

Dr. Faraz Akbar

Associate Professor

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Academic Qualification:

(In chronological order)

Ph.D. (Mechanical Engineering) School of MACE, The University of Manchester United Kingdom, *August 2009*.

B.Engg. (Mechanical Engineering), NED University of Engineering and Technology, *Karachi, Pakistan December, 2005*.

Experience:

February 2011–Present: Associate Professor, Automotive and Marine Engineering Department, NED University of Engineering and Technology, Karachi, Pakistan

2010–2011: Post-Doctoral Fellow (PDF), University of Ontario Institute of Technology (UOIT), Oshawa, Ontario, Canada

2009–2010: Post-Doctoral Researcher, School of Materials, The University of Manchester, UK

September 2006 – August 2009: Part-Time Teaching Assistant, The University of Manchester, UK

September 2008–August 2009: Student Ambassador, The University of Manchester, UK

December 2005–June 2006: Lecturer, Automotive and Marine Engineering Department, NED University of Engineering and Technology, Karachi, Pakistan

Professional Membership:

Associate Member of Institution of Mechanical Engineers – AMIMEchE

The University of Manchester Alumni Association.

Pakistan Engineering Council (PEC)

**Honors & Awards:
(if any)**

Awarded British Overseas Research Student (ORS) scholarship from The University of Manchester for my PhD in July 2006.

Received an award for the best overall academic achievement at the end of my BEngg. in Mechanical Engineering from NED University of Engineering and Technology in 2005.

**Conference, Presentation
& Course Attended:
(if any)**

1. Mentoring Training, 2009, City GATES, The National Programme for Gifted and Talented Education, UK.
2. Developing the Postgraduate Manager, Postgraduate Skills Training workshop, 2007, The University of Manchester, UK.
3. Academic Writing Workshop, 2007, The University of Manchester, UK.
4. Academic Paper Publication Workshop, 2007, The University of Manchester, UK.

5. Effective Presentation Workshop, 2006, The University of Manchester, UK.
6. Staff Training and Development Unit, Graduate Teaching Assistant workshop, 2006, The University of Manchester, UK.
7. Technical seminars on HVAC (Heating, Ventilation and Air Conditioning), 2005, NED University of Engineering and Technology, Karachi, Pakistan.
8. Training session on “Importance of Quality and productivity for SMEs”, 2005, NED University of Engineering and Technology, Karachi, Pakistan.

**Publications:
(if any)**

Refereed Journal Papers

1. Akbar, F., Mativenga, P. T. & Sheikh, M. A. (2010) An experimental and coupled thermo-mechanical finite element study of heat partition effects in machining, *The International Journal of Advanced Manufacturing Technology*, 46, 491-507.
2. Akbar, F., Mativenga, P. T. & Sheikh, M. A. (2009) Predictive modelling of average heat partition in high-speed machining of AISI/SAE 4140 steel, *International Journal of Machining and Machinability of Materials*, 5 (2/3), 135-154.
3. Akbar, F., Mativenga, P. T. & Sheikh, M. A. (2009) On the heat partition properties of TiAlN compared to TiN coating in high-speed machining, *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 223, 363-375.
4. Akbar, F., Mativenga, P. T. & Sheikh, M. A. (2008) An evaluation of heat partition in high-speed turning of AISI/SAE 4140 steel with uncoated and TiN coated tools, *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 222, 759-771.

Papers in Conference Proceedings (refereed)

5. Akbar, F., Mativenga, P. T. & Sheikh, M. A. (2008) An evaluation of heat partition models in high-speed machining of AISI/SAE 4140 steel, *The 6th International Conference on Manufacturing Research (ICMR08)*, 1, 13-21.
6. Akbar, F., Mativenga, P. T. & Sheikh, M. A. (2007) An investigation of the tool-chip interface temperature and heat partition in high-speed machining of AISI/SAE 4140 steel with TiN-coated tool, *Proceedings of the 35th International MATADOR Conference*, 215-218

Book Chapter

7. Akbar, F., Mativenga, P. T. & Sheikh, M. A. (2009) Prediction of heat partition in metal cutting – A state-of-the-art review of conventional to high-speed machining, *NOVA SCIENCE PUBLISHERS (USA)* – Research Book: “Metal Cutting – Research Advances”