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IMTCE2016

10th International Materials Technology Conference & Exhibition

IMM 's initiative

Coatings Fingerprint Satellite Symposium

under the auspices of 10th International Materials Technology Conference and Exhibition (IMTCE2016)

a turnkey industry-academia project that is custom-tailored for oil and gas industry

Date: 17th May 2016 (Tue)
Time: 8.30 am – 5.30 pm
Venue: Putra World Trade Centre, Kuala Lumpur, Malaysia
Website: www.imtce2016.org

WHY FINGERPRINT COATINGS?

Why do we need to FINGERPRINT coatings when anti-corrosion paint failures have never caused structural collapse or direct loss of primary containment?

Should the industry allow non-conforming paints to be supplied just because the price of non-conformance is not a direct cause of leak or structural failure?

Registration fees for speakers and delegates

IMTCE2016 Technical Sessions / Coatings Fingerprint Satellite Symposium
(inclusive of 6% GST)
The Speaker's registration fee and delegate pass permit participation in all technical sessions of IMTCE2016 from 16th – 18th May 2016.

Category	Regular	On-site
IMM Member[*1]	MYR 1500 / USD 530	MYR 1800 / USD 630
Non Members[*1]	MYR 1800 / USD 630	MYR 2000 / USD 730
Postgraduate[*2] (Fee **excludes** cocktails and Banquet Dinner)	MYR 1000 / USD 300	MYR 1200 / USD 400
Banquet Dinner	MYR 200 / USD 75	

[*1] Fee **includes** conference materials, lunches, refreshments, cocktail and banquet Dinner.
[*2] Postgraduate – Please provide evidence of studentship
[*3] On-site payment in *cash* must be in exact amount in only Malaysian Ringgit or US Dollars. Other details for on-site payment shall be referred to www.imtce2016.org.
[*4] For the application as IMM member and membership fees, please go to our website www.iomm.org.my to download the application form and the details.

Join us for the latest development of the first-of-its-kind coating fingerprinting initiative in the WORLD!

Introduction

Are QUALITY and SAFETY not a major concern in our industry and our daily lives?
Do we need a catastrophe or fatality to occur before someone says "we should have foreseen this could happen"?

Corrosion of **METALS** is known to be the biggest culprit in catastrophes and fatalities when they fail despite having MILL CERTIFICATES (FINGERPRINTS). Therefore, it is generally assumed that even with a Coating Fingerprint, paint failures would still be anticipated. The only known result of poor quality paint supply is the increase in costs of repair and maintenance.

Should the industry allow non-conforming paints to be supplied just because the price of non-conformance is not a direct cause of leak or structural failure?

The Malaysian oil & gas industry had been focusing on the paint quality control inspection, surface preparation (abrasive blasting) and paint spraying application techniques & skills since 1990 to improve coating performance. IMM has identified three possible causes of paint failures:-

i. Painting work inspection,
ii. Surface preparation & paint application, and
iii. Paint supply.

This led to the development of **IMM Coatings Inspector Certification program** in 1990 to improve the competency of local painting inspectors. In 2000, IMM developed the **IMM Blaster & Painter Certification program** to improve the competency of blasters & painters. Despite efforts to improve quality in these 2 skill sets, coating failures continue to get worse. Thus, the oil & gas industry now realizes that the coating materials can be another factor causing the failures.

However, there was widespread perception within the oil and gas industry that certification of polymeric coatings was not possible because the expertise on spectroscopic analysis

and interpretation of results for such purpose were not available back then. Hence, the provision of **Coating Fingerprint Certificate** (visit our website www.iomm.org.my for more information) for polymeric coatings supplied to the oil and gas companies did not materialize.

This turnkey industry-academia project will highlight the practicality of the fingerprinting of the polymeric coatings as one of the effective approaches for QA & QC tools for the enhancement of the overall painting coating quality assurance. **The Fourier-transform infra red (FTIR) spectroscopy technique enables paint manufacturers and customers to be assured that the paint products supplied from reputable paint manufacturers were not tampered.** Customers can now be assured that the overall quality of paint they had purchased will not be affected, regardless of the raw materials sourcing.

Aims of symposium:

1. Participants will appreciate the spectroscopic fingerprinting technique for polymeric coatings in regard to the reliability, speed of testing and costs.
2. Participants will be able to understand the execution of Coating Fingerprint Certification Scheme for in-house, on-site and 3rd-party laboratory testing for the oil & gas Industry.

Scopes and topics:

1. Why do we need to FINGERPRINT coatings?
2. IMM Coating Fingerprint Certification Scheme & the execution of **Coating Fingerprint Certificate** by coating manufacturer/supplier, fabricator contractor/ sub-contractor, external auditor, end-user and 3rd-party testing laboratory
3. Current technologies on spectroscopic fingerprinting testing
4. Fingerprinting approaches on products for other industries
5. Other international certification bodies provide the means of technical proficiency on fingerprinting coatings

Symposium chairperson

Ms. Nurul Asni Mohamed (PETRONAS GTS, Malaysia)

Symposium Secretary

Dr. Khoon Hee Chew
(Tunku Abdul Rahman University College , Malaysia)

Tentative program

Keynote speakers (30-min talk)

1. Ms. Nurul Asni Mohamed
(PETRONAS GTS, Malaysia)
Title: Execution of Coating Fingerprint Certificate by coating manufacturer / supplier, fabricator / contractor/sub-contractor, external auditor, end-user and 3rd-party testing laboratory.

2. Dr. Pik Leung Tang
(Agilent Technologies United Kingdom)
Title: Handheld non-destructive FTIR analysis of a variety of coatings and substrates plus their in-service related spectroscopic changes.

Invited speakers (20-min talk)

1. Assoc. Prof. Dr. Melissa Chin Han Chan
(Universiti Teknologi MARA, Malaysia)
Title: Reproducibility and reliability of in-house, on-site and 3rd-party laboratory FTIR testings on intermediate materials of protective coatings.
2. Mr. Kenneth Way
(Perkin Elmer Sdn Bhd, Malaysia)
Title : Advance 2D-IR, FTIR Imaging Spectroscopic Technique in Complex Polymeric Material Characterization.
3. Mr. Mark Yoon Onn Hew
(Universal Corrosion Engineering (M) Sdn Bhd, Malaysia)
Title : Coatings Performance: Applicator's Perspective.

Other invited talks are related to

1. Quality improvement of protective coatings
2. Coating fingerprinting of protective coatings: opportunities and challenges
3. Initiatives in painting skills training
4. Quality assurance of protective coatings with proper selection of raw materials
5. Current technologies on spectroscopic fingerprinting testing
6. Coating inspection/audit coupled with coating fingerprinting
7. *etc*

Questions?

Contact: Ms. Zalilawati Hasan, mobile tel: (+6)018-3227310, email: zalilawati@mte.com.my and c.c. to Dr. Khoon Hee Chew (Secretary of Coatings Fingerprint Satellite Symposium), email: chewkh@acd.tarc.edu.my

Background of Coating Fingerprint Certificate and other relevant information can be accessed on
http://iomm.org.my/coating-fingerprint-certificate/background-of-coating-fingerprint-certificate/

www.imtce2016.org
enquiries@imtce2016.org

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MATERIALS MIND

Issue 13
Jan 2016

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Advance Program

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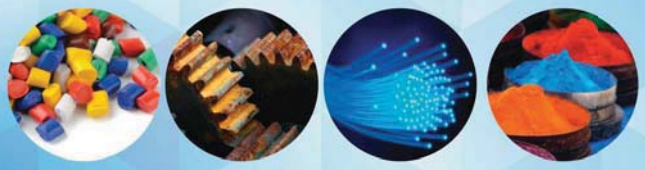

16th - 19th May 2016

Putra World Trade Centre, Kuala Lumpur, Malaysia

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3 Technical Symposiums

ISAPM2016
International Symposium on Advanced Polymeric Materials

ISMAI2016
International Symposium on Materials & Asset Integrity

ISCC2016
International Symposium on Coatings & Corrosion

For more information, visit:
www.imtce2016.org

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HIGHLIGHTS

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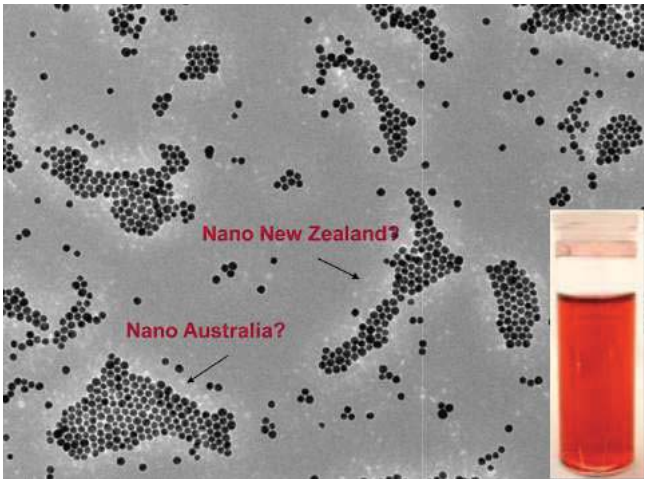

Congratulations to Dr. Lim Teck Hock from Faculty of Applied Sciences and Computing, Tunku Abdul Rahman University College, Setapak. He won RM 500 and an award certificate.

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.