

CURRICULUM VITAE

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Education

- Doctor of Philosophy (Ph.D.) in Civil Engineering, Sirindhorn International Institute of Technology, Thammasat University, Thailand, October 2004
- Master of Engineering (M.Eng.) in Civil Engineering (Structural Engineering), Asian Institute of Technology, Thailand, April 1997
- Bachelor of Engineering (B.Eng.) in Civil Engineering, Chulalongkorn University, Thailand, May 1995

Working Experiences

Jun 1998 - Present Department of Civil Engineering, Faculty of Engineering,
Burapha University
169 Saensuk, Muang, Chonburi 20131, Thailand
Position: Lecturer

Jun 1997 – Apr 1998 Structural Design Department,
PWHL Consulting Engineers Co., Ltd.
Kulab Bdg., Bangna Trad Rd., Bangplee, Samutprakarn 10540
Thailand
Position: Structural Engineer

May 1995 – Aug 1995 Structural Design Department,
Metropolitan Engineering Consultants Co., Ltd.
19/2 Sukhumvit Rd., Soi 23 (Prasanmitr), Bangkok 10110
THAILAND
Position: Civil Engineer

Research Interests

- Construction materials
- Concrete technology
- Corrosion of steel in concrete due to chloride attack
- Durability of concrete structures
- Prediction of service life of concrete structures
- Repair and maintenance of concrete structures

Publications

Book

1. Taweechai Sumrawanich & Somnuk Tangtermsirikul (2018). Concrete Structure Deterioration. Bangkok: Charansanitwong Printing Co., Ltd. ISBN: 978-616-468-647-2 (in Thai)

International Journal

1. Kijjanon, A., Sumranwanich, T., Saengsoy, W., & Tangtermsirikul, S. (2023). Chloride penetration resistance, electrical resistivity, and compressive strength of concrete with calcined kaolinite clay, fly ash, and limestone powder. *Journal of Materials in Civil Engineering*, 35(3), 04022462.
2. Prak, L., Sumranwanich, T., & Tangtermsirikul, S. (2023). Experimental investigation on the degradation of coating on concrete surfaces exposed to accelerated and natural UV in chloride environment. *Journal of Adhesion Science and Technology*, 37(2), 240-256.
3. Prak, L., Sumranwanich, T., & Tangtermsirikul, S. (2021). Time-dependent model for predicting chloride binding capacity of concrete with crystalline material. *Journal of Materials in Civil Engineering*, 33(2), 04020473.
4. Chuosavasdi, T., Stitmannathum, B., Sumranwanich, T., Saengsoy, W. & Tangtermsirikul, S. (2016). Degree of hydration and mass balance equations for determination of mix proportion of hardened OPC concrete. *Engineering Journal*, 20(2), 211-219.
5. Kaewmanee, K., Krammart, P., Sumranwanich, T., Choktaweekarn, P. & Tangtermsirikul, S. (2013). Effect of free lime content on properties of cement-fly ash mixtures. *Construction and Building Materials*, 38, 829-836.
6. Sumranwanich, T. & Tangtermsirikul, S. (2004). A model for predicting time-dependent chloride binding capacity of cement-fly ash cementitious system. *Materials and Structures*, 37, 387-396.
7. Sumranwanich, T. & Tangtermsirikul, S. (2004). Time-dependent chloride binding capacity of various types of cement pastes. *ScienceAsia*, 30(2), 127-134.
8. Niwa, J., Sumranwanich, T. & Matsuo, T. (2000). Experimental study to determine the tension-softening curve of concrete. *Concrete Library of JSCE*, No.35, 1-8.

International Conference

1. Tangtermsirikul, S., Saengsoy, W., Kaewmanee, K., Julnipitawong, P., Sumranwanich, T. (2023). Toward effective utilization of fly ash and multi-binder system with fly ash in concrete. *Journal of Physics: Conference Series*, 2521, 012002. 15th International Conference on Concrete Engineering and Technology (CONCET 2022) 6-7 December 2022 Online.
2. Rungkeerati, N., Chuosavasdi, T., & Sumranwanich, T. (2019). Experimental study on electrical resistivity and rapid chloride penetration resistance of concrete. In *Proceedings of the 3rd ACF Symposium 2019, Assessment and Intervention of Existing Structures on 10-11 September 2019 (pp.1-6)*. Sapporo, Japan: Hokkaido University and Asian Concrete Federation.
3. Prak, L., Sumranwanich, T., & Tangtermsirikul, S. (2017). A time-dependent model of chloride binding capacity of concrete with crystalline material. In *Proceedings of the 2nd ACF Symposium 2017, Innovations for Sustainable Concrete Infrastructure on 23-25 November 2017 (pp.1-10)*. Chiang Mai, Thailand: Sirindhorn International Institute of Technology and Asian Concrete Federation.
4. Prak, L., Sumranwanich, T., & Tangtermsirikul, S. (2017). Prediction of repair-free service life of concrete after repairing with crystalline material and fly ash concrete. In *Proceedings of the 2nd ACF Symposium 2017, Innovations for Sustainable Concrete Infrastructure on 23-25 November 2017 (pp.1-8)*. Chiang Mai, Thailand: Sirindhorn International Institute of Technology and Asian Concrete Federation.
5. Pavitpok, S., & Sumranwanich, T. (2017). Effect of interground fly ash cement and blast-furnace slag cement on chloride diffusion coefficient and compressive strength of concrete under marine environment of Thailand. In *Proceedings of the 5th Annual International*

- Conference on Architecture and Civil Engineering 2017, on 8-9 May 2017 (pp.1-10). Singapore: Global Science and Technology Forum.
6. Prak, L., Sumranwanich, T., & Tangtermsirikul, S. (2016). A study on chloride profiles of concrete repaired with fly ash concrete and crystalline material. In Proceedings of the 7th International Conference of Asian Concrete Federation 2016, Sustainable Concrete for Now and the Future on 30 October - 2 November 2016 (pp.1-10). Hanoi, Vietnam: Asian Concrete Federation.
 7. Kijjanon, A., Sumranwanich, T., & Tangtermsirikul, S. (2016). A time-dependent model for predicting chloride profiles in fly ash cementitious systems. In Proceedings of the 7th International Conference of Asian Concrete Federation 2016, Sustainable Concrete for Now and the Future on 30 October - 2 November 2016 (pp.1-10). Hanoi, Vietnam: Asian Concrete Federation.
 8. Chour, S., & Sumranwanich, T. (2013). A model for predicting chloride penetration profile in concrete containing ground granulated blast-furnace slag. In Proceedings of the 6th ASEAN Civil Engineering Conference on 21-22 November 2013 (pp.CE31-1-CE31-7). Bangkok, Thailand: AUN/SEED Net, JICA and ASEAN Foundation.
 9. Prak, L., & Sumranwanich, T. (2013). Effect of ground granulated blast-furnace slag and limestone powder on the chloride resistance of concrete. In Proceedings of the 6th ASEAN Civil Engineering Conference on 21-22 November 2013 (pp.CE32-1-CE32-8). Bangkok, Thailand: AUN/SEED Net, JICA and ASEAN Foundation.
 10. Sumranwanich, T., Wanichlamlert, C., Tangtermsirikul, S., & Wongkaew, A. (2010). Experimental investigation of chloride threshold of concrete with limestone powder and fly ash. In Proceedings of the 2nd ASEAN Civil Engineering Conference, Forward Civil Engineering for Sustainable Development in ASEAN Region on 11-12 March 2010. Vientiane, Lao People/s Democratic Republic: AUN/SEED Net, JICA and ASEAN Foundation.
 11. Sumranwanich, T., Juleang, P., Wattanalamlert, C., Tangtermsirikul, S., & Wongkaew, A. (2009). A study on chloride diffusion coefficient of concrete structures exposed to marine environment of Thailand. In Proceedings of the 1st ASEAN Civil Engineering Conference, Civil Engineering Innovations for Regional Development on 11-13 March 2009. Chonburi, Thailand: AUN/SEED Net, JICA and ASEAN Foundation.
 12. Rerkmahalikhit, A., Sumranwanich, T., & Tangtermsirikul, S. (2009). Chloride resistance of Portland cement mortar with fly ash, limestone powder and expansive additives. In Proceedings of the 1st ASEAN Civil Engineering Conference, Civil Engineering Innovations for Regional Development on 11-13 March 2009. Chonburi, Thailand: AUN/SEED Net, JICA and ASEAN Foundation.
 13. Tangtermsirikul, S., Kaewmanee, K., Krammart, P., Sumranwanich, T., & Wattanalamlert, C. (2008). Development of Thailand building code with reference to ACMC part 2 document. In Proceedings of the 3rd ACF International Conference, Sustainable Concrete Technology and Structures in Local Climate and Environment Condition on 11-13 November 2008. Ho Chi Minh, Vietnam: Asian Concrete Federation.
 14. Tangtermsirikul, S., Sumranwanich, T., Krammart, P., Khunthongkaew, J., & Sahamitmongkol, R. (2006). Durability design concept for sustainable concrete structure in Thailand. In Proceedings of the 5th International Symposium on New Technologies for Urban Safety of Mega Cities in Asia on 16-17 November 2006. Phuket, Thailand: Asian Institute of Technology (AIT), International Center for Urban Safety Engineering (ICUS), Institute of Industrial Science (IIS) and University of Tokyo.
 15. Sumranwanich, T., & Tangtermsirikul, S. (2006). Experimental study on chloride penetration into cement-fly ash paste. In Proceedings of the 10th East Asia-Pacific

Conference on Structural Engineering and Construction on 3-5 August 2006. Bangkok, Thailand: Asian Institute of Technology.

16. Sumranwanich, T. (2006). Fracture energy of concrete with pozzolan and fiber. In Proceedings of the International Conference on Pozzolan, Concrete and Geopolymer on 24-25 May 2006. Khon Kaen, Thailand: Khon Kaen University.
17. Sumranwanich, T., Tangtermsirikul, S., & Maruya, T. (2004). Prediction of chloride penetration profile in cement-fly ash mortar and concrete. In Proceedings of the 4th International Conference on Concrete Under Severe Conditions: Environment & Loading (CONSEC'04) on 27-30 June 2004 (pp. 401-408). Seoul, South Korea: Seoul National University and Korea Concrete Institute.
18. Sumranwanich, T., & Tangtermsirikul, S. (2002). A chloride binding capacity model for cement-fly ash pastes. In Proceedings of the 27th Conference on Our World in Concrete & Structures on 29-30 August 2002 (pp. 545-552). Singapore: Ready Mixed Concrete Association of Singapore and American Concrete Institute (Singapore Chapter).
19. Niwa, J., Sumranwanich, T., & Tangtermsirikul, S. (1998). New method to determine the tension-softening curve of concrete, In Proceedings of fracture mechanics of concrete structure (FRAMCOS-3) on 12-16 October 1998 (pp. 347-356). Gifu, Japan: International Association of Fracture Mechanics for Concrete and Concrete Structures.

Members

- Member of the Engineering Institute of Thailand under H.M. the King's Patronage (No. 1/021871)
- Member of the Thai Concrete Association (No. 0008)
- ASCE Member (No. 12186568)

Professional Licenses

- License of Civil Engineer of Council of Engineers, Thailand (Fellow Civil Engineer: License No. 8171)
- License of Building Inspector of Department of Public Works and Town & Country Planning, Thailand (License No. 0951/2550)