# SYED MUHAMMAD HASSAN LIAQUAT

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#### **EDUCATION**

- MS Mechanical Engineering | Sep 2015- June 2017 | Wuhan University of Technology, Wuhan, Hubei, China.
  - · Research area: Tribology.
  - Teaching assistant: School of Automotive engineering. For final year BE students. Feb 2017- June 2017.
  - 1 SCI indexed research publication
  - Coursework: 89.57%, Research: 84.4%

# B.Sc. Mechanical Engineering | Nov 2010- June 2014 | University of Engineering and Technology, Taxila

- Core subjects: Heat and Mass transfer, refrigeration and air conditioning, materials, Engineering operations, and management.
- 1 SCI indexed research publication.
- 3<sup>rd</sup> Position in Final year project.

#### RESEARCH JOURNAL PUBLICATIONS

- Tribological behavior of TiAl alloy metal matrix composite brake disc with TiC reinforcement under dry sliding conditions (*Jr. Mat. Eng. And Perf. 2017; Springer, American Society of Metals*)
- Experimental investigation of convective heat transfer augmentation in car radiator using ZnO nanofluid. (*Energy journal, Elsevier 2014*)

# PROFESSIONAL ABRIDGMENT

# LECTURER | MECHANICAL ENG. DEPT. | NED UNIVERSITY, KARACHI | JAN-2018-PRESENT

Experimental demonstrations for Engineering Materials and Mechanics of Materials laboratories.

# **ENGINEERING OFFICER | MARTIN DOW LIMITED | MARCH 2015- JULY 2015**

#### **Achievements:**

- Annual maintenance of 2 Direct-fired absorption chillers (200 RTs).
- Update the drawings and data of HVAC units (21 AHUs) for all the production and packaging areas (30 Nos) in the plant at Korangi industrial area, Karachi.
- Initiated and completed 5 projects including design and development of 3 buffer zones in the production area. Design and development of a dispensing booth at the warehouse.
- In-house installation and commissioning of the Hot water tank for 1-ton boiler.
- Generated complete calibration record of all the gauges and measuring scale in the plant and production area.

#### **Responsibilities:**

- Part of Engineering team responsible for the major revamping of the Plant.
- Supervise routine preventive and breakdown maintenance and repair jobs. (HVAC, Compressors, production area etc.)
- Preparation of Capex, BOQ's, project planning and execution within the specified time for capital projects.
- liaison with engineering consultants/ contractors during design and execution phase for quality check and scope of work.
- Generate purchase requisition via SAP ERP for procurement of Project and Maintenance related engineering materials/parts and follow up.
- Monthly reporting of Engineering department routine activities and project status.

- Ensure that SOP's are being followed to operate the plant machine and LOTO procedure is being implemented in case of any maintenance.
- Fill the GAP identified by compliance dept. in engineering projects and maintenance activities

# MANAGEMENT TRAINEE-UTILITIES | MARTIN DOW LIMITED | AUG 2014- FEB 2015

- Supervise routine maintenance job.
- Assist in engineering projects
- SAP ERP for procurement of Project and Maintenance related engineering materials.

### **INTERNSHIP**

- Siemens Pakistan Engineering. Co. Ltd. | June-2013- Aug-2013.
- Mondelez international (Cadbury Pak Pvt Ltd.) | June-2012- Aug 2012.

# **LANGUAGES**

• English (Fluent, Academic), Chinese (Basic), Arabic (Basic).

#### **SKILLS AND SOFTWARES**

- MS Office, SAP ERP, Pro Engineer, Solid Works, Ansys (Transient structural), Abaqus 10.1, Match XRD pattern.
- Scanning Electron Microscopy, EDS, Spark Plasma Sintering (SPS).

#### **EXTRACURRICULAR ACHIEVEMENTS**

- Head of the cricket club for ICEA, Wuhan University of Technology, China.
- Completed 24 km mountain marathon at Jiangxia, Hubei, China.
- 1-day military training at Chinese military camp, Wuhan.

# **AWARDS**

- Executive member Honorary certificate by International sports and cultural exchange association (ICEA), Wuhan Uni. Of Tech., China.
- Secured 3<sup>rd</sup> position in final year projects at the University of engineering and technology, Taxila, Pakistan

#### **CAREER SUMMARY**

• Offer 1-year experience in engineering projects and maintenance at Martin Dow limited Pakistan. Moreover, I also offer research and hands-on experience for various materials analysis tools (SEM, EDX) as well as data acquisitions systems. Returning now from a 2-year sabbatical owing to the Master's degree, Looking forward to an exciting teaching and research-oriented career at NED University.