

2022

Materials Selection & Corrosion

*Nigel Brewitt &
Dr Andrew Spowage*

2 days course specially intended for new and practicing engineers, materials engineers, maintenance engineers, integrity engineers, asset integrity engineers and engineers from other fields in acquiring knowledge on the process of Materials Selection and the impact of Corrosion and Degradation of Materials.

OBJECTIVES

The course aims to give students a working knowledge of the materials selection process, techniques and procedures. Mainly based on metallic materials, the course covers examples and experiences mainly from the oil and gas industry. The risks associated with corrosion of materials in specific environments are identified. Risk mitigation options are identified and how they can be used to expand the range of materials options for various applications is discussed.

LEARNING OUTCOME

The students will gain knowledge of preparing and executing a materials selection process. Lectures given in the various failure modes associated with corrosion will enable the student to understand the possible risks with incorrect materials selection. Through both lectures and practical sessions the student will gain an appreciation of corrosion failures.

COURSE CONTENTS

- The materials selection process standards used in the oil and gas sector
- Corrosion and degradation of materials
- Corrosion modeling
- Life cycle costing
- Corrosion mitigation and control

TARGET AUDIENCE

- Engineers involved in projects which involve materials selection
- Materials Engineers and materials department / asset integrity managers who wish to gain an appreciation of materials selection
- Integrity Engineers
- Maintenance Engineers from oil and gas, power generation, railways, aerospace and any other industry specifying materials for engineering structures, equipment and components.



PRE-REQUISITES:	Diploma/Degree or Equivalent	LANGUAGE:	English
CERTIFICATE:	Certificate of Attendance	DURATION:	2 Days
DATES:	19-20 Jan, 15-16 Feb, 15-16 Mar, 12-13 Apr, 14-15 Jun, 19-20 Jul, 9-10 Aug, 13-14 Sep, 19-20 Oct 2022		
FEE:	RM2299 per person		

Terms & conditions

- Full payment to be made upon registration
- JOTAC reserves the right to prevent participants from class if no payment made at least 7 days prior to class
- 50% refund when cancellation made 14 days before class.
- No refund for cancellations 7 days before class. Replacement of participants allowed subject to availability of seats

SWEC Code No: 18111500S



JOTAC Academy Sdn Bhd,

2 Jalan TPP 5/17, Taman Perindustrian Puchong, Seksyen 5, 47160 Puchong, Selangor Darul Ehsan
Telephone: (603) 8060-0192 Email: norhazila@jotac.com.my Website: <https://jotac.com.my/wp/>



Eur. Ing. Nigel Brewitt
MMet, CEng, FIMMM, FIMM

Nigel graduated from The University of Sheffield with a Masters Degree in advanced physical metallurgy and from Derby University with a post-graduate diploma in corrosion science and technology. He worked in the

welding and fabrication industry for 10 years before joining Rolls-Royce where he spent 20 years in the nuclear submarine division and a further 3 years in the aero-engine division as a metallurgist/failure investigator. This also included working offshore on titanium heat exchangers in the North Sea for six years. Since retirement from RR, he has worked on a broad range of projects for Intertek Services Ltd in the UK as a failure investigator mainly on aerospace and railway track components. He is a director of MTIS Sdn. Bhd and a materials consultant for Norimax Sdn. Bhd where he has worked mainly on offshore component failures. Nigel is also a part-time lecturer at Nottingham University Malaysia Campus giving advice on industrial design and manufacturing.

He is a European Engineer, a Chartered Engineer, a Fellow of the Institute of Materials Minerals and Mining, a Fellow of the Institute of Materials Malaysia and was made honorary Associate Professor at the University of Nottingham Malaysia Campus. He is also on the industrial advisory panels for UTAR, TARUC and Nottingham Universities.



Dr Andrew Spowage
CEng, CSci, FIMMM, FIMM, PGCHE, CSSBB

Dr Andrew holds the position of Senior Lecturer (Associate Prof) within the School of Engineering and Materials Science at Queen Mary University of London. His areas of expertise range from the performance of materials, materials selection, corrosion and failure of materials. Before joining QMUL Andrew held the post of APAC Engineering Manager Wood PLC where he ran the materials, corrosion and integrity management teams. Andrew has also held the post of Head of Department of Mechanical Materials and Manufacturing Engineering at The University of Nottingham’s Malaysia Campus and has been a materials specialist consultant for MTIS Sdn. Bhd. Since 2009. Dr Andrew holds a Post Graduate Certificate in Higher Education (PGCHE), is a Chartered Engineer, (CEng) a Chartered Scientist (CEng) and is a fellow of IOM3, IMM and HEA.

REGISTRATION FORM

Please send the completed form to norhazila@jotac.com.my or WhatsApp no.: (011) 6556.0336. Thank you.

Name of Course: _____ Date of Course: _____

Name/s of Participant: 1. _____ Mobile No: _____
 2. _____ Mobile No: _____
 3. _____ Mobile No: _____
 4. _____ Mobile No: _____

Name of Company: _____ Location: _____

Email Address: _____ Office No: _____

PAYMENT DETAILS

Please make payment to **JOTAC ACADEMY SDN BHD**

Bank: Maybank

Account No.: 5127-1811-6603

Please email or WhatsApp a copy of the remittance slip for our record. Thank you.