

# **Dr. Nabeel H. Alharthi**

King Saud University, P.O.Box 800, Riyadh 11421, Kingdom of Saudi Arabia

Cell Phone: +966555703706, e-mail: [alharthy@ksu.edu.sa](mailto:alharthy@ksu.edu.sa), Website: <http://fac.ksu.edu.sa/alharthy/>

## **Education**

---

### **2011 – 2014**

Ph.D. Mechanical Engineering and Mechanics

Lehigh University, Pennsylvania, US

### **2009 – 2011**

Master of Science with Thesis

Mechanical Engineering and Mechanics

Lehigh University, Pennsylvania,

### **2005 – 2007**

Non-Degree Courses, Executive MBA

King Abdulaziz University (KAU), Jeddah, SA

### **1996-2001**

Bachelor of Science

Mechanical Engineering

King Abdulaziz University (KAU), Jeddah, SA

## **Research Fields**

---

Deformation Processing; Physical Metallurgy, Physical and Numerical Modeling, Microstructure Characterization, Machinability

## **Work Experience**

---

### **8/2014- Present**

Assistant Professor

Mechanical Engineering Department King Saud University Riyadh- (KSA)

**4/2007- 8/2014**

Teacher Assistant

Mechanical Engineering Department King Saud University Riyadh- (KSA)

**4/2003- 3/2007**

Technical specialist Material and Logistics Department

Saudi Arabian Airlines Jeddah, SA

**5/2002-4/2003**

Mechanical Engineer

Saline Water Conversion Corporation Jeddah, SA

**6/2001- 6/2002**

Mechanical Engineer

Economic Research Department

Saudi Arabian Monetary Agency (SAMA) Economic Research Department Riyadh, SA

**Co-operative Summer Programs****06/2000 to 08/2000**

Assistant Production Engineer

Savola Company-Saudi Paper Cup &Containers Co. Jeddah, SA

**06/1999 to 08/1999**

Summer Trainee (Power Plant, Steam Plant, HVAC system)

Al-Hada Armed Forces Hospital-Maintenance Department Taif, SA

**Short Courses Training**

---

**10-12/2014**

11 training courses in teaching development

Deanship of Skills Development, King Saud University, Riyadh, SA

**4/2003 to 4/2004**

- Maintenance and Engineering Management Information System (MIMES)
- Safety awareness.
- Effective communication

- Effective supervision
- Costs benefit analysis
- Negotiation skills
- Team building
- Interaction skills
- Basic concepts of administration support
- Administration procedure training
- Management report writing

Saudi Arabian Airlines Jeddah, SA

**09/2001 to 10/2002**

Intensive courses in Macro Economics, Micro Economics, Money and Banking, and Econometrics

Institute of Banking, SAMA Riyadh, SA

**08/2000**

Certificate in Bench Marking Analysis

Savola Company-Saudi Paper Cup & Containers Co. Jeddah, SA

## **Skills**

---

- Microstructure Characterization Techniques- Scanning Electron Microscopy (SEM), Orientation Imaging Microscopy using Electron Backscatter Diffraction (EBSD), and X-Ray Diffraction (XRD), (EDS)
- Mechanical testing
- Heat treatment
- Thermo-mechanical physical simulation
- Finite Elements Based Numerical Simulation Software ( Deform 2D and 3D, HyperWork)
- Knowledge of Engineering Software - AutoCAD, Solidworks, Matlab, Maple

## **Publications & Presentations**

---

- Analysis of Extrusion Welding in Magnesium Alloys – Numerical Predictions and Metallurgical Verification

**Nabeel H. Alharthi**; Sedat Bingöl; Anthony P. Ventura; Wojciech Z. Misiolek 11th International Conference on Technology of Plasticity, ICTP 2014, 19-24 October 2014, Nagoya Congress Center, Nagoya, Japan

- Extrusion welding in a magnesium alloy (AM30) hollow section extrudate

**Nabeel H. Alharthi**, Wojciech Z. Misiolek Advanced Materials and Processes, (2014) 16-17

- Microstructure characterization of extrusion welding in a magnesium Alloy extrudate

**Nabeel H. Alharthi**, Wojciech Z. Misiolek Metallography, Microstructure, and Analysis  
DOI:10.1007/s13632-013-0099-z

- Modeling surface grain structure evolution in AA6082 hot direct extrusion

**Nabeel H. Alharthi**, Luigi De Pari Jr, Andreas Jaeger, Ahmet Güzel, Wojciech Z. Misiolek, A. Erman  
Tekkaya 12th International Aluminum Conference Montréal, Québec, Canada

- Microstructure evolution of asymmetrically rolled AA-5182

**Nabeel H. Alharthi**, W.Z.Misiolek ASME District A 2011 Student Professional Development  
Conference, Temple University, Philadelphia, PA

## **Awards**

---

**05/2014**

Outstanding Student Award  
Saudi Cultural Mission in Washington, USA

**10/2013**

2013 Jacquet-Lucas Award for Excellence in Metallography, Best in International Metallographic Contest  
ASM International

**5/2008**

Scholarship from King Saud University to USA for graduate studies

## **Memberships**

---

American Society for Mechanical Engineers (ASME), Society for Manufacturing Engineering (SME),  
Materials Information Society (ASM International), The Minerals, Metals and Materials Society (TMS),  
Association for Iron and Steel Technology (AIST)

## **Languages**

---

Arabic & English