

CURRICULUM VITAE

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EDUCATION :

- Ph.D. in Applied Mathematics, May, 2006, Suranaree University of Technology,
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- M.Sc. in Applied Mathematics, May, 2000, Mahidol University, Bangkok, Thailand.
- B.Sc. 2nd Class Honors in Applied Mathematics, 1995, King Mongkut's Institute
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WORK EXPERIENCE :

- Lecturer in Mathematics Department at King Mongkut's University of Technology
North Bangkok, Bangkok, Thailand.
- Teacher Assistance in School of Mathematics at Suranaree University of
Technology, Nakornratchasima, Thailand (January – April 2002).
- Research Training on Numerical Simulation of Fluid Flow past Self-Propelled
Body at Curtin University of Technology, Australia (February – May 2004).
- Research Training on Numerical Simulation of Laminar Flow over Two Rotating
Circular Cylinders at Massey University, New Zealand, (March – May 2007).

PUBLICATIONS

- [1] **Surattana Sungnul**, Bubpha Jitsom, and Mahosut Punpocha, (2018), “Numerical Solutions of the Modified Burger's Equation using FTCS Implicit Scheme”, *IAENG International Journal of Applied Mathematics*, 48(1), pp.53-61.
- [2] **Surattana Sungnul**, Wisanlaya Pornprakun, Santipong Prasattong, and Chanasak Baitiang, (2018), “A Mathematical Model for the Sugarcane Trading System in Thailand”, *Engineering Letters*, 26(1), pp.84-91.
- [3] Sasikarn Sakulrang, **Surattana Sungnul**, Boonlert Srihirun and Elvin J Moore, (2018), “Derivation of lie groups for some higher order stochastic differential equations”, *Thai Journal of Mathematics*, **Special Issue (2018) on (AMM 2017)**, pp.1-20.
- [4] Sasikarn Sakulrang, Elvin J Moore, **Surattana Sungnul** and Andrea de Gaetano, (2017), “A fractional differential equation model for continuous glucose monitoring data”, *Advances in Difference Equations*, 2017:150 DOI 10.1186/s13662-017-1207-1 pp.1-11.
- [5] **Surattana Sungnul**, Kanokwan Pananu, and Vimolyut Varnasavang, (2017), “Efficient Representatives of Some Transcendental Functions”, *IAENG International Journal of Applied Mathematics*, 47(2), pp.130-137.
- [6] **Surattana Sungnul**, Wisanlaya Pornprakun, Santipong Prasattong and Chanasak Baitiang, (2017), “Multi-objective Mathematical Model for the Optimal Time to Harvest Sugarcane”, *Applied Mathematics*, 8(3), pp.329-343.
- [7] **Sungnul, S.**, (2016). “Transformation of the Navier-Stokes Equations in Curvilinear Coordinate Systems with Maple”, *Global Journal of Pure and Applied Mathematics*. 12(3). pp.3315-3325.
- [8] **Sungnul, S.**, Baitiang, C. and Ratanapun, S., (2011), “Software Development for Subjective Test Analysis” *The Journal of KMUTNB*, 21(3), pp. 627-635.
- [9] **Sungnul, S.** and Moshkin, N.P, (2009), “Effect of Rotation Rates and Gap Spacing on the Structure of Low Reynolds Number Flow over Two Rotating Circular Cylinders”, *Computational Fluid Dynamics 2008*, Springer Berlin Heidelberg Publishing, pp. 771-777.
- [10] **Sungnul, S.** and Moshkin, N.P., (2008), “Numerical Simulation of Flow over Two Rotating Self- Moving Circular Cylinders”, *Recent Advances in Computational Sciences*, World Scientific Publishing-Imperial College Press, pp. 278-296.
- [11] **Sungnul, S.** and N.P. Moshkin, (2006), “Numerical Simulation of Steady Viscous Flow Past Two Rotating Circular Cylinders”, *Suranaree Journal of Science and Technology*, 13(3), pp. 219-233.

Proceedings

- [1] **Surattana Sungnul**, and Ekkachai Kunnawuttipreechachan, (2018), “Behavior of the Two-Dimensional Viscous Flow over Two Circular Cylinders with Different Radii,” *Proceedings of The International MultiConference of Engineers and Computer Scientists 2018*, 14-16 March, 2018, Hong Kong, pp. 434-438.
- [2] Wisanlaya Pornprakun, **Surattana Sungnul**, Chanakarn Kiataramkul, and Elvin J. Moore, (2018), “Bi-Objective Optimization Model for Harvesting of Sugarcane with Fixed and Variable Costs of Harvesting,” *Proceedings of The International MultiConference of Engineers and Computer Scientists 2018*, 14-16 March, 2018, Hong Kong, pp. 876-8793.
- [3] Sivaporn Ampun, **Surattana Sungnul** and Sanoe Koonprasert, (2017), “New Exact Solutions for the Time Fractional Clannish Random Walker’s Palabolic Equation by the Improved $\tan(\phi(\xi)/2)$ -expansion Method”, *Proceedings of 22nd Annual Meeting in Mathematics (AMM2017)*, Chiang Mai University, June 2-4, pp. PDE-01-1 – PDE-01-13.
- [4] **Sungnul, S.**, Prasattong, S., Pornpakun, W. and Baitiang, C., (2016), “Optimal Time of Sugarcane Harvesting for Sugar Factories in Thailand”, *Proceedings of 7th International Conference in Mathematics and Applications (ICMA-MU 2016)*, the Centre of Excellence in Mathematics, December 17-19, pp.185-194.
- [5] Jitsom, B., **Sungnul, S.** and Punpocha, M., (2016), “Convergence of Numerical Solutions of Burger’s Equation”, *Proceedings of 21st Annual Meeting in Mathematics (AMM2016) and Annual Pure and Applied Mathematics Conference (APAM2016)*, Chulalongkorn University, May 23-25, pp. 281-290.
- [6] Pananu, K. and **Sungnul, S.**, (2015), “Convergence of Power Series Representation for Transcendental Functions”, *Proceedings of 20th Annual Meeting in Mathematics (AMM2015)*, Silapakorn University, May 27-29, pp. 228-239.
- [7] Pornpakun, W. and **Sungnul, S.**, (2014), “A Mathematical Model for the Optimal Time to Harvest Sugarcane”, *Proceedings of 19th Annual Meeting in Mathematics (AMM2014)*, March 20-22, pp. 21-30.
- [8] Chawengkrittianont, P., **Sungnul, S.** and Punpocha, M., (2014), “A Fractional Order Dynamic Model of Agriculture, Industry and Ecosystem”, *Proceedings of 19th Annual Meeting in Mathematics (AMM2014)*, March 20-22, pp. 15-20.
- [9] **Sungnul, S.**, (2013), “Numerical Simulation of Fluid Flow Over Two Rotating Circular Cylinders for Reynolds number $Re > 45$ ”, *8th International Conference on Multiphase Flow (ICMF 2013)*, May 26-31, Jeju, Korea. pp. 1-6.

- [10] Prasattong, S., **Sungnul, S.** and Ratanapun, S., (2011), “Effects of a symmetric stenosis on arterial blood flow”, *Proceedings of Annual Pure and Applied Mathematics Conference 2011 (APAM2011)*, May 19-20, Chulalongkorn University, pp. 95-99.
- [11] Moshkin, N.P. and **Sungnul, S.**, (2006), “Numerical Simulation of Flow Past Two Rotating Circular Cylinders”, *Proceedings of 10th Annual National Symposium on Computational Science and Engineering (ANSCSE10)*, March 22-24, Chiang-Mai University, pp. 479-484.
- [12] **Sungnul, S.**, (2005), “On the Representation of the Navier-Stokes Equations in Cylindrical Bipolar coordinate System”, *Proceedings of 9th Annual National Symposium on Computational Science and Engineering (ANSCSE9)*, March 23-25, Mahidol University, pp. 340-348.

ตำรา

- [1] สุรัตน์ สัจจ์หุน, “พีชคณิตเชิงเส้นเบื้องต้น” Elementary Linear Algebra กรุงเทพฯ : กongsเสริมวิชาการ มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าพระนครเหนือ, 2560 จำนวน 501 หน้า
ISBN 978-616-368-049-5
- [2] สุรัตน์ สัจจ์หุน, “สมการเชิงอนุพันธ์ 1” Differential Equations I กรุงเทพฯ : กongsเสริมวิชาการ มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าพระนครเหนือ, 2558 จำนวน 399 หน้า
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รางวัลที่ได้รับ

1. ได้รับรางวัลผู้ปฏิบัติงานดีเด่นระดับส่วนงาน ประจำปี พ.ศ. 2553 กลุ่มพนักงานมหาวิทยาลัย
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