

C.V. of Dr. SZE Lip Kit

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ACADEMIC QUALIFICATIONS

- PhD in Mechanical Engineering, The Hong Kong Polytechnic University
- BEng (Hons) in Mechanical Engineering, The Hong Kong Polytechnic University

PROFESSIONAL AFFILIATIONS AND MEMBERSHIPS

- Graduate Membership of The Hong Kong Institution of Engineers (HKIE)
- Technically Competent Person T1

WORKING EXPERIENCE:

Full Time Experiences:

- **Research Engineering Development Façade Consultants, June 2012 - present**
 - Job duty:
 - Coordinating fire testing services and facilitating fire testing for clients with global network of test laboratories and professionals.
 - Providing consultancy services to a wide range of industry, fire and structural related issues including regulatory approvals, material selection compliance reviews, testing, assessments and ad-hoc projects.
 - Providing assessment for varies types of Passive Fire Protection Products, such as fire resistant doorsets, fire resistance glazing screen, fire resistance block work wall etc., which are aimed to serve the Hong Kong and Singapore market.
 - Witnessing fire tests for tests done by others laboratory and construction witnessing for assessment and certification purposes.
 - Fire Engineering, providing computational fluid dynamic modelling and finite element analysis for testing and assessment related projects.
- **Exova Warringtonfire (HK) Limited, May 2008 – May 2012**
 - Job title: Testing and Assessment Engineer / Fire Engineer
 - Job duty: Responsible for testing, assessment, fire engineering analysis and consultancy enquiry, product certification.
- **The HK Polytechnic University, Jan 2008 – Apr 2008**
 - Job title: Research Associate
 - Project title: Development of Carbon Footprint Calculator for Hong Kong
 - Job duty: To be responsible for project planning, methodology of carbon footprint calculation and analysis.
- **The HK Polytechnic University, Dec 2006 – Feb 2007**
 - Job title: Research Associate
 - Project title: Development of Hydrogen Burner Using Methanol/Water Mixture

- Job duty: To be responsible for project planning, development of experimental test rigs, experimental measurements and data analysis

- **PAST CONSULTANTS AND TESTING**

Exova Warringtonfire (HK) Limited, May 2008 – May 2012
 - Various Fire Protection Products assessment, Fire Resistance Doorsets, Fire Resistance Glazing System, Fire Resistance Ceiling, etc.
 - Fire Engineering of the Feasibility Study to the Means of Escape for Nina Tower
 - Fire Engineering Study for Yau Tong Estate Phase 4
 - Analysis on fire resistance glass enclosure at PTI lobby
 - Study on common boundary between the shopping centre and MTRC forecourt.
 - Fire Safety Engineering Consultancy for Public Rental Housing Development at Kwai Luen Road
 - Fire Engineering Study for Automall – Discovery Park L6 Showroom Conversion
 - Fire Engineering Study for NAG Project, Singapore
 - Fire Engineering Services for 1 Gough Hill Road, The Peak
 - Fire Engineering Consultancy for Ocean Park Panda Habitat

- **Department of Mechanical Engineering, PolyU, Jan 2008 – Jun 2008**
 - Job title: Part-time Visiting Lecturer
 - Subject title: Urban Transportation Technology
 - Subject description: Social and economic importance in the development of land transportation, Sustainability of transportation development and the technology for abatement of air pollutants, noise and solid wastes from land transportation systems

- **PolyU Technology and Consultancy Co. Ltd., Oct 2007 – Nov 2007**
 - Job title: Project Assistant
 - Project title: Exhaust Gas Emission Test for In-Service Diesel Locomotives
 - Job duty: To be responsible for on-site and in-laboratory experimental measurements and data analysis.

- **PolyU Technology and Consultancy Co. Ltd., Dec 2005, Dec 2006 – Mar 2007**
 - Job title: Project Assistant
 - Project title: Emission Improvement of Classic Star Ferries – Part I to Part III
 - Job duty: To be responsible for on-site and in-laboratory experimental measurements and data analysis.

- **PolyU Technology and Consultancy Co. Ltd., Dec 2006 – Jan 2008**
 - Job title: Project Assistant
 - Project title: Emission Measurement and Consultancy Service for Rubber Tire Gantry Crane (RTG) and Mobile Equipment

- Job duty: To be responsible for on-site and in-laboratory experimental measurements and data analysis.
- **PolyU Technology and Consultancy Co. Ltd., Apr 2006 – Jun 2006**
 - Job title: Project Assistant
 - Project title: Performance Tests on “Econo-Plus D-6000”
 - Job duty: To be responsible for in-laboratory experimental measurements and data analysis.
- **PolyU Technology and Consultancy Co. Ltd., Mar 2005, Jul 2005**
 - Job title: Project Assistant
 - Project title: Alternative Fuel, KEM – Part I to Part II
 - Job duty: To be responsible for in-laboratory experimental measurements and data analysis.

Post-Graduate research in University:

Department of Mechanical Engineering, PolyU

- Research title: Thermal and Emission Characteristics of An Inverse Diffusion Flame with Circumferentially Arranged Fuel Ports
- Description: Experimental investigations of a newly developed flame type. Experiments, included combustion phenomena, flame visualization analysis, in-flame temperature and emission measurement and post-flame emission analysis, were conducted. Preliminary numerical studies in reacting-flow were also carried out.

Referred Journal Articles:

Department of Mechanical Engineering, PolyU

1. Sze, L.K., Cheung, C.S. and Leung, C.W., “Temperature distribution and heat transfer characteristics of an inverse diffusion flame with circumferentially arranged fuel ports”, International Journal of Heat and Mass Transfer 47: 3119-3129 (2004)
2. Sze, L.K., Cheung, C.S. and Leung, C.W., “Appearance, temperature and NOx emission of two inverse diffusion flames with different port design”, Combust and Flame 144:237-248 (2006)