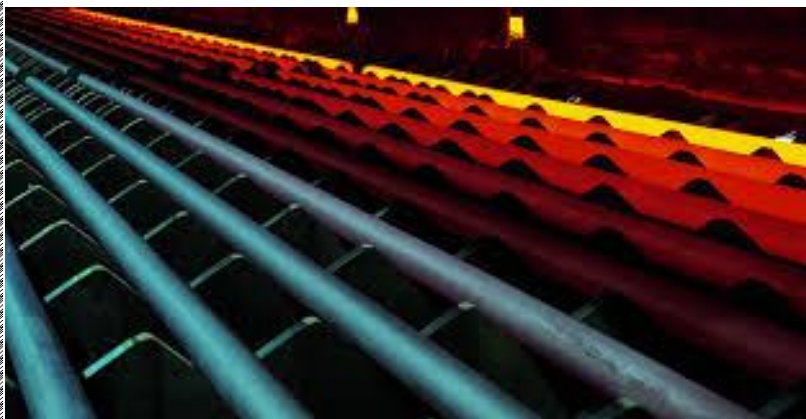


# **TRAINING COURSE ON CLEAN STEEL TECHNOLOGY**

## **30-31 MAY 2023**

### **MISIF TRAINING ROOM, SHAH ALAM, SELANGOR**



**Dr. Sheikh Abdul Rezan bin Sheikh  
Abdul Hamid**

School Of Materials & Mineral Resources  
Engineering, Universiti Sains Malaysia (USM)

### **INTRODUCTION**

Steel production has evolved over many centuries and new technological improvements are being made daily. The making, shaping and treating of steel are critical to product design, application, cost and performance. Therefore, knowledge of these processes is essential to employees working in producing, supplying and designing iron and steel products. These employees need basic understanding of steel production, making, shaping and treatment to final products. This course will be an introductory journey for those who have non-technical background in metallurgical engineering. It is hoped after taking this course, the participants will understand the technical aspects of steel manufacturing, properties and applications.

### **LEARNING OUTCOMES AND OBJECTIVES**

The course will be applicable to both EAF and BOF producers. The course will stress the relationships between the fundamental principles which govern the various processes and the attainment of a consistent quality operation. The course is appropriate for people involved in the operation, start-up and control of steelmaking vessels, ladle metallurgy stations and continuous casters as well as those supplying materials to the above installations. It is appropriate for billet, bloom, and thick and thin caster personnel.

### **COURSE CONTENTS**

Lecture 1: Steel – Types and Properties  
Lecture 2: Steel: Overview of Making, Shaping and Treating of Steel – Evolution of Iron and Steelmaking  
Lecture 3: Ironmaking and Steelmaking  
Lecture 4: Secondary Steelmaking  
Lecture 5: Ladle Metallurgy  
Lecture 6: Strategies for Clean Steel  
Lecture 7: Continuous Casting of Steel Products  
Lecture 8: Solidification of Steel – Casting Defects and Prevention

### **WHO SHOULD ATTEND**

Iron and Steelmaking Industries in Malaysian and ASEAN.

### **METHODOLOGY**

\* This course will be conducted on-site (Face-to-Face) at MISIF Training Room, Shah Alam, Selangor.  
\* Each participant will receive a set of course materials.

### **REGISTRATION FEE AND ADMINISTRATIVE DETAILS**

**Members / Non-Members: RM1,500 per participant**

**Deadline For Registration: 26 May 2023 (Friday)**

No refund will be entertained although participants can be substituted at any time.  
The organizer reserves the right to cancel, reschedule, postpone or amend the course date/venue/programme, due to unforeseen circumstances.

**ORGANISED BY: MALAYSIAN IRON AND STEEL INDUSTRY FEDERATION (MISIF)**

**TRAINING COURSE ON  
CLEAN STEEL TECHNOLOGY  
30-31 MAY 2023**



**DATE AND VENUE**

Date : **30-31 May 2023 (Tuesday-Wednesday)**  
Time : **9.00 a.m. – 5.30 p.m. (Daily)**  
Venue : **MISIF Training Room, Shah Alam,  
Selangor**

**SKIM BANTUAN LATIHAN**

Companies registered with HRD Corp can apply for refund under Skim Bantuan Latihan (SBL) Scheme.

**ABOUT THE TRAINER**

Dr. Sheikh Abdul Rezan joined USM Engineering campus in 2010. He completed his PhD in Materials Engineering (Pyrometallurgy) from University of New South Wales, Australia in 2010. His undergraduate degree was from Alfred University (New York), USA and Master in Engineering from UTM, Johor. He has published more than 100 journals and conference papers combined in the field of extractive metallurgy, steelmaking, marine corrosion and high temperature ceramics. He was an invited member to Malaysia Steel Institute (MSI) and SIRIM committee for Malaysian Standard for raw materials for iron, steel and intermediate products (TC/P/1). His research interest included sacrificial zinc anode for cathodic protection (SACP), marine corrosion, steelmaking waste recycling and pyro-processing of titanium minerals. He is actively working on the recycling of EAF/BF steel slag, SACP for marine applications and production of titanium tetrachloride and titanium metal by low temperature chlorination process. Dr. Sheikh Abdul Rezan has been conducting “Introduction to Steelmaking” and various other short courses from 2011 with MISIF and USM.

**REGISTRATION FORM**

Please register the following person/s for the “**TRAINING COURSE**”.

**PLEASE TYPE IN BLOCK LETTERS:-**

1. NAME: \_\_\_\_\_ DESIGNATION: \_\_\_\_\_  
EMAIL: \_\_\_\_\_ TEL NO: \_\_\_\_\_
2. NAME: \_\_\_\_\_ DESIGNATION: \_\_\_\_\_  
EMAIL: \_\_\_\_\_ TEL NO: \_\_\_\_\_
3. NAME: \_\_\_\_\_ DESIGNATION: \_\_\_\_\_  
EMAIL: \_\_\_\_\_ TEL NO: \_\_\_\_\_
4. NAME: \_\_\_\_\_ DESIGNATION: \_\_\_\_\_  
EMAIL: \_\_\_\_\_ TEL NO: \_\_\_\_\_

**SUBMITTED BY:** \_\_\_\_\_

**DESIGNATION:** \_\_\_\_\_ **EMAIL ADDRESS:** \_\_\_\_\_

**COMPANY NAME:** \_\_\_\_\_ **TEL NO:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**FOR INFORMATION**

Ms. Norlian Mohamed Najib

**MALAYSIAN IRON & STEEL INDUSTRY FEDERATION (MISIF)**

28E & 30E, 5<sup>th</sup> Floor, Block 2, Worldwide Business Park,

Jalan Tinju 13/50, Section 13, 40675 Shah Alam, Selangor

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