



# EHSAN AHMED ASHRAFI

Modhubag, Mogbazar, Dhaka-1217.

E-mail: ashrafi.mme@gmail.com

Phone: +880-1713145458, +880-1554300969

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## OBJECTIVE

To gain long term employment in a leading company, where I can utilize my skills and gain further experience, while enhancing the company's productivity and reputation.

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## EDUCATIONAL QUALIFICATION

### **Bachelor of Science (B.Sc.Engg.) :**

Bangladesh University of Engineering and Technology (BUET)

Department of Materials & Metallurgical Engineering (MME)

Date of Graduation: 16<sup>th</sup> February, 2013

CGPA: 3.75 in a scale of 4.00 (degree awarded with HONOURS)

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## PROFESSIONAL EXPERIENCE

- **Quality Officer** (15<sup>th</sup> Apr, 2013 – Continuing)

Quality Control & Product Development, Welding Electrodes,  
Linde Bangladesh Limited, Mahona, Bhulta, Rupganj, Narayanganj.

Responsibilities:

- Conduct receiving inspection tests of raw materials
- Assisting in research for improving existing welding electrode brands
- Testing of electrodes for scheduled testing program and annual approval of welding electrodes
- Calibration and Maintenance of measuring, inspection and test equipments
- Assisting foreign experts in yearly calibration of lab instruments
- Controlling FiFo (First in First out) system of raw materials and finished goods
- Diagnosing Quality problems, preservation of quality related records and directing the quality inspectors
- Monitoring compliance of ISO 9001 and ISO 14001
- Conducting mechanical, chemical and other tests at laboratory for internal and external customers

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## AWARDS ACHIEVED

1. Dean's List Award (in 3<sup>rd</sup> year)
2. University Merit Scholarships (in several semesters)
3. Higher Secondary & Secondary School Merit Scholarship (Jessore Education Board) (Jul 2008 – Jul 2012)
4. JEXCA (Jhenidah Ex-Cadets Association) Merit Scholarship (Jul 2008 – Dec 2008)

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## RESEARCH & PROJECT WORKS

- ❖ **Undergraduate Thesis** (Sep 2011 – Feb 2013)

Title: Study of Effect of Composition on Mechanical Properties of As-cast and Homogenised Aluminium Alloys.

- ❖ **Research on Improving Welding Electrodes** (Nov 2013 – Continuing)

Assisting my Line Manager in research for improving the existing welding electrodes brands by modifying the electrode coating composition. The objective is to improve the welding quality with cost minimization.

- ❖ **Research on Aluminium Alloys and Nano particles** (Jan 2014 – Aug 2014)

Conducted research through team work in BUET and successfully published 03 papers in international journal.

- ❖ **Other Project Works** (Aug 2008 - Nov 2013)

- Materials Industries in Bangladesh: Problems & Solutions
- Uses of Natural Gas in Bangladesh
- Selection of Materials to Manufacture A Furnace
- Industrial Design of Ball Mill Liner
- Steel Foundry Design
- Failure Analysis of Gas Pipeline

## ❖ Publications

1. **E. A. Ashrafi**, A. Hasan and H. M. M. A. Rashed, "Effect of Cu in Al-Si Alloys with Phase Modelling", *International Conference on Mechanical, Industrial and Materials Engineering (ICMIME) 2013*, Rajshahi University of Engineering & Technology (RUET), pp. 583-588, 2013.
2. Mohammad Sharear Kabir, **Ehsan Ahmed Ashrafi**, Tamzid Ibn Minhaj and Md Moinul Islam, "Effect of Foundry Variables on the Casting Quality of As-Cast LM25 Aluminium Alloy", *International Journal of Engineering and Advanced Technology (IJEAT)*, Vol. 03, Issue 06, pp. 115-120, 2014.  
[www.ijeat.org/attachments/File/v3i6/F3340083614.pdf](http://www.ijeat.org/attachments/File/v3i6/F3340083614.pdf)
3. Mohammad Sharear Kabir, Tamzid Ibn Minhaj, **Ehsan Ahmed Ashrafi** and Md Moinul Islam, "The Influence of Ageing Time and Temperature on the Structure and Properties of Heat Treated A201.0 Aluminum Alloy", *International Journal of Recent Technology and Engineering (IJRTE)*, Vol. 03, Issue 03, pp. 78-83, 2014.  
[www.ijrte.org/attachments/File/v3i3/C1150073314.pdf](http://www.ijrte.org/attachments/File/v3i3/C1150073314.pdf)
4. Mohammad Sharear Kabir, Tamzid Ibn Minhaj, **Ehsan Ahmed Ashrafi** and Md Maruf Hossain, "Influence of Sintering Routes on the Structure and Indentation Hardness of Nano  $\alpha$ -Al<sub>2</sub>O<sub>3</sub> Particles", *International Journal of Advanced Engineering and Nano Technology (IJAENT)*, Vol. 01, Issue 09, pp. 26-30, 2014.  
[www.ijaent.org/attachments/File/v1i9/I0204081914.pdf](http://www.ijaent.org/attachments/File/v1i9/I0204081914.pdf)

## LAB EXPERIENCES

Lab experiences at university and job location:

- Materials characterizing and analytical techniques such as OES, XRF, Sample preparation machines for OES and XRF, SEM (equipped with EDS, FIB), DSC, TGA, DTA, XRD, FTIR etc.
- Surface treatment lab experiences (Electroplating, Chemical plating, Diffusion processes)
- Machine shop experiences (CNC machine, lathe machine, shaper machine etc.)
- Materials Testing Lab experiences (UTM, Impact and Hardness testing machines etc.)
- Foundry shop experiences (Various types of melting and casting practices)
- Metallography and Chemical lab experiences
- Welding shop experiences (MMAW, Electric arc, Gas, TIG etc.)

## COMPUTER SKILLS

- Windows OS, MS Word, MS Excel, MS PowerPoint
- Basic knowledge about C++, AutoCAD, MATLAB, Adobe Photoshop
- SAP, Lotus Notes, Synergy

## INDUSTRIAL ATTACHMENTS AND TRAININGS

- **Trainee Engineer - BITAC (Bangladesh Industrial Technical Assistance Centre) (Mar 2012)**  
Al alloy casting, Brass and Bronze foundry, CNC processes, Commercial Heat treatment procedures, Machining.
- **Trainee Engineer - BSRM (Bangladesh Steels Re-Rolling Mills Limited) (Mar 2012)**  
Two strand continuous casting process, Induction furnace melting technology, Ladle & Tundish refractory
- **Arc Welding Training at Welding Training Centre, Linde Bangladesh Ltd. (Apr 2013)**  
Manual Metal Arc Welding (MMAW), Arc welding principles, Welding Metallurgy.
- **Safety Trainings at Linde Bangladesh Ltd. (May 2013 – Aug 2014)**  
Risk Assessment, Golden Rules of Safety, Hazard Triangle, Safety Dialogue, Incident Reporting & Investigation, Working at Height, Permit to Work.
- **Six Sigma Yellow Belt Training at Linde Bangladesh Ltd. (April 2014)**  
Basic problem solving, 5 Whys, Fishbone analysis, Chart Analysis, DMAIC Approach, Priority Matrix.
- **Fire Fighting Training by Fire Service and Civil Defence at Linde Bangladesh Ltd. (Jul 2014)**  
Types of Fire, Using Extinguishers, First Aid, Rescue and Evacuation process.
- **Radiation Control Officer Training by Bangladesh Atomic Energy Commission. (October 2015)**  
Awareness about Safety controls for Radiation related works at industries.
- **Health and Occupational Hygiene (HOH) Training at Linde Bangladesh Ltd. (February 2016)**  
HOH related risks, risk assessment, standard limits, monitoring and control.

## LANGUAGE TEST

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IELTS Overall Band Score: 7.5 (*Date: 08 Nov, 2012*)  
Listening: 8, Reading: 8.5, Writing: 6.5, Speaking: 6.5.

## REFERENCES

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### **Dr. Aminul Islam**

Professor  
*Email: aminulislam@mme.buet.ac.bd*  
Phone: 9665650-80 Ext: 7380  
Department of Materials & Metallurgical Engineering.  
Bangladesh University of Engineering and Technology.

### **Dr. Hossain Rashed**

Assistant Professor [Thesis Supervisor]  
*Email: hrashed@mme.buet.ac.bd*  
Phone: 9665650-80 Ext: 7352  
Department of Materials & Metallurgical Engineering.  
Bangladesh University of Engineering and  
Technology.

## DECLARATION

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I, Ehsan Ahmed Ashrafi, hereby declare that the above mentioned information is true to the best of my knowledge.



[Ehsan Ahmed Ashrafi]