

Curriculum Vitae

1. Name and Surname

Associate Professor Nuntachai Thongpance

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2. Education

- 2015 Certification : Future Leaders Program 5th National Defence Studies Institute.
Royal Thai Army Force
- 2014 Certification : QMD Training Course on ISO/IEC 17025 Uncertainty
Measurement.
- 2013 Certification :QMD Training Course on ISO/IEC 17025 Quality System
Document Writing.
- 2005 Certification :Mini BMA,Rangsit University
- 1987 M.Eng. in Nuclear Technology, Chulalongkorn University
- 1981 B.Sc. in Physics (2nd Class Honors), Prince of Songkla University

3. Work Experience

- 2018 – Present, Dean, College of Biomedical Engineering Rangsit University
- 2016 – 2017, Dean, Faculty of Biomedical Engineering Rangsit University
- 2008 – Present, Executive Committee of Thai Biomedical Engineering Association
- 2010 – Present, Executive Committee of Thai Biomedical Instrumentation Association
- 2004 – Present, Founder of Research Center Development and service of biomedical devices
Rangsit University.
- 2002 – 2015, Head of Department of Physics And Head of the Faculty of Biomedical
Engineering Faculty of Science Rangsit University
- 1997 – 2001, Head of Department of Chemistry and Physics And the head of physics.
Rangsit University
- 1995-1996, Lecturer Position Department of Physics, Rangsit University
- 1992 – 1994, Head of Department of Physics Rangsit University
- 1989 – 1991, Lecturer Department of Physics, Rangsit University
- 1987 – 1988, Assistant Product Manager, Private Sector

4. Research Works

1. พุนกิจกรรมขับเคลื่อนผลงานวิจัยเพื่อสร้างมูลค่าเชิงพาณิชย์หรือสู่บัญชีนวัตกรรม.กรมส่งเสริมอุตสาหกรรม .2562
2. พุนกิจกรรมขับเคลื่อนผลงานวิจัยเพื่อสร้างมูลค่าเชิงพาณิชย์หรือสู่บัญชีนวัตกรรม.กรมส่งเสริมอุตสาหกรรม .2561
3. พุนกิจกรรมขับเคลื่อนผลงานวิจัยเพื่อสร้างมูลค่าเชิงพาณิชย์หรือสู่บัญชีนวัตกรรม.กรมส่งเสริมอุตสาหกรรม .2560
4. National Research, A Design of Self-Balancing Wheelchair.October 2016 – October 2017.
5. Research Institute, Rangsit University, The design of intelligent electric wheelchair. October 2016 – October 2017.
6. Research Institute, Rangsit University. Design and Development of Infusion Analyzer.June 2013 – June 2014.
7. National Research Council of Thailand. Design & Development of Blood Pressure Simulator and Defibrillator Energy Tester. February 2012 - February 2013.
8. Research Institute, Rangsit University. Design and Development of Infusion Tester.June 2010 – June 2011.
9. National Metal and Materials Technology Center,Thailand. Design & Development of Patient Lift Prototype . August 2008 - August 2009.
10. Research Institute, Rangsit University. Design and Development of Infant Apnea and Heart Rate Monitor.June 2005 – June 2006.
11. National Metal and Materials Technology Center,Thailand. Design & Development of Blood Pressure Monitor. August 2003 - August 2004.
12. Research Institute, Rangsit University. Design & Development of ECG monitor Display on Microcomputer and Internet. June2001-June2002.
13. Research Institute, Rangsit University. Design & Development of Physics Instrument Set InterfacingMicrocomputer. June1999-June2000.

5. Research publications.

1. Yutthana Pititheeraphab 1,Nuntachai Thongpance 2,Hisayuki Aoyama 3 andChuchart Pintavirooj 1,*. Vein Pattern Verification and Identification Based on Local Geometric Invariants Constructed from

Minutia Points and Augmented with Barcoded Local Feature. *Appl. Sci.* 2020, 10(9), 3192; <https://doi.org/10.3390/app10093192> (registering DOI), 3 May 2020

2. Pechprasarn, S.; Sasivimolkul, S.; Sukkasem, C.; Suvarnaphaet, P. and Thongpance, N. (2020). Surface Plasmons Phase Imaging Microscopy using Deep Learning. In Proceedings of the 8th International Conference on Photonics, Optics and Laser Technology - Volume 1: PHOTOPTICS, ISBN 978-989-758-401-5, pages 33-39. DOI: 10.5220/0008917100330039
3. Prinyakupt, J., Yootho, T., Boonrat, B., Khunard, S., Thongpance, N., & Kanchanaphum, P. The design of turbidimeter for Mg₂P₂O₇ in LAMP product of Salmonella Typhi detection. In the RSU International Research Conference 2019, Pathum Thani, Thailand, 25th – 27th April, 2019.
4. สื่อจิตต์ เพ็ชรประสาน, พิญช์สิณี สุวรรณแพทย์, ชญาณิศรา สุขเกษม, ศุวิชา ศศิวิมลกุล และ นันทชัย ทองแป้น (2562). ภาพรวมของการประยุกต์ใช้ปัญญาประดิษฐ์ทางชีวการแพทย์ในปี พ.ศ.2562 (Overview of Artificial intelligence in Biomedical Applications in 2019). ในงานประชุมวิชาการอุปกรณ์การแพทย์ ครั้งที่ 30 เรื่อง สมาร์ทฮอสพิทล และ เฮลท์แคร์ 4.0. (Smart Hospital and Healthcare 4.0). วันที่ 1–2 สิงหาคม 2562. ณ โรงแรมทวิน ทาวเวอร์ กรุงเทพฯ, หน้า 20-44
5. Chotikunnan, P., Khumlue, S., Duangpim, P., Thongpance, N., Sangworasil, M., Matsuura, T., Chotikunnan, R. and Kacntanu, W., (2018, June). A Design of The Intelligent Wheelchair. In The 10th Biomedical Engineering Conference (BMECON-2018), King Mongkut's University of Technology North Bangkok (KMUTNB), Thailand.
6. Torsutkanok, N., Thongpance, N., & Wongkamhamg, A. (2018, November). The Development of Smart Dental Unit. In 2018 11th Biomedical Engineering International Conference (BMEiCON) (pp. 1-4). IEEE.

7. N.Thongpance¹, T.Kaewgun², A. Wongkamhang³, K. Roongprasert⁴, Y. Pititeeraphab. Implementation of Defibrillator Calibrator for Working standard. The International Journal of Applied Biomedical Engineering.Vol.10., No.1 2017
8. R.Deepankaew⁶ , A.Nirapai⁷ and P. Choitkunnan Y. Pititeeraphab, P. Choitkunnan, N. Thongpance, K.Kullathum, Ch.Pintavirooj. Robot-arm Control System using LEAP Motion Controller. 2016 Third International Conference on Biomedical Engineering (BME-HUST 2016). 978-1-5090-1099-8/16/\$31.00 ©2016 IEEE.
9. Yutthana Pititeeraphab, Thanapong Chaichana, and Nuntachai Thongpance. Implementation of Electric Wheelchair with Microcontroller. International Journal of Electronics and Electrical Engineering Vol. 4, No. 3, June 2016.P253-257.
10. N.Thongpance, T.Kaewgun, S.Petprapasert. Development of The energy tester for defibrillator. The 2015 Biomedical Engineering International Conference (BMEiCON-2015). Paper ID 1-1570213931
11. A. Wongkamhang, N. Thongpance, M.Sangworasil, K. Roongprasert and T. Matsuura. Development of The Low - Cost Blood Pressure Simulator. The 2014 Biomedical Engineering International Conference (BMEiCON-2014). Paper ID 1570022161
12. N.Thongpance, K.Roongprasert. Design and construction of Infusion Device Analyzer. The 2014 Biomedical Engineering International Conference (BMEiCON-2014). Paper ID 1570017943
13. A. Wongkamhang, P. Phasukkit¹,C. Pintuviroj¹, S. Prasantamrongsiri, A. Sanpanich and N. Thongpance. Design and Simulation of Air Flow Inside Double Wall Infant Incubator By Using 3D FEM; Case Study for Multi Inflow and Outflow Slot. Proceedings of Biomedical Engineering International Conference (BMEiCON-2013). Paper ID 1569802463
14. N.Thongpance, T.Kaewgun, R.Deepankaew. Design and construction The Low – Cost Defibrillator Analyzer. Proceedings of Biomedical

Engineering International Conference (BMEiCON-2013). Paper ID 1569795907.

15. Nuntachai Thongpance, Thawat Kaewkan. Design and Construction of White Blood Cell Differential Counter. Proceedings of Biomedical Engineering Conference (BMECON 2012).P92-97
16. Nuntachai Thongpance, Thawat Kaewkan . THE DESIGN AND CONSTRUCTION OF THE DC MOTOR DRIVE UNIT WITH ELECTROMYOGRAM. Proceedings of Biomedical Engineering Conference (BMECON 2012).P105-110
17. Nuntachai Thongpance,Thawat Kaewkan.The Design and Construction of Controller for Regeneration Resin in Reverse Osmosis. Proceedings of Biomedical Engineering Conference (BMECON 2012).P98-103
18. Nuntachai Thongpance .Ronnachit Deparnkaew.. THE DESIGN AND CONSTRUCTION OF SPHYGMOMANOMETER TESTER . Proceedings of Biomedical Engineering Conference (BMECON 2012).P127-132
19. K.Roongprasert, P.Phasukkit, S.Airphai boon, C.Pintavirooj, N.Thongpance, A.Sanpanich. Heat Transfer Efficiency Analysis of Infant Radiant Warmer by 3D Finite Element Method. Proceedings of Biomedical Engineering International Conference (BMEiCON-2012). Paper ID [BME-2012-78](#)
20. A. Wongkamhang, P. Phasukkit¹, S.Airphai boon, C. Pintavirooj, N. Thongpance. and A. Sanpanich³. 3D Finite Element Analysis of Heat Transfer Efficiency in Double Wall Infant Incubator. Proceedings of Biomedical Engineering International Conference (BMEiCON-2012). Paper ID [BME-2012-81](#)
21. Nuntachai Thongpance ,Yuttana Pititeeraphab, Matida Ophasphanichayakul.The Design and Construction of Infusion Pump Calibrator. Proceedings of the 2012 Biomedical Engineering International Conference (BMEiCON-2012) Paper ID [BME-2012-24](#)

22. Nuntachai Thongpance. A Study on the Design and Construction of Semi Automatic Dialyzer Tester. Proceedings of [BMECON-2011](#).P42-48
23. Nuntachai Thongpance, Design and Construction of Respiration Rate Monitor using Thermistor Sensor. Proceedings of [BMECON-2011](#). P49-55.
24. Nuntachai Thongpance, Thanakorn Yooto, Neungluethai Boorasit. Design and Construction of Control Expiratory Time Adjustment Display Knob for the Bird Mark 7 Ventilator. Proceedings of the 2011 Biomedical Engineering International Conference (BMEiCON-2011).P178-181
25. Nuntachai Thongpance. A Study on The Design and Construction of Volume and Flow Rate Tester For Infusion Pump. Proceedings of RSU Research Conference 2010.P179-187.
26. N Thongpance, A. Wongkamhangl.(2009). Development of Blood Pressure Monitor by Microcontroller . Journal Thai Biomedical Instrumentation Association. P 97 -113
27. Nuntachai Thongpance, Burin Kanacharen. Development of Blood Pressure and Temperature Monitor by Microcontroller. Proceedings of the ThaiBME' 2007.P239-245
28. N Thongpance, B Kanacharen.(2003). Development of Blood Pressure Monitor by Microcontroller . Journal Thai Biomedical Instrumentation Association.P150 -155
29. N Thongpance, B Kanacharen.(2002). Development of Electrocardiogram Data recorder and Monitor by Microcomputer System and Internet. Journal Biomed Instru Assoc Thai .P73 -81
30. Nuntachai THONGPANACE.(2002). Physics Redesign Project at Rangsit university. [Bull Health.Sci.& Tech.2002 ; 5\(2\) : P141- 144](#)
31. N Thongpance and B Kanacharen .(2002). Cooperation Contract Signing Ceremony between Rangsit University and Intellect Company Limited., Bull Health,Science &Tech. 2002

32. N Thongpance, B Kanacharoen.(2001) Development of Physics (Mechanics) Instrument-Set Interfacing Microcomputer System. [Bull Health Sci Tech ; 4\(2\): 113-24.](#)
33. Tadsanee PUNJANON¹ and Nuntachai THONGPANCE².(2000). Hazardous Waste of Cobalt – 60 in Bangkok'2000. Bull. Health. Sci.& Tech.2000 ; 3(1) : 55 – 61

6. PROFESSIONAL SERVICE AND SOCIETIES

1. 2019 Keynote Speaker of BMEiCON 2019. Thailand – Lao PDR
2. 2016 Academic service project on Biomedical Engineering for Lao PDR. Hospitals.
3. 2015.General Chair of BMEiCON 2015. Pattaya, Thailand
4. 2012: Hosts of 5st Thai Biomedical Engineering Conference
5. 2010: Hosts of 3rd Thai Biomedical Engineering Conference
6. 2007- Present. vice president,Thai Biomedical Engineering Research Societies
7. 2006: Hosts of 1th Thai Biomedical Engineering Conference
8. 2005- Present. Executive Committee, Thai Biomedical Instrumentation Societies.
9. Project LAO/017 Lao-Luxembourg Health Initiatives Support Programme in the development of the human resources on medical instrumentation of Laotian staffs from Medical Products Supply Center Ministry of Health, Lao PDR both in the form of a bachelor's degree and a short-term training course at Rangsit University during 2009-2012.
10. Academic service project on maintenance and calibration for rural hospitals of Thailand during 2004 – present.
11. Establishment of Biomedical Instrumentation research and development Center of Rangsit University. 2005 – present.
12. To provide short-term training program in biomedical engineering for hospital personnel and agencies involved. 2006 – present.
13. Founder of the RSU Medical Equipment for Society Club. 2005 – present

9. Honor Awards

2017 Outstanding Management Awards, Rangsit University

1. 2012 Senior Scientist, Senate, Thailand

2. 2011 Outstanding Faculty Award for 9 Consecutive years, Rangsit University
3. 2010 Thai Society Award Management of Science Education, Thai Route Magazine
4. 2009 Outstanding Academic Advisor Award, Rangsit University
5. 2008 Outstanding Teacher Award, Rangsit University
6. 2008 Outstanding Supporting Personnel Award, Association of Private Higher Education Institutions of Thailand
7. 2008 Excellent Club Advisors Award, Rangsit University
8. 2004 Outstanding Teacher Award, Rangsit University
9. 2003 Outstanding Science Teacher Higher Education Award, Science Society Thailand Under the Royal Patronage
10. 2002 Invention Award, National Research Council
11. 2001 Outstanding invention Teacher Award, Rangsit University