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RGC-funded Projects Explore Manufacturing, Fuel, Economics, Language, and Tourism Issues

Sparing no effort in research, CPCE academics commenced six research projects funded by the Research Grants Council (RGC) in 2018/19 and 2019/20 in the areas of manufacturing, fuel, economics, language, and travel and tourism.

Establish the Research Centre for Advanced Design, Materials and Manufacturing Technologies in PolyU SPEED

Funded by the Institutional Development Scheme Research Infrastructure Grant under the RGC Competitive Research Funding Schemes for the Local Self-financing Degree Sector in 2019/20, SPEED launched the project entitled "Establish the Research Centre for Advanced Design, Materials and Manufacturing Technologies (RCADMM) in PolyU SPEED". Led by CPCE Associate Dean (Research), Professor of SPEED, and Director of RCADMM Prof C W Leung, the project endeavours to nurture multidisciplinary talents and develop higher value-added original brand manufacturing, with the aim of promoting



Members of RCADMM (from left): Dr Udaya Kahangamage, Dr Anthony Loh, Prof C W Leung, and Dr Zerance Ng RCADMM 成員(左起): Udaya Kahangamage 博士、陸偉強博士、梁振華教授及吳新培博士

the transformation of the manufacturing industry in Hong Kong and strengthening Hong Kong's edge in the export-led market.

Develop the Most Sustainable, Safe, Reliable and Low-carbon Domestic Fuel for Hong Kong

Liquefied petroleum gas (LPG) has been widely used as domestic fuel in Hong Kong because of its convenience, safety and reliability. However, the toxic emissions of carbon monoxide and nitrogen oxides have caused pollution problems.

The project entitled "Develop the Most Sustainable, Safe, Reliable and Low-carbon Domestic Fuel for Hong Kong", with CPCE Associate Dean (Research) and Professor of SPEED Prof C W Leung as the Principal Investigator, received funding from the Faculty Development Scheme (FDS) under the RGC Competitive Research Funding Schemes for the Local Self-financing Degree Sector in 2019/20. Prof Leung and his team member Dr Udaya Kahangamage will fully explore and ensure the safety, stability, reliability as well as the high thermal and low pollutant-emission characteristics of the blended hydrogen gas/LPG fuel. By trying to blend them together in appropriate percentages, the two research scholars hope to develop this blended fuel into sustainable and green domestic fuel in Hong Kong.

A Grammar of Niesu, a Southeastern Dialect of Nuosu

Grammatical description is the scientific foundation and academic core of protecting vulnerable languages. The purpose is to discover the target language's phonetics and phonology, morphology, word classes, grammatical relations, phrasal and clausal structures, and information structure. Niesu Yi is an understudied Tibeto-Burman language with no writing system, spoken by about 600,000 people in Liangshan Yi Autonomous Prefecture, Sichuan, China. The project "A Grammar of Niesu, a Southeastern Dialect of Nuosu", funded by the FDS in 2019/20 with Dr Ding Hongdi, Lecturer, serving as the Principal Investigator, aims to describe the grammar of Adur Niesu, one of the dialects of Niesu Yi spoken in Butuo County, central Liangshan.

Dr Ding was invited by the RGC to present his research proposal, which scored full marks, to academic staff from self-financing tertiary institutions in November 2019.



The RGC invites Dr Ding Hongdi to present his research proposal, which obtains a perfect score, to academic staff from self-financing tertiary institutions.

研究資助局邀請丁泓棣博士向自資 專上院校的教員闡述其獲評為滿分 的研究計劃書。

獲研究資助局撥款 探討製造、燃料、經濟、 語言及旅遊議題

CPCE 教員對研究不遺餘力,於 2018/19 及 2019/20 年度展開研究資助局資助的六項研究計劃,範疇涵蓋製造、燃料、經濟學、語言,以及旅遊。

為 PolyU SPEED 創建 "先進設計、 材料及製造科技"科研中心

SPEED 獲 2019/20 年度研究資助局本地自資學位界別競逐研究資助轄下的院校發展計劃研究基礎設施撥款資助推行「為香港理工大學之專業進修學院創建一個"先進設計、材料及製造科技"科研中心(RCADMM)」項目,由 CPCE 副院長(研究)及 SPEED 教授梁振華教授擔任 RCADMM 中心總監,帶領團隊培育具備跨學科知識的人才,研發高增值的原創品牌,從而推動香港製造業轉型,以提高香港在出口導向型市場上的競爭力。

為香港研發最可持續性、安全、可靠 及低碳的家用燃料

石油氣因為方便、安全及可靠而廣為香港 家庭使用,卻會產生有毒的一氧化碳及 氮氧化物,污染環境。

「為香港研發最可持續性、安全、可靠及低碳的家用燃料」項目獲 2019/20 年度研究資助局本地自資學位界別競逐研究資助轄下的教員發展計劃(簡稱 FDS)撥款資助,由 CPCE 副院長(研究)及 SPEED教授梁振華教授擔任首席研究員,與 Udaya Kahangamage 博士合作探討及確定混和氫氣及石油氣燃料的安全、穩定、可靠、高熱能及低污染物排放的特性,並嘗試運用「適量混和」的方法,將這種混合燃料發展為可持續的家用環保燃料。

四川涼山聶蘇語參考語法

語法描寫是對弱勢語言進行保護的科學基礎和核心,旨在揭示目的語言的語音系統和規律、構詞規則、詞類使用、語法關係、短語和句子結構,以及信息結構。聶蘇彝語是在中國四川涼山彝族自治州使用的一種藏緬語,母語者約60萬人,並無書寫系統,有關研究尚不足。「四川涼山聶蘇語參考語法」項目獲2019/20年度FDS資助,並由講師丁泓棣博士擔任首席研究員,描寫的是涼山中部布拖縣的聶蘇彝語阿都方言。

丁博士獲研究資助局邀請,於 2019 年 11 月向多間自資專上院校的教員闡述其獲評 為滿分的研究計劃書。

Is the Same Price Always Fair? Consumer Attitudes and Behaviour towards Price-Fixing Activities in Hong Kong

Price-fixing is an issue of enormous economic significance influencing global sales worth about \$16.6 trillion US dollars, making products and services more expensive for consumers. As an attempt to tackle this problem in Hong Kong, the Competition Ordinance, which criminalises price-fixing, took effect in December 2015.

Funded by the FDS in 2019/20 and led by Dr Phoebe Wong, Senior Lecturer, the project "Is the Same Price Always Fair? Consumer Attitudes and Behaviour towards Price-Fixing Activities in Hong Kong" is the first empirical

consumers to report suspected price-fixing activities.



Dr Phoebe Wong, Principal Investigator, hopes that her research project could address price-fixing issues. 首席研究員黃慧心博士希望她的研究計劃能夠解決合謀定

study investigating consumer behaviour in relation to price-fixing. In line with the HKSAR Government strategy, this research seeks to find more effective ways to encourage

同樣價格總是公平的嗎? 香港消費者對舉報可疑合謀定價的 態度和行為

合謀定價是具有重大經濟意義的問題, 影響著全球 16.6 萬億美元的銷售額, 消費者需要付出較昂貴的價格購買產品 和服務。為了解決這個問題,香港《競 爭條例》於2015年12月生效,合謀定 價屬於違法行為。

由高級講師黃慧心博士負責的「同樣 價格總是公平的嗎?香港消費者對舉 報可疑合謀定價的態度和行為」項目獲 2019/20 年度 FDS 撥 款 資 助。 本 研 究 是第一份調查消費者對合謀定價行為 的實證研究,與香港特區政府的策略一 致,目的是尋找更有效的方法,鼓勵消 費者舉報可疑的合謀定價活動。

Investigate the Moderating Effect of Theory of Mind (ToM) on Smart Tourism and **Destination Image**

Dr Pimtong Tavitiyaman, Senior Lecturer and Associate Head of the Division of Business and Hospitality Management, serves as the Principal Investigator of the project "Smart Tourism and Destination Image: Moderating Effect of Theory of Mind (ToM)" funded by the FDS in 2018/19. The project aims to explore tourist behaviour towards the application of smart tourism. In particular, it evaluates the moderating effect of cognitive and affective components on the relationship between tourist behaviour towards the application of smart tourism and the overall destination image.



Dr Pimtong Tavitiyaman (centre) with team members including Dr Lancy Tsang (right) and Dr Rachel Lam (left), Lecturers

Pimtong Tavitiyaman 博士 (中) 與團隊成員包括講師曾詠詩博士 (右) 及林千華博士 (左)

研究智能旅遊與目的地形象: 心智理論的調節效果

工商及款待業管理學部高級講師兼 副學部主任 Pimtong Tavitiyaman 博士為 2018/19 年度 FDS 撥款的「香港智能旅 遊與目的地形象:心智理論的調節效果」 項目擔任首席研究員,該計劃旨在探討 有關智能旅遊應用的旅客行為,尤其是 旅客行為與整體目的地形象之關係,從 中評估認知和情感元素的調節作用。

Investigate the Effect of CSR Practice on Social Media Crises in Travel Industry

In today's digital world, how to protect corporate image is a big challenge for almost every Chief Executive Officer.

Led by Dr Edmund Wut, Principal Investigator and Senior Lecturer, and funded by the FDS in 2018/19, the project "Effect of Corporate Social Responsibility Practice on Social Media Crises in Travel Industry" will look into the fitness between CSR practices and the business operations of travel agencies.



Dr Edmund Wut (left) and Dr Bill Xu (right), Senior Lecturers, conduct research on CSR practices in the travel industry.

高級講師屈大明博士(左)及徐景博士(右)進行研究項目,探討旅遊業的企業社會責任實踐。

探討企業社會責任實踐對旅遊業 社交媒體危機的作用

在現今數碼化年代,大部分企業主管也 面對著如何保護企業形象的重要挑戰。

高級講師屈大明博士為「企業社會責任 實踐於旅遊業社交媒體危機的作用」項目 擔任首席研究員,該項目獲 2018/19 年度 FDS 撥款,旨在研究企業社會責任實踐 與旅行社業務運作如何互相配合。