

協辦單位:



澳門營運工程師學會 (SOE Macau)

“持續培訓”計劃

有源電力諧波濾波器係統 (APF) 的設計、安裝、測試及維修

簡介：

為秉承本學會的其中一項宗旨 – 提升本澳電機及電子工程技術專業水平，本學會一直以來都持續不斷地將電機、電子或資訊科技工程的技術知識及相關的經驗引進本澳，讓會員和業界同仁一同學習、交流和分享。

本澳現今的社會發展迅速，一日千里。隨著本澳的各項大型工程項目的展開及落成，工程界人材的質量需求有增無減，為此本會特別安排本課程，以提升會員及有關人員在有源電力諧波濾波器係統 (APF) 的設計、製造、測試及維修各方面的知識水平。

無論大小項目，特別是那些關鍵性的系統，例如數據中心，通訊設備，火車訊號系統等。要保證有安全可靠又潔淨的電源系統至為重要，因為現在所用的開關式電源供應器、LED 燈具的推動器和很多電器設備和用具都會產生不同程度的大小和序列的諧波，而這些諧波會對供電係統做成負面的影響，要避免這些負面的影響，掌握主動式諧波過濾系統的設計、安裝、測試及維修各方面的知識是有絕對需要的。而且今次的課程本學會更會預留部份的名額給本澳的學生，除了希望能鼓勵他們學習更多的課堂知識，養成“終生學習”的習慣外，更希望能激發他們在電機工程方面的興趣，為本澳工程界盡一點作育英才的綿力。

課程資料

這次舉辦的持續培訓課程分二節授課，內容主要是介紹有源電力諧波濾波器係統 (APF) 的設計、製造、測試及維修，有關此課程的資料如下：

	授課日期	培訓主題	主講導師
第一節	2016年6月1日 (周三) 14:00 至 17:30	1. APF 系統的運作原理 2. APF 系統的設計 3. APF 系統的安裝 4. APF 系統的維護和保修 5. 電能質量問題、標準及處理的新技 6. 發問時間	Mr. Sam Tan (AblereX) Mr. Fred Hsu Wen-Pin (AblereX) 黃民聰博士
第二節	2016年6月16日 (周四) 至 2016年6月18日 (周六)	參觀一所在屏東的 APF 工廠 在第一節課程後，再實地了解 APF 系統的製造及測試過程。有專人講解及示範各種有關生產技術及測試。	Mr. Sam Tan (AblereX) Mr. Casey Chia (AblereX)

今次邀請的講者，是分別屬於 **APF** 有關行業的專家。各人從事這方面的工作均超過 25 年，一直陪伴著的發展，在這方面也具備豐富的知識。今次有幸能從他們身上學習其知識和分享其經驗，各學者必定會獲益良多。有關今次講者和課程的詳細資料，請參閱附件。

第一節 授課地點：澳門科學館

費用：

	項目	課程費用	證書費用
2016年6月1日 (周三) 14:00 至 17:30	有源電力諧波濾波器系統 (APF) 的設計、安裝、測試及 維修	MOP 100	MO P50

參加者在完成培訓課程後，將獲頒發證書一張，證書費用另收 MOP50 (Optional)。

第二節 授課地點：台灣

費用：另行通知

贊助單位：



報名及收費 **Registration & Fees**

活動名稱 Activity	有源電力諧波濾波器係統 (APF) 的設計、安裝、測試及維修 Design, Installation, Test and Maintenance of Active Harmonic Filter System
日期 Date	2016 年6 月1 日 (周三) 14:00 至17:30 01/06/2016 (Wednesday) 14:00 to 17:30
場地 Venue	澳門孫逸仙大馬路- 澳門科學館 Avenida Dr. Sun Yat-Sen, Macau – Macao Science Centre
收費 Fees	課程費用 MOP 100，證書費用另收 MOP 50 Course: MOP 100; CPD Certificate: MOP 50 (Optional)
報名 Registration	秘書處：66515535 或電郵：soemacau@yahoo.com.hk Secretariat: 66515535 or Email: soemacau@yahoo.com.hk

閣下將參與 You will join

- 課程 Course 證書 Certification
 參觀 Visit (費用將另行通知 / Costs will be noticed later)

英文姓名

(請用正楷填寫)

Name in English: _____

中文姓名

Chinese Name: _____

性別

Gender: _____

出生日期(日/月/年)

Birthday (DD/MM/YY): _____

聯絡電話

Contact: _____

電郵

E-Mail: _____

公司

Company Name: _____

部門/職銜

Department/Title: _____

申請人簽署

Applicant's Signature: _____

課程費用可存入本會於工商銀行澳門營運工程師學會戶口(0119000200002463532)並將存款證明電郵至soemacau@yahoo.com.hk

日期

Date: _____

Ablerex Electronics (S) Pte Ltd

No.23 New Industrial Road

#05-03 Solstice Business Center

Singapore 536209

Tel: +65 6282 6535 Fax: +65 6282 6343

Co. Reg. No.: 200203197Z



Executive Biography

**Mr Sam Tan****Managing Director****Ablerex Electronics (S) Pte Ltd**

Sam founded Ablerex Electronics Singapore in 2002 and brought the Ablerex brand under the custody of the Singapore office. Sam manages the entire operations of Ablerex Electronics in Asia Pacific. As Managing Director for Asia Pacific, Sam currently spearheads the product distribution channel for the region. Besides setting stringent channel assessment criteria and evaluating potential channel candidates, he is key to providing strategic insights for the company by monitoring market conditions, competitors' activities, and country analysis. Since the company started its operations in Singapore 13 years ago, Sam has dramatically expanded the distribution territory in various geographic regions and sales revenue of existing accounts for the company.

At Ablerex Electronics, Sam's operational roles includes working as head of expansion, business development, brand and new products. He continued to add to its product offerings, expanding the Enersine APF business to Asia region. He is also responsible for establishing and managing APF distribution relationships in Southeast Asia and Pacific continent throughout various channels to market, including commercial building developers, semiconductors industry, downstream manufacturers and banks. These attributes leads to Ablerex's success in increasing market share, achieving Enersine APF distribution across segments and geographies and brand recognition in the rapidly growing competitive harmonic filter market. Ablerex is awarded Business Development Strategy Leadership Award in the world harmonic filter market by Frost and Sullivan. The award recognizes Ablerex's ability to perceive consumer needs, develop product, successfully introduce products to the industry and identify new market segments to expand the existing customer base.

Ablerex Electronics (S) Pte Ltd

No.23 New Industrial Road

#05-03 Solstice Business Center

Singapore 536209

Tel: +65 6282 6535 Fax: +65 6282 6343

Co. Reg. No.: 200203197Z



Prior to this, Sam started his humble career as a sales engineer in ABB, where he was in charge of local project sales of UPS from 10 Kva to 400 Kva. His clients included multi-national corporations like SingTel, MINDEF, Power Supply (then PUB), etc.

Sam later joined Socomec Sicon as area manager for Singapore, Malaysia and Thailand, and was promoted to export manager in charge of sales and marketing in Asia Pacific. Throughout his stay at Socomec, Sam achieved record sales for Socomec Sicon UPS in Singapore, Taiwan, Malaysia and Thailand, especially in semiconductor manufacturing and IT industry.

Bringing with him nearly a decade of industry experience in UPS, Sam strongly believes that appropriate marketing strategies coupled with business development capabilities will be the winning formulae in the industry, reinforcing Ablerex's commitment to the region and its support of accelerating Asian market growth.

Ablerex Electronics (S) Pte Ltd

No.23 New Industrial Road

#05-03 Solstice Business Center

Singapore 536209

Tel: +65 6282 6535 Fax: +65 6282 6343

Co. Reg. No.: 200203197Z



Executive Biography



Mr Fred Hsu Wen-Pin

R&D Product Manager

Ablerex Electronics Co., Ltd

Mr Fred Hsu Wen-Pin joined Ablerex Electronics in 2001 and has held various positions where he worked on industrial research projects mostly in the application of power electronic converters. In 2005, he became the R&D Product Manager for the power electronics team with a particular focus on Active Harmonic Filters.

His role involved directing the team to design, modelling and fabrication the first generation of harmonic filters. He has worked on numerous research projects, both at national and international level, relating to power conversion and subsequent development of the world first rack-mounted APF – Enersine ESD34. Ablerex's active harmonic filter, Enersine ESD34, which was developed in-house and comply with CE and UL standards, offers unique modularity and scalability onsite. These attributes leads to Ablerex's success in market share and recognition in the rapidly growing competitive harmonic filter market. Ablerex is awarded Business Development Strategy Leadership Award in the world harmonic filter market by Frost and Sullivan. The award recognizes Ablerex's ability to perceive consumer needs, develop product, successfully introduce products to the industry and identify new market segments to expand the existing customer base.

Fred earned his Master Degree of Electrical Engineering at National Cheng Kung University. He is based at Ablerex R&D Centre in KaoHsiung, Taiwan. His current research focus is on the use of power electronics converters in power systems and in particular on the integration and interfacing of power electronics to the grid. Particular interests include the development of power electronics or

Ablerex Electronics (S) Pte Ltd

No.23 New Industrial Road

#05-03 Solstice Business Center

Singapore 536209

Tel: +65 6282 6535 Fax: +65 6282 6343

Co. Reg. No.: 200203197Z



solid state transformers and the application of power electronics in the interconnection of offshore renewable energy.



黃民聰博士 (自 2006 年成為 IEEE 國際電機及電子工程師學會高級會員) 分別於 1993 年及 1997 年在澳門大學科技學院電機及電子工程系獲得學士及碩士學位，並於 2003 年在中國北京清華大學電機系獲得博士學位。於 2014 年七月至十二月在英國劍橋大學為訪問學者，現是澳門大學科技學院電機及電腦工程系副教授。黃博士共發表了超過 120 篇分別在國際期刊及國際會議的論文，在全球較大的科技出版社(Springer) 出版相關電能質量問題及解決方案的專著兩本，擁有中國及美國專利共七項。黃博士於 2000 年獲得澳門國際研究所青年研究學者獎、於 2001 年獲得澳門大學青年研究學者獎、其博士論文於 2003 年獲清華大學優秀博士學位論文二等獎、並分別於 2012 年及 2014 年分別獲得澳門科技發明三等獎。

黃博士於 2014~2015 年為澳門國際電機及電子工程師學會 (IEEE Macau Section) 的理事長，現為澳門國際電機及電子工程師學會電力、能源及電力電子的部 (IEEE Power Joint Chapter) 理事長及 IEEE 電力及能源分部的第十區北區代表(包括中國內地、台灣、香港、澳門、韓國及日本)。