

精密表面工程：處理及應用

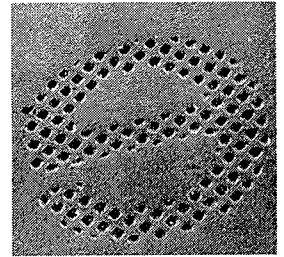
Precision Surface Engineering: Processes and Applications

二零一零年九月三十日(星期四)上午十時至下午五時正

30th September, 2010 (Thursday) 10:00 am-5:00 pm

Background 背景:

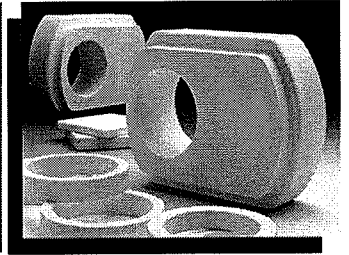
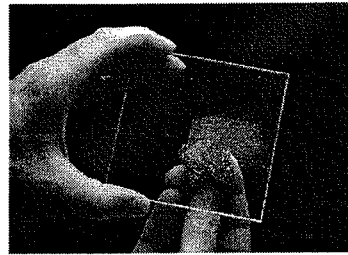
One major challenge of surface modification of engineering materials is the precise control in the deposition of the surface structure. Besides, surface coatings are often subjected to delamination due to mismatch with the substrate. Surface technology has evolved to allow the manufacturing of high-value-added products with good corrosion and scratch resistance often coupled with improved functional properties, including self-cleaning, anti-bacterial, anti-haze, anti-reflective, and many other stimuli-responsive behaviors. Several surface tailoring methods, including sol-gel and ion plating, have significant industrial applications. The aim of this course is to illustrate the present state of the art and the emerging applications that come with these surface modification techniques.



Target Participants 參加人士:

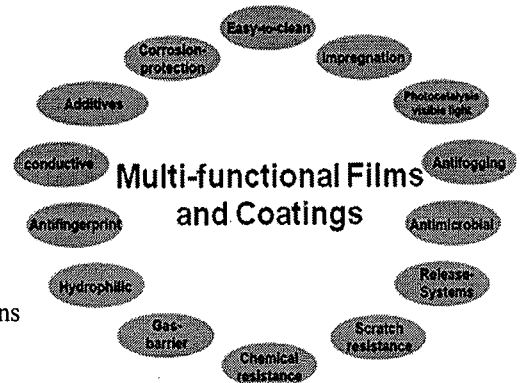
Stakeholders, researchers and engineers in manufacturing fields, such as production of advanced materials, watches/clocks, electronic devices, medical devices and optics are welcomed. **Anyone who is interested in surface technology is also welcomed.**

歡迎所有相關行業及對表面處理技術有興趣之人士參與。



Content 內容

- ✓ Fundamental of sol-gel technology
納米透明硬塗層(Sol-gel)的概念
- ✓ Sol-gel technology on surface treatment and its applications
納米透明硬塗層(Sol-gel)之表面處理及應用
- ✓ Fabrication of microelectronics by sol-gel technology
Sol-gel 技術之微電子製造
- ✓ Fundamental of ion plating technology, including PVD and CVD
離子電鍍技術的概念(包括物理氣相沉積和化學氣相沉積)
- ✓ Ion plating technology on surface modification and its applications
離子電鍍技術之表面處理及應用
- ✓ Fundamental of micro-electroforming technology
微電鑄技術的原理及概念
- ✓ Micro-electroforming technology on precision components and its applications
微電鑄技術之精密零部件及應用
- ✓ Laboratory tour
實驗室參觀
- ✓ Sharing session on surface technology
表面處理技術分享



Speakers 講者

Dr. Lo Wai Yin 盧偉賢博士

Dr. Lo has more than 15 years of experience in surface finishing industry and micro-fabrication. He is mainly responsible for the technology development and technology transfer in production process and waste minimization for the local surface finishing and micro-fabrication industry. He is highly experienced in carrying out turn key projects, process/quality improvement, technology upgrading, equipment design, and R&D in surface finishing technology for local industries including precision components, watch & clock, die-casting, jewellery, spectacles, and metal forming, etc. In addition, he is the officer-in-charge of the Materials Testing Laboratory and responsible for failure analysis of materials and surface finishing products.

Dr. Lau Yiu Ting, Richard 劉耀庭博士

Dr. LAU, Richard obtained his PhD in Chemical Engineering from the Hong Kong University of Science and Technology. He has eight-year research experience in surface engineering and materials processing technology. He has published ten articles in peer-reviewed scientific journals and made four public presentations in international conferences in the field of chemistry and materials science. He was the winner of Student Award and SIMS Research Award which were conferred by international academic community for the originality of his research contributions.

Dr. Chong Yat Ming, Joe 莊一鳴博士

Dr. CHONG, Joe works as Associate Consultant of Materials Technology Division in Hong Kong Productivity Council. He received his PhD degree in Physics and Materials Science from City University of Hong Kong. He has 6 years of research experience in low-pressure plasma technology and advanced materials characterization. He has deep understanding of coating technology especially in Magnetron Sputtering, Cathodic Arc Evaporation, and Electron Cyclotron Resonance Microwave Plasma Assisted Chemical Vapor Deposition. He is experienced in carrying out turn key projects, process/quality improvement to local surface finishing industry.

Ms. Tsang So Fan, Sue 曾素芬小姐

Miss TSANG, Sue graduated from City University of Hong Kong in Materials Science and Engineering. She has deep understanding of materials science and engineering in the field of ceramics processing, failure analysis, materials characterization, etc. She conducted the research project on "Preparation and dielectric properties of modified (Ba_xSr_{1-x}) TiO₃ thin films by sol-gel processing".

Date and Time 時間及日期:

二零一零年九月三十日 (星期四)
10:00 am-5:00 pm 上午十時至下午五時正

Venue 地點:

1/F, Hong Kong Productivity Council Building, 78 Tat Chee Avenue, Kowloon, Hong Kong
香港九龍達之路 78 號生產力大樓一樓

Quota 人數:

Limited to 50 persons, first-come-first-serve basis
只限五十人, 座位有限, 先到先得

Language 語言:

Cantonese Presentation with English PowerPoint
廣東話演講及英語簡報

Enquiry 查詢:

For more information, please contact
Ms. Tsang So Fan, Sue 曾素芬小姐
(Tel: 2788 5516 email: suetsang@hkpc.org)
Dr. Lau Yiu Ting, Richard 劉耀庭博士
(Tel: 2788 5507 email: richardlau@hkpc.org)

Registration Fee 報名費用:

HK\$650

Course materials are included.
包括教材費用。

Attendance certificate will be given to all participants.
所有出席者均會獲發證書。

(Members of Supporting Organization Discount: HK\$585)

Application Method 報名方法:

Please send the filled enrolment form to 2788-5522 by fax to enrol.
請把已填妥之報名表傳真至 2788-5522 留位。

AND 並且

Please make cheque payable to "Hong Kong Productivity Council" and send to Materials Technology Division, 5/F, Hong Kong Productivity Council Building, 78 Tat Chee Avenue, Kowloon Tong, Hong Kong. And please mark "To Miss Sue Tsang 曾素芬小姐" on the envelope. 請將支票寄交九龍塘達之路 78 號生產力大樓 5 樓材料科技部, 並於信封上列明「曾素芬小姐(Sue Tsang)收」。
(支票請書明支付「香港生產力促進局」並請劃線)

Attention: Ms. Sue Tsang. Fax No. 2788-5522
請填妥此報名表並傳真到2788-5522曾素芬小姐收。

報名表 Enrolment Form

I would like to join the course on Precision Surface Engineering: Processes and Applications on 30th September, 2010.
本人想參加2010年9月30日舉行的精密表面工程：處理及應用。

中文姓名 (先生/小姐/太太/女士*) : (必須與香港身份證/護照相同)			
Name in English : (Must be the same as shown on ID card/Passport)		last name	First name
公司名稱 : Company Name :			
職位 : Position :			
辦事處電話 : Office Telephone :	手提電話 : Mobile No. :	住宅電話 : Home Telephone :	
電郵地址 : E-mail Address :		傳真 : Fax :	
通訊地址 : Correspondence Address :			

繳費方法 Method of Payment :

請選擇一項 Please select one only

現金 Cash

支票號碼 Cheque No. : _____, (公司 Company / 私人 Private*)。

(支票請劃線, 抬頭人為「香港生產力促進局」。The cheque has to be crossed and made payable to the "Hong Kong Productivity Council.")

Is the workshop fee sponsored by your employer?
工作坊費用由僱主贊助? YES 是 NO 否

聲明 Declaration :

本人聲明在此報名表格及隨附文件所載的資料, 依本人所知均屬完整真確。
I declare that all information provided in this enrolment form and the attached documents are, to the best of my knowledge, accurate and complete.
本人已細閱報名表的重要通知, 並明白所有「重要通知」內容均以本工作坊單張及網頁之最後更新版本為依歸。
I have read and understood the "Important Note" in this enrolment form is subject to revisions in the workshop pamphlets and the latest updates in the website.

申請者簽名

Applicant's Signature : _____

日期

Date : _____

重要通知:

- 報名表(可用影印本)必須連同費用於開始前一併繳交, 否則報名無效。
- 本局建議申請者以支票繳交學費。學費收據以本局機印方為有效, 支票收妥作實。
- 除非本局於工作坊開始前最少 5 個工作日收到申請者書面通知退學, 否則已繳費用概不退还。申請者申請退還費用需繳交手續費二百元正。
- 申請者可提名他人代替其本人出席工作坊, 惟事先須得本局同意。
- 香港生產力促進局保留在任何情況下更改工作坊內容、地點、日期及時間的權利。
- 颱風及暴雨警告: 如課堂時間是在早上(09:00-13:00)、下午(14:00-17:00)或晚間(6:30-10:00), 將在下列情況下取消: (一)八號或以上颱風訊號或黑色暴雨警告訊號在早上 6:00、11:00 或下午 4:00 仍然懸掛; 或(二)香港天文台在早上 6:00、11:00 或下午 4:00 或之後, 宣佈將懸掛八號或以上颱風訊號或黑色暴雨警告訊號。本局將盡早通知學員補課的日期及時間。

IMPORTANT NOTE:

- Course fee must be accompanied with this form (or photocopy) before workshop commence, otherwise enrolment would be rejected.
- Applicants are encouraged to pay by cheques, if possible. Amount received will be imprinted. Cheques are subject to bank clearance.
- Enrolment fee is not refundable unless HKPC is notified in writing of your withdrawal at least 5 working days before the workshop commences. A handling charge of HK\$200 will also be levied.
- An applicant may, subject to approval from HKPC, nominate a person to attend the workshop on his/her behalf.
- HKPC reserves the right to change the contents, venue and / or time as necessary.
- Classes in the morning, afternoon or evening will be cancelled if typhoon signal No. 8 or above OR black rainstorm warning is still hoisted after (or is announced by the Hong Kong Observatory to be hoisted at/after) 6:00 a.m., 11:00 a.m. and 4:00 p.m. respectively. Participants will be notified when the class will be made up as soon as possible.

Sender: _____ Tel: _____, email: _____

發送者: _____ 電話: _____, 電郵: _____

If you do not wish to receive further information from HKPC, please inform us via fax at (852) 3187-4531 or via email to: unsubscribe@hkpc.org with "unsubscribe" as the subject.

若閣下不欲再接收本局信息, 請以傳真:(852) 3187-4531 通知我們或發電郵至: unsubscribe@hkpc.org, 並在主旨欄填上「拒絕接收」。