



HKRITA Seminar:

Sustainable Solutions on Functional Materials, Textiles Sorting and Recycling for Circularity HKRITA 研討會: 功能材料、紡織物分類及循環再造的持續發展方案

Date · 21 April 2023 (Fri)

日期 2023年4月21日(星期五)

Time · 2:45pm – 3:45pm (UTC/GMT+8)

時間 下午 2 時 45 分至 3 時 45 分 (UTC/GMT+8)

Venue · the STAGE, Hall 3E, HKCEC

地點 香港會議展覽中心展覽廳 3E, the STAGE

Language . English (with simultaneous interpretation: Putonghua)

語言 以英語進行,附設普通話即時傳譯

Organiser The Hong Kong Research Institute of Textiles and Apparel (HKRITA)

主辦機構香港紡織及成衣研發中心

Remarks : Free of charge, pre-registration required

備注 免費參加,需預先登記

Programme 活動議程

| Time 時間 | Rundown 程序 |
|-----------------|--|
| 2:35pm – 2:45pm | Registration 登記 |
| 2:45pm – 2:50pm | Introduction of HKRITA 香港紡織及成衣研發中心簡介 Ms Katherine Chan, Director, Business Development, The Hong Kong Research Institute of Textiles and Apparel 香港紡織及成衣研發中心總監 (業務拓展) 陳念群女士 |



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| 2:50pm – 3:05pm | Bio-based Functional Fabric for Sporty Fashion 以生物基功能布料製作運動風服裝 |
|-----------------|---|
| | One-way transfer moisture management fabric is developed for sporty fashion using bio-based eco- friendly material. The green textile is durable, adopting existing production process while boosting performance of the end products. |
| | 為運動風服裝開發的生物基環保材料為單向導水面料,材料環保耐用,採用現有生產工藝同時亦 能提高製成品的性能。 |
| | Dr Gloria Yao, Director, Project Development, The Hong Kong Research Institute of |
| | Textiles and Apparel |
| | 香港紡織及成衣研發中心總監(項目發展)姚磊博士 |
| 3:05pm – 3:20pm | Intelligent Sorting for Circular Fashion |
| | 智能衣物分類促進循環模式發展 |
| | A smart sorting system is developed to identify garment type, fabric material, structure and colour by using artificial intelligence in conjunction with image analysis, and carry out used garment sorting automatically. |
| | · 智能服裝分類回收系統透過人工智能及圖像分析來辨認衣服種類、材料、結構及顏色,並進行舊 |
| | 衣自動化分類。 |
| | Mr Raymond Chiu, Senior Research Manager, The Hong Kong Research Institute of Textiles and Apparel |
| | 香港紡織及成衣研發中心高級研究經理 趙汝謙先生 |
| | 自心别越及风代明弦中心同微明九程连 超汉球儿主 |
| 3:20pm – 3:35pm | Green Machine - A Green Treatment for Textile Recycling |
| | Green Machine - 環保織物循環回收 |
| | A chemical hydrothermal treatment selectively decomposes cotton into cellulose powders, thereby |
| | enabling the separation of polyester fibres from the blends. |
| | 利用化學水熱處理方法將棉分解為纖維素粉末,從而把聚酯纖維從混紡織物中分離。 |
| | Dr Alex Chan, Senior Research Manager, The Hong Kong Research Institute of Textiles and Apparel |
| | 香港紡織及成衣研發中心高級研究經理 陳學聰博士 |
| 3:35pm – 3:40pm | Round Up 總結 |
| 3:40pm – 3:45pm | Q&A Session 問答環節 |
| 3:45pm | The End 活動結束 |





Speaker Profile 講者簡介



Ms Katherine Chan, Director, Business Development, The Hong Kong Research Institute of Textiles and Apparel

香港紡織及成衣研發中心總監 (業務拓展) 陳念群女士

Ms Chan has extensive experiences in the full supply chain of textile and apparel industry globally. Her knowledge covers textile chemicals, yarn spinning and textile manufacturing and was in roles overseeing design to garment productions to retail in the USA, Singapore and Hong Kong.

Ms Chan has worked with textile factories in Asia and the Americas in product development as well as manufacturing. She was involved in R&D, marketing, operations and quality assurance.

Before joining HKRITA, Ms Chan was with BASF as global product manager as well as global marketing, strategic projects and regional product managements for different chemical segments. During the years, she has worked with global teams and management for chemical manufacturing around the world including Europe, the USA, Asia and Middle East.

Ms Chan received a Bachelor of Arts degree in Economics from University of Wisconsin, Madison, an AAS degree in Fashion Buying and Merchandising from Fashion Institute of Technology, both in the USA and MBA from The Hong Kong University of Science and Technology.

陳念群女士在全球紡織服裝行業整個供應鏈方面有著豐富的經驗。她的知識涵蓋紡織化學品、紗線紡紗和紡織製造,並於美國、新加坡和香港負責監督從設計、生產至零售市場的工作。

陳女士曾於亞洲和美洲的紡織和成衣生產商工作,從事產品開發和製造流程管理,並參與研發、行銷、營運和質量保證的管理工作。

陳女士加入 HKRITA 之前,曾於巴斯夫香港和新加坡擔任全球產品經理,在各種不同的化工領域負責全球行銷、 戰略專案和區域產品管理工作。多年來,她與全球的團隊和管理層合作,為世界各地包括歐洲、美國、亞洲和中 東的客戶提供解決方案。

陳女士擁有美國威斯康辛大學麥迪遜分校經濟學學士學位、紐約州立時尚科技學院時尚採購及商品副應用科學學 位及香港科技大學工商管理碩士學位。



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Dr Gloria Yao, Director, Project Development, The Hong Kong Research **Institute of Textiles and Apparel**

香港紡織及成衣研發中心總監(項目發展)姚磊博士

Dr Yao has considerable research experience of textile and clothing. She played a key role in a number of research projects on the textiles and clothing area. Her research specialises in textile/clothing-human body interactions with focus areas on textiles material and skin, textiles functions and its health impaction, sportswear design and human physiology evaluation.

Dr Yao has published over a dozen papers in refereed journal and 30 papers in refereed conference proceedings. She has written several books/chapters on Technology Roadmap of Textile and Clothing Industry and Denim Industry of

Mainland China and Hong Kong. She is a reviewer to Textile Research Journal, Journal of American Academy of Dermatology, International Journal of Dermatology and editor to Journal of Fiber Bioengineering and Informatics. She held post-doctoral fellowship of the New Zealand Wool Research Institute in the University of Otago. She is the director of Textile Bioengineering Informatics Society.

姚磊博士具深厚的紡織成衣研發經驗,於多項研究中擔任主要科研人員。其研究集中於紡織/衣服與人體的交互 作用,重點包括服裝材料和皮膚、紡織功能及其於健康的影響、運動服設計與生理檢測。

姚博士撰寫過十多份期刊論文、越 30 份會議論文,出版過多本/份以紡織服裝行業技術路綫圖及香港及中國大陸 牛仔布工業為重點的專書/章節。她是 Textile Research Journal, Journal of American Academy of Dermatology, International Journal of Dermatology 多份科學期刊的審稿員,《纖維生物工程與資訊》期刊編輯。姚博士曾任 University of Otago 的 New Zealand Wool Research Institute 博士後研究員,現為紡織生物工程與資訊學會董事。



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Mr Raymond Chiu, Senior Research Manager, The Hong Kong Research **Institute of Textiles and Apparel**

香港紡織及成衣研發中心高級研究經理 趙汝謙先生

Mr Raymond Chiu joined HKRITA in 2022 and now leads a research team to handle the research projects in automatic system integration for textile & apparel recycling process, AI & IoT development for textile industry, and materials separation by mechanical method.

Prior to joining HKRITA, Raymond has over 20 years of experience in automation and system integration for different industrials. His customers include Apple Inc, Huawei, LG Electronics, Samsung Electronics... such kind of world's top companies. He is also highly involved in IIoT development. The

Smart continuous plater, one of his joined developed IIoT product, was granted the Hong Kong Award for industries in 2018.

趙汝謙先生於 2022 年加入 HKRITA, 現正帶領研究團隊專注於紡織品循環再造的自動化流程與系統設計的整合、 紡織工業的人工智能和物聯網、以及利用機械技術給物料分離等項目的研發。

趙先生在加入香港紡織及成衣研發中心前,有超過二十年的自動化和系統整合的經驗,當中客戶包括蘋果、華為、 LG 電子、三星電子等世界頂級公司。趙先生還有參與工業物聯的研發工作。智能連續電鍍線是他其中一項參與 的工業物聯網產品,該產品在2018年獲得了香港工商業獎。



Dr Alex Chan, Senior Research Manager, The Hong Kong Research Institute of Textiles and Apparel

香港紡織及成衣研發中心高級研究經理 陳學聰博士

Dr Alex Chan has worked on consulting projects on crystallization, solids processing and process development for petrochemicals, specialty chemicals and industrial enzymes. He is undertaking R&D development at HKRITA; developing and managing projects for blended textile upcycling, textile material decoloring, cellulosic material applications, waterless dyeing, denim wastewater treatment, etc. He holds multiple award-winning IPs.

陳學聰博士曾參與有關石化、特種化學品和工業酶的結晶、固體加工和 工藝開發的諮詢項目。他正在 HKRITA 工作,研發和管理混紡織物升級再

造、紡織材料脫色、纖維素物料應用、無水染色、牛仔布廢水處理等項目。他擁有多個發明專利。