems, Indian Nuclear Society, Mumbai, May 8-12, 2017</li> </ul>
<p>Guidance / Supervision of M.Tech &amp; Ph.D. Dissertations</p>
<ul style="list-style-type: none"> <li>Ph.D. – 4 (ongoing)</li> <li>M.Tech.- 58 (53 completed, 5 ongoing),</li> </ul>
<p>Research Projects Undertaken</p>
<ul style="list-style-type: none"> <li>Joint research programme in the field of Computational Dynamics with Bhabha Atomic Research Centre (BARC), 2005-2014</li> <li>Experimental and Numerical Investigation of Shock Wave Propagation at Micro-scales under RPS-NDF Scheme of AICTE, 2019-2022</li> </ul>
<p>Revenue generation (Consultancy/Testing assignments Undertaken) (In last 5 years)</p>
<ul style="list-style-type: none"> <li>NewTech Energy Engineers, Mumbai - Calculation of pressure drop for a reducer (8" x 6") followed by a diffuser (6" x 8") in a free vent for HSD tank</li> <li>Pharma Vision, Mumbai – CFD analysis of Warehouse air-conditioning</li> <li>Marine Hydraulics, Mumbai - Testing of spray nozzles</li> <li>SU Motors, Mumbai – Calibration of V-Notch</li> </ul>
<p>Organization of Academic Conferences / Workshops / Designing Courses (In last 5 years)</p>
<ul style="list-style-type: none"> <li>Advanced Petroleum Technology &amp; Management Programme (APTAM-33) – 3 week course for Army Officers, August 14-28, 2019</li> <li>Advanced Petroleum Technology &amp; Management Programme (APTAM-33) – 3 week course for Army Officers, March 19- April 3, 2019</li> <li>Advanced Petroleum Technology &amp; Management Programme (APTAM-32) – 3 week course for Army Officers, October 3-16, 2018</li> <li>Advanced Petroleum Technology &amp; Management Programme (APTAM-31) – 3 week course for Army Officers, February 13-27, 2018</li> <li>Advanced Petroleum Technology &amp; Management Programme (APTAM-30) – 3 week course for Army Officers, September 12-26, 2017</li> <li>Advanced Petroleum Technology &amp; Management Programme (APTAM-29) – 3 week course for Army Officers, February 7-21, 2017</li> </ul>
<p>Invited Lectures / Chairing / Resource Person / Keynote Address (In last 5 years)</p>
<ul style="list-style-type: none"> <li>Fluid Mechanics/Fluid Machinery– Army Officers training program (8 batches)</li> <li>Introduction to CFD - AICTE ISTE Approved One Week STTP on “Finite Element Analysis &amp; Computational Fluid Dynamics”, Thakur College of Engineering, Mumbai, 21<sup>st</sup> December, 2018</li> </ul>