



## CURRICULUM VITAE

### Worsak Kanok-Nukulchai

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#### PERSONAL DATA

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Nationality	Thai
Current Position & Address	President Asian Institute of Technology P.O. Box 4, Klong Luang, Pathumthani 12120, Thailand

#### EDUCATION

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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

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##### Awards & Honors

May 1, 1973	Top Academic Performance Award (G.P.A. 4.0) among 1973 AIT graduating class of 400 students, honored by AIT Alumni Association.
Sep 1, 1977	1977 Earle C. Anthony Award from University of California, Berkeley.
Apr 1, 1984	Associate Professorship of the University of Tokyo, granted by the Japanese Government.
Mar 1, 1987	Recipient of the 1987 Thailand National Research Council's Engineering & Research Innovative Prize from H.E. Prime Minister Prem Tinsulanonda.

- 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.
- Jul 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.
- Jan 1, 2003 Member of Thailand Academy of Science and Technology
- Dec 5, 2003 Bestowed the Royal Decoration of the Companion of the Most Admirable Order of Direkgunabhorn (4th class) by H.M. King Bhumibol.
- Jul 18, 2006 IACM Fellows Award of the International Association of Computational Mechanics for distinguished record of research accomplishment in the area of computational mechanics.
- Sep 22, 2006 Distinguished Thai AIT alumnus recognized by the Thailand Chapter of the AIT Alumni Association
- Dec 9, 2006 Outstanding AIT alumnus recognized by the AIT Alumni Association (Mother Chapter)
- Nov 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.
- March 18, 2015 Honoris Causa Doctor of Science (D.Sc.), awarded by Sam Higginbottom Institute of Agriculture, Technology and Sciences (SHIATS), Allahabad, India, "for his wisdom and dedication, as a scholar and top administrator of an international institute with the noble goal to foster international cooperation in this Asian Century".
- June 8, 2016 Inducted into Thailand's Academy of Sciences of the Royal Society of Thailand by the Royal Command of His Majesty the King Bhumibol Adulyadej of Thailand.
- Dec 24, 2016 Honorary Degree of Doctor of Philosophy, awarded by K.L. University, Andhra Pradesh, India, in recognition of exceptional contribution to the public through professional activity.

### **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 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**

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Jan.-Dec. 1978	Senior Structural Analyst, Diablo Nuclear Power Plant Project, John A. Blumes & Associates, 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 & Construction, 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-July 2013	Vice President for Resource Development, Asian Institute of Technology.
July 2013-July 2014	Interim President, Asian Institute of Technology
July 2014-present	President, Asian Institute of Technology

## COMMUNITY SERVICES

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- 1980            □ Subcommittee for Don Muong Air Port Expansion Project, Air Port Authority of Thailand 1980-82.
- 1985            □ Vice Chairman and Chief Editor, The Civil Engineering Chapter, Engineering Institute of Thailand 1985-87.
- 1988            □ Member of Governing Board of the Engineering Institute of Thailand under H.M. the King's Patronage 1988-89.
- Founder and Chief Editor of the Technical Journal of the Engineering Institute of Thailand 1988-89.
- 1989            □ Working Party to arbitrate the contract dispute between National Petrochemical Corporation and the Contractor, Sinothai-Wakashiku Joint Venture 1989-90.
- 1990            □ Vice Chairman, Civil Engineering Chapter, Engineering Institute of Thailand under H.M. the King's Patronage 1990-92.
- Chairman, Subcommittee for Drafting EIT's Earthquake Resistant Design Code 1990-92.
- 1992            □ Chairman of Civil Engineering Chapter & member of the Governing Board, Engineering Institute of Thailand under H.M. the King's Patronage (First Term), 1992-1993.
- Member of the Academic and Curriculum Committee of Sirindhorn International Institute of Technology (SIIT), Thammasat University, 1992-1999.
- 1993            □ Member of Fast-track Committee, to supervise the construction the Hopewell Community Train and Elevated Expressway Project, appointed by Minister of Communication.
- 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.
- 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.
- Member of the Ad-hoc Working Committee on Steel Industries in Thailand, Board of Investment (BOI), Thailand.
- 1994            □ Chairman of Civil Engineering Chapter & member of the Governing Board, Engineering Institute of Thailand under H.M. the King's Patronage (Second Term) 1994-96.
- 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.
- 1995            □ Chairman of the Organization of the Second National Civil Engineering Conference, held in Chiang Mai University, Chiang Mai Province,

November 9-10, 1995.

- Member of Procurement Subcommittee for 13th Asian Games Sport Complex at Thammasat University Campus, Rangsit, Appointed by Ministry of Finance, Royal Thai Government, 1995-1998.
- 1996
- 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.
  - Member of Technical Subcommittee on Impact of Overloaded Trucks, appointed by H.E. Prime Minister.
  - Chairman of Subcommittee of the Prime Minister's Advisory Committee on Quality Development and Standards of Architects, Engineers, and Related Technical Professions.
  - 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.
  - 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
- Chairman of Fire Safety in Buildings, Engineering Institute of Thailand.
  - 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.
  - Member of the Committee on Registration of Building Safety Inspection, Appointed by Bangkok Metropolitan Administration.
  - Task Force for Study and Solution to the Construction of the Padang Bezar Custom Port, Appointed by Ministry of Finance.
  - Chairman of Subcommittee for Public and Social Welfare, Engineering Institute of Thailand.
  - Member of the Advisory Committee of the Bangkok Governor on Civil Works.
  - Member of the Executive Commission on Disaster Protection, appointed by the order 156/2541 of Prime Minister Mr. Chuan Leekpai to oversee National Safety Council of Thailand on August 20, 1998.
- 2000
- Member of the Academic Auditing Committee of the Faculty of Architecture, Chulalongkorn University.
- 2000
- Member of Audit Committee of the Construction of Chalerm Prakiart Sport Stadium, Pathumthani Province, appointed by Department of Physical Education.
  - Member of the Subcommittee of Fact Finding on Fire Disasters, National Safety Council, Bureau of the Prime Minister Office, Royal Thai Government.

- Member of the Subcommittee of Fact Finding on Fire Disasters, National Safety Council, Royal Thai Government.
- 2001
  - Advisory Committee on Strategies for Thailand's Industrial Development, appointed by Minister of Industry, Royal Thai Government.
  - Member of Committee on Follow-Up of Road over Klong Prapa under H.M. Initiation, appointed by Minister of Communication, Royal Thai Government.
  - Member of the Curriculum Development Committee of Master Program in Faculty of Architecture, Chiang Mai University.
  - Member of Committee on Selection of Designers for New Office Building Compound of the Bank of Thailand, appointed by Bank of Thailand.
  - Member of the Public Hearing Committee, Mass Transit System in Ratanakosin Island, Appointed by Bangkok Metropolitan Administration.
  - Advisory Committee of Faculty of Engineering, Kasetsart University, appointed by Dean of Faculty of Engineering, Kasetsart University.
- 2002
  - Chairman of Thailand's Society of Computation Mechanics, Engineering Institute of Thailand.
  - Chairman of Subcommittee for Quality of life and Society, Engineering Institute of Thailand.
  - Member of the Quality Assurance Audit, College of Innovation, Thammasat University, Bangkok 2002-2007.
- 2003
  - External Expert on the Establishment of the Doctoral Curriculum Committee in Civil Engineering Faculty of Engineering, Chiang Mai University.
  - Advisor, Faculty of Engineering, Srinakarinwirote University, Nakorn Nayok.
  - Governing Board, The Expressway and Rapid Transit Authority of Thailand, 2003-2005
- 2005
  - Advisor to the Minister of Transport 2005-2006
  - Vice Chair, Committee on Airport Construction Acceleration, Ministry of Transport, Royal Thai Government 2005-2006
  - Member of the Board of Directors, Airports of Thailand, Public Company (AOT), 2005-2006
- 2012
  - Member of the Founding Committee, the Vidyasirimedhi Institute of Science and Technology (VISTEC).
- Since 2014
  - Member of the Council and the Executive Committee of the Vidyasirimedhi Institute of Science and Technology (VISTEC).
- Since 2015
  - Chairman, Academic Committee of the Vidyasirimedhi Institute of Science and Technology (VISTEC)

## INTERNATIONAL ACTIVITIES

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### 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

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### 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.

## PUBLICATION

Worsak Kanok-Nukulchai, Ph.D.



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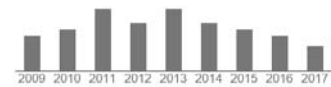
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Citation indices	All	Since 2012
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*(Bold font items are refereed international journal articles)*

1. W. KANOK-NUKULCHAI, "Analysis and design of ferro-cement rice bin," M. Eng. Thesis, Asian Institute of Technology, Bangkok, 1973.
2. P. KARASUDHI, S.L. LEE and W. KANOK-NUKULCHAI, "Analysis and design of ferrocement rice bins," Research Report No. 33, Asian Institute of Technology, June 1973.
3. T.J.R. HUGHES, R.L. TAYLOR, J.L. SACKMAN, A. CURNIER, and W. KANOKNUKULCHAI, "Finite element formulation and solution of a class of contact-impact problems in continuum mechanics," Transaction, 3rd International Conference on Structural Mechanics in Reactor Technology, Vol. 4, part J5/5, London, September 1975.
4. **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", Computer Methods in Applied Mechanics and Engineering, 8, 249-276 (1976).**
5. T.J.R. HUGHES, R.L. TAYLOR and W. KANOK-NUKULCHAI, "A finite element method for large displacement contact and impact problems," Proceedings of the Symposium on Formulations and Computational Algorithms in Finite Element Analysis, M.I.T., Cambridge, Massachusetts, August 9-13, 1976.
6. **T.J.R. HUGHES, R.L. TAYLOR, and W. KANOK-NUKULCHAI, "Numerical prediction of head/helmet system response," in Measurement and Prediction of Structural and Biodynamic Crash-Impact Response, ASME, New York, 1976, pp. 151-165.**
7. T.J.R. HUGHES, R.L. TAYLOR, J.L. SACKMAN and W. KANOK-NUKULCHAI, "Finite element formulation and solution of contact-impact problems in continuum mechanics - IV," SESM Report 76-4, UC. Berkeley, July 1976.
8. **T.J.R. HUGHES, R.L. TAYLOR, and W. KANOK-NUKULCHAI, "A simple and efficient finite element for plate bending", International Journal for Numerical Methods in Engineering, 11, 1529-1542 (1977).**
9. W. KANOK-NUKULCHAI, "A simple and efficient finite element for general shell analysis," SESM Report No. 78-1, U.C. Berkeley, January 1978.
10. W. KANOK-NUKULCHAI, "A large-deformation formulation for shell analysis by the finite element method," Ph.D. Dissertation, University of California, Berkeley, December 1978.
11. **W. KANOK-NUKULCHAI, "A simple and efficient finite element for general shell analysis", International Journal for Numerical Methods in Engineering, 14, 179-200 (1979).**



12. W. KANOK-NUKULCHAI, R.L. TAYLOR, and T.J.R. HUGHES, "A large deformation for shell analysis by the finite element method", in Computational Methods in Nonlinear Structural and Solid Mechanics, Edited by A.K. Noor and H.G. McComb, pp. 19-27, Pergamon Press, Oxford, 1981.
13. **W. KANOK-NUKULCHAI, R.L. TAYLOR, and T.J.R. HUGHES, "A large deformation for shell analysis by the finite element method", International Journal of Computers and Structures, 13, 1/2, 19-27 (1981).**
14. **W. KANOK-NUKULCHAI, P.H. DAYAWANSA, and P. KARASUDHI, "An exact finite element model for deep beams", International Journal of Structures, 1, 1, 1-7 (1981).**
15. W. KANOK-NUKULCHAI and J.S. SHIM, Analysis Interpretive Treatise (AIT) Program, Structural Analysis Program Library SEC-81-001, Division of Structural Engineering & Construction, Asian Institute of Technology, January, 1981.
16. V.V.S. RAO, W. KANOK-NUKULCHAI and P. KARASUDHI, "A large deformation analysis for elasto-viscoplastic shells by finite method," Proceedings of the Eighth Canadian Congress of Applied Mechanics, Moncton, Canada, June 7-12, 1981, pp.245-246.
17. W. KANOK-NUKULCHAI, "Formulation of degenerated finite elements for large-deformation analysis - a unified approach," Proceedings of the Eighth Australasian Conference on the Mechanics of Structures and Materials, the University of Newcastle, New South Wales, August 22-25, 1982, pp. 43.1-43.7.
18. **W. KANOK-NUKULCHAI and V.W. SUARIS, "An efficient finite element scheme for elastic porous media", International Journal of Solids and Structures, Vol. 18, No. 1, pp. 37-49 (1982).**
19. **W. KANOK-NUKULCHAI and A.K. GILANI, "A macroelement for waffle slab analysis", International Journal of Computers and Structures, 15, 2, pp. 117-122 (1982).**
20. **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).**
21. W. KANOK-NUKULCHAI, P. KARASUDHI and P. TANTIPRABHA, "Selection of Bridge Deck System for Suksawat Interchange, and Its Finite Element Analysis", Research Report SEC 82-01, Division of Structural Engineering & Construction, Asian Institute of Technology, June, 1982.
22. **W. KANOK-NUKULCHAI, S.Y. LEE, and P. KARASUDHI, "A versatile finite strip model for three-dimensional tall building analysis", International Journal of Earthquake Engineering & Structural Dynamics, Vol. 11, pp. 149-166 (1982).**
23. W. KANOK-NUKULCHAI and H.K.S. SZE, "An accurate degenerate beam element for large deformation analysis," Proceedings of the International Conference on Finite Element Methods, Shanghai, China, August 2-6, 1982, pp. 727-733.
24. W. KANOK-NUKULCHAI and S. UDOMLERGCHAI, "Development strategy of a microcomputer finite element analysis program - MICROFEAP", Proceedings of the International Conference on Engineering Software for Microcomputers, Venice, Italy, April 2-5, 1984, pp. 447-460.
25. **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).**
26. W. KANOK-NUKULCHAI, "AIT - Analysis Interpretive Treatise", in STRUCTURAL ANALYSIS SYSTEMS (Editor: A. NIKU-LARI), Vol. 1, Pergamon Press, Paris, 1985.
27. W. KANOK-NUKULCHAI, "Integrated Software System for Structural Analysis and Design", Proceedings of the International Conference on Education, Practice and Promotion of Computational Methods in Engineering Using Small Computers (EPMESC), Macao, August 1985.

28. W. KANOK-NUKULCHAI, R. PIYASENA and P. KARASUDHI, "AIT - Analysis Interpretive Treatise for Structural Analysis on Microcomputer", Proceeding of the International Conference on Education, Practice and Promotion of Computational Methods in Engineering Using Small Computers (EPMESC), Macao, August 1985.
29. **W. KANOK-NUKULCHAI, "On a Microcomputer Integrated System for Structural Engineering Practice", International Journal of Computers and Structures, Vol. 13, No. 1, 33-37 (1986).**
30. **W. KANOK-NUKULCHAI, A. HASEGAWA and F. NISHINO, "Generic Formulation Procedure For Large Deformation Analysis of Structural Elements", Proc. of JSCE, Structural Engineering /Earthquake Engineering, Vol 3, No. 1, April 1986.**
31. W. KANOK-NUKULCHAI and S. PRUGMAHACHAIKUL, "Formulation of Cable Elements for Analysis of Prestressed Cable-Suspended Roofs", in Structural Engineering & Construction: Advances and Practice in East Asia & the Pacific (editors: W. Kanok-Nukulchai et al.), Pergamon Press, Oxford, January, 1986.
32. Y.C. LOO, W. KANOK-NUKULCHAI and L.C. YANG, "Model Tests of a Prestressed Cable-Suspended Roof With Precast Panels" in Structural Engineering & Construction: Advances and Practice in East Asia & the Pacific (editors: W. Kanok-Nukulchai et al.), Pergamon Press, Oxford, January, 1986.
33. W. KANOK-NUKULCHAI, "Implication and Impacts of Earthquake Regulation on Building Design", Proceedings of the 1st Work-shop on Earthquake Engineering and Hazard Mitigation (Editors: P. Lukku-naprasit et al.), Chula-longkorn Univer-sity, Bangkok, November 5-6, 1986 (in Thai)
34. W. KANOK-NUKULCHAI, and W. K. WONG, "Pseudo-Lagrangian Formulation for Large Deformation Analysis", Proceedings of the International Conference on Computational Engineering Mechanics, Beijing, China, June 22-26, 1987.
35. D.C.V. NGU and W. KANOK-NUKULCHAI, "An Efficient Thin-Walled Deck Finite Element for Three Dimensional Analysis of Cable- Stayed Bridges", in Cable-Stayed Bridges: Experiences & Practice (Editor: W. Kanok-Nukulchai), Proceedings of the International Conference on Cable-Stayed Bridges, Bangkok, Thailand, November 18-20, 1987.
36. **W. KANOK-NUKULCHAI and M. SIVAKUMAR, "Degenerate Elements for Combined Flexural and Torsional Analysis of Thin-Walled Structures", J. of Structural Engineering, ASCE Vol 114, No. 3, March 1988, pp. 657-674.**
37. **W. KANOK-NUKULCHAI and W.K. WONG, "Element-Based Lagrangian Formulation for Large Deformation Analysis", International Journal of Computers and Structures, Vol. 30, No. 4, pp. 967-974, 1988.**
38. W. KANOK-NUKULCHAIT and K.T. CHAU, "Fundamental Solutions and Boundary Element for Saturated Porous Halfspace." in Computational Mechanics '88, edited by S.N. Atluri and G. Yagawa, Springer-Verlag, New York 1988.
39. W. KANOK-NUKULCHAI, "On Integrated Software System for Structural Engineering Practice", Paper presented at the Seminar on Technology for Self-Reliance and Development, Dhaka, November 1-3, 1988.
40. S. ATTASERANEEWONG and W. KANOK-NUKULCHAI, "Modern Structural Analysis on Microcomputers", Thailand Engineering Journal, Vol. 41, No. 4, 1988 (in Thai).
41. **T. CHAISOMPFOB, W. KANOK-NUKULCHAI, and F. NISHINO, "An Automatic Arc Length Control Algorithm for Tracing Equilibrium Paths of Nonlinear Structures", Structural Engineering/Earthquake Engineering, JSCE, Vol. 5, No. 1, April 1988, pp. 205-208.**

42. K.T. CHAU and W. KANOK-NUKULCHAI, Development of boundary elements for porous half space and its application to Bangkok's subsidence, Research Report No. 216, Asian Institute of Technology, Bangkok, June 1988.
43. E. YAMAGUCHI and W. KANOK-NUKULCHAI, "A formulation of finite displacement theory by finite element method", Proceedings of the JSCE National Conference, Hiroshima, 3-5 October 1988.
44. S. ATTASERANEWONG and W. KANOK-NUKULCHAI, "Performance of MICROFEAP II System", Proceedings of EASEC-2 Conference, Chiang Mai, January 11-13, 1989.
45. H.T. MA and W. KANOK-NUKULCHAI, "On the application of assumed strain methods", Proceedings of the EASEC-2 Conference, Chiang Mai, January 11-13, 1989.
46. W. KANOK-NUKULCHAI and S. ATTASERANEWONG, Finite Element Analysis of Rail Tank Wagon Structure, Research Report submitted to Thai Shell Exploration and Production Co., Ltd., February, 1989.
47. **W. KANOK-NUKULCHAI, "Closure to Degenerate Elements for Combined Flexural and Torsional Analysis of Thin-Walled Structures", J. of Structural Engineering, ASCE, Vol. 115, No. 9, pp 2412-2413, 1989.**
48. **YAMAGUCHI, W. KANOK-NUKULCHAI, T. OHTA, "A Study of Finite Displacement Analyses of Beam Structures by the Finite Element Method", J. of Structural Engineering, JSCE, Vol. 35A, pp. 175-183, 1989 (in Japanese).**
49. N. PHIEN-WEJ and W. KANOK-NUKULCHAI, "Excavation induced pile movement and damage: a case history in Bangkok", Paper to be presented in PILETALK International Seminar '89, Kuala Lumpur, 8-9 March 1989.
50. T. Ueda, W. KANOK-NUKULCHAI, C. CHOYEY PUNT, S. SACHAVANICH, and C. SUTHIKAN, Evaluation of Compressive Strength of Concrete Water Transmission Tunnel by Rebound Hammer Test, Research Report submitted to Bangkok Metropolitan Water Work Authority, October 1989.
51. W. KANOK-NUKULCHAI, A Powerful General Purposed Nonlinear Finite Element Package Adopting Automatic Arc Length Control Algorithm, Proceedings of the Asia Pacific Structural Analysis Conference, paper IV-1, Malacca, Malaysia, 7-9 November 1989.
52. **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, 1990.**
53. W. KANOK-NUKULCHAI, S. Attasaeranewong and A. Trinidad, "MICROFEAP II System -General Purpose Microcomputer Package for Structural Analysis". Paper presented at the Technical Conference on Microcomputer Applications in Civil Engineering, Iligan City, September 22-23, 1990.
54. W. KANOK-NUKULCHAI and H.T. Ma, "Improvement of a Displacement-based Shell Element", Proceedings of the Third East Asia-Pacific Conference on Structural Engineering & Construction, Shanghai, China, 23-26 April 1991, pp. 23-28.
55. E. Yamaguchi and W. KANOK-NUKULCHAI, "Accurate Degeneration Approach to Analysis of Beam Structures", Proceedings of the Third East Asia-Pacific Conference on Structural Engineering & Construction, Shanghai, China, 23-26 April 1991, pp. 53-58.
56. W. KANOK-NUKULCHAI and T. Susompow, "The False Paradox of Torsional Buckling of I-Column with Variable Cross-Section", Proceedings of the International Conference on Steel and Aluminium Structures, Singapore, 22-24 May 1991, pp. 349-362.
57. W. KANOK-NUKULCHAI, "Seismic Risk Mitigation: Whose Role is it?", Invited Paper in Environment 1991, Proceedings of the Second National Seminar on National Resources and Environment Preservation, 15-16 June 1991, pp. 324-333 (in Thai).

58. W. KANOK-NUKULCHAI and H.T. Ma, "A General Approach to the Improvement of Displacement-based Shell Elements", Proceedings of the Fourth International Conference on Computing in Civil and Building Engineering, Tokyo, Japan, 29-31 July 1991, page 94.
59. W. KANOK-NUKULCHAI, "Seismic Risk Mitigation: Whose Role is It?", Yotha Sarn (Civil Engineering Newsletter), Engineering Institute of Thailand, Vol. 3 No. 3, 1991, pp. 18-23.
60. W. KANOK-NUKULCHAI, "An Efficient Degenerate Element for Large Deformation Analysis of Thin-Walled Structures", in Computational Mechanics (editors: Y.K. Cheung et al.), A.A. Balkema, Rotterdam, 1991.
61. **W. KANOK-NUKULCHAI, P.K. Yiu, and D.M. Brotton, "Mathematical Modelling of Cable-Stayed Bridges", Structural Engineering International, Journal of the International Association for Bridge and Structural Engineering (IABSE), No. SEI 2, 1992, pp. 108-113.**
62. **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.**
63. W. KANOK-NUKULCHAI, "Tall Building Modelling: Economics & Safety", in Prospects on Housing Policy and Technology Development For 21st Century", Proceedings of International Symposium on Housing, Korea National Housing Corporation, Seoul 17-19 June 1992, pp. 607-624.
64. **G.M. Hong, C.M. Wang, and W. KANOK-NUKULCHAI, "Elastic Buckling of Circular Plates with Allowance for Pre-Buckling Deformation" in Journal of Engineering Mechanics, ASCE, Vol. 119, No. 5, 1993, pp.905-916.**
65. **W. KANOK-NUKULCHAI, and G. Hong, "Nonlinear Modelling of Cable-Stayed Bridges", Journal of Constructional Steel Research, Vol. 26, 1993, pp. 249-267.**
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164. **C Buachart, W KANOK-NUKULCHAI, E Ortega, E Onate, A shallow water model by finite point method, International Journal of Computational Methods, 11, 1 (2014), pp. 1-27.**
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## PROFESSIONAL EXPERIENCES

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- 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.
- 1989 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.
- 1991 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, Choburi; Structural Analyst.
- 1993 8 highway interchanges of Outer Ring Road Highway (Lam Lukka, Sukhabhival, 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, Bangkokapi, Romklao, Lad Krabang, Pantong and Cholburi), for Thai Engineering Consultants, Co., Ltd.; Structural Consultant.
- 21-story Vichaiyut II Hospital, Samsen, Bangkok; Structural Engineer.
- 1994 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.
- 1995 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.
- 1997 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.
- 2000 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.
- 2001 The Design and Construction Acquisition Committee of the new building complex of the Bank of Thailand, Invited Expert Member.
- 2002 Adjustments of Building Energy Codes in Thailand, a study for 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.
- 2003 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-Storeyed Twin Towers, on Sukhumvit 55, Independent Checker.
- 2004 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.
- 2008 Investigation and Renovation of Wat Borvornnives Chedi in Bangkok, for Department of Fine Arts, Royal Thai Government; Chief Design Engineer.