

Prof. Barry Jones, PhD;

FASCE (Fellow American Society of Civil Engineering);

FCIOB (Fellow Chartered Institute of Building, UK)

Emeritus Professor of Construction Engineering and Project Management

Construction Innovations Center, California Polytechnic State University, San Luis Obispo, CA

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Degrees and Awards

Senior Fulbright Scholar (2022) Vietnam – Engineering Project Management

Senior Fulbright Scholar (2014 -15) Indonesia – Engineering Infrastructure Project Management

Doctor of Philosophy (PhD.) Civil Engineering Department; University of Southampton, Southampton, UK, Thesis Title: “A Model for Collaborative Engineering in the Construction Industry” (1999).

Master of Science (MSc.) Management and Economics, University of Aston in Birmingham, UK (1980).

ONC/HNC Undergraduate Construction Engineering and Management (Building), Luton College of Technology, UK.

Fellow – American Society of Civil Engineers (2003).

Fellow – Chartered Institute of Building (2003).

Outstanding Educators Award in recognition of my contribution to Excellence in Teaching and Support for Construction Education - American Schools of Construction (ASC) (Boston 2010).

Award nomination for distinguished professor award (2006).

Distinguished Educator Award, California Faculty Association, (2004).

Member America’s Registry of Outstanding Professionals (2003).

ACADEMIC, RESEARCH AND INDUSTRY EXPERIENCE

The following demonstrates leadership and authority in consultancy, teaching, research and scholarship.

Dr. Jones has established an international reputation in Collaborative Engineering and Project Management through his research focused on developing an integrated decision-support system for solving complex problems using a collaborative multi-agent approach. His contribution to the Construction and Engineering Industry has developed through his first-hand knowledge of working or monitoring construction projects in the UK, USA and Internationally with different companies in various project management positions. This provided a solid grounding in the construction professions and understanding of the business of construction. It was the springboard to establish his reputation as an academic who could relate to the research needs of the construction industry while still relating to the nuts and bolts of the business. His interest over the past 5 years including published conference papers has been in the area of sustainability in particular related to the design of buildings and infrastructure projects.

Notable achievements include: Recognition by the construction engineering professional bodies of his contribution to the industry through the award of the distinguished title of “Fellow” designation of the American Society of Civil Engineers that is considered one of the most esteemed honors that Civil Engineers can receive from their peers in the USA. In bestowing the grade of Fellow on Dr. Barry K. Jones and other ASCE members, ASCE’s Past President Delon

Hampton pointed out that “the work of these prominent Civil Engineers realizes a major goal: to serve as stewards of the public infrastructure and guardians of public health and safety.” In the same year he was recognized as meeting the requirements of Fellow of the Chartered Institute of Building, London. Recently he received an Outstanding Educators Award in recognition of his contribution to Excellence in Teaching and Support for Construction Education. Also notable is his doctorate research work carried out in the Civil Engineering Department at the University of Southampton, UK after spending time at the Center for Integrated Facility Engineering, Department of Civil Engineering, Stanford University, USA. His research work in collaborative engineering led to the development of a computer model to facilitate collaboration between all the parties to the contract. This work was cutting-edge relative to the strategic direction of the UK Construction Industry at that time and the call for change proposed by Sir Michael Latham, “Constructing the Team” and Sir John Egan “The Report of the Construction Industry Task Force: Rethinking Construction.” It is significant that the construction industry is finally advancing in new ways of interrogating project proposals by an integrated multi-disciplined team approach using collaborative engineering and Integrated Project Delivery (IPD). Recent work has researched ways in which the collaborative model can assist with solution development on Health and Safety issues and Environmental and Sustainability Issues.

Also, significant is his technical professional experience built up with over 30 years in project management and management consultancy. Over 17 of those years have been spent working in various companies that manage heavy engineering, commercial or computer software projects in the USA, UK, Europe, and the Far East including Shell, Kier, Jardine, Laing, Bovis and Peregrine Systems in addition to working with many smaller firms. His technical knowledge spans across the project supply chain from project conception and design through to facility management. His role also involved training project managers in many of these companies. His appointment as Senior Engineer with Shell Exploration and Production resulted in significant achievements include working on developing a new generation of project control tools to assist the project management of building Oil and Gas platforms during the early days of the UK’s North Sea Oil Industry. Some of the first experiments of interdisciplinary integration took place during this time. From 1997 to 2001 he worked as European Managing Consultant for Peregrine Systems managing a number of IT projects in Europe with many corporate clients.

As an educator he has held taught at a number of universities including the University of Brighton, UK; Kingston Regional Management Center, UK; the University of Southampton, UK; and Dorset Institute of Technology, UK; Melbourne Institute of Technology, Australia; Stanford University, USA; North Carolina State University, USA; Cape Peninsula University of Technology, SA; University of Applied Science, Graz, Austria; Bandung Institute of Technology, Indonesia; Udayana University, Bali; University of Chiang Mai, Thailand and California Polytechnic State University where he is now still teaching part-time as an emeritus tenured professor of construction and engineering project management. The tasks have been varied and exposed Dr. Jones to working in Colleges of Business Management, Civil Engineering, Architecture and Environmental Design, Building, Regional Management Center, and IT. Teaching and research supervision of many hundreds of students in the skills of construction project management. In particular, the partnerships he has established between some of the largest construction engineering companies in California and Cal Poly students through the Professional Development program he developed at Cal Poly. Recently the Heavy Construction team that I taught and coached won the ASC Western Regional student competition

in Reno and then went on to win the USA National competition three times in a row. Dr. Jones has developed many contacts with Contractors and Civil Engineering firms in the USA and UK. Each year he runs a field trip to the Bay area visiting the major construction projects or London where the students base themselves for 5 weeks at University of Sussex and visit a number of major projects in London. This program has been conducted in Prague over the past 4 years.

Courses Taught include Construction Management, Project Management, Construction Engineering, Engineering Economy, Project Controls, Cost Engineering, Finance and Economics, Contract Administration, IT systems, Strategic Management, Facilities Management, Building Technology, Construction Method and Design, Professional Development; Operations Management, IT systems, Risk Management.

With curriculum development, Dr. Jones has spent much of his career in university education developing and revising curriculum either for individual courses or subject programs at certificate, undergraduate degree and master's degree programs both in the UK and USA. One of his first opportunities was developing a Master's degree in partnership with Bovis Construction while employed as a principal lecturer at the University of Brighton. This was the first partnership initiative of this kind that provided many of Bovis's middle management a continuing education program that led to a Masters Degree, and to which both parties to the partnership collaborated to deliver the program. He served on program and curriculum development teams including: MBA; MSc (Construction and Project Management); BSc (Hon) Financial Services; BSc (Hon) Business Management; BSc (Hons) Construction Management; BSc (Hons) Building Surveying; BSc (Hons) Building Engineering and Management; BSc (Hons) Building; BSc (Hons) Project Management; BSc (Hons) Manufacturing Engineering; BSc(Hons) Information Systems; HND Information Technology; HNC/ONC Building; BSc(Hons) Civil Engineering. Professor Jones has been involved with innovative curriculum development for all of the years he has been in academia both at department and College level often acting as the chair of difference committees. He has headed up a division of Operations Management in a School of Business Management in addition to running undergraduate and masters' degree programs.

In 2014-15 Prof. Jones spent a very productive year working with the Construction Engineering and Management group in the Civil Engineering Department at Bandung Institute of Technology (ITB), Bandung, Indonesia with Prof. Dr. Rizal Z Tamin acting as leader of that group.

While in Indonesia seminars and teaching was also conducted at the University of Indonesia, Depok; Gadjah Mada University, Yogyakarta and Udayana University, Bali.

During the past two years Professor Jones has developed an online Project Management course and an online Heavy Civil CM course.

Employment History

2001 to present- California State University, San Luis Obispo, Construction Innovations Center, California, Professor of Construction Project Management.

1997-2001 - European Project Manager and Management Consultant - Peregrine Systems Inc., San Diego, USA, based in Richmond, London, UK - Customers include: AstraZeneca; Capp Gemini; Carillion/BT; Ericsson; Ernst and Young; The European Commission; Fortis; ICL; InfraCom; Italian MOD; IX Europe; KBC Bank; Merrill Lynch; PriceWaterhouse; ProKom; Province of Antwerp; SEMA; Seiko; Siemens; SmithKlineBeecham; UCL; Aramco; Hewlett Packard

1990-1997 - Principal Lecturer and BSc/MSc program director University of Brighton, Brighton, UK -Faculty of Engineering and Environmental Science.
 1988-1997 – Owner - Wessex Consultancy, London, UK - Consultancy in project management and design.
 1986 -1990 - Head of the Division of Operations Management – Dorset Institute of Technology (now University of Bournemouth), Business Management Department, Bournemouth, UK.
 1985-1986 - Management Consultant in Operations and Project Management - Kingston Regional Management Center, London, UK.
 1980 -1985 - Senior Engineer - Shell Exploration and Production — Project management, controls and cost engineering.
 1977 - Senior Lecturer and program leader - Luton College of Technology (University of Luton)
 1973 Senior Planning Engineer/Site Management Supervisor - Kier Ltd, Tempsford, UK –Civil Engineering and Building Company.
 1970 Project Engineer - John Laing Construction, London.
 1965 Engineering Trainee - Engineers Department Bedford Borough Council, Engineers Department.

International Academic Activities:

Senior Fulbright Scholar (2022) Vietnam – Engineering Project Management
 Senior Fulbright Scholar (2014 -15) Indonesia – Engineering Infrastructure Project Management
 Visiting professor -Department of Civil Engineering -CM program, North Carolina State University, Raleigh, North Carolina (my first USA experience).
 Visiting professor -Department of Civil Engineering; Construction Management program and Centre for Integrated Facilities Engineering. Stanford University, California, USA.
 Visiting Scholar -1994- 1995 Department of Construction Management, California Polytechnic State University.
 Visiting lecturer - Department of Civil Engineering, University of Southampton, UK.
 Visiting advisor - Universiti Sans Malaysia, Penang, Malaysia funded by the British Council.
 Visiting lecturer - Mara Institute of Technology, Kuala Lumpur, Malaysia.
 Visiting program advisor - Royal Melbourne Institute of Technology, Melbourne, Australia.
 Visiting professor - Colleges of Higher Education, Dubai, UAE.
 Visiting professor – Technical University - FH Joanneum, Graz, Austria.
 Visiting professor (2007) Cape Peninsula University of Technology (CPUT), Cape Town, South Africa and the South Africa Built Environment Research Center (SABERC). Visits were made to: the Faculty of Engineering and The Built Environment, University of Johannesburg, The Department of Construction Economics at The University of Pretoria; The department of Building Sciences at Tshwane University of Technology, SA and The Department of Construction Management, University of Port Elizabeth and the University of the Witwatersrand.
 Visiting professor (2011) conducting seminars/short courses in Construction Project Management at:
 The National University of Singapore; Singapore Polytechnic;
 The University of Science, Penang, Malaysia;
 University Teknologi, MARA institute, Kuala Lumpur;
 The University of Moratuwa, Sri Lanka.
 Visiting Professor (2011) FH Joanneum, University of Applied Sciences, Graz, Austria to interact and teach on their CM program for 2 months.

Fulbright Senior Scholar: Teaching award at Institute Technology Bandung (ITB) Indonesia and Udayana University, Bali, Indonesia.

Visiting Professor CE department, University of Chiang Mai, Thailand.

Visiting Professor, University of Indonesia, CE department Jakarta.

Visiting Professor, Udayana University, CE department, Bali

Visiting Professor, CE Department, Peridiana University, Kandy, Sri Lanka.

Recent Californian and International Companies student project visits over the past 12 months

(USA and UK): Granite Construction; Cupertino Electric; Rudolph and Sletton; XL Construction; Bechtel (USA and UK); Kiewit; DPR; Walters and Wolfe; Pankow; Overaa; Bovis Lend Lease; Parsons; Hathaway Dinwiddie; Preston Pipeline; DeSilva Gates; Taylor Woodrow (UK); Sir Robert McAlpine; Canary Wharf Development Corporation London; Costain London; Balfour Beatty. Brookfield (Europe); Mace; Skanska; Costain; Dragados; Kier; Balfour Beatty.

2016 to present Peer Reviewer panel for the Fulbright Scholar Program, Council for International Exchange of Scholars (CIES), Institute of International Education (IIE)

Conference Papers and Keynotes

Keynote Speaker The 6th International Conference on Green Technology & Sustainable Development (GTSD 2022), Nha Trang City, Vietnam July 29th – 31st 2022

Jones, B.K. (2018) invited Keynote speaker SCESCM 2018 4th International Conference, Universitas Gadjah Mada, Yogyakarta, Indonesia, “The Failure to Deliver Infrastructure Projects on Time and to Budget – do we have the right tools and contract strategies?” Sept 5th – 7th 2018

Jones, B.K. (2018) Keynote speaker HKCEEEES 2nd International Conference on Structure and Civil Engineering Research (ICSCEER 2018) Czech Technical University, Prague, “The Failure to Deliver Infrastructure Projects on Time and to Budget – do we have the right tools and contract strategies?” 20-22 June 2018

Jones, B.K. (2017) Keynote speaker 6th International Conference on Civil Engineering, (ICCEN2017) University of Queensland —Infrastructure Projects Delivered to Cost and Time Estimates – Why do we still get it so wrong? Nov 20-22 2017

Jones, B.K (2017) 12th International enviBUILD Conference 2017 Vienna, Austria Title: “Using Integrated Project Delivery (IPD) to deliver Public Private Partnerships (P3) to achieve a healthy built environment solution”.

Jones, B.K (2017) 8th International Conference on Construction and Project Management (ICCPM) Sapporo, Japan, August 17th – 19th, 2017 Paper: "Delivering Public Private Infrastructure Projects using Integrated Project Delivery"

Jones, B.K. (2016) Keynote Speakers and Conference Chair 2016 International Conference on Structural and Civil Engineering, ICSCE and ICBMM, Hong Kong, September 9-11, 2016, Title: Linking Public Private Partnership with Integrated Project Delivery (IPD) for Maximizing Design and Construction Value.

Jones, B.K. (2016) paper presentation 2016 International Conference on Structural and Civil Engineering, Hong Kong September 9-11, 2016, Title: A Model for Collaborative Engineering in the Project Team – Integrated Project Delivery.

Jones, B.K (2016) Invited Speaker at the Special Topics in Public Works Research and Technology where engineers from all parts of Indonesia attended. Title: “BIM & IPD use in heavy civil construction Infrastructure Development”

Jones, B.K. (2016) Public Private Initiatives (PPI) facilitated through Integrated Project Delivery (IPD) for Maximizing Design and Construction Value”. 3rd International Conference on Civil Engineering Structures and Construction Materials (SCESCM2016) September 5-7, 2016 in Bali, Indonesia.

Jones, B.K. (2014-15) Various presentations as Senior Fulbright Scholar (2014 -15) Indonesia – Infrastructure Management Based at the Institute of Technology, Bandung, Java, Indonesia and Udayana University, Denpasar, Bali.

Jones, B.K (2015) Keynote Speaker A Model for Collaborative Engineering in the Project Team – Public Private partnerships and Integrated Project Delivery 2015 International Conference on Civil Engineering and Geology (ICCEG 2015) September 5-6, 2015 in Shanghai, China. ICCEG 2015 (<http://www.icceg.org/>)

Jones, B.K (2014) Second Australasia and SE Asia Conference in Structural Engineering and Construction: ASEA-SEC2, Sustainable Solutions in Structural Engineering and Construction; Kasetsart University, Bangkok, Thailand 3-7 November: paper Collaborative Engineering for Sustainable Solutions Assisted by Virtual Construction and chair of Education and Ethics & Motivation and Leadership session

Jones, B.K (2014) World SB14 Conference “Sustainable Building Barcelona, Spain 28th-30 October 2014 Accepted paper “Achieving Sustainable Design and Construction through Integrated Project Delivery. (Conference not attended)

Jones, B.K (2014) Second International Conference on Civil and Architecture Engineering (ICCAE 2014) Bali, Indonesia; 27-28 September submitted paper “Collaboration on Infrastructure Projects through Integrated Project Delivery”

Jones, B.K (2014) Invited Speaker Conference SCESCM ‘Towards Better Sustainable Structures and Construction for Future Generations – held at Gadjah Mada University, Yogyakarta, Indonesia, 23-26 September 2014 paper “Integrated Project Delivery (IPD) for Maximizing Design and Construction Considerations Regarding Sustainability”.

Jones, B.K (2014) International Conference on Construction in a Changing World – CIB W55/W65/W89/92/96/102/117 & TG72/81/83 held at Heritance Kandalama, Sri Lanka, 4th-7th May 2014 paper: “Collaborative Engineering facilitated through IPD”

Jones, B.K (2013) Seventh International Conference on Construction in the 21st Century (CITC-VII) will be held in Bangkok, Thailand from December 19-21, 2013 paper accepted “Integrated Project Delivery (IPD) for a Sustainable Design and Construction”. (Did not attend)

Jones, B.K (2013) SB 13 Singapore is part of a series of regional conferences hosted in different parts of the world in 2013. Hosted in Singapore by the BCA Centre for Sustainable Buildings (BCA CSB) and co-organized with the National University of Singapore (NUS), Conference (SB13), Singapore, Sept 8-10, 2013 paper “Collaborative Engineering Assistance for Sustainable Design”.

Jones, B.K (2013) ISEC-7 Conference: Engineering in a Virtual Design and Construction Environment ISEC_7th International Structural Engineering and Construction Conference (ISEC-7), Honolulu, Hawaii, June 18-23, 2013 paper accepted not presented “Collaborative Engineering assisted by IPD, BIM and Intelligent Agents”. (Peer review)

Jones, B.K (2013) Conference: "Sustainable Built Environment for Now and The Future" Hanoi, NUCE Vietnam, 26th – 30th March 2013 paper accepted “Virtual Design and Construction in Support of Sustainable Construction Projects" (peer review)

Jones, B.K (2012) et al “Collaborative Engineering Assisted by IPD, BIM and Intelligent Agents” The First Australasia and South East Asia Structural Engineering and Construction Conference (ASEA-SEC-1) Perth, Australia, from 28 Nov - 02 Dec, 20 (peer review)

Jones, B.K (2012) “Interrogation of Safety Issues through Computer Integrated Construction” CIB W99 International Safety Conference on Modeling and Building Safety, Singapore 10th-11th September 2012. (Peer reviewed)

Jones, B.K (2012) et al. “Facilitating Integrated Project Delivery” Athens Institute for Education and Research -ATINER, 2nd Intl Conference on Construction, June 2012. (Peer reviewed)

Jones, B.K (2011) “Computer Integrated Construction through IPD, BIM and Collaborative Engineering” CIB W107 Construction in Developing Countries, Hanoi, Vietnam, November 2011. (Peer reviewed)

Jones, B.K (2011) “Agent Assistance in Refining Design and Construction Decisions Integrating design and construction problem solving at pre-construction stages” Special Focus Symposium on Decision Technology and Intelligent Information Systems”) INTERSYMP-2011: 23rd International Conference on Systems Research, Informatics and Cybernetics, Baden-Baden, Germany.

Jones, B.K. (August 2010) paper: “Integrating Design and Construction Problem Solving at Pre-construction Stages”, 2nd International Conference on Construction in Developing Countries (ICCIDC-2), Advancing and Integrating Construction, Cairo, Egypt. (Peer reviewed)

Jones, B.K (May 2009) “A Model for Increased Collaboration in Construction” Fifth International Conference on Construction in the 21st Century (CITC-V) “Collaboration and Integration in Engineering, Management and Technology” May 20-22, 2009, Istanbul, Turkey. (Peer reviewed) [list finished due to length limit]

Jones, B.K (March 2008) Agent assistance for interrogating safe and healthy methods of working, CIB W99 Univ. of Florida Gainesville. M.E. Rinker, Sr. School of Building Construction. (Peer reviewed)

Jones, B.K (March 2007) Keynote presentation “The Changing Role of the Construction Manager” University of Port Elizabeth. SA

Jones, B.K (January 2007) Keynote presentation (2007) ‘Capstone’ courses in Construction Management University of Johannesburg, SA

Jones B.K (January 2007) Keynote presentation ‘CM education in the USA’ Dept. of Construction Economics, University of Pretoria, SA

Jones, B.K (March 2007) “Collaborative Engineering” presentation South African Industrial Liaison Group, University of Port Elizabeth, SA

Jones, B.K (2006) “Collaborative Knowledge Sharing in the Inter-disciplinary Project Team” ASC Conference, Fort Collins, Colorado, USA. (Peer reviewed)

Jones, B.K (2005) “Knowledge Sharing in the Inter-disciplinary Construction Team” Special Focus Symposium on Systems Research in the Architecture, Engineering and Construction (AEC) of Built Environments" (PDF) INTERSYMP-2005: 17th International Conference on Systems Research, Informatics and Cybernetics, Baden-Baden, Germany. (Peer reviewed)

Jones, B.K (2005) “Trust in Construction Project Management - Observations from Practitioners in the USA CITC-III Conference, Athens, Greece. (Peer reviewed)

Jones, B.K (2005) “Knowledge Sharing in the Inter-disciplinary Construction Team” Special Focus Symposium on Systems Research in the Architecture, Engineering and Construction (AEC) of Built Environments" (PDF) INTERSYMP-2005: 17th International Conference on Systems Research, Informatics and Cybernetics, Baden-Baden, Germany. (Peer reviewed)

Jones, B.K (2005) “Trust in Construction Project Management - Observations from Practitioners in the USA” CITC-III Conference, Athens, Greece. (Peer reviewed)

Jones, B.K (2004) “Health and Safety Accident Improvements” 4th Triennial International Conference, ‘Rethinking and Revitalizing Construction Safety, Health, Environment and Quality, Port Elizabeth, SA.

Jones, B.K (2004) “Contract strategy - built on collaboration and trust Observations on changing USA traditional contract procurement to strategies built on trust and collaboration” Seminar presentation at Salford University, Manchester, England sharing a platform with Sir Michael Latham. (Peer reviewed).

Selected other

Jones, B.K. (2003) “American Society of Civil Engineers Nashville 2003 Civil Engineering Conference and Exposition November 12-15 2003 Session: Culture and Trust in Construction Presenter and technical session coordinator with invited speakers from the UK, India and the USA.

Jones, B.K (2003) “Human-Machine Collaboration to bring essential Knowledge to the Inter-disciplinary construction team”, International Conference– Construction Project Management Systems: The Challenge of Integration (CIB W99)*, San Paulo, Brazil 25-28 March 2003 – (peer reviewed)

Jones.B.K. and M.J.Riley (1995) A Computer-Aided Environment to Assist Engineers view CM criteria and constraints at early design stages, Sixth International Conference in Civil and Structural Engineering Computing, Cambridge, England. (Peer reviewed)

Jones.B.K. and M.J.Riley (1995) Collaborative Construction Agents, ASCE, 2nd Congress on Computing in CE, Atlanta, USA, June 1995, pp 1316-1323. (Peer reviewed)

Jones.B.K. and M.J.Riley (1995) Autonomous Construction Agents in an ICADS environment, ASCE, 6th Intl. Conf. In Civil and Building Engineering, Berlin, Germany, July 1995, pp 407-412. (Peer reviewed)

Jones.B.K. and M.J.Riley (1994) Concurrent Construction Analysis with Intelligent Design Tools, First Congress on Computing in Civil Engineering, ASCE, Washington D.C. USA. June 1994. Pp 79-87. (Peer reviewed)

Jones, B. and Riley, M.J. (1993) "Concurrent Integrated Design". In: B.H.V.Topping and A.I.Khan, ed. Information Technology for Civil and Structural Engineers, Edinburgh, Civil-Comp Press, August 1993, pages 53-60. ISBN 0-948749-16-4. (Peer reviewed)