# **CURRICULUM VITAE**

# Worsak Kanok-Nukulchai

	PERSONAL DATA
Nationality	Thai
Current Position & Address	President Professor of Structural Engineering Asian Institute of Technology P.O. Box 4, Klongluang, Pathumthani 12120, Thailand
	EDUCATION
B.Eng.,	Civil Engineering, Chulalongkorn University, Bangkok, Thailand, 1971 (Hons)
M.Eng.,	Structural Engineering, Asian Institute of Technology, Thailand, 1973
Ph.D.,	Structural Engineering and Structural Mechanics, University of California, Berkeley, California, USA, 1978
	SCHOLASTIC HONORS AND AWARDS
	Awards & Honors
May 1, 1973	Top Academic Performance Award (G.P.A. 4.0) among 1973 AIT graduating class of 400 students, honored by the AIT Alumni Association.
September 1, 1977	1977 Earle C. Anthony Award from University of California, Berkeley.
April 1, 1984	Associate Professorship of the University of Tokyo, granted by the Japanese Government.
March 1, 1987	Recipient of the 1987 Thailand National Research Council's Engineering & Research Innovative Prize from H.E. Prime Minister Prem Tinsulanonda.
July 16. 1997	Induction to the Royal Institute of Thailand
Nov. 25, 1997	"1997 Model Concrete Man of the Year" awarded by the Association of Thai Concrete Product Industry for the benevolent contributions to the civil engineering industry.
Mar. 6, 1998	"1998 Thailand's Outstanding Engineer in Education and Research Sector" by Alumni Association of the Faculty of Engineering, Chulalongkorn University.
July 19, 1999	"1999 National Researcher of the Year" from National Research Council of Thailand. The award was presented by Thailand's Prime Minister on September 27, 1999.
January 1, 2003	Member of Thailand Academy of Science and Technology
December 5, 2003	Bestowed the Royal Decoration of the Companion of the Most Admirable

Order of Direkgunabhorn (4th class) by H.M. King Bhumibol.

July 18, 2006 IACM Fellows Award of the International Association of Computational

Mechanics for distinguished record of research accomplishment in the area

of computational mechanics.

September 22, 2006 Distinguished Thai AIT alumnus recognized by the Thailand Chapter of the

AIT Alumni Association

December 9, 2006 Outstanding AIT alumnus recognized by the AIT Alumni Association

(Mother Chapter)

November 19, 2008 The First Nishino Medal, An award in memorial of the late Professor Fumio

Nishino, in recognition for international contribution in the area of structural engineering. The award was presented at the beginning of the Eleventh East Asia Pacific Conference on Structural Engineering and Construction

(EASEC-11) in Taipei, Taiwan.

**Scholarships** 

1971-1973 The Netherlands Government Scholarship, AIT, 1971-1973

1973-1977 Fulbright Scholarships, awarded by the U.S. Government's Department of

States to attend the doctoral program at the University of California,

Berkeley.

PROFESSIONAL AND HONOR SOCIETIES

SIGMA XI - The Scientific Research Society of America. - Member

Engineering Institute of Thailand (EIT) under H.M. the King's Patronage - Vice President

American Society of Civil Engineers (ASCE) - Member

International Association for Bridge and Structural Engineering (IABSE) - Member

International Association for Computational Mechanics (IACM) - Member of the Executive Council

The East Asia-Pacific Conference on Structural Engineering & Construction (EASEC) - Past Chairman of the International Steering Committee

Thailand Society Computational Mechanics (TSCM) - Chairman

Thailand Academy of Science and Technology - Member

The Royal Institute of Thailand - Member

Global Alliance for Disaster Reduction (GADR) - Vice President for Asia

International Construction Technology Information Institute - Director

EMPLOYMENT RECORDS

Jan.-Dec. 1978 Senior Structural Analyst, Diablo Nuclear Power Plant Project, John A.

Blumes & Asso-ciates, San Francisco, California, U.S.A.

Dec. 1978-Dec. 1981	Assistant Professor of Structural Engineering and Construction, Asian Institute of Technology.
Jan. 1982-June 1989	Associate Professor of Structural Engineering and Construction, Asian Institute of Technology.
May 1984-May 1985	Associate Professor, Department of Civil Engineering, University of Tokyo. (On Sabbatical Leave from AIT).
June 1989-Present	Professor of Structural Engineering and Construction, Asian Institute of Technology.
Aug. 1988-Aug. 1992	Chairman, Division of Structural Engineering and Construction, Asian Institute of Technology.
July 1994-June 1998	Coordinator, Program of Structural Engineering & Construcion, School of Civil Engineering, Asian Institute of Technology.
June 1998-June 2004	Dean, School of Civil Engineering, Asian Institute of Technology.
Nov 2005-Aug 2009	Dean, School of Engineering and Technology, Asian Institute of Technology.
Aug 2009-June 2013	Vice President for Resource Development, Asian Institute of Technology.
July 2013-present	President, Asian Institute of Technology.

# **COMMUNITY SERVICES**

	Past Activities
1980-1982	Subcommittee for Don Muoung Air Port Expansion Project, Air Port Authority of Thailand.
1986-1987	Secretary of the 1987 International Conference on Cable-Stayed Bridges to coincide with the grand opening of the then world longest cable-stayed bridge, an event to celebrate the 60th birthday of H.M. the King.
1985-1987	Vice Chairman and Chief Editor, The Civil Engineering Chapter, Engineering Institute of Thailand.
1988-1989	Member of Governing Board of the Engineering Institute of Thailand under H.M. the King's Patronage.
1988-1989	Founder and Chief Editor of the Technical Journal of the Engineering Institute of Thailand.
1990-1992	Vice Chairman, Civil Engineering Chapter, Engineering Institute of Thailand under H.M. the King's Patronage.
1990-1992	Chairman, Subcommittee for Drafting EIT's Earthquake Resistant Design Code.
1989-1990	Working Party to arbitrate the contract dispute between the National Petrochemical Corporation and the Contractor, Sinothai-Wakashiku Joint Venture.
1992-1993	Chairman of Civil Engineering Chapter & member of the Governing Board, Engineering Institute of Thailand under H.M. the King's Patronage (First Term).

1993-1993	Member of Fast-track Committee, to supervise the construction the Hopewell Community Train and Elevated Expressway Project, appointed by the Minister of Communication.
1993	Member of Prime Minister Chuan Leekpai appointed "Committee of Facts Finding on May 10, 1993 Fire of the Toy Factory (Kader Industrial Thailand)", which killed 188 workers. Final report submitted to Cabinet on September 6, 1993.
1993	Chairman of Engineering Institute of Thailand's Facts Finding Party on technical reasons of building collapse of the Royal Plaza Hotel in Nakorn Ratchasima Province on 13 August 1993, which killed 137 people. Final report scheduled to be completed in August 1994.
1993	Member of the Ad-hoc Working Committee on Steel Industries in Thailand, Board of Investment (BOI), Thailand.
1994-1996	Chairman of Civil Engineering Chapter & member of the Governing Board, Engineering Institute of Thailand under H.M. the King's Patronage (Second Term).
1994	Founder and Chairman of the Organization of the First National Civil Engineering Conference, held in Suranari Technological Institute in Nakorn Rajsima Province, November 2-3, 1994.
1994 -1995	Chairman of the Organization of the Second National Civil Engineering Conference, held in Chiang Mai University, Chiang Mai Province, November 9-10, 1995.
1996-1997	Member of Task Force on Classification of Buildings for Insurance Purposes, Insurance Department, Ministry of Commerce, Royal Thai Government.
1997	Advisor to H.E. Prime Minister on Urban Development, appointed on February 18, 1997 Order 73/2540.
1997	Member of Technical Subcommittee on Impact of Overloaded Trucks, appointed by H.E. Prime Minister.
1997	Chairman of Subcommittee of the Prime Minister's Advisory Committee on Quality Development and Standards of Architects, Engineers, and Related Technical Professions.
1992-1999	Member of the Academic and Curriculum Committee of Sirindhorn International Institute of Technology (SIIT), Thammasat University.
1995-1998	Member of Procurement Subcommittee for 13th Asian Games Sport Complex at Thammasat University Campus, Rangsit, Appointed by Ministry of Finance, Royal Thai Government.
1997-1999	Chairman of the Subcommittee on Measures for Fire Safety in Tall Buildings, appointed by Deputy Prime Minister in charge of the National Safety Council of Thailand on August 8, 1997.
1998-1999	Chairman of Fire Safety in Buildings, Engineering Institute of Thailand.
1998	Member of the Board on Development of the 13th Asian Games Sport Complex at Thammasat University Campus, Rangsit, Appointed by Ministry of Finance, Royal Thai Government.
1998	Member of the Committee on Registration of Building Safety Inspection,

Appointed by Bangkok Metropolitan Administration. 1998 Task Force for Study and Solution to the Construction of the Padang Bezar Custom Port, Appointed by Ministry of Finance. 1999 Member of the Committee on Ground Improvement for Airside Pavement Contracts in the New Bangkok International Airport, appointed by the Ministry of Communication. 1999 Member of the Academic Auditing Committee of the Faculty of Engineering, Chulalongkorn University. Member of the Academic Auditing Committee of the Faculty of 2000 Architecture, Chulalongkorn University. 2000 Member of Audit Committee of the Construction of Chalerm Prakiart Sport Stadium, Pathumthani Province, appointed by the Department of Physical Education. 2000 Member of the Subcommittee of Fact Finding on Fire Disasters. National Safety Council, Bureau of the Prime Minister Office, Royal Thai Government. 2002-2006 Member of the Quality Assurance Audit, College of Innovation, Thammasat University, Bangkok 2002-2007. Advisor to the Minister of Transport 2005-2006. Vice Chair, Committee on Airport Construction Acceleration, Ministry of Transport, Royal Thai Government. Governing Board, The Expressway and Rapid Transit Authority of Thailand, 2003-2005 Member of the Board of Directors, Airports of Thailand, Public Company (AOT), 2005-2006 **Ongoing Activities** Since 1993 Member of Academic Review Committee of the Ministry of University Affairs, to evaluate and recommend academic promotion of teaching members of Thai Universities in the area of Civil Engineering. Member of Committee on Rehabilitation of Ananta Smakom Palace, Since 1993 Secretariat of the House of Senate. Since Mar 1997 Member of the Subcommittee on Disaster Prevention in Residential and Public Places, appointed by Deputy Prime Minister in charge of the National Safety Council of Thailand on April 18, 1997. Since July 1997 Admission to Membership of the Royal Institute (Rajapunditaya Sathan). Since Jan 1, 1998 Chairman of Subcommittee for Public and Social Welfare, Engineering Institute of Thailand. Since Jun 18, 1998 Member of the Advisory Committee of the Bangkok Governor on Civil Works. Since Aug 20, 1998 Member of the Executive Commission on Disaster Protection, appointed by the order 156/2541 of Prime Minister Mr. Chuan Leekpai to oversea

	National Safety Council of Thailand on August 20, 1998.
Since 2000	Member of the Subcommittee of Fact Finding on Fire Disasters, National Safety Council, Royal Thai Government.
Since September 11, 2001	Advisory Committee on Strategies for Thailand's Industrial Development, appointed by the Minister of Industry, Royal Thai Government.
Since 2001	Member of Committee on Follow-Up of Road over Klong Prapa under H.M. Initiation, appointed by the Minister of Communication, Royal Thai Government.
Since October 2001	Member of the Curriculum Development Committee of Master Program in Faculty of Architecture, Chiang Mai University.
Since September 2001	Member of Committee on Selection of Designers for New Office Building Compound of the Bank of Thailand, appointed by Bank of Thailand.
Since August 2001	Member of the Public Hearing Committee, Mass Transit System in Ratanakosin Island, Appointed by Bangkok Metropolitan Administration.
Since July 2001	Advisory Committee of Faculty of Engineering, Kasetsart University, appointed by Dean of Faculty of Engineering, Kasetsart University.
Since Jan 1, 2002	Chairman of Thailand's Society of Computation Mechanics, Engineering Institute of Thailand.
Since Jan 1, 2002	Chairman of Subcommittee for Quality of life and Society, Engineering Institute of Thailand.
Since Feb 28, 2003	External Expert on the Establishment of the Doctoral Curriculum Committee in Civil Engineering Faculty of Engineering, Chiang Mai University.
Since April 21, 2003	Advisor, Faculty of Engineering, Srinakarinwirote University, Nakorn Nayok.
	INTERNATIONAL ACTIVITIES

# INTERNATIONAL ACTIVITIES

# **International Organizations**

- International Association of Computational (Elected Member of the Executive Council)
- International Steering Committee of the East Asia-Pacific Conferences on Structural Engineering and Construction (Past Chairman).
- International Association of Bridge and Structural Engineering (IABSE), member
- The Global Alliance for Disaster Reduction (GADR), Vice President for Asia,
- International Institute for Construction Technology Information (I2CTI), Board of Directors

# **Member of Editorial Board**

• International Journal of Structural Engineering and Mechanics

- International Journal of Computational Structural Engineering
- International Journal of Structural Stability and Dynamics
- Journal Institute of Materials Malaysia, Universiti Kebangsaan Malaysia
- International Journal of Computational Mechanics (IJCM)
- Mechanics of Advanced Materials and Structures (MAMS)

#### **International Committees**

Serve as members of more than 50 International Committees, mostly international conferences related to computational mechanics, structural engineering and civil engineering, all over the world.

# INVITED LECTURES/SPEAKERS

# **Oversea Lectures and Keynotes**

More than 40 invited lectures at universities and conferences around the world. Most recently as Semi-plenary Keynote Speaker at World Congress in Computational Mechanics at Venice, Italy, 30 June – 4 July 2008.

# INTERNATIONAL JOURNAL PUBLICATION

(not include 109 International Conference Papers)

- 1. T.J.R. HUGHES, R.L. TAYLOR, J.L. SACKMAN, A. CURNIER, and W. KANOKNUKULCHAI, "A finite element method for a class of contact-impact problems", <u>Computer Methods in Applied Mechanics and Engineering</u>, 8, 249-276 (1976).
- 2. T.J.R. HUGHES, R.L. TAYLOR, and W. KANOKNUKULCHAI, "Numerical prediction of head/helmet system response," in Measurement and Prediction of Structural and Biodynamic Crash-Impact Response, <u>ASME</u>, New York, 1976, pp. 151-165.
- 3. T.J.R. HUGHES, R.L. TAYLOR, and W. KANOKNUKULCHAI, "A simple and efficient finite element for plate bending", International Journal for Numerical Methods in Engineering, 11, 1529-1542 (1977).
- 4. W. KANOK-NUKULCHAI, "A simple and efficient finite element for general shell analysis", International Journal for Numerical Methods in Engineering, 14, 179-200 (1979).
- 5. W. KANOK-NUKULCHAI, R.L. TAYLOR, and T.J.R. HUGHES, "A large deformation for shell analysis by the finite element method", <u>Computers and Structures</u>, 13, 1/2, 19-27 (1981).
- 6. W. KANOK-NUKULCHAI, P.H. DAYAWANSA, and P. KARASUDHI, "An exact finite element model for deep beams", <u>International Journal of Structures</u>, 1, 1, 1-7 (1981).
- 7. W. KANOK-NUKULCHAI and V.W. SUARIS, "An efficient finite element scheme for elastic porous media", <u>International Journal of Solids and Structures</u>, Vol. 18, No. 1, pp. 37-49 (1982).
- 8. W. KANOK-NUKULCHAI and A.K. GILANI, "A macroelement for waffle slab analysis", <u>Computers and Structures</u>, 15, 2, pp. 117-122 (1982).
- 9. C. POLPRASERT, W. KANOK-NUKULCHAI, and V.S. RAJPUT, "A ferro- cement digester: biogas and biomass production", Journal of Ferrocement, 12, 1, pp. 25-34 (1982).
- 10. W. KANOK-NUKULCHAI, S.Y. LEE, and P. KARASUDHI, "A versatile finite strip model for three-dimensional tall building analysis", <u>International Journal of Earthquake Engineering & Structural Dynamics</u>, Vol. 11, pp. 149-166 (1982).
- 11. W. KANOK-NUKULCHAI and Y.S. SHIN, "Versatile and improved higher order beam element", Journal of Structural Engineering, **ASCE**, Vol. 110, ST 9, 2234-49 (1984).
- 12. W. KANOK-NUKULCHAI, "On a Microcomputer Integrated System for Structural Engineering Practice", Computers and Structures, Vol. 13, No. 1, 33-37 (1986).
- 13. W. KANOK-NUKULCHAI, A. HASEGAWA and F. NISHINO, "Generic Formulation Procedure For Large Deformation Analysis of Structural Elements", <u>Proc. of **JSCE**</u>, <u>Structural Engineering</u> /<u>Earthquake</u> Engineering, Vol 3, No. 1, April 1986.
- 14. W. KANOK-NUKULCHAI and M. SIVAKUMAR, "Degenerate Elements for Combined Flexural and Torsional Analysis of Thin-Walled Structures", <u>J. of Structural Engineering</u>, **ASCE** Vol 114, No. 3, March 1988, pp. 657-674.
- 15. W. KANOK-NUKULCHAI and W.K. WONG, "Element-Based Lagrangian Formulation for Large Deformation Analysis", <u>Computers and Structures</u>, Vol. 30, No. 4, pp. 967-974, 1988.
- 16. T. CHAISOMPHOB, W. KANOK-NUKULCHAI, and F. NISHINO, "An Automatic Arc Length Control Algorithm for Tracing Equilibrium Paths of Nonlinear Structures", <u>Structural</u> Engineering/Earthquake Engineering, JSCE, Vol. 5, No. 1, April 1988, pp. 205-208.
- 17. W. KANOK-NUKULCHAI, "Closure to Degenerate Elements for Combined Flexural and Torsional Analysis of Thin-Walled Structures", <u>J. of Structural Engineering</u>, **ASCE**, Vol. 115, No. 9, pp. 2412-2413, 1989.

- 18. YAMAGUCHI, W. KANOK-NUKULCHAI, T. OHTA, "A Study of Finite Displacement Analyses of Beam Structures by the Finite Element Method", <u>J. of Structural Engineering</u>, <u>JSCE</u>, Vol. 35A, pp. 175-183, 1989 (in Japanese).
- 19. W. KANOK-NUKULCHAI and K.T. Chau, "Point sink fundamental solutions for subsidence prediction", J. of Engineering Mechanics, ASCE, Vol. 116, No. 5, pp. 1176-1182.
- 20. W. KANOK-NUKULCHAI, P.K. Yiu, and D.M. Brotton, "Mathematical Modelling of Cable-Stayed Bridges", <u>Structural Engineering International, Journal of the International Association for Bridge and Structural Engineering</u> (IABSE), No. SEI 2, 1992, pp. 108-113.
- 21. W. KANOK-NUKULCHAI and S.F. LIN, "Nonlinear Analysis Using Ritz Vectors Reduced Basis", Computers & Structures, Vol.44, No.1/2, 1992, pp. 117-124.
- 22. G.M. Hong, C.M. Wang, and W. KANOK-NUKULCHAI, "Elastic Buckling of Circular Plates with Allowance for Pre-Buckling Deformation" in <u>Journal of Engineering Mechanics</u>, **ASCE**, Vol. 119, No. 5, 1993, pp.905-916.
- 23. W. KANOK-NUKULCHAI, and G. Hong, "Nonlinear Modelling of Cable-Stayed Bridges", <u>Journal of Constructional Steel Research</u>, Vol. 26, 1993, pp. 249-267.
- 24. W. KANOK-NUKULCHAI and T. Susompow, "False Paradox of Torsional Buckling", <u>J. of Structural Engineering</u>, **ASCE**, Vol. 119, No. 12, 1993.
- 25. D. Gee-Clough, J. Wang and W. KANOK-NUKULCHAI, "Deformation and Failure in Wet Clay Soil: Part 3, Finite Element Analysis of Cutting of Wet Clay by Tines," <u>Journal of Agricultural Engineering Research</u>, 58, 1994, pp. 121-131.
- 26. W. KANOK-NUKULCHAI "Collapse of the Royal Plaza Hotel, Thailand," in Structural Engineering International, <u>Journal of the International Association for Bridge and Structural Engineering</u> (IABSE), SEI Vol. 5 Number 1, February 1995, pp. 55-57.
- 27. S.J. Lee, and W. KANOK-NUKULCHAI, "A Nine-node Assumed Strain Finite Element for Large-Deformation Analysis of Laminated Shells," <u>Int. J. for Numerical Methods in Engineering</u>, Vol. 42, No. 5, 1998, pp. 777-798.
- 28. E. Yamaguchi, W. KANOK-NUKULCHAI, Hammadeh, and Kubo, "Large displacement analysis of beams by degeneration approach," <u>Journal of Engineering Mechanics</u>, **ASCE**, Vol. 125, No. 10, 1999, pp. 1140-46.
- 29. W. KANOK-NUKULCHAI, and B.T. Tam, "Structure-fluid interaction model of tuned liquid dampers," Int. J. for Numerical Methods in Engineering, Vol. 46, No. 9, 1999, pp.. 1541-1558.
- 30. W. KANOK-NUKULCHAI, N. Pien-wej, A. Naveed, and C. Tangtongchit, "Collapse of a shaft at bangkok wastewater pumping station", <u>Structural Engineering International</u>, **IABSE**, 3, pp. 202-205 (2000)
- 31. W. KANOK-NUKULCHAI, "Discretizing ancient pagodas in thailand", <u>Expressions</u>, **Bulletin for the International Association for Computational Mechanics**, 9, pp. 22-27 (2000)
- 32. W. KANOK-NUKULCHAI, W.J. Barry, and K. Saran-Yasoontorn, "Meshless formulation for shear-locking free bending elements", <u>Journal of Structural Engineering and Mechanics</u>, 11, 2(2001), pp. 123-132.
- 33. W. KANOK-NUKULCHAI, W.J. Barry, K. Saran-Yasoontorn, and P. H. Bouillard, "On elimination of shear locking in the element-free Galerkin method", <u>Int. J. for Numerical Methods in Engineering</u>, Vol. 52, 2001, pp.705-725.
- 34. R.F. Terregosa, and W. KANOK-NUKULCHAI, "Weight Optimization of Steel Frames Using Genetic Algorithm", <u>Advances in Structural Engineering</u>, 5, 2 (2002), pp. 99-111.
- 35. P. Tonsuk, and W. KANOK-NUKULCHAI, "Further investigation of element-free Galerkin method usign Kriging interpolation", <u>International Journal of Computational Methods</u>, 1, 2(2004), pp.345-364.

- 36. S.C. Han, K.D. Kim and W. KANOK-NUKULCHAI, An element-based 9-node resultant shell element for large deformation analysis of laminated composite plates and shells, <u>Structural Engineering and Mechanics</u>, 18, 6(2004), pp. 807-829.
- *37.* N. Anwar, W. KANOK-NUKULCHAI, D.N. Batanov, Component-based information oriented structural engineering applications, <u>Journal of Computing in Civil Engineering</u>, **ASCE**, 19, 1 (2005), pp.45-57.
- 38. N. Anwar, and W. KANOK-NUKULCHAI, Framework for a general section designer software component, <u>Computers and Concrete</u>, 1, 3(2004), pp. 303-324.
- 39. P. Plengkhom and W. KANOK-NUKULCHAI, An enhancement of finite element method with moving Kriging shape functions, <u>International Journal of Computational Methods</u>, 2, 4 (2005), pp. 451-477.
- 40. A. Patjawit and W. KANOK-NUKULCHAI, Health monitoring of highway bridges based on a Global Flexibility Index, <u>Engineering Structures</u>, 27(2005), pp. 1385-1391
- 41. C. Pattamaprom, D. Dechojarassri, W. KANOK-NUKULCHAI, The effect of cure conditions on the strength of ebonite rubber network, <u>Journal of Rubber Chemistry and Technology</u>, 78, 4 (2005), pp. 724-735.
- 42. V. Sayakourmmane and W. KANOK-NUKULCHAI, A Meshless Analysis of Shells Based on Moving Kringing Interpolation, <u>International Journal of Computational Methods</u>, 3, 3 (2006), pp. 1-23
- 43. T. Vacharasintopchai, W. Barry, V. Wuwongse and W. KANOK-NUKULCHAI, A Semantic Web Services Framework for Computational Mechanics, <u>Journal of Computing in Civil Engineering</u>, **ASCE**, 21, 2 [2007] pp. 65-77.
- 44. C. Pattamaprom, D. Dechojarassri, and W. Kanok-Nukulchai, Die Wirkung der Vulkarinsationsbedingungen auf das Netzwerk von Ebonit, Gummi Fasern Kunststoffe, <u>Fachmagazin fur die Polymerindustrie</u>, Jahrgang 59, GAK 7 (2006), pp. 428-433.
- 45. S.C. Han, H.D. Ham, and W. KANOK-NUKULCHAI, Geometrically Non-linear Analysis of Arbitrary Elastic Supported Plates and Shells using an Element-Based Lagrangian Shell Element, <u>International Journal of Non-linear Mechanics</u>, 43 (2008), pp. 53-64.
- 46. W. KANOK-NUKULCHAI and V. Vimuktayon, Suvarnabhumi Airport, <u>J. Structural Engineering International</u>, **IABSE**, SEI 1 (2009), pp. 1-6.
- 47. F.T. Wong and W. KANOK-NUKULCHAI, On the Convergence of the Kriging-Based Finite Element Method, International Journal of Computational Mechanics, 6, 1 (2009), pp. 1–27.
- 48. F.T. Wong and W. KANOK-NUKULCHAI, Kriging-Based Finite Element Method: Element-By-Element Kriging Interpolation, <u>Civil Engineering Dimension</u>, 11 (2009), pp.15-22
- 49. C. Buachart a, W. KANOK-NUKULCHAI, E. Ortega b, and E. Oñate, A Shallow Water Model by Finite Point Method, International Journal of Computational Methods, *Accepted for publication on October 11*, 2012.

(A total number of 553 citations were made to Papers 1-47 up to June 30, 2009)

# PROFESSIONAL EXPERIENCES

- 1983 The Chom Tien Condotel, Pattaya; Structural Engineer.
- 1984 16-story and 8-story Grand Tower Apartment Buildings at Sukhumvit 55, Bangkok; Construction Consultant
- 1988 26-Story Pattaya Beach CondoTown Project; Structural Engineer.
- 30-Story Lotus Tower Hotel Building, Sukhumvit Soi 33, Bangkok; Structural Engineer (with Pramote Tarasak).
  - 40-Story New Imperial Queen's Park Hotel, Sukhumvit Soi 22, Bangkok; Structural Engineer (with Pramote Tarasak)
- 1990 19-Story Cha-am Beach Avenue Building, Cha-am, Petchburi; Structural Engineer.
- Don Muang Tollway Project, in association with DYWIDAG (Thailand) and Thai Engineering Consultants, Co., Ltd.; Chief Structural Engineer (Local Counterpart).
- 1992 Queen Sirikit's Hall of Fame National Museum of Science, Ministry of Science, Technology and Energy, Rangsit, Pathumthani; Structural Analyst.
  - 3D Wind Load and Vibration Analysis of Pattaya Park Tower Project, for Pattaya Park Beach Hotel, Pattaya, Cholburi; Structural Analyst.
- 8 highway interchanges of Outer Ring Road Highway (Lam Lukka, Sukhabhibal, Klong Klum, Thanyaburi, Ram Indra, On-Nuj, Tap Chang, and Wat Salud), for Thai Engineering Consultants, Co., Ltd.: Structural Consultant.

7 highway interchanges of the New Bangkok Cholburi Motorway (Bang Prakong, Bang Pra, Bangkapi, Romklao, Lad Krabang, Pantong and Cholburi), for Thai Engineering Consultants, Co., Ltd.; Structural Consultant.

21-story Vichaiyut II Hospital, Samsen, Bangkok; Structural Engineer.

7-story Krisda Car Plaza, Paholyothin 53, Bangkok; Structural Engineer.

MMC Headquarter Complex, Km 47 Paholyothin, consisting of (a) Office Building - 5 stories, 20,000 sq.m. 240 million Baht; (b) Canteen - 2 stories, 6,000 sq.m. 60 million Baht; (c) Repair Center - 3 stories, 1,500 sq.m. 150 million Baht; (d) Parts Center - 3 stories, 1,600 sq.m. 160 million Baht.; Structural Engineer.

7-story Sotharavej Hospital, Chachoengsao Province; Structural Engineer.

- Impact of Traffic Vibration on Pra Prathom Chedi in Nakorn Pathom Province for the Temple of Pra Prathom Chedi and the Department of Fine Arts, Royal Thai Government; Principal Investigator.
- 1996 Investigation and Rehabilitation of Phu Khao Tong Chedi in Ayudhaya Province, for Department of Fine Arts, Royal Thai Government; Principal Investigator.

Interstate Concession Toll Road and related Development in Northern Laos, for Economic Quadrangle Joint Development Corporation, Ltd.; Chief Engineering Advisor.

Elevated Multimode Highway over Klong Prapa Canal Project under HM. The King's Initiation, for Department of Highways, Royal Thai Government; Conceptual Designer.

- Investigation and Rehabilitation of Phra That Doi Suthep in Chiang Mai Province, for Department of Fine Arts, Royal Thai Government; Principal Investigator.
- 1998 Renovation of Don Chedi Monument in Supanburi Province, for Department of Fine Arts, Royal Thai Government, Principal Investigator.
  - 13th Asian Games Sport Complex at Thammasat University Campus, Rangsit, Member of Procurement Subcommittee Appointed by Ministry of Finance, Royal Thai Government.
- The Overall Klong Prapa Coverage Project under H.M. the King's Initiation A Conceptual Study of the Covering Structures, Hydraulics and Water Quality Management, Road, Transport and Traffic Study, Construction Technique and Cost Estimation, for Department of Highways, Team Leader.
- The Design and Construction Acquisition Committee of the new building complex of the Bank of Thailand, Invited Expert Member.
- Adjustments of Building Energy Codes in Thailand, a study for the Department of Energy Development and Promotion under the sponsorship of Danish Agency for Environment and Development (DANCED), Team Leader.
  - Development of Rubberized Asphalt from Used Rubber Tire Scrap for Infrastructure Construction, sponsored by the National Metal and Material Technology Center (MTEC), National Science and Technology Development Agency, Thailand, Team Leader.
- Natural Rubber Composites for Railway Sleepers: A Feasibility Study, sponsored by the Royal Thai Government Joint Research Fund for AIT, Team Leader.
  - Noble Ora Condominium, 22-Storied Twin Towers, on Sukhumvit 55, Independent Checker.
- The new Vichaiyut Medical Center 26-story Building at Rama 6 Road, Chief Structural Engineer.
  - Twin parking and dormitory buildings of the Siriraj Hospital, Chief Structural Engineer.
- Investigation and Renovation of Wat Borvornnives Chedi in Bangkok, for Department of Fine Arts, Royal Thai Government; Chief Design Engineer.