

# **Dr. Aqeel Ahmed**

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### **Personal Details**

Date of Birth: 10<sup>th</sup> April, 1976

Gender : Male

Nationality : Pakistani

# **Career Objective**

To pursue learning and research in the field of Industrial and Manufacturing Engineering. Also enrich my knowledge and improve my innovative and development skills. Collaborate with the industry to provide efficient and innovative research solutions, and teach effectively to impart and spread this knowledge.

#### Award

- PhD Scholarship through Faculty Development Programme (FDP) of NED UET to purse higher education in Concordia University, Montreal (Quebec), Canada
- HEC approved supervisor.

# **Career History**

2009 – 2013 Concordia University, Montreal (Canada).

Doctor of Philosophy in the field of Mechanical Engineering.

2006–2008 NED University of Engineering and Technology, Karachi.

Masters in Engineering in the field of Industrial and

Manufacturing Engineering with a CGPA of 3.8.

Working as an instructor in Pakistan Navy Poly-technical institute (PNPI) Karachi.
 Performed teaching and give training to the persons serving in the PN Dockyard workshops.

 NED University of Engineering and Technology, Karachi.
 Bachelors in Engineering in the field of Mechanical Engineering with first class first division.

# **Current Responsibilities**

Teaching, managing and supervising research as an Assistant Professor, in the Department of Industrial and Manufacturing Engineering of NED UET, Karachi since 2006.

Following are the main responsibilities;

- Supervisor of one Ph.D student.
- Supervisor of engineering projects for the undergraduate students.
- Supervisor of individual study projects of post graduate students.
- Teaching undergraduate and graduate courses,
- Consulting and providing corporate trainings to the managers and engineers related to production and operations management
- Final year class advisor,
- Member of the committee for the accreditation with Pakistan Engineering Council (P.E.C.).

# **Teaching**

Taught following graduate, undergraduate and corporate level courses;

- Strategic Planning and Decision Making (Compulsory Graduate Course of Industrial, Quality and Supply chain management streams)
- Organizational system (Compulsory Graduate Course of Industrial, Quality and Supply chain management streams)
- Business process and simulation. (Graduate course of Supply chain management stream)
- Warehouse management.( Graduate course of supply chain stream)
- Operations Management (Under graduate course)
- Industrial Quality Control (Undergraduate course),
- Hear Transfer (Undergraduate course),
- (Finite element analysis) FEA(Undergraduate course)

- Tool Design (Undergraduate course)
- Industrial organization and management (Undergraduate course)
- Management information system (Undergraduate course)

# **Research Projects**

Supervised following graduate projects;

- Design and fabrication of fully automated wire twisting machine.
- Design FEM based modeling, simulation analysis of investment casting product.
- Design and development of paper recycling plant.
- By using queuing theory, analyze the services of any bank and give suggestion for any improvement in services.
- Analyze the case of different inventory levels for various situations.
- Tool path generation and postprocessor verification of five axis milling machine.
- Productivity enhancement of Gul Ahmed Textile through lean implementation.

### **Publications**

- Aqeel Ahmed, Zezhong Chevy Chen, Liming Wang, "Safe and short tool length determination for 5-axis machining of sculptured surfaces". Ist international conference on virtual machining process technology. CIRP sponsored conference in May, 2012.
- 2. Liming Wang, **Aqeel Ahmed**, Zezhong Chevy Chen, "A parametric CAD model of end mill based on grinding processes" 1st international conference on virtual machining process technology. CIRP sponsored conference in May, 2012.
- 3. **Aqeel Ahmed,** Z. C. Chen, "A Precise Approach for the Determination of the Setup Parameters to Utilize Maximum Work Space of 5-Axis Machine Tools", International Journal of Advanced Manufacturing Technology, online, Springer, 2015.
- Aqeel Ahmed, Liming Wang, Syed Amir Iqbal, "An Efficient Method of Collision detection For 5-axis CNC Milling", 5th International Mechanical Engineering Congress, 9-10<sup>th</sup> May, 2015, Karachi, Pakistan.
- 5. **Aqeel Ahmed,** Z. C. Chen, "A comprehensive approach to determining minimum cutter lengths for five-axis milling", International Journal of Advanced Manufacturing Technology, online, Springer, 2016.
- 6. M. Rababah, M. Wasif, **Aqeel Ahmed**, S. A. Iqbal, "Accurate Machine-Settings for the Face-Milling of Hypoid Gears", International Review of Mechanical Engineering, Vol. 11, No. 12, page 1-12, Praise Worthy Prize, 2018.

- 7. Fatima, **Aqeel Ahmed**, Yaqoob, S., & Fahad, M. (2020). Wear comparison of unstructured and structured tungsten carbide. Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology, 234(10), 1658–1668. <a href="https://doi.org/10.1177/1350650120923533">https://doi.org/10.1177/1350650120923533</a>
- 8. M. Wasif, A. Fatima, **A. Ahmed**, S. A. Iqbal, "Investigation and Optimization of Parameters for the Reduced Spring back in JSC-590 sheet metals occurred during the V-bending Process" Transaction of Indian Institute of Metals, Vol. 74, page 2751–2760, 2021. https://doi.org/10.1007/s12666-021-02357-9. (HJRS "X" Category, JCR, Impact Factor 1.499)
- 9. **Aqeel Ahmed**, Wasif, Muhammad, Fatima, Anis, Wang, Liming, Iqbal, Syed Amir. Determination of the feasible setup parameters of a work piece to maximize the utilization of a five-axis milling machine. Frontiers of Mechanical Engineering. 2021/03/18, 10.1007/s11465-020-0621-3

### Languages

- Fluency in English and Urdu.
- Basic Knowledge of French and Arabia.

# **Membership and Affiliations**

- Pakistan Engineering Council (**PEC**).
- Member and reviewer of research articles and conferences arranges International Institute of Engineers (IIE).
- Reviewer of International Mechanical Engineering Congress of Institute of Engineers Pakistan (**IEP**).

### **Research Interests**

- Strategic planning.
- Supply chain management in manufacturing industry.
- Optimization and productivity enhancement of production facilities.
- CAD/CAM.
- Optimization of tool design and machining parameters.