

**HRDF
Claimable**



FTIR APPLICATION FOR COATINGS FINGERPRINTING MASTERCLASS

Date : 19th May 2016 Time : 9.00 am - 5.00 pm
Venue : Bilik Pahang, PWTC, Kuala Lumpur



Who Should Attend

QA/QC coating inspectors, coating supervisors, clients' site QA/QC representatives, third-party QA/QC authorities' representatives, third-party laboratories' chemists/ technicians, and management personnel.

Anyone interested in the topic and their applications, including graduates with bachelor degree through Ph.D. level, researchers, chemists, engineers, physicists, or technicians from academia and industry who work in or are beginning to work in this field.

Speakers' Profile



Dr. Winie Tan is working at Universiti Teknologi MARA, Malaysia. She is an Associate Fellow of the Malaysian Scientific Association (2012– present), Council Member of Institute of Materials, Malaysia (2014-2016) and member of Malaysian Solid State Science and Technology Society (2009-present). Her research outcomes won her several medals and awards in international and national events. She is the advisor of the IMM Task Force on Coatings Fingerprinting since 2013.



Dr. Pik Leung Tang graduated with a PhD in Chemistry from the University of Strathclyde. The PhD was funded by Ciba Specialty Chemical (now BASF Schweiz AG) that supplied pigments to many of the leading coatings industries and was in-depth study of a particular type of high value azo pigment. He is currently an application scientist for Agilent Technologies delivering technical solutions specifically for mobile FTIR as well as training and method creation from concept to full-testing. His role as application scientist calls for direct involvement in industrial oriented challenges requiring a wide skill set.

Synopsis

The paint & coatings industries have initiated the requirement for a polymeric "Coating Fingerprint Certificate" (similar to a Mill Certificate for metals) to improve quality assurance. Fourier Transform Infra-Red (FTIR) method has been selected as the appropriate method to provide the fingerprinting requirement in addition to other physical & chemical tests which are regularly conducted by the paint & coating manufacturers.

For the benefit of the participants of this masterclass, IMM has made this masterclass to be equivalent to the one-day "IMM Coating Fingerprint Foundation Course", the pre-requisite for candidates who wish to be certified as an IMM Certified Coating Fingerprint Quality Controller".

Tentative IMM Coating Fingerprint Certification Scheme comprises :

1. IMM Coating Fingerprint Foundation Course (pre-requisite : NIL).
2. IMM Certified Coating Fingerprint Quality Controller (pre-requisite : IMM Coating Fingerprint Foundation Course OR IMM Coating Inspector Level 2 OR equivalent).

Course Objectives

The oil & gas industries in Malaysia will soon implement the requirement for Coating Fingerprint Certificates for all the protective coatings and paints supplied to them. This masterclass has been designed to equip the participants with the knowledge and skills to demand sufficient authority for his / her decisions to be recognized by both client and contractor, in the preparation of Coating Fingerprint Certificate for third party or in-house laboratories.

Course Content

1. Background of Coating Fingerprinting Certificate for protective coatings
2. Presentation of tentative Coating Fingerprint Certificate for 2-component intermediate materials of epoxy coatings
3. Is it possible to fingerprint protective coatings without any intrusion of paint formulations?
4. Sampling standards of the materials from the mixing tank immediately after each batch of the production in the paint factory, e.g. ASTM D3925-02, ISO 1513, ISO 15528 etc
5. FTIR analysis standard for protective coatings, e.g. ASTM D7588-11
6. Generation of reference FTIR spectrum
7. Estimation of degree of similarity (r) for the Reference spectrum to the sample spectrum
8. Setting the threshold (degree of similarity $\geq 90.0\%$) to reject or to accept one sample

Certification

Upon completion of this masterclass, participants will be issued
(1) Certificate of participation of IMTCE2016 masterclass and
(2) "IMM Coating Fingerprint Foundation Certificate" with validity of 5 years.

Fees

USD 300 / MYR 800 (include 6% GST)
+ IMM Membership Fee (5 years) : USD 75.00 / MYR 220.00
TOTAL : USD 375.00 / MYR 1020.00

Payment Mode

Payment to be made by CDM (Cash Deposit Machine), Cheque, Telegraphic Transfer and Bank Draft to:-

Account Name:
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For Registration or more information, Please contact :

Mr. Lex (019-387 3008 or lex@mte.com.my) & Mr. Ikmal (013-252 7660 or ikmal@mte.com.my)

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Issue 13

Jan 2016

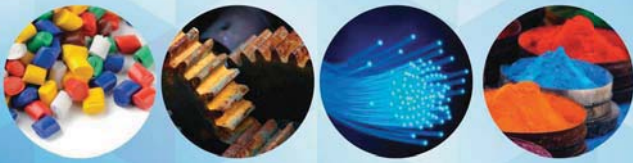
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International Symposium on Materials & Asset Integrity

ISCC2016

International Symposium on Coatings & Corrosion

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featuring

**COATINGS & CORROSION
FABRICATION & WELDING 2016**

HIGHLIGHTS



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**Coatings Fingerprinting
Implementation**



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MLC 2015



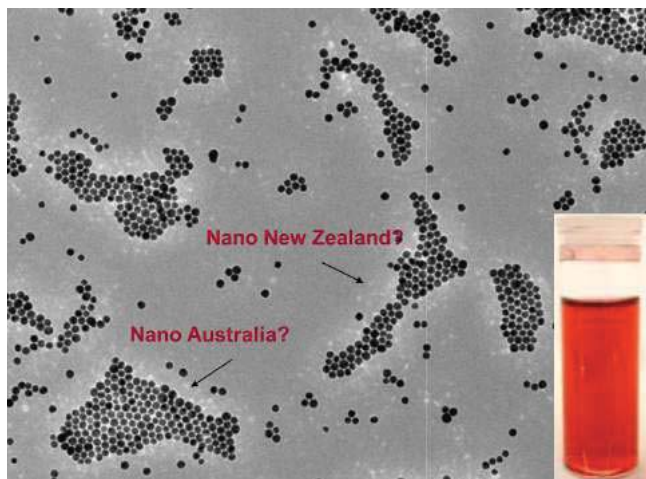
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**Welding Quality
Improvement Initiatives**



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6-9	IMTCE2016 Conference Leaflet
10-15	IMTCE2016 List of Invited Speaker/Oral-E/Oral-O
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25	IMTCE2016 Conference Publication Avenue
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31-34	IMM Coating Fingerprint Certification Scheme
40-42	Report on: <ul style="list-style-type: none">• Forum "Towards Fingerprinting of Polymeric Coatings" IV
43	Report on: <ul style="list-style-type: none">• Jotun Visit to Faculty of Applied Sciences, Universiti Teknologi MARA
44	Report on: <ul style="list-style-type: none">• Kuala Lumpur Engineering Science Fair 2016
45-46	Report on: <ul style="list-style-type: none">• Young Persons' World Lecture Competition (YPWLC2015)
48	Report on: <ul style="list-style-type: none">• Shell Malaysia Exploration and Production Quality Day 2015
49-52	IMM Working Committees & Regional Chapters
53	Reports on: <ul style="list-style-type: none">• 24th Asian Welding Federation Council Meeting• Collaboration between IMM-IIS-MOCA
54-57	Technical Article: <ul style="list-style-type: none">• Economical aspect of efficient process control in welding Fabrication

Materials Mind Photography Competition Winning Photograph Issue 13



Congratulations to Dr. Lim Teck Hock from Faculty of Applied Sciences and Computing, Tunku Abdul Rahman University College, Setapak. He won RM 500 and an award certificate.

Title : NanoGold: A whole new world

Photography description:

A bright-field high resolution transmission electron microscopy (HRTEM) image of monodispersed gold nanoparticles taken at the start of an in-situ study of coalescence at nanoscale. The particles self-assembled into shapes resembling that of New Zealand and Australia - a purely serendipitous and delightful encounter.