

Professor CHOW Wan Ki

Development and Performance Review 2002-06

Principal Investigator

Areas of Strength: Fire Safety Engineering

Director

Research Centre for Fire Engineering



1. Teaching and Learning

- Subjects taught
 - MSc/PgD in Fire and Safety Engineering / MSc/PgD in Building Services Engineering / MEng in Building Services Engineering:
 - Research Methods (Subject Examiner) 2002; 2003
 - Safety Management Systems and Safety Auditing (Subject Examiner) 2002; 2003; 2004; 2005
 - Safety Aspects in Construction (Subject Examiner) 2003; 2005
 - Fire Engineering Systems (Subject Examiner) 2003; 2004; 2005
 - Fire Dynamics (Subject Examiner) 2002; 2003; 2004; 2005
 - Occupational Health and Ergonomics (Subject Examiner) 2003; 2004; 2005
 - BEng(Hons)/MEng in Building Services Engineering:
 - Fire Dynamics (Subject Examiner) 2002
 - Research Methods (Subject Examiner) 2002
 - Part-time BEng (Hons) in Building Services Engineering:
 - Fire Dynamics (Subject Examiner) 2002
 - BE3 Research Project Development 2003; 2004; 2005
 - BE3 Research Project Execution 2003; 2004; 2005
 - Teaching packages prepared or updated are listed in Appendix A - Publications 2002-06
- Teaching portfolio
 - Updating lecture notes and powerpoints with updated results on research, consultancy, and services to the country.
 - 24 CPD lecture notes and packages.
- Number of postgraduate students supervised/graduated
 - Ongoing: 1 full-time and 3 part-time PhD students at PolyU; 2 PhD students at University of Science and Technology of China (USTC); 2 PhD students at Harbin Engineering University (HEU).
 - 4 PhD theses submitted for oral examination
 - 5 PhD students graduated at PolyU: Dr. Li Junmei, Dr. Qiao Kui, Dr. Manliza W.M. Chan, Dr. Mok Wai Kuen and Dr. Jojo Li Shuk Man
 - 5 PhD students graduated at Peking University, USTC and HEU: Dr. Liang Fuming, Dr. Xin Guojun, Dr. Zeng Wenru, Dr. Jiang Zhi and Dr. Zou Gaowan

- Contributions to subject or curriculum development

Continue to lead the subject Fire Engineering at international outstanding level; and plan to upgrade to international leading level.

- Teaching and educational development grants obtained and projects conducted in 2003-04, teaching innovation, such as developing the subject Fire Engineering for Hong Kong and China websites, etc.

2. Research and Scholarship

- Publication list

A publication list of 2002-06 is shown in Appendix A with 127 refereed journal papers (70 in journals cited by Science Citation Index and Engineering Index; and 57 in journals cited only by Engineering Index); 50 conference papers; 69 others; and 57 presentations.

- Number of citations: 35

- External Research projects/high-level consultancy undertaken

- National 973 project of China on “火災動力學演化與防治基礎 Fire Dynamics and Fundamentals of Fire Safety (2001CB409600)” of the 國家重點基礎研究發展規劃項目 National Key Basic Research Programme, funded by the Ministry of Science and Technology, central government of the People’s Republic of China as a member of the 項目專家 Monitoring Committee Member, and 專題組長 subgroup 4 leader “Smoke Movement and Toxic Harmful Gases Transfer in Fire”, to monitor a research funding of ¥200 million for 5 years (2001-2006); an Interim Assessment passed in May, 2004.
- “Thermal decomposition and combustion characteristics of polymeric materials under water mist application” HK\$480,549 funded by RGC from November, 2001 to October, 2004 (Final report submitted).
- “Determination of the concentrations needed for extinguishing fires with clean agent heptafluoropropane (FM-200)” HK\$397,149 funded by RGC from December, 2003 to December, 2005.
- “Fire safety provisions for workplaces in non-industrial sectors” HK\$395,600 funded by Occupational Safety and Health Council from March, 2004 to August, 2005.
- “Fire safety for glass façades in green and sustainable buildings” HK\$312,181 funded by RGC from November, 2004 to October, 2006.
- “The Skybridge as an Evacuation Option for Tall Buildings in Hong Kong” HK\$389,224 funded by RGC from January, 2006 to December, 2007.
- “Active Fire Protection in Supertall Buildings” HK\$1,200,000 funded by CAS-Croucher Funding Scheme for Joint Laboratories from July, 2006 to June, 2009.
- “Onsetting of internal fire whirls in buildings and associated safety provisions” HK\$1,026,000 funded by RGC from January, 2007 to December, 2009.

- Contract research/high-level consultancy reports 2002-06:
 - “Hot smoke tests in an atrium – retail area at URA-K2”, November 2003 to April 2004
 - “Review on reasonableness and appropriateness of the EMU fire size prediction approach and result for the new SP1900 train conducted by KCRC”, January to February 2004
 - “Sprinkler practical discharge test at hotel development KIL11103”, February to June 2004
 - “Fire engineering design for the Mei Foo Station, West Rail”, April to October 2004
 - “Fire Engineering Report on Omission of Drencher Systems on Refugee Floors”, May to June 2004
 - “Expert comment on a fire investigation report”, August to September 2004
 - “Fire safety assessment at the Hong Kong Convention and Exhibition Centre”, March to July 2005
 - “Long throw sprinkler water coverage test”, June 2005 to June 2006
 - “Cinema reconfiguration: Fire safety provision”, June 2005 to October 2006
 - “Atrium Tower, Fire Safety Provision”, July to December 2005
 - “Police Headquarters Phase III, Arsenal Street, Wanchai, Hong Kong”, August to September 2005
 - “A fire engineering report on a cargo terminal”, October 2005
 - “Response to fire investigation reports”, January to February 2006
 - “Computational Fluid Dynamic studies on a cargo terminal with two scenarios”, August 2006
 - “Enterprise Square 5: Atrium Hot Smoke Test Procedure – Justification Report”, August to November 2006
 - “Enterprise Square 5: Atrium Hot Smoke Test Procedure – test 1”, August to November 2006

All income of over HK\$2 Million donated to support research activities in Areas of Strength: Fire Safety Engineering through account A078.

- Research grants at PolyU (2002-2006)
 - “Fire safety in atrium buildings” HK\$3,000,000 funded by PolyU President Donation Account from June, 1995 to June, 2005.
 - “Numerical studies on the combustion effect in building fires” HK\$70,145 funded by PolyU-PT PhD (Degree conferred) from November, 1996 to October, 2004.
 - “Critical analysis on the safety aspects for tunnels in HKSAR HK\$77,000 funded by PolyU-PT PhD (Degree conferred) from January, 1998 to January, 2005.
 - “Advanced studies on the safety aspects for hotels in the HKSAR and China Mainland” HK\$118,861 funded by PolyU-PT PhD (Thesis submitted) from March, 1998 to March, 2005.
 - “Advanced hazard assessment in enclosures with forced ventilation” HK\$925,540 funded by PolyU-FT PhD (Degree conferred) from August, 1998 to July, 2003.
 - “Fire safety engineering research” HK\$6,800,000 funded by PolyU Resources & Budget + Consultancy from November, 1998 to October, 2008.
 - “Corrosion studies on building water piping systems in Hong Kong” HK\$712,340 funded by PolyU-FT PhD (Degree conferred) from March, 1999 to September, 2003.

- “Fire spreading of materials and its contribution to compartment fire” HK\$859,760 funded by PolyU-PT PhD (Thesis to be submitted) from July, 2000 to December, 2004.
 - “Fire safety in higher education institutes” HK\$55,000 funded by PolyU-PT PhD from July, 2000 to July, 2006.
 - “Fire safety in new generation of architecture” HK\$644,820 funded by PolyU-PT PhD (Thesis submitted) from August, 2000 to August, 2004.
 - “Fire safety in airport terminal buildings” HK\$450,054 funded by PolyU-FT PhD from November, 2000 to November, 2004.
 - “Contribution of furniture to a building fire” HK\$429,880 funded by PolyU-PT PhD (Thesis submitted) from June, 2001 to December, 2004.
 - “A feasibility study on implementing engineering performance-based fire codes in Hong Kong” Up to HK\$80,000 funded by PolyU-PT PhD from July, 2001 to July, 2007.
 - “Application of coulomb blockade effect for temperature measurement in full-scale burning tests” HK\$951,340 funded by CRG-PolyU Post-doct. from April, 2002 to September, 2004.
 - “Water mist fire suppression system” HK\$412,000 funded by PolyU-FT PhD from October, 2002 to September, 2005.
 - “Theoretical analysis on buoyancy-induced turbulence encountered in building services engineering” HK\$838,560 funded by CRG-PolyU Post-doct. from July, 2003 to August, 2005.
 - “Studies on the operation mode of selected environmentally clean fire extinguishments” HK\$300,000 funded by CRG-Inter-faculty from June, 2004 to November, 2005.
 - “Chemical kinetics of pyrolysis and combustion of combustibles for fire safe buildings” HK\$150,000 funded by CRG-Poly/ZU Joint Supervision Scheme from October, 2004 to October, 2007.
 - “Polymer-Flame Retardation in Silicon/Metal Halide Doped Polymers” HK\$269,085 funded by CRG-Inter-faculty from September, 2006 to September, 2008.
 - “Pyrolysis, Ignition and Combustion of Different Combustibles in Buildings” HK\$150,000 funded by CRG-Poly/ZU Joint Supervision Scheme from September, 2006 to March, 2009.
- Awards received, impact factor or equivalent
 - Hat’s Off Award of Society of Fire Protection Engineering, USA, 2003
 - Second class award of Science and Technology, Anhui Province, China, 2003
 - PhD student Vicky C.W. Leung got the NFPA David B. Gratz Scholarship, National Fire Protection Association, USA in 2003
 - PhD student Fiona S.C. Tsui got the NFPA David B. Gratz Scholarship, National Fire Protection Association in 2004
(The fifth times my PhD student won this award. The other three students were Dr. K.C. Cheung, Dr. Gigi C.H. Lui and Dr. Junmei Li in 1999, 2000 and 2001 respectively)
 - Supervisor Award on supervising the BEng(Hons) degree student Elaine Y.L. Ma for the Award for the Second Place Winner of the 2004/2005 Student Safety Engineering Design Contest, ASME International’s Safety Engineering and Risk Analysis Division and the National Institute for Occupational Safety & Health, American Society of Mechanical Engineers, USA, 2005

- Key positions held
 - Guest Professor (1994 -) and Supervisor of Doctoral Degree Candidate (2003 -), University of Science and Technology of China, Hefei, Anhui, China.
 - Part-time Professor (2000 -) and Supervisor of Doctorate Candidates (2001 -), Harbin Engineering University, Harbin, Heilongjiang, China.
 - Guest Professor (2001 -), Beijing Polytechnic University, Beijing, China.
 - Visiting Research Professor (2004 -), Beijing Municipal Institute of Labor Protection, Beijing Academy of Science and Technology, Beijing, China.
 - Foundation President (2002 -), Society of Fire Protection Engineering (USA)-Hong Kong Chapter.
 - Hon. Technical Advisor (1999 -) of the Institution of Fire Engineers (Hong Kong Branch) for pursuing excellence in the field of fire engineering. The other 3 Technical Advisors appointed at the same time are Dr. the Hon. Raymond Ho, Ir. Otto Poon and Ir. P.K. Kwok.
 - Technical Advisor (2005) to the Working Group “Fire Engineering Discipline in HKIE” of the Hong Kong Institution of Engineers.
 - Appointed Member and Secretary of the Education & Examinations Committee (2006 -), Fire Engineering Discipline, The Hong Kong Institution of Engineers, Hong Kong.
 - Appointed Member (Representation from Fire Discipline) Education & Examinations Committee (2006 -), The Hong Kong Institution of Engineers, Hong Kong.
 - President designated (2007 -), Asia-Oceania Society on Fire Science and Technology.
 - Committee Member (2005 -), International Association on Fire Safety Science.
 - Non-official Member (1998 -), Fire Safety Committee, Buildings Department, Government of the HKSAR.
 - Member (1999 - 2004), Steering Group for the Consultancy Study on Review of Lighting and Ventilation Requirements for Building, Buildings Department, Government of the HKSAR.
 - Member (2000 - 03), Appeal Tribunal Panel, Section 45 of the Buildings Ordinance (Cap 123), The Government of the Hong Kong Special Administrative Region.
 - Member (2002 -), Steering Committee for Consultancy Study on Fire Engineering Approach and Fire Safety in Buildings, Buildings Department, Government of the HKSAR.
 - Invited Assessor on research projects (1997 -), Research Grants Council, Hong Kong.
 - Expert Assessor of International Standing (2002 -), Engineering and Environmental Science, Australian Research Council (ARC), Australia.
 - Member (2006 - 09) of Engineering and Physical Sciences Research Council (EPSRC) College, U.K.
 - Committee Member on “Strategic Research of Planning and Formulation of Science & Technology for City Public Safety” National Long-term Planning and Formulation of Science & Technology to the Premier, People’s Republic of China.
 - Chairman of the Management Council (2004) of CERTIFIRE (Hong Kong) Limited, Warrington Certfire (Hong Kong) Limited.
 - Committee Member (2005 -), Committee for University Research Association for Engineering Thermophysics, The People’s Republic of China 高等學校工程熱物理研究會理事

- Chairman (2004 -), Fire Conference 2004 - Total fire safety concept, Hong Kong, invited by the official journal of the Ministry of Public Security, People's Republic of China.
 - Organization Chairman (2004 - 07) of 7th Asia-Oceania Symposium on Fire Science and Technology to be held at Hong Kong, 20-22 September 2007.
 - Organizer of the First International Public Safety Forum – Fire Science, 7 December 2004, Hong Kong.
 - Chairman of the 3rd Education Symposium on Advanced Fire Research, 9 December 2004, Hong Kong.
 - Session Organizer of 2005 ASME Summer Heat Transfer Conference, July 17-22, 2005, San Francisco, California, USA.
 - Organizer and Chairman, Forum on Fire and City Safety, Beijing Academy of Science and Technology, Beijing, People's Republic of China, 24 September 2005.
 - Chairman (2005), Technical Paper Competition, Institution of Fire Engineers (Hong Kong Branch).
 - Organizing Chairman, Firestop Academy, Fire Resisting Construction and Passive Fire Protection – Important?, Firestop Academy, supported by Hilti (Hong Kong) Ltd., 12 September 2005, Hong Kong. (over 400 professionals attended).
 - Chairman of the Forum on Fire and City Safety, 24 September 2005, Beijing Academy of Science and Technology, Beijing, China.
 - Chairman (2004) of the 8th International Symposium on Building and Urban Environmental Engineering, 10-13 July 2006.
 - Editor-in-Chief, International Journal on Engineering Performance-Based Fire Codes (1999 -).
 - Editor-in-Chief, International Journal on Architectural Science (1999 -).
 - Associate Editor, Energy - The International Journal (SCI journal in this field with the highest impact factor) (2001 - 03).
 - Member of Editorial Board, Journal of Applied Fire Science (1996 -).
 - Member of Editorial Board, Architectural Science Review (2000 -).
 - Member of Editorial Board, Building and Environment (2003 -).
 - Member of Editorial Board, Energy and Buildings (2005 -).
 - Member of Editorial Board, International Journal for Fire Science and Technology (2004 -).
 - Member of the Editorial Board, Journal of Thermal Science and Technology – in Chinese (2004 -).
 - Member of the Editorial Board, Journal of Safety Science and Technology in China (2005 -).
- Conference/symposia attendance
 - A presentation “Fire safety of small retail shops in terminal halls” Chongqing – Hong Kong Joint Symposium 2002 – Symposium on System Design and Operation for Enhancing Sustainability of Buildings, 8 July 2002, Chongqing, China.
 - International Symposium on A Study of Management Technologies for Building organized by Division of Energy Commission, Ministry of Economics Affairs, Government of Republic of China, 10 September 2002, National Taipei University of Technology, Taipei, Taiwan.
 - Green Building Conference 2002: Architecture features for the environmental friendly century, 25 September 2002, New Symbiotic Building and Environmental Technology – The Future Scope in Subtropical Region, Sustainable Building 2002 International Conference, 23-25 September 2002, Oslo, Norway as Invited

- International Expert by the Archilife Foundation, Taiwan.
- Seminar on ‘NFPA 5000 Introduction to structural and materials requirements’, 15 October 2002, Headquarters, Fire Services Department, Hong Kong.
- Education Symposium on Advanced Fire Research, 10-15 January 2003, State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui, China.
- International Conference – Fire Asia 2003, 26-28 February 2003, Hong Kong.
- Advanced Fire Research and Necessity on Modelling Fire and Smoke Management as part of the National 973 Project, 5 September 2003, Tsinghua University, Beijing, China.
- International Symposium on Fire Science and Fire-protection Engineering (2003 ISFSFE), 12-15 October 2003, Beijing, China (5 papers presented).
- A presentation “Discussions on the fire aspects in karaoke boxes” in Shandong - Hong Kong Joint Symposium 2003 on New Technology for Better Built Environment, 17-18 October 2003, Qingdao, Shandong, China (Paper presented).
- A public lecture “Aspects on fire safety in railway in tunnels” to Beijing Academy of Science and Technology, 25 March 2004, Beijing, China.
- A presentation “A fire safety ranking system OB-FSRS for old highrise buildings” in 7th International Symposium on Building and Urban Environmental Engineering 2004, 11-15 May 2004, Tianjin University, Tianjin, China.
- A presentation “Field measurement of optical smoke density in studying water curtain” in 7th International Symposium on Building and Urban Environmental Engineering 2004, 11-15 May 2004, Tianjin University, Tianjin, China.
- Chairing session of the 7th Asia-Pacific International Symposium on Combustion and Energy Utilization, 15-17 December 2004, Hong Kong Special Administrative Region, China.
- A presentation “On Designing Total Gas Flooding System with Clean Agent Heptafluoropropane” to the 2005 Hubei - Hong Kong Joint Symposium, 1-2 July 2005, Wuhan, China.
- A presentation “Atrium smoke exhaust and technical issues on hot smoke tests” in ASME 2005 Summer Heat Transfer Conference, 17-22 July 2005, Westin St. Francis, San Francisco, CA, USA.
- A presentation “Stability of smoke layer under sprinkler water spray” in ASME 2005 Summer Heat Transfer Conference, 17-22 July 2005, Westin St. Francis, San Francisco, CA, USA.
- A presentation “On estimating heat release rate for a design fire in sprinkler protected area” in 2005 Asia-Pacific Conference on Risk Management and Safety, 1-2 December 2005, Hong Kong.
- Poster presentation “Experimental studies on fire engineering systems for non-industrial workplaces” in CIBSE National Conference 2006 – Engineering the Future, 21-22 March 2006, London, UK.
- A presentation “Engineering approach and discussion on the design fire” 6th International Conference on Performance-Based Codes and Fire Safety Design Methods, 14-16 June 2006, Tokyo, Japan.
- A presentation “Performance Evaluation of Sidewall Long-Throw Sprinklers at Height” 9th AIAA/ASME Joint Thermophysics and Heat Transfer Conference, 5-8 Jun 2006, California, USA.
- A presentation “Experimental Studies on Thermal and Smoke Blockage by Water Curtains” 9th AIAA/ASME Joint Thermophysics and Heat Transfer Conference, 5-8 Jun 2006, California, USA.

- A presentation “Atrium smoke control in Hong Kong” ASHRAE Annual Meeting on Smoke Control and the Codes, 24-28 June 2006, Quebec City, Canada.
 - A presentation “Discussion on Fire Safety Requirements for Office Buildings in Hong Kong” 8th International Symposium on Building and Urban Environmental Engineering” 10-13 Jul 2006, Tokyo, Japan.
 - A presentation “Performance evaluation of fire services installation in kitchens of big hotels” 8th International Symposium on Building and Urban Environmental Engineering” 10-13 Jul 2006, Tokyo, Japan.
 - A presentation “Wall function at the upwind sharp convex corners in simulating incident air flow on a cube” The 4th International Symposium on Wind Engineering (CWE2006), 16-19 July 2006, Japan.
 - Lecture on “Fire Safety in Subway System” Beijing University of Technology, Beijing, China, 23 August 2006.
 - Lecture on “Atrium hot smoke test” Harbin Engineering University, Harbin, Heilongjiang, China, 24 August 2006.
- Invited seminars, plenary lectures and keynotes, etc.
 - Seminar on ‘Essential fire safety provision for highrise buildings in Hong Kong: Lessons learnt from World Trade Centre Incident’, Hong Kong Institute of Construction Managers, 8 January 2002, Hong Kong (Key Speaker).
 - Seminar on Fire Engineering in Structures, “Importance of heat release rate in fire safety engineering and full-scale burning facility” organized by Hong Kong Institute of Steel Construction, 2 February 2002, Hong Kong (Invited Speaker).
 - Open lecture on ‘Fire safety engineering and fire dynamics’, 16 May 2002, Northeastern University, Shenyang, Liaoning, China.
 - Open lecture by newly appointed Guest Professor on ‘Birth of the new subject: Fire safety engineering and review on the associated research activities’, 21 May 2002, Beijing Polytechnic University, Beijing, China.
 - Open lecture on ‘Fire safety engineering and review on the associated research activities’, 10 July 2002, Chongqing University, Chongqing, China.
 - A lecture on ‘Building fire safety provisions: Prescriptive codes and engineering approach’, 12 July 2002, Sichuan Fire Research Institute, Dujiangyan, Sichuan, China.
 - A lecture on ‘Heat release rate and full-scale burning facilities’ to Fire Services Department and Hong Kong Airport Authority delegate at Harbin Engineering University, Harbin, Heilongjiang, China, 25 August 2002.
 - A lecture on ‘On the possibility of implementing building performance-based codes: Energy and fire’, 10 September 2002, at the International Symposium on A Study of Management Technologies for Building organized by Division of Energy Commission, Ministry of Economics Affairs, Government of Republic of China, held at National Taipei University of Technology, Taipei, Taiwan (Invited Overseas Expert).
 - An invited lecture on ‘Green Building Conference 2002: Architecture features for the environmental friendly century’, 25 September 2002, New Symbiotic Building and Environmental Technology – The Future Scope in Subtropical Region, Sustainable Building 2002 International Conference, 23-25 September 2002, Oslo, Norway (Invited International Expert by the Archilife Foundation, Taiwan).
 - Open lecture on ‘Birth of the Fire Safety Engineering: Importance of performance based fire codes’, 3 October 2002, Opening Ceremony on Society of Fire Protection Engineering-Hong Kong Chapter, Hong Kong by the Foundation President.

- Presentation on ‘Why Fire Safety Engineering?’, 10-11 October 2002, Directors of Joint Research Laboratories Meeting, Chinese Academy of Science and Hong Kong, Shenzhen, China.
- Seminar on ‘NFPA 5000 Introduction to structural and materials requirements’, 15 October 2002, Headquarters, Fire Services Department, Hong Kong.
- A presentation on Education Symposium on Advanced Fire Research, 10-15 January 2003, State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui, China.
- A presentation on ‘International Conference – Fire Asia 2003’, 26-28 February 2003, Hong Kong.
- Open lecture ‘Application of the fire engineering approach in Hong Kong’, 21 March 2003, State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui, China.
- Open forum ‘Fire safety engineering’, 29 August 2003, Harbin Engineering University, Harbin, Heilongjiang, China.
- Open forum ‘Fire safety for highrise buildings in big cities’, 29 August 2003, Harbin Engineering University, Harbin, Heilongjiang, China.
- A presentation ‘Advanced Fire Research and Necessity on Modelling Fire and Smoke Management as part of the National 973 Project’, 5 September 2003, Tsinghua University, Beijing, China.
- Keynote Speaker of the International Conference on Sustainable Development in Building and Environment, SET2 (Sustainable Energy Technology), 24-27 October 2003, Chongqing, China (with 2 other papers presented).
- Keynote Speaker of the International Conference on Building Fire Safety, 20-21 November 2003, Gardens Point Campus, Queensland University of Technology, Brisbane, Queensland, Australia.
- Keynote Speaker of the 2004 Sino-Japan Work Safety Symposium, 18-19 February 2004, Anhui, Hefei, China.
- Keynote Speaker of the 7th International Symposium on Building and Urban Environmental Engineering, 11-14 May 2004, Tianjin University, Tianjin, China.
- A public lecture ‘Engineering Performance-Based Fire Codes’ to Chinese People’s Armed Police Force College, 14 May 2004, Lang Fang, Hebei, China
- Keynote Speaker of the 2nd Education Symposium on Advanced Fire Research, 25 May 2004, State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui, China.
- Keynote Speaker of the conference Subgroup 4 “Smoke Movement and Toxic Harmful Gases Transfer in Fire” of the National 973 Project “Fire Dynamics and Fundamentals of Fire Safety”, 26 May 2004, Huangshan, Anhui, China.
- A public lecture ‘Fire Engineering Research’ to Shenyang Fire Research Institute, 30 July 2004, Shenyang, China.
- Invited Speaker “Prescriptive codes versus performance based design”, 26 August 2004, Professional Lecture Series in Fire Safety Engineering organized by HKIE/IFE-HKB/CIBSE-HKB/ASHRAE-HKC/BSOMES, Hong Kong.
- Invited Speaker “Computer modeling – Compartment fires” 2 September 2004, Professional Lecture Series in Fire Safety Engineering organized by HKIE/IFE-HKB/CIBSE-HKB/ASHRAE-HKC/BSOMES, Hong Kong.
- A public lecture “Fire Research Activities” to State Key Laboratory of Fire Science, University of Science and Technology, 10 November 2004, Anhui, Hefei, China.
- A public lecture “Engineering Performance-Based Fire Codes” to Southeast University, 13 November 2004, Nanjing, Jiangsu, China.

- Session Chairman to the 7th Asia-Pacific International Symposium on Combustion and Energy Utilization, 15-17 December 2004, Hong Kong.
- Keynote Speaker “Technical Issues on Performance-Based Fire Engineering Design” to Fire Symposium 2005 – Contemporary Solutions for Life Safety, 20-21 January 2005, Hong Kong.
- Invited lecture “Application of Fire Engineering Approach: A New Project” to the University of Ulster, 3 May 2005, Belfast, North Ireland, UK.
- Invited Speaker “Research and education in fire engineering in Hong Kong” in the 2nd International Symposium on the 21st Century Centre of Excellence Programme, 7-9 March 2005, Tokyo & Chiba, Japan.
- Invited Speaker “A brief report on fire engineering activities at The Hong Kong Chapter, Society of Fire Protection Engineers” in the 2nd International Symposium on the 21st Century Centre of Excellence Programme, 7-9 March 2005, Tokyo & Chiba.
- Invited lecture “Fire Engineering Approach in Hong Kong: Development and Education” to the Kingston University, 9 May 2005, London, UK.
- Invited lecture “Fire Load Density, Heat Release Rates and Design Fires” to Fire Services Department, Fire Services Training School, 18 May 2005, Hong Kong.
- Invited Speaker “Traditional Versus Engineering Approach in Building” to the Real Estate Developers Association of Hong Kong, 21 May 2005, Hong Kong.
- Keynote Speaker of the 4th Education Symposium on Advanced Fire Research, 13-16 June 2005, State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui, China.
- Invited lecture “Fire Safety for Highrise Building in Hong Kong” to the Shenzhen Research Center, University of Science and Technology of China, 8 July 2005, Shenzhen, China.
- Invited lecture “Reviewing Fire Tests for Local Materials” to the Fire Resisting Construction and Passive Fire Protection – Important?, Firestop Academy, 12 September 2005, Hong Kong.
- A presentation “Building Fire Safety and Performance-Based Design” to Dalian University of Technology, 17-18 September 2005, Dalian, China.
- Session Chairman to the 8th International Symposium on Fire Safety Science, 18-23 September 2005, Beijing, China.
- Keynote Speaker “Technical Issues on Atrium Hot Smoke Tests” to the 2nd Conference on the Development of Performance-based Fire Code, 24-28 November 2005, Hong Kong.
- Invited lecture “Case study for Performance-Based Design in Hong Kong” 6th International Conference on Performance-Based Codes and Fire Safety Design Methods, 14-16 June 2006, Tokyo, Japan.
- Invited lecture “Necessity of carrying out hot smoke tests and a case study” Workshop on the Trends of Fire Safety and Smoke Control in Building, 13-14 Dec 2005, Taiwan.
- Invited speech “A long-term research programme on studying cabin fires” Fire Asia 2006, Hong Kong.
- Invited lecture “Necessity of full-scale burning tests in fire hazard assessment on cabin design” 2006 Symposium on Fire Risk Assessment, 18-19 May 2006, JinKe Hotel, Hefei, Anhui, China.
- Lecture on “Fire Engineering Approach and Discussion on The Design Fire” Carleton University, Ottawa, Canada, 21 June 2006.

3. Other Relevant Activities

- Programme /subject leadership:
 - Program Leader, MSc in Fire and Safety Engineering (2001-2003)

- Contribution to own profession
 - Invited reviewer for local journals such as the Hong Kong Engineers, the Transactions of HKIE and the Building and Construction Management Journal.
 - External Examiner to MEng candidate at the Nanyang Technology University, Singapore.
 - External Examiner to PhD candidate at the National University of Singapore, Singapore.
 - Programme Leader for CPD lecture on A Model of the Role of Management in Construction Fire Safety Failure Scenarios, 1 March 2002.
 - Programme Leader and Key Speaker for training course on Fire Dynamics for Hazard Assessment for professional officers in the Buildings Department, 18-19 March 2002.
 - Programme Leader for CPD lecture on Fire Safety Management in Karaoke, 22 March 2002.
 - Programme Leader for CPD lecture on Advanced topics on fire safety engineering, 7 November 2002.
 - Programme Leader for CPD lecture on Thermal radiation and flashover in room fires, 3 December 2002.
 - Programme Leader for CPD lecture on Risk Assessment and Management of Fire Safety, 30 December 2002.
 - Member, Steering Committee for Consultancy Study on Fire Engineering Approach and Fire Safety in Buildings, Buildings Department, Government of the HKSAR.
 - Programme Leader for CPD lecture on Application of fire field modeling in fire safety engineering: Computational Fluid Dynamics (CFD) or Numerical Heat Transfer (NHT)?, 29 March 2003.
 - Programme Leader for CPD lecture on Importance of Fire Research in Dense Urban Areas and National 973 Project in China, 13 June 2003.
 - Programme Leader for CPD lecture on Fire Safety (Commercial Premises) Ordinance and Fire Safety (Buildings) Ordinance, 25 June 2003.
 - Programme Leader for CPD lecture on Performance Based Building and Fire Safety Code in Hong Kong – The Impact & Opportunities Coming in a New Era, 22 July 2003.
 - Programme Leader for CPD lecture on Fire Safety in Green and Sustainable Buildings and a Brief Introduction to EPBFC, 8 August 2003.
 - Programme Leader for Two-day Workshop on Fire Dynamics for professional officers in the Buildings Department, 21 and 23 February 2005.
 - Programme Leader for Two-day Workshop on Fire Service Installations for professional officers in the Buildings Department, 2 and 4 March 2005.
 - External Examiner to PhD candidate at City University of Hong Kong, Hong Kong.

- Fund-raising
 - Successful in getting 4 scholarships since March 2004 to BEng(Hon) in BSE students (\$40,000 each).
 - Donated consultancy funding of HK\$2,182,000 to research.

- Earned HK\$97,067 by running the following CPD programmes and devoted to research:
 - 2002 A Model of the Role of Management in Construction Fire Safety Failure Scenarios, 1 March 2002.
 - 2002 Fire Safety Management in Karaoke, 22 March 2002.
 - 2002 Birth of the FSE: Importance of Performance Based Fire Codes, 3 October 2002
 - 2002 Advanced Topics on Fire Safety Engineering, 7 November 2002.
 - 2002 Thermal Radiation and Flashover in Room Fires, 3 December 2002.
 - 2002 Risk Assessment and Management of Fire Safety, 30 December 2002.
 - 2003 Application of Fire Field Modeling in Fire Safety Engineering: Computational Fluid Dynamics (CFD) or Numerical Heat Transfer (NHT)?, 29 March 2003.
 - 2003 Importance of Fire Research in Dense Urban Areas and National 973 Project in China, 13 June 2003.
 - 2003 Fire Safety (Commercial Premises) Ordinance and Fire Safety (Buildings) Ordinance, 25 June 2003.
 - 2003 Performance Based Building and Fire Safety Code in Hong Kong – The Impact & Opportunities Coming in a New Era, 22 July 2003.
 - 2003 Fire Safety in Green and Sustainable Buildings and a Brief Introduction to EPBFC, 8 August 2003.
 - 2004 New alternatives on Fire Services Installations with Gas Protection Systems, 6 January 2004.
 - 2004 New Fire Safety Designs for a Large Atrium, 30 March 2004.
 - 2004 Fire Risk Analysis: Probability and Bayes Theorem, 3 April 2004.
 - 2004 Recent Train Fires and Fire Safety Desired, 29 April 2004.
 - 2004 Atrium Hot Smoke Test: Theory and Practice, 12 June 2004.
 - 2004 Advanced Measurement of Chemical Species in Fires, 13 July 2004.
 - 2004 Fire Conference 2004 - Total Fire Safety Concept, 6-7 December 2004
 - 2005 Fire Load and Design Fires Studies in Canada, 22 February 2005
 - 2006 Sustainable Building Design and Fire Safety, 19 January 2006
 - 2006 Recent Developments in Foam System, 20 April 2006
 - 2006 A Word of Caution on Pressure-Loss Correlations for Concentrates of Fire Fighting-foams, 4 August 2006
- Media interviews, etc.
 - Double-desk bus fire, November 2002.
 - South Korean Underground Railway fire, March 2003.
 - Interviewed by Wen Wei Po on 7 September 2004 on broken glass panel of the platform screen door, Mass Transit Railway Corporation, Hong Kong.
 - Interviewed by Sing Tao Daily on 6 October 2004 on spray droplet fire.
 - Interviewed by Sing Tao Daily on 21 October 2004 on explosion of fuel tank.
 - Interviewed by Oriental Daily News on 23 January 2005 on water leakage in Mei Foo.
 - Interviewed by Oriental Daily News on 26 January 2005 on spalling of external finishes.
 - Interviewed by Apple Daily on 3 February 2005 on water leakage.
 - Interviewed by Wall Streets Journal on 20 June 2005 on uses of plastic bags.

- Interviewed by Sing Tao Daily on 15 May 2006 on emergency evacuation in a primary school.
- Interviewed by Apple Daily on 18 July 2006 on bus fire.
- Services to the country
 - Supervisor of Doctorate Degree Candidates, Harbin Engineering University, Harbin, Heilongjiang, China.
 - Supervisor of Doctorate Degree Candidates, University of Science and Technology of China, Hefei, Anhui, China.
 - Committee Member of the committee establishing ‘Public Safety’ as a key subject as designated by Premier Wen Jiabao, People’s Republic of China.
 - Safety Advisor on the Olympic 2008 Halls as Visiting Research Professor to the Beijing Municipal Institute of Labor Protection, Beijing Academy of Science and Technology, Beijing, People’s Republic of China.
 - Academic Advisor, ‘China Public Security’, Official journal of the Ministry of Public Security, People’s Republic of China.
 - Committee Member and Subgroup Leader of the National 973 project “Fire Dynamics and Fundamentals of Fire Safety”, People’s Republic of China.
 - Advisor on Taiwan High Railway System, Taipei, to the Central Police University, China.

Brief2002-06Website

Appendix A: Publications 2002-06

(A) Refereed Academic Journal Papers (Total: 331) :

- S* A1. W.K. Chow, W.Y. Fung & L.T. Wong
“Preliminary studies on a new method for assessing ventilation in large spaces”
Building and Environment, Vol. 37, No. 2, p. 145-152 (2002)
- S* A2. W.K. Chow & Gigi C.H. Lui
“Numerical studies on evacuation design in a karaoke”
Building and Environment, Vol. 37, No. 3, p. 285-294 (2002)
- E* A3. W.K. Chow, M.Y. Ng & M.K. Chan
“Fire safety aspects for Chinese restaurants in Hong Kong”
Architectural Science Review, Vol. 45, No. 1, p. 31-37 (2002)
- E* A4. C.W. Leung & W.K. Chow
“A brief review on construction safety in some South-East Asian countries”
Architectural Science Review, Vol. 45, No. 1, p. 39-49 (2002)
- S* A5. W.K. Chow
“Ventilation of enclosed train compartments in Hong Kong”
Applied Energy, Vol. 71, No. 3, p. 161-170 (2002)
- S* A6. Y.Z. Li, R. Huo & W.K. Chow
“On the operation time of horizontal ceiling vent in an atrium”
Journal of Fire Sciences, Vol. 20, No. 1, p. 37-51 (2002)
- S* A7. W.K. Chow & Gigi C.H. Lui
“A proposed fire safety ranking system for karaoke establishments and its comparison with the NFPA - Fire safety evaluation system”
Building and Environment, Vol. 37, No. 6, p. 647-656 (2002)
- S* A8. F.M. Liang, W.K. Chow & S.D. Liu
“Preliminary study on flashover mechanism in compartment fires”
Journal of Fire Sciences, Vol. 20, No. 2, p. 87-112 (2002)
- E* A9. R. Yin & W.K. Chow
“Building fire simulation with a field model based on large eddy simulation”
Architectural Science Review, Vol. 45, No. 2, p. 145-153 (2002)
- S* A10. W.M. Chan, F.T. Cheng & W.K. Chow
“Materials susceptibility to cavitation erosion in Hong Kong potable water”
Journal of American Water Works Association, Vol. 94, No. 8, p. 76-84 (2002)
- S* A11. W.K. Chow & R. Yin
“Discussion on two plume formulae with Computational Fluid Dynamics”
Journal of Fire Sciences, Vol. 20, No. 3, p. 179-201 (2002)
- E* A12. L.T. Wong, H.W. Chong & W.K. Chow
“Sprinkler systems: code review in highrise buildings use”
Facilities, Vol. 20, No. 11/12, p. 374-385 (2002)
- E* A13. W.K. Chow
“Proposed fire safety ranking system EB-FSRS for existing high-rise nonresidential buildings in Hong Kong”
ASCE Journal of Architectural Engineering, Vol. 8, No. 4, p. 116-124 (2002)
- E* A14. B. Yao & W.K. Chow
“On the fire protection of a commercial kitchen using water mist fire suppression systems”
Architectural Science Review, Vol. 45, No. 4, p. 317-322 (2002)
- E* A15. Candy M.Y. Ng & W.K. Chow
“Review on the design and scientific aspects for drencher systems in different countries”
Architectural Science Review, Vol. 45, No. 4, p. 323-335 (2002)
- E* A16. W.K. Chow & Gigi C.H. Lui
“Fire safety facilities assessment for karaokes”
Facilities, Vol. 20, No. 13/14, p. 441-449 (2002)

- S A17. W.R. Zeng, S.F. Li & W.K. Chow
 “Preliminary studies on burning behaviour of Polymethylmethacrylate (PMMA)”
 Journal of Fire Sciences, Vol. 20, No. 4, p. 297-317 (2002)
- S A18. W.K. Chow
 “Assessment on heat release rate of furniture foam arrangement by a cone calorimeter”
 Journal of Fire Sciences, Vol. 20, No. 4, p. 319-328 (2002)
- E A19. W.K. Chow & M.Y. Ng
 “Fire risk to a local shopping mall”
 International Journal of Risk Assessment and Management, Vol. 3, No. 2/3/4, p. 152-169 (2002)
- S A20. W.R. Zeng, S.F. Li & W.K. Chow
 “Review on chemical reactions of burning Poly(methyl methacrylate) PMMA”
 Journal of Fire Sciences, Vol. 20, No. 5, p. 401-433 (2002)
- S A21. W.K. Chow, B. Yao & M.Y. Ng
 “Application of water mist fire suppression systems in small retail shops”
 Journal of Fire Sciences, Vol. 20, No. 6, p. 479-503 (2002)
- E A22. W.K. Chow, S.S. Han & C.L. Chow
 “Fire behaviour of timber products with and without fire retardant”
 Journal of Applied Fire Science, Vol. 11, No. 3, p. 209-227 (2002-2003)
- E A23. J. Li & W.K. Chow
 “On designing horizontal ceiling vent in an atrium”
 Journal of Applied Fire Science, Vol. 11, No. 3, p. 229-254 (2002-2003)
- E A24. C.L. Chow, S.S. Han and W.K. Chow
 “Smoke toxicity assessment of burning video compact disc boxes by a cone calorimeter”
 Journal of Applied Fire Science, Vol. 11, No. 4, p. 349-366 (2002-2003)
- E A25. W.K. Chow & Y.F. Li
 “A review on studying extinguishing room fires by water mist”
 Journal of Applied Fire Science, Vol. 11, No. 4, p. 367-403 (2002-2003)
- S A26. W.K. Chow & M.Y. Chan
 “Field measurement on transient carbon monoxide levels in vehicular tunnels”
 Building and Environment, Vol. 38, No. 1, p. 227-236 (2003)
- E A27. W.K. Chow
 “Fire safety management: Replacement procedure of fire doors for an existing building”
 Architectural Science Review, Vol. 46, No. 1, p. 13-18 (2003)
- E A28. J. Hao & W.K. Chow
 “A brief review on intumescent fire retardant coatings”
 Architectural Science Review, Vol. 46, No. 1, p. 89-96 (2003)
- S A29. Guojun Xin, W.K. Chow & Shida Liu
 “Windows and routes to chaos in mixed convection in confined spaces”
 Chaos, Solitons & Fractals, Vol. 15, No. 3, p. 543-558 (2003)
- S A30. J. Li & W.K. Chow
 “Line plume approximation on atrium smoke filling with thermal stratified environment”
 ASME Journal of Heat Transfer, Vol. 125, No. 2, p. 289-300 (2003)
- E A31. W.K. Chow, Y. Gao, H. Dong, G. Zou & L. Meng
 “Will water mist extinguish a liquid fire rapidly?”
 Architectural Science Review, Vol. 46, No. 2, p. 139-144 (2003)
- E A32. W.K. Chow & H.W. Au Yeung
 “On the superposition of heat release rate for polymeric materials”
 Architectural Science Review, Vol. 46, No. 2, p. 145-150 (2003)
- S A33. E.P.F. Lee, J.M. Dyke, F.T. Chau, W.K. Chow & D.K.W. Mok
 “Reaction enthalpies and activation energies of two important reactions in flame suppression by CF₃Br”
 Chemical Physics Letter, Vol. 376, p. 465-474 (2003)

- E* A34. Y. Gao & W.K. Chow
 “Review on wind-induced air movement around a cube”
 Architectural Science Review, Vol. 46, No. 3, p. 247-258 (2003)
- E* A35. S.C. Tsui & W.K. Chow
 “Possibility of applying performance-based approach for designing means of escape in a public transport interchange”
 Architectural Science Review, Vol. 46, No. 3, p. 279-289 (2003)
- E* A36. W.K. Chow, Y. Gao, H. Dong, G.W. Zou, Z. Luo & L. Meng
 “Experimental studies on minimum heat release rates for flashover with oxygen consumption calorimetry”
 Architectural Science Review, Vol. 46, No. 3, p. 291-296 (2003)
- E* A37. W.K. Chow
 “Fire safety in green or sustainable buildings: Application of the fire engineering approach in Hong Kong”
 Architectural Science Review, Vol. 46, No. 3, p. 297-303 (2003)
- S* A38. W.K. Chow & W.Y. Hung
 “On the fire safety for internal voids in highrise buildings”
 Building and Environment, Vol. 38, No. 3, p. 1317-1325 (2003)
- E* A39. W.K. Chow & C.L. Chow
 “Green influences”
 Fire Prevention & Fire Engineers Journal, September, p. 34-35 (2003)
- S* A40. Wen-ru Zeng, Shu-fen Li & W.K. Chow
 “The kinetic study of PMMA isothermal combustion”
 Chinese Journal of Chemical Physics, Vol. 16, No. 4, p. 317-320 (2003)
- S* A41. Yigang Cao, Jiangxing Chen, Youmei Wang, Zhengkuan Jiao & W.K. Chow
 “Numerical study on the dynamics of driven disordered colloids”
 Physical Review B 68, 134209, 4 pages (2003)
- S* A42. Jojo S.M. Li & W.K. Chow
 “Numerical studies on performance evaluation of tunnel ventilation safety systems”
 Tunnelling & Underground Space Technology, Vol. 18, No. 3, p. 435-452 (2003)
- E* A43. J. Li & W.K. Chow
 “Numerical studies on evacuation patterns in atria”
 Architectural Science Review, Vol. 46, No. 4, p. 427-441 (2003)
- S* A44. Walter Wah Yuen, Shousuo Han & Wan Ki Chow
 “The effect of thermal radiation on the dynamics of flashover in a compartment fire”
 JSME International Journal Series B, Vol. 46, No. 4, p. 528-538 (2003)
- S* A45. Y. Yu & W.K. Chow
 “Disordered junction arrays used for coulomb blockade thermometry”
 European Physical Journal – Applied Physics, Vol. 24, No. 1, p. 27-31 (2003)
- E* A46. W.K. Chow, Y. Gao, H. Dong, G. Zou & L. Meng
 “Full-scale burning tests on heat release rate of gasoline fire with water mist”
 Journal of Applied Fire Science, Vol. 11, No. 1, p. 21-40 (2003)
- E* A47. W.K. Chow & M.Y. Ng
 “Review on fire safety objectives and application for airport terminals”
 ASCE Journal of Architectural Engineering, Vol. 9, No. 2, June, p. 47-54 (2003)
- E* A48. L. Zhao & W.K. Chow
 “Smoke extraction system requirement for basements and performance-based fire engineering approach”
 ASHRAE Transactions, Vol. 109, Part 2, p 299-304 (2003)
- E* A49. Jojo S.M. Li & W.K. Chow
 “Environmental simulation of tunnel fires by Computational Fluid Dynamics”
 Journal of Environmental Systems, Vol. 30, No. 1, p. 27-43 (2003/2004)

- E A50. Q. Kui, W.K. Chow & S.L. Liu
 “Numerical studies on thermally-induced indoor aerodynamics in a compartment with natural ventilation”
 Journal of Environmental Systems, Vol. 30, No. 1, p. 45-72 (2003/2004)
- E A51. C.W. Leung & W.K. Chow
 “Assessing flame spread over combustible materials with smaller-scale tests”
 Journal of Applied Fire Science, Vol. 12, No. 2, p. 83-105 (2003-2004)
- E A52. W.K. Chow, C.W. Leung, Gaowan Zou, Hui Dong & Ye Gao
 “Assessment of fire hazard in timber karaoke music boxes with real-scale burning tests”
 Journal of Applied Fire Science, Vol. 12, No. 2, p. 107-124 (2003-2004)
- E A53. W.K. Chow, Z. Jiang & S.F. Li
 “Suppression chemistry of water mists on diffusional flames”
 Journal of Applied Fire Science, Vol. 12, No. 3, p. 159-180 (2003-2004)
- E A54. S.S. Han & W.K. Chow
 “Cone calorimeter studies on fire behaviour of polycarbonate glazing sheets”
 Journal of Applied Fire Science, Vol. 12, No. 3, p. 245-261 (2003-2004)
- E A55. Anthony C.M. Sung, W.K. Chow, S.S. Han, Y. Gao, H. Dong & G.W. Zou
 “Preliminary full-scale burning tests of electric cables”
 Journal of Applied Fire Science, Vol. 12, No. 4, p. 335-352 (2003-2004)
- S A56. W.K. Chow
 “Wind-induced indoor-air flow in a high-rise building adjacent to a vertical wall”
 Applied Energy, Vol. 77, No. 2, p. 225-234 (2004)
- S A57. L.H. Hu, Y.Z. Li, R. Huo, L. Yi, C.L. Shi & W.K. Chow
 “Experimental studies on the rise-time of buoyant fire plume fronts induced by pool fires”
 Journal of Fire Sciences, Vol. 22, No. 1, p. 69-81 (2004)
- S A58. W.K. Chow & L. Meng
 “Analysis of key equations in a two-layer zone model and application with symbolic mathematics in fire safety engineering”
 Journal of Fire Sciences, Vol. 22, No. 2, p. 97-124 (2004)
- S A59. Yigang Cao & W.K. Chow
 “Renormalization group theory and its application to thermally-induced turbulence”
 Communication in Theoretical Physics, Vol. 41, No. 4, p. 599-604 (2004)
- E A60. S.C. Tsui & W.K. Chow
 “Legislation aspects of fire safety management in Hong Kong”
 Facilities, Vol. 22, No. 5/6, p. 149-164 (2004)
- S A61. W.K. Chow & R. Yin
 “A new model on simulating smoke transport with Computational Fluid Dynamics”
 Building and Environment, Vol. 39, No. 6, p. 611-620 (2004)
- S A62. M.Y. Chan & W.K. Chow
 “Car park ventilation system: Performance evaluation”
 Building and Environment, Vol. 39, No. 6, p. 635-643 (2004)
- S A63. Y.F. Li & W.K. Chow
 “Modeling water mist fire suppression systems by a one-zone model”
 Combustion Theory and Modelling, Vol. 8, No. 3, p. 567-592 (2004)
- S A64. Yigang Cao & W.K. Chow
 “Recursive renormalization-group calculation for the eddy viscosity and thermal eddy diffusivity of incompressible turbulence”
 Physica A, Vol. 339, No. 3-4, p. 320-338 (2004)
- S A65. W.K. Chow & S.S. Han
 “Studies on fire behaviour of video compact disc (VCD) materials with a cone calorimeter”
 Polymer Testing, Vol. 23, No. 6, p. 685-694 (2004)
- S A66. W.W. Yuen & W.K. Chow
 “The role of thermal radiation on the initiation of flashover in a compartment fire”
 International Journal of Heat & Mass Transfer, Vol. 47, No. 19-20, p. 4265-4276 (2004)

- E* A67. W.K. Chow, E.P.F. Lee, F.T. Chau & J.M. Dyke
 “The necessity of studying chemical reactions of the clean agent heptafluoropropane in fire extinguishment”
 Architectural Science Review, Vol. 47, No. 3, p. 223-228 (2004)
- E* A68. C.L. Chow, W.K. Chow & H.Y. Yuan
 “A preliminary discussion on selecting active fire protection systems for atria in green or sustainable buildings”
 Architectural Science Review, Vol. 47, No. 3, p. 229-236 (2004)
- S* A69. Yabin Yu & W.K. Chow
 “The development of primary thermometers using disordered tunneling junction arrays”
 Sensors and Actuators A, Vol. 116, No. 1, p. 79-84 (2004)
- S* A70. P.Z. Gao, S.L. Liu, W.K. Chow & N.K. Fong
 “Large eddy simulations for studying tunnel smoke ventilation”
 Tunnelling and Underground Space Technology, Vol. 19, No. 6, p. 577-586 (2004)
- S* A71. W.K. Chow
 “Fire hazard assessment on polyurethane sandwich panels for temporary accommodation units”
 Polymer Testing, Vol. 23, No. 8, p. 973-977 (2004)
- S* A72. Z. Jiang, W.K. Chow, J. Tang & S.F. Li
 “Preliminary study on the suppression chemistry of water mists on poly(methyl methacrylate) flames”
 Polymer Degradation and Stability, Vol. 86, No. 2, p. 293-300 (2004)
- E* A73. W.K. Chow & M.Y. Ng
 “Fire risk analysis on retailing areas of a new airport terminal”
 Journal of System Safety, Vol. 40, No. 5, p. 30-37 (2004)
- E* A74. L. Yi, W.K. Chow, R. Huo, N.K. Fong, Y.Z. Li, C.W. Leung, C.L. Shi, W.Y. Hung & H.B. Wang
 “Full-scale burning tests on mechanical smoke exhaust in large atrium”
 ASHRAE Transactions, Vol. 110, Part 2, p. 267-273 (2004)
- E* A75. W.K. Chow
 “Smoke control for retail shops with cabin design”
 ASHRAE Transactions, Vol. 110, Part 2, p. 417-423 (2004)
- E* A76. W.K. Chow & J. Li
 “Wind effects on performance of static smoke exhaust systems: Horizontal ceiling vents”
 ASHRAE Transactions, Vol. 110, Part 2, p. 479-488 (2004)
- S* A77. J. Qin, B. Yao & W.K. Chow
 “Experimental study of suppressing cooking oil fire with water mist using a cone calorimeter”
 International Journal of Hospitality Management, Vol. 23, No. 5, p. 545-556 (2004)
- E* A78. Raymond W.M. Choy, W.K. Chow & N.K. Fong
 “Assessing the clean agent heptafluoropropane by the cup burner test”
 Journal of Applied Fire Science, Vol. 12, No. 1, p. 23-40 (2004)
- E* A79. W.Y. Hung and W.K. Chow
 “Fire safety provisions for ultra highrise buildings consequent to the World Trade Center incident”
 Journal of Applied Fire Science, Vol. 12, No. 1, p. 41-54 (2004)
- E* A80. W.K. Chow & P.Z. Gao
 “Large eddy simulation of turbulent convective cavity flow”
 International Journal of Computational Fluid Dynamics, Vol. 18, No. 8, p. 641-650 (2004)
- S* A81. J. Qin & W.K. Chow
 “Bench-scale tests on PMMA fires with water mist”
 Polymer Testing, Vol. 24, No. 1, p. 39-63 (2005)
- S* A82. W.K. Chow & C.L. Chow
 “Evacuation with smoke control for atria in green and sustainable buildings”
 Building and Environment, Vol. 40, No. 2, p. 195-200 (2005)

- S A83. Y.F. Li & W.K. Chow
 “Optimum insulation-thickness for thermal and freezing protection”
 Applied Energy, Vol. 80, No. 1, p. 23-33 (2005)
- S A84. Y. Gao & W.K. Chow
 “Numerical studies on air flow around a cube”
 Journal of Wind Engineering & Industrial Aerodynamics, Vol. 93, No. 2, p. 115-135 (2005)
- S A85. L.H. Hu, R. Huo, Y.Z. Li, H.B. Wang & W.K. Chow
 “Full-scale burning tests on studying smoke temperature and velocity along a corridor”
 Tunnelling and Underground Space Technology, Vol. 20, No. 2, p. 223-229 (2005)
- S A86. B. Yao & W.K. Chow
 “Extinguishment of a PMMA fire by water spray with high droplet speeds”
 International Journal of Thermal Sciences, Vol. 44, No. 4, p. 410-419 (2005)
- S A87. C.L. Shi, Y.Z. Li, R. Huo, B. Yao, W.K. Chow & N.K. Fong
 “Mechanical smoke exhaust for small retail shop fires”
 International Journal of Thermal Sciences, Vol. 44, No. 5, p. 477-490 (2005)
- S A88. W.K. Chow & G.W. Zou
 “Correlation equations on fire-induced air flow rates through doorway derived by large eddy simulation”
 Building and Environment, Vol. 40, No. 7, p. 897-906 (2005)
- E A89. W.K. Chow
 “Fire hazard assessment of combustibles in big terminals”
 International Journal of Risk Assessment and Management, Vol. 5, No. 1, p. 66-75 (2005)
- E A90. Candy M.Y. Ng & W.K. Chow
 “Proposed fire safety strategy on airport terminals”
 International Journal of Risk Assessment and Management, Vol. 5, No. 1, p. 95-110 (2005)
- S A91. L. Yi, W.K. Chow, Y.Z. Li & R. Huo
 “A simple two-layer zone model on mechanical exhaust in an atrium”
 Building and Environment, Vol. 40, No. 7, p. 869-880 (2005)
- E A92. W.K. Chow
 “On carrying out atrium hot smoke tests”
 Architectural Science Review, Vol. 48, No. 1, p. 105-107 (2005)
- S A93. W.K. Chow, Guojun Xin & Shida Liu
 “A further study on multiple attractors of mixed convection in confined spaces”
 Building and Environment, Vol. 40, No. 8, p. 1021-1031 (2005)
- S A94. G.W. Zou & W.K. Chow
 “Evaluation of the field model, Fire Dynamics Simulator, for a specific experimental scenario”
 SFPE – Journal of Fire Protection Engineering, Vol. 15, No. 2, p. 77-92 (2005)
- S A95. R. Huo, X.H. Jin, W.K. Chow & N.K. Fong
 “Experimental studies on natural smoke filling in atrium due to a shop fire”
 Building and Environment, Vol. 40, No. 9, p. 1185-1193 (2005)
- S A96. E Cui & W.K. Chow
 “Simulation on indoor aerodynamics induced by an atrium fire”
 Building and Environment, Vol. 40, No. 9, p. 1194-1206 (2005)
- E A97. W.K. Chow
 “Assessment on fire hazard in a small news agent in transport terminal halls”
 ASCE - Journal of Architectural Engineering, Vol. 11, No. 1, March, p. 35-38 (2005)
- S A98. Walter W. Yuen & W.K. Chow
 “A Monte Carlo approach for the layout design of thermal fire detection system”
 NFPA – Fire Technology, Vol. 41, No. 1, p. 93-104 (2005)
- S A99. Yigang Cao & W.K. Chow
 “A theoretical analysis on Rayleigh-Taylor and Richtmyer-Meshkov mixing”
 Journal of Physics A: Mathematical and General, Vol. 38, No. 29, p. 6613-6622 (2005)

- S A100. J.Q. Wang & W.K. Chow
 “A brief review on fire retardants for polymeric foams”
 Journal of Applied Polymer Science, Vol. 97, No. 1, p. 366-376 (2005)
- E A101. W.K. Chow & J. Li
 “On atrium smoke management system design”
 ASHRAE Transactions, Vol. 111, Part 1, p. 395-406 (2005)
- E A102. Q. Kui & W.K. Chow
 “Zone modeling simulations on retail shop fires”
 ASHRAE Transactions, Vol. 111, Part 1, p. 407-415 (2005)
- S A103. W.K. Chow, L. Yi, C.L. Shi, Y.Z. Li & R. Huo
 “Experimental studies on mechanical smoke exhaust system in an atrium”
 Journal of Fire Sciences, Vol. 23, No. 5, p. 429-444 (2005)
- S A104. S.S. Han & W.K. Chow
 “Calculating FED and LC₅₀ for testing toxicity of materials in bench-scale tests with a cone calorimeter”
 Polymer Testing, Vol. 24, No. 7, p. 920-924 (2005)
- E A105. W.K. Chow and Y.F. Li
 “Modeling the interaction between fire-induced air flow and water mist with computational fluid dynamics”
 International Journal of Heat and Technology, Vol. 23, No. 1, p. 123-130 (2005)
- E A106. L.H. Hu, W.K. Chow, R. Huo, Y.Z. Li & H.B. Wang
 “Comparison of rise time of smoke plume front predicted for high space by a field model with full-scale experiments”
 ASHRAE Transactions, Vol. 111, Part 2, p. 193-202 (2005)
- S A107. W.K. Chow, J. Qin & S.S. Han
 “Bench-scale tests on controlling plastic fires with water mist”
 Chemical Engineering and Technology, Vol. 28, No. 9, p. 1041-1047 (2005)
- S A108. Yigang Cao & W.K. Chow
 “Langevin dynamics of fluid monolayer pinning on a disordered substrate”
 Physica A, Vol. 348, No. 1, p. 74-84 (2005)
- E A109. Wan Ki Chow
 “Research and education in fire engineering in Hong Kong”
 International Journal for Fire Science and Technology, Vol. 24, No. 2 (Special Issue), p. 99-111 (2005)
- E A110. Walter Wah Yuen & Wan Ki Chow
 “A new method for selecting the design fire for safety provision”
 International Journal for Fire Science and Technology, Vol. 24, No. 3, p. 133-149 (2005)
- S A111. W.K. Chow & Y. Gao
 “On using the wall function and the staggered grid arrangement at upwind sharp convex corners in simulating approach air flow”
 International Journal of Computational Fluid Dynamics, Vol. 19, No. 5, p. 381-398 (2005)
- S A112. E.P.F. Lee, J.M. Dyke, W.K. Chow, F.T. Chau, D.K.W. Mok
 “The heat of formation of 2-H heptafluoropropane by ab initio calculations”
 Chemical Physics Letters, Vol. 402, p. 32-36 (2005)
- E A113. W.K. Chow
 “Building fire safety in the Far East”
 Architectural Science Review, Vol. 48, No. 4, p. 285-294 (2005)
- S A114. W.K. Chow, S.S. Han & W.F. Du
 “‘Bridge-mixing’ of gasified fuel vapours and simultaneous ignitions of different combustibles at flashover”
 Journal of Fire Sciences, Vol. 24, No. 1, p. 65-76 (2006)
- S A115. W.K. Chow & S.S. Han
 “Superposition of heat release rate curves for combustibles with bench-scale tests”
 Polymer Testing, Vol. 25, No. 1, p. 75-82 (2006)

- S A116. E.P.F. Lee, J.M. Dyke, W.K. Chow, F.T. Chau, D.K.W. Mok
 “DFT and ab initio calculations on the reaction between fluorine atoms and the fire suppressant, 2-H heptafluoropropane”
 Chemical Physics Letters, Vol. 417, p. 256-260 (2006)
- S A117. W.K. Chow & W.Y. Hung
 “Effect of cavity depth on smoke spreading of double-skin facade”
 Building and Environment, Vol. 41, No. 7, p. 970-979 (2006)
- S A118. J. Qin & W.K. Chow
 “Bench-scale studies on poly(vinylchloride) fires with water mist”
 Journal of Applied Polymer Science, Vol. 99, No. 5, p. 2520-2527 (2006)
- S A119. W.K. Chow, L. Yi, C.L. Shi, Y.Z. Li & R. Huo
 “Mass flow rates across layer interface in a two-layer zone model in an atrium with mechanical exhaust system”
 Building and Environment, Vol. 41, No. 5, p. 1198-1202 (2006)
- S A120. W.R. Zeng & W.K. Chow
 “Reaction mechanisms of methane for modelling combustion and suppression”
 Asian Journal of Chemistry, Vol. 18, No. 3, p. 1719-1745 (2006)
- S A121. L.H. Hu, R. Huo, W. Peng, W.K. Chow and R.X. Yang
 “On the maximum smoke temperature under the ceiling in tunnel fires”
 Tunnelling & Underground Space Technology, Vol. 21, No. 4, p. 650-655 (2006)
- E A122. W.K. Chow & Y.F. Li
 “Modeling thermal radiation in fire control with clean agent and water mist with computational fluid dynamics”
 International Journal of Heat and Technology, Vol. 23, No. 2, p. 81-87 (2005)
- E A123. Li Shu-ying, Chow Wan-ki & Liu Shun-long
 “Possibility of simulating turbulent flow by the Lattice Boltzmann method”
 International Journal of Heat and Technology, Vol. 23, No. 2, p. 89-94 (2005)
- S A124. Jiang Zhi, Yuan Kai-jun, Li Shu-fen & Chow W K
 “Study of FTIR spectra and thermal analysis of polyurethane” – in Chinese
 Spectroscopy and Spectral Analysis, Vol.26, No.4, p.624-628 (2006)
- E A125. K.P. Cheng, W.K. Chow & S. Han
 “On assessing flammability of textiles”
 Research Journal of Textile and Apparel, Vol. 10, No. 1, p. 65-72 (2006)
- S A126. W.K. Chow & C.W. Leung
 “Necessity of testing fire behaviour of plastic materials under flashover”
 Polymer Testing, Vol. 25, No. 6, p. 853-858 (2006)
- S A127. B. Yao & W.K. Chow
 “Numerical modeling for compartment fire environment under a solid-cone water spray”
 Applied Mathematical Modelling, Vol. 30, No. 12, p. 1571-1586 (2006)

S *Science Citation Index and Engineering Index*

E *Engineering Index only*

(B) Refereed International Conference Papers (Total: 103) :

- B1. W.K. Chow
 “On the possibility of implementing building performance-based codes: Energy and fire”
 An invited paper at the International Symposium on A Study of Management Technologies for Building organized by Division of Energy Commission, Ministry of Economics Affairs, Government of Republic of China, held at National Taipei University of Technology, Taipei, Taiwan, 10 September 2002 (2002)

- B2. W.Y. Hung & W.K. Chow
 “Architecture features for the environmental friendly century”
 Sustainable Building 2002: 3rd International Conference on Sustainable Building, 23-25 September 2002, Oslo, Norway – Paper 011 presented at the Session on New Symbiotic Building and Environmental Technology – The Future Scope in Subtropical Region (2002)
- B3. J. Hao, C.W. Leung & W.K. Chow
 “Fire safety provision and fire retardants in karaoke buildings”
 Proceedings of the Society for the Advancement of Material and Process Engineering, SAMPE 34th Conference, November 4-7, 2002, Renaissance Harbor Place Hotel, Baltimore, Maryland, USA, Edited by A.B. Goldberg, M.C. Moher, J.S. Harris and A.J. Vizzins, M&P – Ideas to Reality, Vol. 34, p. 672-684 (2002)
- B4. W.W. Yuen, S.S. Han & W.K. Chow
 “The effect of thermal radiation on the dynamics of flashover in a compartment fire”
 6th ASME-JSME Thermal Engineering Joint Conference, March 16-20, 2003, Hapuna Beach Prince Hotel, Kohala Coast, Hawaii Island, Hawaii, USA, Paper TED-AJ03-127 (2003)
- B5. C.W. Leung, W.W. Yuen & W.K. Chow
 “A practical model on flame spreading over materials”
 6th ASME-JSME Thermal Engineering Joint Conference, March 16-20, 2003, Hapuna Beach Prince Hotel, Kohala Coast, Hawaii Island, Hawaii, USA, Paper TED-AJ03-128 (2003)
- B6. Wan K. Chow & Fengyun Liu
 “Outline of fire safety in the Qing Dynasty”
 Proceedings of the International Symposium on Protection of Cultural Heritage Buildings from Fire, 6-7 April 2003, Kyoto, Japan, p. 34-41 (2003)
- B7. Y.B. Yu & W.K. Chow
 “Disordered nanometer-sized junction arrays as coulomb blockade thermometers”
 Proceedings of the ICCE/10 Tenth International Conference on Composites/Nano Engineering, Edited by David Hui, July 20-26, 2003, New Orleans, USA, p.801-802 (2003)
- B8. W.K. Chow
 “Wind environment for a high-rise building adjacent to a vertical wall”
 Keynote speech presented at the International Conference on Sustainable Development in Building and Environment, SET2 (Sustainable Energy Technology), held on 24-27 October 2003, Chongqing, China and appeared also in Journal of Chongqing University (English Edition) Vol. 2, Special Issue, October, p. 19-25 (2003)
- B9. C.L. Chow & W.K. Chow
 “Artificial lighting for green or sustainable buildings and their fire safety concerns”
 A paper presented at the International Conference on Sustainable Development in Building and Environment, SET2 (Sustainable Energy Technology), held on 24-27 October 2003, Chongqing, China and appeared also in Journal of Chongqing University (English Edition), p. 36-40 (2003)
- B10. H.H. Wu & W.K. Chow
 “Fire safety management in hotel”
 A paper presented at the International Conference on Sustainable Development in Building and Environment, SET2 (Sustainable Energy Technology), held on 24-27 October 2003, Chongqing, China and appeared also in Journal of Chongqing University (English Edition), p. 236-241 (2003)
- B11. W.K. Chow
 “Review on fire models and their application to design based on 'fire engineering approach”
 Keynote Lecture – International Conference on Building Fire Safety, 20-21 November 2003, Gardens Point Campus, Queensland University of Technology, Brisbane, Queensland, Australia; appeared in the proceedings, p. 12-24 (2003)
- B12. C.L. Chow, W.K. Chow & Z.A. Lu
 “Assessment of smoke toxicity of building materials”
 Proceedings of the 6th Asia-Oceania Symposium on Fire Science & Technology, Daegu, Korea, 17-20 March 2004, p. 132-142 (2004)

- B13. N. Zhu & W.K. Chow
 “A brief review on design and operation principles for nozzles discharging water mist”
 Proceedings of the 6th Asia-Oceania Symposium on Fire Science & Technology, Daegu, Korea, 17-20 March 2004, p. 946-957 (2004)
- B14. L.H. Hu, W.K. Chow, R. Huo, Y.Z. Li & H.B. Wang
 “Comparison of rise time of smoke plume front predicted by a field model with full-scale experiments”
 Proceedings of the 6th Asia-Oceania Symposium on Fire Science & Technology, Daegu, Korea, 17-20 March 2004, p. 459-468 (2004)
- B15. W.K. Chow
 “Fire safety concerns in green and sustainable buildings”
 Keynote speech at 7th International Symposium on Building and Urban Environmental Engineering, 11-14 May 2004, Tianjin University, Tianjin, China (2004)
- B16. W.K. Chow
 “A fire safety ranking system OB-FSRS for old highrise buildings”
 Proceedings of the 7th International Symposium on Building and Urban Environmental Engineering 2004, May 11-15, 2004, Tianjin University, Tianjin, China, p. 298-306 (2004)
 Appeared also at the Transactions of Tianjin University Vol. 19, Supplementary, p. 15-18 (2003)
- B17. G.W. Zou, N.K. Fong, W.K. Chow, Y. Gao & H. Dong
 “Field measurement of optical smoke density in studying water curtain”
 Proceedings of the 7th International Symposium on Building and Urban Environmental Engineering 2004, May 11-15, 2004, Tianjin University, Tianjin, China, p. 354-356 (2004)
- B18. K.P.S. Cheng & W.K. Chow
 “Flammability of textiles”
 Proceedings of The Textile Institute 83rd World Conference (83th TIWC) “Quality Textiles for Quality Life”, Edited by College of Textiles, Donghua University, May 23-27, 2004, Shanghai, China, Vol. 2, p. 603-606 (2004)
- B19. Candy M.Y. Ng & W.K. Chow
 “Computer simulation of crowd movement in a big airport terminal for safety assessment”
 Proceedings of 22nd International System Safety Conference, 2-6 August 2004, Providence, Rhode Island, USA, p. 423-432 (2004)
- B20. Y.F. Li & W.K. Chow
 “Computational fluid dynamics simulation of fire-induced air flow in a large space building: Key points to note”
 Proceedings of HT-FED04, 2004 ASME Heat Transfer/Fluids Engineering Summer Conference, July 11-15, 2004, Charlotte, North Carolina, USA, paper HT-FED04-56656, 7 pages (2004)
- B21. B. Yao, J. Qin & W.K. Chow
 “Experimental study on water mist suppression of poly(methyl methacrylate) PMMA fires”
 Proceedings of HT-FED04, 2004 ASME Heat Transfer/Fluids Engineering Summer Conference, July 11-15, 2004, Charlotte, North Carolina, USA, paper HT-FED04-56674, 7 pages (2004)
- B22. W.K. Chow
 “Application of Computational Fluid Dynamics: Fire safety awareness for gas station in dense urban areas with wind effects”
 Proceedings of HT-FED04, 2004 ASME Heat Transfer/Fluids Engineering Summer Conference, July 11-15, 2004, Charlotte, North Carolina, USA, paper HT-FED04-56699, 9 pages (2004)
- B23. L. Yi, R. Huo, Y.Z. Li, W.K. Chow & N.K. Fong
 “On evaluating static smoke exhaust system in an atrium”
 Proceedings of HT-FED04, 2004 ASME Heat Transfer/Fluids Engineering Summer Conference, July 11-15, 2004, Charlotte, North Carolina, USA, paper HT-FED04-56704, 6 pages (2004)

- B24. C.L. Shi, Y.Z. Li, R. Huo, B. Yao, W.K. Chow & N.K. Fong
 “Mechanical smoke exhaust for small retail shop fires”
 Proceedings of the 2004 ASME International Mechanical Engineering Congress (IMECE04) held at Anaheim, California, Anaheim Hilton, USA, 13-20 November 2004, Paper IMECE2004-59301 (2004)
- B25. S.S. Han & W.K. Chow
 “Assessing the fire behaviour of polycarbonate materials by a cone calorimeter”
 Proceedings of the 7th Asia-Pacific International Symposium on Combustion and Energy Utilization, December 15-17, 2004, Hong Kong Special Administrative Region, China, Paper A5-307 (2004)
- B26. H. Dong, G.W. Zou, Y. Gao, W.K. Chow & C.W. Leung
 “Assessment of fire retardant coatings by full-scale burning tests”
 Proceedings of the 7th Asia-Pacific International Symposium on Combustion and Energy Utilization, December 15-17, 2004, Hong Kong Special Administrative Region, China, Paper A5-310 (2004)
- B27. Candy M.Y. Ng & W.K. Chow
 “Numerical studies on evacuation design in airport terminals”
 Proceedings of Interflam 2004, 10th International Conference on Fire Science and Engineering held at Edinburgh, Scotland, UK, 5th to 7th July, 2004, p. 749-755 (2004)
- B28. S.C. Tsui & W.K. Chow
 “A holistic approach to fire safety management for high-rise multiple occupancy building”
 Proceedings of the 5th International Conference on Performance-Based Codes and Fire Safety Design Methods, 6-8 October 2004, European Commission Facilities, Luxembourg, p. 421-433 (2004)
- B29. J. Li, P. Lu, N. Fong, W. Chow, L. Wong & D. Xu
 “Automatic flame tracing technique for atrium fire from video images”
 APOC 2004, Asia-Pacific Optical Communications, 7-11 November 2004, Beijing, China, Paper 5637-54 (2004)
- B30. W.K. Chow
 “Research and education in fire engineering in Hong Kong”
 Proceedings of the 2nd International Symposium on the 21st Century Centre of Excellence Programme, March 7-9, 2005, Tokyo & Chiba – Invited paper, p. 118-125 (2005)
- B31. W.K. Chow
 “A brief report on fire engineering activities at The Hong Kong Chapter, Society of Fire Protection Engineers”
 Proceedings of the 2nd International Symposium on the 21st Century Centre of Excellence Programme, March 7-9, 2005, Tokyo & Chiba – Invited paper, p. 157-159 (2005)
- B32. L. Yi, Y.Z. Li, R. Huo & W.K. Chow
 “Full-scale burning tests on atrium mechanical smoke exhaust system under quasi-steady vented stage”
 Proceedings of the 6th World Conference on Experimental Heat Transfer, Fluid Mechanics, and Thermodynamics, April 17-21, 2005, Matsushima, Miyagi, Japan, Edited by N. Kasagi, S. Maruyama, H. Yoshida and T. Inoue, p. 486-487 (2005)
- B33. Walter W. Yuen & W.K. Chow
 “Analysis of radiation heat transfer in an enclosure fire including the effect of scattering”
 ASME 2005 Summer Heat Transfer Conference, July 17-22, 2005, Westin St. Francis, San Francisco, CA, USA, Paper HT2005-72350, 12 pages (2005)
- B34. W.K. Chow
 “Atrium smoke exhaust and technical issues on hot smoke tests”
 ASME 2005 Summer Heat Transfer Conference, July 17-22, 2005, Westin St. Francis, San Francisco, CA, USA, Paper HT2005-72412, 4 pages (2005)
- B35. C.F. Zhang, R. Huo, Y.Z. Li & W.K. Chow
 “Stability of smoke layer under sprinkler water spray”
 ASME 2005 Summer Heat Transfer Conference, July 17-22, 2005, Westin St. Francis, San Francisco, CA, USA, Paper HT2005-72482, 4 pages (2005)

- B36. D.K. McGrail, S.F. Lay & W.K. Chow
 “Fire engineering the tallest building in the historic city of Manchester, UK”
 Council of the Tall Buildings and Urban Habitat CTBUH 2004, held at Seoul, Korea, 10-13 October 2004, p. 735-742 (2004)
- B37. Q. Chen & W.K. Chow
 “Discussion on ‘work under stress’ as an occupational disease in the Far East”
 23rd International System Safety Conference, August 22-26, 2005, San Diego, California, USA, Paper S22 P3, 8 pages (2005)
- B38. W.K. Chow & Gigi C.H. Lui
 “A brief review on occupational safety and health regulations in Hong Kong”
 23rd International System Safety Conference, August 22-26, 2005, San Diego, California, USA, Paper S22 P4, 10 pages (2005)
- B39. W.K. Chow
 “On estimating heat release rate for a design fire in sprinkler protected area”
 Proceedings of 2005 Asia-Pacific Conference on Risk Management and Safety, 1-2 December 2005, Hong Kong, p. 121-129 (2005)
- B40. W.K. Chow
 “Experimental studies on fire engineering systems for non-industrial workplaces”
 CIBSE National Conference 2006 – Engineering the Future, 21st & 22nd March 2006, London, UK – Poster presentation (2006)
- B41. W.K. Chow & Elaine Y.L. Ma
 “Experimental studies on thermal and smoke blockage by water curtains”
 9th AIAA/ASME Joint Thermophysics and Heat Transfer Conference, 5-8 June 2006, San Francisco, California, USA, Paper AIAA-2006-3287 presented (2006)
- B42. W.K. Chow, Y. Gao, G.W. Zou & H. Dong
 “Performance evaluation of sidewall long-throw sprinklers at height”
 9th AIAA/ASME Joint Thermophysics and Heat Transfer Conference, 5-8 June 2006, San Francisco, California, USA, Paper AIAA-2006-3288 presented (2006)
- B43. W.K. Chow
 “Fire engineering approach and discussion on the design fire”
 Proceedings of 6th International Conference on Performance-Based Codes on Fire Safety Design Methods, June 14-16, 2006, Tokyo, Japan, p. 148-161 (2006)
- B44. W.K. Chow, N.K. Fong, Edgar C.L. Pang, Fred K.W. Lau & Kenny S.M. Kong
 “Case study for performance-based design in Hong Kong”
 Project presented at 6th International Conference on Performance-Based Codes and Fire Safety Design Methods, June 14-16, 2006, Tokyo, Japan, p. 148-161 (2006)
- B45. W.K. Chow
 “Atrium smoke control in Hong Kong”
 ASHRAE Meeting on Smoke Control and the Codes, 24-28 June 2006, Quebec City, Canada, Paper 4, Seminar 16 (2006)
- B46. Chen Qiang & W.K. Chow
 “Proposed occupational health and safety management for the catering industry in China”
 Work Congress, 7th International Congress on Work Injuries Prevention, Rehabilitation and Compensation 2006, 27-29 June 2006, Hong Kong Convention and Exhibition Centre, Hong Kong, Session 1A: OSH Management, Paper 2 (2006)
- B47. W.K. Chow, Joey Cheung and S.S. Han
 “Fire load survey of non-industrial workplaces for small and medium enterprises”
 Work Congress, 7th International Congress on Work Injuries Prevention, Rehabilitation and Compensation 2006, 27-29 June 2006, Hong Kong Convention and Exhibition Centre, Hong Kong, Session 1F: OSH in SMEs, Paper 4 (2006)
- B48. W.K. Chow & S.C. Tsui
 “Discussions on fire safety requirements for office buildings in Hong Kong”
 Proceedings of BUEE2006, 8th International Symposium on Building and Urban Environmental Engineering, held at Tokyo Institute of Technology, Tokyo, Japan, July 10-13, 2006, p. 185-189 (2006)

- B49. H.H. Wu, W.K. Chow, G.W. Zou, H. Dong & Y. Gao
 “Performance evaluation of fire services installation in kitchens of big hotels”
 Proceedings of BUÉE2006, 8th International Symposium on Building and Urban Environmental Engineering, held at Tokyo Institute of Technology, Tokyo, Japan, July 10-13, 2006, p. 226-231 (2006)
- B50. Y. Gao & W.K. Chow
 “Wall function at the upwind sharp convex corners in simulating incident air flow on a cube”
 Proceedings of the Fourth International Symposium on Computational Wind Engineering (CWE 2006) held at Pacifico Yokohama, Yokohama, Japan, July 16-19, 2006, p. 629-632 (2006)
- (C) ***Others :***
- C1. W.K. Chow
 “Preliminary views on implementing Engineering Performance-Based Fire Codes in Hong Kong: What should be done?”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 1, p. 1-9 (2002)
- C2. L. Meng & W.K. Chow
 “Mathematical analysis and possible application of the two-layer zone model FIRM”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 1, p. 13-22 (2002)
- C3. Wen-ru Zeng, Shu-fen Li & W.K. Chow
 “Combustion characteristics and formation mechanisms of CO and CO₂ of PMMA”
 Journal of Fuel Chemistry and Technology, Vol. 30, No. 2, p. 151-155 (2002)
- C4. T.Y. Chao & W.K. Chow
 “A review on the applications of finite element method to heat transfer and fluid flow”
 International Journal on Architectural Science, Vol. 3, No. 1, p. 1-19 (2002)
- C5. W.K. Chow
 “Should smoke management system be provided in karaoke establishments?”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 2, p. 30-34 (2002)
- C6. S.C. Tsui & W.K. Chow
 “Review on the local Code of Practice for the Provision of Means of Escape”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 2, p. 35-50 (2002)
- C7. J. Hao & W.K. Chow
 “Fire safety in karaokes: Survey on available fire retardant FR coatings”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 2, p. 51-53 (2002)
- C8. W.K. Chow
 “Review on heat release rate of burning furniture”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 2, p. 54-59 (2002)
- C9. S.L. Liu & W.K. Chow
 “A review on numerical simulation of turbulent flow”
 International Journal on Architectural Science, Vol. 3, No. 2, p. 77-102 (2002)
- C10. Gao Ye & Chow Wan-ki
 “Effects of wind movement on smoke and dispersion of pollutant in high buildings” - in Chinese
 Journal of Harbin Engineering University, Vol. 23, No. 1, p. 113-119 (2002)
- C11. Chow W.K. & Gao Y.
 “The influence of wind on the fire flow field in multi-storey” - in Chinese
 Acta Aerodynamica Sinica – KongQiDongLiXue XueBao, Vol. 20, No. 3, p. 289-299 (2002)

- C12. Chow Wan-ki & Gao Ye
 “Numerical simulation on the wind action and fire-induced flow field of an international finance building in Beijing” – in Chinese
 Acta Aerodynamica Sinica – KongQiDongLiXue XueBao, Vol. 20, No. 3, p. 351-360 (2002)
- C13. Zhou Yunji (W.K. Chow) & Liu Fengyun
 “Fire-fighting organizations and equipment in the Qing Dynasty” – in Chinese
 Palace Museum Journal, Vol. 6 (overall 104), p. 1-7 (2002)
- C14. H.W. Au Yeung & W.K. Chow
 “Necessity of testing furniture materials with a cone calorimeter”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 3, p. 60-67 (2002)
- C15. W.Y. Hung & W.K. Chow
 “Review on the requirements on fire resisting construction”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 3, p. 68-83 (2002)
- C16. H.W. Au Yeung & W.K. Chow
 “Cone calorimeter studies: Effect of radiative heat flux and sample thickness on burning of plywood samples”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 4, No. 4, p. 106-109 (2002)
- C17. Zeng Wen-ru, Li Shu-fen and Chow W.K.
 “Chemical kinetics on thermal oxidative degradation of PMMA”
 Journal of Chemical Physics (in Chinese), Vol. 16, No. 1, p. 64-68 (2003)
- C18. Gigi C.H. Lui & W.K. Chow
 “Comments on "exchange rate" imposed in the local Factories and Industrial Undertakings (Noise at Work) Regulation”
 International Journal on Architectural Science, Vol. 3, No. 4, p. 163-170 (2002)
- C19. R. Yin & W.K. Chow
 “Comparison of four algorithms for solving pressure-velocity linked equations in simulating atrium fire”
 International Journal on Architectural Science, Vol. 4, No. 1, p. 24-35 (2003)
- C20. W.K. Chow & C.L. Chow
 “Awareness of fire safety for green and sustainable buildings” – in Chinese
 Asian Fire Fighting and Security, Vol. 11, April, p. 55-58 (2003)
- C21. W.K. Chow
 “Observation on the two recent bus fires and preliminary recommendations to provide fire safety”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 5, No. 1, p. 1-5 (2003)
- C22. W.K. Chow, Gaowan Zou, Hui Dong & Ye Gao
 “Necessity of carrying out full-scale burning tests for post-flashover retail shop fires”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 5, No. 1, p. 20-27 (2003)
- C23. Gigi C.H. Lui & W.K. Chow
 “A short note on experimental verification of zone models with an electric heater”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 5, No. 2, p. 30-32 (2003)
- C24. Q. Kui, W.K. Chow, Y. Gao and S.L. Liu
 “A study on plume equation in a chamber with forced ventilation”
 International Journal on Architectural Science, Vol. 4, No. 3, p. 123-140 (2003)
- C25. C.L. Chow & W.K. Chow
 “Assessing fire safety provisions for satisfying green or sustainable building design criteria: Preliminary suggestions”
 International Journal on Architectural Science, Vol. 4, No. 3, p. 141-146 (2003)

- C26. C.L. Shi, R. Huo, Y.Z. Li, L. Yi, N.K. Fong, W.K. Chow, W.Y. Hung & K.S.Y. Cheng
 “Design and implementation of distributed data acquisition system based on fieldbus for large space fire test”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 5, No. 3, p. 82-90 (2003)
- C27. Wen-ru Zeng, Shu-fen Li and W.K. Chow
 “The thermal degradation of poly(methylmethacrylate)”
 Polymer Materials Science and Engineering (in Chinese), Vol. 19, No. 3, p. 12-16 (2003)
- C28. Wenru Zeng, Shufen Li & W.K. Chow
 “Study of the combustion mechanisms of poly(methyl methacrylate)”
 Polymer Materials Science and Engineering (in Chinese), Vol. 19, No. 6, p. 183-186 (2003)
- C29. Lan Meng & W.K. Chow
 “Numerical simulation of fire in a single-room by using a two-layer zone model”
 Journal of Harbin Engineering University, Vol. 23, No. 4, p. 56-61 (2002)
- C30. Yuanzhou Li, Ran Huo, Liang Yi, Guodong Wang & W.K. Chow
 “Experimental studies on the effect of the fire position on plume entrainment in a large space”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 5, No. 4, p. 138-145 (2003)
- C31. L. Yi, R. Huo, Y.Z. Li, R. Feng & W.K. Chow
 “Numerical studies on atrium smoke movement induced by a shop fire”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 5, No. 4, p. 163-169 (2003)
- C32. W.K. Chow
 “Fire safety in train vehicle: Design based on accidental fire or arson fire?”
 The Green Cross, March/April, 7 pages (2004)
- C33. W.K. Chow
 “A short note on fire safety for new architectural features”
 International Journal on Architectural Science, Vol. 5, No. 1, p. 1-4 (2004)
- C34. Y.F. Li & W.K. Chow
 “Application of Computational Fluid Dynamics for simulating fire-induced air flow in a large terminal hall”
 International Journal on Architectural Science, Vol. 5, No. 1, p. 20-34 (2004)
- C35. W.K. Chow
 “Arson fire in train compartment”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 1, p. 1-4 (2004)
- C36. Ran Huo, Weichang Fan, W.K. Chow and N.K. Fong
 “Fire safety and technology research centre for large space”
 International Journal on Engineering Performance-based Fire Codes, Vol. 6, No. 1, p. 19-27 (2004)
- C37. W.K. Chow
 “Fire control safety idea of super building” – in Chinese
 Safety Bimonthly (An Quan), Vol. 25, No. 3, p. 7-11 (2004)
- C38. Leung Cheuk-wai & Chow Wan-ki
 “Recommendation on assessing flame spreading of materials using ISO9705”
 Fire Science and Technology (Xiaofang Kexue Yu Jishi), Vol. 23, No. 3, p. 226-232 (2004)
- C39. W.K. Chow
 “Aspects of fire safety in ultra highrise buildings”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 2, p. 47-52 (2004)
- C40. W.W. Yuen & W.K. Chow
 “A new method of assessing uncertainties in designing building fire safety provisions”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 2, p. 78-86 (2004)

- C41. Zou Gao-wan, Liu Shun-long, Zhou Yun-ji (W.K. Chow) & Gao Ye
 “Survey of ship engine-room fire in China” – in Chinese
 China Safety Science Journal, Vol. 14, No. 5, p 76-79 (2004)
- C42. Gao Pu-zhen, Liu Shun-long & Chow W.K.
 “Large eddy simulation of smoke movement in mall” – in Chinese
 Journal of Thermal Science and Technology, Vol. 3, No. 2, p. 116-120 (2004)
- C43. W.K. Chow
 “Fire safety of the railway systems”
 International Journal on Architectural Science, Vol. 5, No. 2, p. 35-42 (2004)
- C44. W.K. Chow
 “Application of the software fire dynamics simulator in simulating retail shop fires”
 Fire Safety Science, Vol. 13, No. 1, p. 18-27 (2004)
- C45. W.K. Chow
 “Prevention and emergency measure of fire accidents in the railway”
 Safety Bimonthly (An Quan), Vol. 25, No. 5, p. 1-6 (2004)
- C46. W.K. Chow
 “Necessity of carrying out full-scale burning tests to measure the heat release rate of combustibles”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 3, p. 88-93 (2004)
- C47. W.K. Chow, Candy M.Y. Ng, G.W. Zou, H. Dong & Y. Gao
 “Full-scale burning tests for retail shop fires: Preliminary studies”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 3, p. 94-121 (2004)
- C48. C.W. Leung, W.K. Chow, Gaowan Zou, Hui Dong & Ye Gao
 “Assessment of timber partition materials with fire retardants with a room calorimeter”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 3, p. 122-154 (2004)
- C49. W.K. Chow, W.Y. Hung, G.W. Zou, H. Dong & Y. Gao
 “Preliminary experimental study of double-skinned facade”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 3, p. 155-167 (2004)
- C50. W.K. Chow, S.S. Han, H. Dong, Y. Gao & G.W. Zou
 “Full-scale burning tests on heat release rates of furniture”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 3, p. 168-180 (2004)
- C51. Li Jin, Fong N.K., Chow W.K., Wong L.T., Lu Puyi & Xu Dian-guo
 “The motion analysis of fire video images based on moment features and flicker frequency”
 Journal of Marine Science and Application, Vol. 3, No. 1, p. 81-86 (2004)
- C52. W.K. Mok & W.K. Chow
 “Verification and validation' in modeling fire by computational fluid dynamics”
 International Journal on Architectural Science, Vol. 5, No. 3, p. 58-67 (2004)
- C53. W.K. Chow
 “A note on the 2004 Sino-Japan Work Safety Symposium”
 International Journal on Architectural Science, Vol. 5, No. 3, p. 68-71 (2004)
- C54. W.K. Chow, Y. Cao & N.K. Fong
 “Necessity on studying physics of buoyancy-induced turbulence in building services engineering”
 International Journal on Architectural Science, Vol. 5, No. 4, p. 88-90 (2004)
- C55. C.L. Chow, W.K. Chow, N.K. Fong, Z. Jiang & S.S. Han
 “Assessing fire behaviour of common building materials with a cone calorimeter”
 International Journal on Architectural Science, Vol. 5, No. 4, p. 91-98 (2004)
- C56. W.K. Chow, W.Y. Hung, C.W. Leung, C.H. Lui & N.K. Fong
 “The necessity of offering higher education in Fire and Safety Engineering in Hong Kong”
 Fire Safety Science, Vol. 13, No. 3, p. 186-195 (2004)

- C57. Q. Kui & W.K. Chow
 “Two-layer fire zone models with symbolic mathematics”
 Fire Safety Science, Vol. 15, No. 2, p. 61-74 (2005)
- C58. W.K. Chow & W.Y. Hung
 “Possible collapse scenarios of the World Trade Center twin towers”
 Asian Fire Fighting & Security Journal, June, p. 24-37 (2005)
- C59. W.K. Chow
 “Fire safety engineering: A new subject area”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 6, No. 4, p. 181-187 (2004)
- C60. W.K. Chow
 “Comment on estimating heat release rate for a design fire in sprinkler protected area”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 7, No. 1, p. 1-5 (2005)
- C61. W.K. Chow & J. Li
 “Notes on sizing of horizontal ceiling vents with traditional flow model”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 7, No. 1, p. 8-14 (2005)
- C62. G.W. Zou & W.K. Chow
 “Numerical studies on fire environment by a field model”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 7, No. 1, p. 18-34 (2005)
- C63. W.K. Chow & W.R. Zeng
 “Reviewing on the combustion tests suitable for fire studies”
 Asian Fire Fighting & Security Journal, Vol. 27, December, p. 24-34 (2005)
- C64. Y. Gao & W.K. Chow
 “A brief review on combustion modeling”
 International Journal on Architectural Science, Vol. 6, No. 2, p. 38-69 (2005)
- C65. Dong Hui, Zou Gao-wan, Gao Ye & Chow Wan-ki
 “Studying fire retardants in ISO 9705 fire room”
 Journal of Harbin Engineering University, Vol. 26, No. 1, p. 35-38 (2005)
- C66. W.K. Chow & J. Li
 “Review on design guides for smoke management system in atrium”
 Fire Safety Science, Vol. 14, No. 3, p. 182-198 (2005)
- C67. B.H. Cong, G.X. Liao & W.K. Chow
 “Review of modeling fire suppression by water sprays by Computational Fluid Dynamics”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 7, No. 2, p. 35-56 (2005)
- C68. W.K. Chow & J. Li
 “Review on design guides for smoke management system in an atrium”
 International Journal on Engineering Performance-Based Fire Codes, Vol. 3, No. 2, p. 65-87 (2005)
- C69. Jiang Zhi, Li Shufen, Yu Shuqin, Chow Wan Ki & Chow Cheuk Lun
 “A brief review on combustion behavior of polyvinyl chloride PVC and smoke suppression”
 Asian Fire Fighting & Security Journal, June, No. 30, p. 24-29 (2006)

(D) Presentations :

- D1. W.K. Chow
 “Essential fire safety provision for highrise buildings in Hong Kong: Lessons learnt from World Trade Centre Incident”
 Keynote Speech to Hong Kong Institute of Construction Managers, 8 January 2002, SPACE – Building, University of Hong Kong, Hong Kong (2002)

- D2. W.K. Chow
 “Importance of heat release rate in fire safety engineering and full-scale burning facility”
 Seminar on Fire Engineering in Structures, Hong Kong Institute of Steel Construction, 2 February 2002, The Hong Kong Polytechnic University, Hong Kong – Invited speaker (2002)
- D3. W.K. Chow
 “Fire safety of small retail shops in terminal halls”
 Proceedings of the Chongqing – Hong Kong Joint Symposium 2002 on System Design and Operation for Enhancing Sustainability of Buildings, 8-10 July 2002, Chongqing, China, p. A1-A9 (2002)
- D4. W.Y. Hung & W.K. Chow
 “Several points of concern on fire resisting construction”
 Proceedings of the Chongqing – Hong Kong Joint Symposium 2002 on System Design and Operation for Enhancing Sustainability of Buildings, 8-10 July 2002, Chongqing, China, p. A72-A79 (2002)
- D5. Gigi C.H. Lui & W.K. Chow
 “Review on the use of heptafluoropropane as clean agent for gas protection systems”
 Proceedings of the Chongqing – Hong Kong Joint Symposium 2002 on System Design and Operation for Enhancing Sustainability of Buildings, 8-10 July 2002, Chongqing, China, p. A132-A141 (2002)
- D6. W.K. Chow
 “Fire engineering approach for building design in Hong Kong”
 International Conference on Advances in Building Technology, 4-6 December 2002, Sheraton Hong Kong Hotel & Towers, Faculty of Construction and Land Use, The Hong Kong Polytechnic University – Paper presented (2002)
- D7. W.K. Chow
 “Fire safety engineering: A new subject area”
 Education Symposium on Advanced Fire Research, 10-15 January 2003, State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui, China – Paper presented, January (2003)
- D8. W.K. Chow & C.L. Chow
 “Awareness of fire safety for green and sustainable buildings”
 Paper 2, Session 3 on “Fire engineering and the community”, International Conference – Fire Asia 2003, 26-28 February 2003, Hong Kong (2003)
- D9. W.K. Chow
 “Fire safety engineering and potential application of fire models”
 Proceedings of the Advanced Fire Research and Necessity on Modelling Fire and Smoke Management as part of the National 973 Project “Fire Dynamics and Fundamentals of Fire Safety, 5 September 2003, Tsinghua University, Beijing, China – Paper presented and appeared in International Journal on Engineering Performance-Based Fire Codes, Vol. 5, No. 4, p. 92-101 (2003)
- D10. Leung Cheuk-wai & Chow Wan-ki
 “Recommendation on assessing flame spreading materials using ISO 9705”
 Proceedings of the International Symposium on Fire Science and Fire-protection Engineering (2003 ISFSFE) on 12-15 October 2003, Beijing, China, p. 204-211 (2003)
- D11. Chow Cheuk-lun, Fong Nai-kong & Chow Wan-ki
 “Assessment of materials by toxic potency data: A preliminary study”
 Proceedings of the International Symposium on Fire Science and Fire-protection Engineering (2003 ISFSFE) on 12-15 October 2003, Beijing, China, p. 270-275 (2003)
- D12. Hung Wing-yan & Chow Wan-ki
 “Fire safety in new architectural design associated with the extensive use of glass”
 Proceedings of the International Symposium on Fire Science and Fire-protection Engineering (2003 ISFSFE) on 12-15 October 2003, Beijing, China, p. 389-396 (2003)

- D13. Li Junmei & Chow Wan-ki
 “Evacuation for fire safety in an atrium under different uses”
 Proceedings of the International Symposium on Fire Science and Fire-protection Engineering (2003 ISFSFE) on 12-15 October 2003, Beijing, China, p. 397-403 (2003)
- D14. S.S. Han & W.K. Chow
 “Brief review on meanings of fire safe furniture”
 Proceedings of the International Symposium on Fire Science and Fire-protecting Engineering (2003 ISFSFE) on 12-15 October 2003, Beijing, China, p. 404-409 (2003)
- D15. W.K. Chow
 “Discussions on the fire aspects in karaoke boxes”
 Proceedings of the Shandong - Hong Kong Joint Symposium 2003 on New Technology for Better Built Environment, 17-18 October 2003, Qingdao, Shandong, China, p. A31-A43 (2003)
- D16. W.K. Chow
 “Preliminary view on urban mass fires research”
 Forum on Fire Safety Science & Technology, National Key Basic Research Project (973 project), 6 November 2003, Hangzhou, Zhejiang, China – Paper presented (2003)
- D17. S.Y. Li, W.K. Chow & S.L. Liu
 “Turbulence simulation by the Lattice-Boltzmann method”
 Proceedings of the 10th National Conference on Academic Affairs, Higher Education Engineering Thermophysical Research Institute, 16-20 October 2003, University of Science and Technology of China, Hefei, Anhui, China, p. 701-710 (2003)
- D18. P.Z. Gao, S.L. Liu & W.K. Chow
 “Simulation of fire-induced air flow in a shopping mall by Large-eddy simulation”
 Proceedings of the 10th National Conference on Academic Affairs, Higher Education Engineering Thermophysical Research Institute, 16-20 October 2003, University of Science and Technology of China, Hefei, Anhui, China, p. 768-775 (2003)
- D19. W.Y. Hung & W.K. Chow
 “Review on fire protective coatings for structural steel elements”
 Proceedings of the International Seminar on Recent Developments of Fire Protection in Structures, Fire Group of the Hong Kong Institute of Steel Construction, 19 February 2004, Hong Kong, China, Edited by K.F. Chung & S.W. Yuen, p. 1-10 (2004)
- D20. W.K. Chow
 “Discussion on fire safety in big cities”
 Invited lecture as representative from China, 2004 China-Japan Product Safety Forum – Beijing Academy of Science and Technology, held at Hefei, Anhui, China, 18-20 February (2004)
- D21. W.K. Chow
 “Aspects on fire safety in railway in tunnels”
 Invited lecture to Beijing Academy of Science and Technology, 25 March 2004, Beijing, China (2004)
- D22. W.K. Chow
 “Common problems on engineering performance-based fire codes and education training”
 Keynote speech to Workshop of the Fire Engineering Designs and Applications, 15-16 April 2004, City University of Hong Kong, Hong Kong (2004)
- D23. W.K. Chow
 “Introduction to engineering performance-based fire codes”
 Proceedings of the 2nd Education Symposium on Advanced Fire Research, 25 May 2004, State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui, China, p. 1-4 (2004)

- D24. W.K. Chow
 “Arson train fires and safety research desired”
 Proceedings of the Subgroup 4 “Smoke movement and toxic harmful gases transfer in fire” of the National 973 project “Fire Dynamics and Fundamentals of Fire Safety” 26 May 2004, State Key Laboratory of Fire Science, University of Science and Technology of China, Hefei, Anhui, China, p. 1-7 (2004)
- D25. A. Wood, D. McGrail & W.K. Chow
 “Immediate action in providing fire safety in cities with dense highrise buildings: The possibility of incorporating skybridges”
 Proceedings of the Shenyang – Hong Kong Joint Symposium 2004 on Healthy Building in Urban Environment, Shenyang, China, 29-30 July 2004, p. A77-A85 (2004)
- D26. W.K. Chow
 “Numerical studies on smoke control in spaces adjacent to atria”
 Proceedings of 12th National Conference on Fluid Mechanism, Xian, China, 17-20 August 2004, p. 611-617 (2004)
- D27. W.K. Chow & C.L. Chow
 “Fire safety concern on building design for reducing solar heat gain”
 3rd China-Japan-US Symposium on Structural Health Monitoring and Control and 4th Chinese National Conference on Structural Control, Dalian University of Technology, Dalian, China, October 13-16, 2004, Edited by Hongnan Li, Hui Li and Guoxin Wang, p. 150 (2004)
- D28. W.Y. Hung & W.K. Chow
 “Necessity of a fire risk assessment scheme for existing and new buildings”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 1, p. 94-99 (2004)
- D29. L. Yi, Y.Z. Li, R. Huo & W.K. Chow
 “Mass flow across the smoke layer interface during mechanical exhaust – CFD demonstration”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 1, p. 129-137 (2004)
- D30. Jiang Zhi, Li Shufen, Yu Shuqin, Chow Wan Ki & Chow Cheuk Lun
 “A brief review on combustion behaviour of polyvinyl chloride PVC and smoke suppression”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 2, Paper 2 (2004)
- D31. Yigang Cao, W.K. Chow & N.K. Fong
 “Theoretical analysis on thermally induced turbulence”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 2, Paper 4 (2004)
- D32. Y.Z. Li & W.K. Chow
 “Review and importance of thermal radiation in room fires”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 2, Paper 6 (2004)
- D33. Yabin Yu & Wan Ki Chow
 “An advanced high-temperature measurement technology: The optical fiber thermometry”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 2, Paper 7 (2004)
- D34. W.K. Mok & W.K. Chow
 “Application of ‘verification and validation’ for compartmental fire simulation by computational fluid dynamic”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 2, Paper 9 (2004)
- D35. G. Zou, H. Dong, Y. Gao & W.K. Chow
 “Effect of ventilation on ship engine room fire”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 2, Paper 11 (2004)

- D36. L.H. Hu, Y.Z. Li, L. Yi, R. Huo & W.K. Chow
 “Full-scale tests on studying smoke extraction efficiency in an underground corridor”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 2, Paper 14 (2004)
- D37. H.H. Wu & W.K. Chow
 “Hotel kitchen fire”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept, 6-7 December 2004, Hong Kong, China, Vol. 2, Paper 28 (2004)
- D38. S.S. Han & W.K. Chow
 “Review on the equations used in calculating the heat release rate in oxygen consumption calorimetry”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept and 3rd Education Symposium on Advanced Fire Research, 9 December 2004, Hong Kong, China, Vol. 3, Paper 4 (2004)
- D39. N. Zhu & W.K. Chow
 “Review on experimental studies on water mist system”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept and 3rd Education Symposium on Advanced Fire Research, 9 December 2004, Hong Kong, China, Vol. 3, Paper 6 (2004)
- D40. Z. Jiang & W.K. Chow
 “Fire extinguishing mechanism of the gas clean agent heptafluoropropane”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept and 3rd Education Symposium on Advanced Fire Research, 9 December 2004, Hong Kong, China, Vol. 3, Paper 8 (2004)
- D41. W.R. Zeng, W.K. Chow & S.F. Li
 “Thermal kinetic study of PMMA: Application of iso-conversional method”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept and 3rd Education Symposium on Advanced Fire Research, 9 December 2004, Hong Kong, China, Vol. 3, Paper 12 (2004)
- D42. D.K. Shen, M.X. Fang & W.K. Chow
 “A review on the pyrolysis and ignition of wood”
 Proceedings of the Fire Conference 2004 – Total Fire Safety Concept and 3rd Education Symposium on Advanced Fire Research, 9 December 2004, Hong Kong, China, Vol. 3, Paper 16 (2004)
- D43. Li Jin, N.K. Fong, W.K. Chow, L.T. Wong, Xu Dian-guo & Lu Pu-yi
 “New fire criterion based on texture from video images”
 ISIST’2004, Proceedings of the 3rd International Symposium on Instrumentation Science and Technology, August 18-22, 2004, Xi’an, China, Vol. 2, p. 2-0171 to 2-0176 (2004)
- D44. Li Jin, L.T. Wang, N.K. Fong, W.K. Chow, Xu Dianguo
 “Review on video image processing technique in fire detection and the possibility of application in controlling atrium smoke management system”
 WMRHLHS’2004, Proceedings of 1st Workshop on Multidisciplinary Researches for Human Life and Human Support, September 23-25, 2004, Harbin, China, p. 222-227 (2004)
- D45. W.K. Chow
 “Technical issues on performance-based fire engineering design”
 Fire Symposium 2005 – Contemporary Solutions for Life Safety, 20-21 January 2005, Hong Kong, China – Invited paper presented at Day 1 Session 2 (2005)
- D46. W.K. Chow
 “Common problems on engineering performance-based fire codes and education training” – in Chinese
 China Public Security – Government Circulation, Vol. 3 (Total 96), p. 84-88 (2004)
- D47. W.K. Chow, Raymond W.M. Choy & Gigi C.H. Lui
 “On designing total gas flooding system with clean agent heptafluoropropane”
 Proceedings of the Hubei – Hong Kong Joint Symposium 2005, Wuhan, Hubei, China, 30 June to 3 July 2005, p. 31-41 (2005)

- D48. H.H. Wu & W.K. Chow
 “Hotel kitchen fire”
 Proceedings of the Hubei – Hong Kong Joint Symposium 2005, Wuhan, Hubei, China, 30 June to 3 July 2005, p. 61-69 (2005)
- D49. Kenny S.M. Kong, W.K. Chow & Carmen C.S. Fong
 “Fire load survey in non-industrial workplaces: Offices in a university”
 Proceedings of the Hubei – Hong Kong Joint Symposium 2005, Wuhan, Hubei, China, 30 June to 3 July 2005, p. 80-87(2005)
- D50. W.K. Chow
 “Reviewing fire tests for local materials”
 Firestop Academy: Fire Resisting Construction and Passive Fire Protection, 12 September 2005, Langham Place Hotel, Hong Kong, Organized by Areas of Strength: Fire Safety Engineering, The Hong Kong Polytechnic University; The HKIE – Materials Division; Hong Kong Productivity Council, Invited Lecture (2005)
- D51. W.K. Chow
 “Technical issues on atrium hot smoke tests”
 Proceedings of the Fire Science and Engineering - the 2nd Conference on the Development of Performance-based Fire Code, 24-28 November 2005, Invited Lecture, p. 267-272 (2005)
- D52. W.K. Chow
 “Necessity of carrying out hot smoke tests and a case study”
 Invited Lecture of “Workshop on the Trends of Fire Safety and Smoke Control in Building”, National Taipei University of Science and Technology organized by Architectural and Building Research Institute, Ministry of Interior, Taipei, Taiwan, December 22, 2005, appears at the proceedings, p. 1-19 (2005)
- D53. W.K. Chow
 “Fire tests and cone calorimeter”
 Invited Lecture at the Seminar on Certificate of Fire Rated Products, Warrington Fire, 13 January 2006, Hong Kong (2006)
- D54. W.K. Chow
 “A long-term research programme on studying cabin fires”
 Invited Speaker – Fire Asia 2006 – Best Practices in Life Safety, 15-17 February 2006, Hong Kong Convention and Exhibition Centre (HKCEC), Hong Kong – Paper presented (2006)
- D55. W.K. Chow
 “Necessity of full-scale burning tests in fire hazard assessment on cabin design”
 Invited Lecture, 2006 Symposium on Fire Risk Assessment and Application, 17-19 May, 2006, organized by Chinese Fire Protection Association, p. 17-25, Hefei, Anhui, China (2006)
- D56. Edgar C.L. Pang & W.K. Chow
 “Preliminary experiments on sprinkler spray with smoke exhaust system”
 Proceedings of Sichuan – Hong Kong Joint Symposium 2006 on Trends and Challenges in Green, Healthy and Safe Buildings, 30 June - 1 July 2006, Chengdu, China, p. 85-91 (2006)
- D57. Fiona S.C. Tsui & W.K. Chow
 “Performance-based design of sprinkler systems”
 Proceedings of Sichuan – Hong Kong Joint Symposium 2006 on Trends and Challenges in Green, Healthy and Safe Buildings, 30 June - 1 July 2006, Chengdu, China, p. 147-157 (2006)

(E) Teaching Packages :

- E1. W.K. Chow, N.K. Fong, Gigi C.H. Lui, B. Yao, W.Y. Hung, C.W. Leung & J. Li
 Lecture Notes for Training Course “Fire dynamics for hazard assessment” for professional officers in the Buildings Department
 18-19 March 2002, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2002)

- E2. W.K. Chow, Vicky C.W. Leung & Gigi C.H. Lui
Lecture Notes for CPD Lecture “Fire safety management in karaokes”
22 March 2002, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2002)
- E3. W.K. Chow, Kathleen H. Almand, L.D. Zhao & C.W. Leung
Lecture Notes for CPD Lecture “Birth of FSE: Importance of performance based fire codes”
3 October 2002, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2002)
- E4. W.K. Chow & W.Q. Tao
Lecture Notes for CPD Lecture “Application of fire field modeling in fire safety engineering: Computational Fluid Dynamics (CFD) or Numerical Heat Transfer (NHT)?”
29 March 2003, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2003)
- E5. W.C. Fan & W.K. Chow
Lecture Notes for CPD Lecture “Importance of fire research in dense urban areas and National 973 Project in China”
13 June 2003, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2003)
- E6. W.K. Chow & P. Johnson
Lecture Notes for CPD Lecture “Performance based building and fire safety code in Hong Kong – The impact and opportunities coming in a new era”
22 July 2003, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2003)
- E7. W.K. Chow
Lecture Notes for CPD Lecture “Fire safety in green and sustainable buildings and a brief introduction to EPBFC”
8 August 2003, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2003)
- E8. W.K. Chow, M.J. Venes & H.C. Man
Lecture Notes for CPD Lecture “New alternatives on fire services installations with gas protection system”
6 January 2004, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2004)
- E9. W.K. Chow, N.K. Fong & W.Y. Hung
Lecture Notes for CPD Lecture “On the new standards of Engineering Performance-Based Fire Codes”
28 February 2004, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2004)
- E10. W.K. Chow, Paul Chan, Longde Zhao and Simon Pearce
Lecture Notes for CPD Lecture “New fire safety designs for a large atrium”
30 March 2004, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2004)
- E11. W.K. Chow & Walter W. Yuen
Lecture Notes for CPD Lecture “Fire risk analysis: Probability and Bayes Theorem”
3 April 2004, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2004)
- E12. W.K. Chow
Lecture Notes for CPD Lecture “Recent train fires and fire safety desired”
29 April 2004, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2004)
- E13. W.K. Chow, P. Chan & S. Pearce
Lecture Notes for CPD Lecture “Atrium hot smoke test: Theory and practice”
12 June 2004, Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2004)

- E14. W.K. Chow, N.K. Fong, Vicky C.W. Leung & Joan W.Y. Hung
Lecture Notes for Workshop “Fire dynamics” for professional officers in the Buildings Department
21 and 23 February 2005, Area of Strength: Fire Safety Engineering; Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2005)
- E15. W.K. Chow, D. Ball, H.C. Man, K.C. Lam, N.K. Fong, Fiona S.C. Tsui, Gigi C.H. Lui & Juliet N. Zhu
Workshop “Fire service installations” for professional officers in the Buildings Department
2 and 4 March 2005, Area of Strength: Fire Safety Engineering; Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2005)
- E16. Helmut Haselmair, W.K. Chow, Michael B. Leitner, Dean McGrail, S.M. Lo & Longde Zhao
Lecture Notes for CPD Lecture “Reviewing fire tests for local materials”
Firestop Academy: Fire Resisting Construction and Passive Fire Protection, 12 September 2005, Langham Place Hotel, Hong Kong, Organized by Areas of Strength: Fire Safety Engineering, The Hong Kong Polytechnic University; The HKIE – Materials Division; Hong Kong Productivity Council (2005)
- E17. W.K. Chow, Chris Miles, Ian Laithwaite & Longde Zhao
Lecture Notes for Seminar on Certificate of Fire Rated Products
13 January 2006, Co-organized by Warrington Fire and Area of Strength: Fire Safety Engineering; Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2006)
- E18. Malcolm Cook, John Mardaljevic & W.K. Chow
Lecture Notes for the CPD Lecture “Sustainable building design and fire safety”
19 January 2006, Area of Strength: Fire Safety Engineering; Research Centre for Fire Engineering, The Hong Kong Polytechnic University, Hong Kong (2006)

(F) Books :

- F1. Henry J. Cowan and Peter R. Smith, with contributions from W.K. Chow, Fergus R. Fricke, Graham E. Holland, Warren G. Julian, David Leifer, Cedric Marsh, Douglas Noble, David Rowe, Steven Szokolay and Ayca Tuzmen
“Dictionary of Architectural and Building Technology”
4th Edition, Spon Press: London; New York (2004)

(G) Consultancy and Investigational Reports :

- G1. W.K. Chow
“Review of fire safety strategy for East Rail Stations”
Study Report to Kowloon-Canton Railway Corporation, May to October 2002 (2002)
- G2. W.K. Chow, N.K. Fong & Raymond W.M. Choy
“Water coverage for long throw sprinkler”
Consultancy Report to Suen Tat Metal Machine Factory Ltd., January to December 2003 (2003)
- G3. W.K. Chow
“Review on reasonableness and appropriateness of the EMU fire size prediction approach and result for the new SP1900 train conducted by KCRC”
Consultancy Report to Parsons Brinckerhoff (Asia) Ltd., February to March 2004 (2004)
- G4. W.K. Chow
“Hot smoke tests in an atrium – retail area at URA-K2”
Consultancy Report to Logon Engineering Ltd., December 2003 to April 2004 (2004)
- G5. W.K. Chow & N.K. Fong
“Sprinkler practical discharge test at hotel development KIL11103”
Consultancy Report to Chubb Hong Kong Ltd., February to June 2004 (2004)

- G6. W.K. Chow
 “Fire investigation report”
 Consultancy Report to Benny Kong & Peter Tang Solicitors, August to September 2004 (2004)
- G7. W.K. Chow
 “Fire engineering study for justification of proposed restaurants with seating at Mei Foo station of West Rail”
 Consultancy Report to DCL Consultants Ltd., April 2004 to October 2005 (2004-05)
- G8. W.K. Chow
 “Omission of drencher systems on refuge floors proposed comprehensive development (Urban renewal project K13) at T.W.T.L. 398, Tai Ho Road/Yeung Uk Road, Tsuen Wan, N.T.”
 Consultancy Report to Sino Land Company Ltd., May 2004 to June 2005 (2004-05)
- G9. W.K. Chow
 “Fire Detectors at the Police Headquarters Phase III, Arsenal Street, Wanchai, Hong Kong”
 Consultancy Report to Fai Tak Engineering Company Ltd., August to September 2005 (2005)
- G10. W.K. Chow
 “Fire safety assessment at the Hong Kong Convention and Exhibition Centre”
 Advisory Comment to Scientific Fire Services Pty. Ltd., March to September 2005 (2005)
- G11. W.K. Chow
 “Consideration on waiving the hot smoke test at the Asia airfreight terminal expansion”
 Consultancy Report to Aedas Ltd., October to December 2005 (2005)
- G12. W.K. Chow
 “Water Coverage for Long Throw Sprinkler at a Proposed Development at Kowloon Bay NKIL 5927”
 Consultancy Report to Atal Engineering Ltd., June 2005 to June 2006 (2005-06)
- G13. W.K. Chow
 “Comment on the two reports”
 Consultancy Report to Benny Kong & Peter Tang Solicitors, January to February 2006 (2006)
- G14. W.K. Chow
 “CFD Results with a 1.2 MW fire Consideration on Waiving the Hot Smoke Test at the Asia Airfreight Terminal Expansion”
 Consultancy Report to Aedas Ltd., August 2006 (2006)