



CURRICULUM VITAE

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BORN : July 23, 1980, Angthong, Thailand

2. POSITION : Lecturer, Institute for Innovation and Development of Learning Process, Mahidol University

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3. EDUCATION :

- B.Sc.(Biology) Mahidol University, Thailand (2003)

- Diploma (Teaching Profession) Mahidol University, Thailand (2004)

- Ph.D. (Science and Technology Education) Mahidol University, Thailand (2009)

4. RESEARCH EXPERIENCES :

- Science education research at Centre for Science and Technology Education Research, University of Waikato, Hamilton, New Zealand (2007-2008)

5. SCHOLARSHIP :

- Scholarship students of the Project for Promotion of Science and Mathematics Talented Teachers (PSMT) of the Institute for the Promotion of Teaching Science and Technology (IPST), Thailand (1999-2008)

6. AREAS OF EXPERTISE :

- Constructing/developing multimedia for teaching and learning

- Science and Technology Education

- Science teacher professional development

7. PUBLICATIONS :

International papers

1. Choopan, W., **Ketpichainarong, W.**, Laosinchai, P. & Panijpan, B. (2011). A Demonstration set-up to simulate detection of planets outside the solar system. *Physics Education*, 46(5), 554-558.

2. Pewnim, K., **Ketpichainarong, W.**, Panijpan, B, & Ruenwongsa, P. (2011). Biocontrol of insect pests in the rice field: A learning unit about environmental problems for secondary school students. *The International Journal of Learning*, 18(2), 219-223.
3. Pewnim, K., **Ketpichainarong, W.**, Panijpan, B & Ruenwongsa, P. (2011). Creating young scientists through community science projects. *Procedia Social and Behavioral Science*, 15, 2956–2962.
4. Nuangsaeng, B., **Ketpichainarong, W.**, Ruenwongsa, P., Panijpan, B, & Niemi, K.J. (2011). Promoting inquiry-based teaching practices through an aquatic toxicology laboratory. *The International Journal of Learning*, 17(12), 161-180.
5. Piyayodilokchai H., Ruenwongsa, P., **Ketpichainarong W.**, Laosinchai, P., Panjaburee, P*. (2010). Promoting students' understanding of SQL in a database management course: A learning cycle approach. *The International Journal of Learning*, 17(11), 325-337.
6. Wannawichitra, C., Ruenwongsa, P., **Ketpichainarong, W.**, & Jittam, P.* (2010). Development of an integrated learning unit for enhancing awareness and conceptual understanding of global warming in secondary students. *The International Journal of Learning*, 17(11), 399-415.
7. To-im, J., Tianchai, C., Tianchai, N., **Ketpichainarong, W.**, Jittam, P., Sriwattanarothai, N., & Ruenwongsa, P. (2010). Using a Local Water Problem as Case-based Scenario to Encourage Thai Grade 8 Students' Learning of Science. *The International Journal of Learning*, 17(6), 157-163.
8. Pewnim, K., **Ketpichainarong, W.***, & Ruenwongsa, P. (2010) Bringing science to community: A STS-based learning unit on biocontrol for secondary school students. *The International Journal of Learning*, 17(4), 29-44.
9. **Ketpichainarong, W**, Jittam, P*, Ruenwongsa, P., & Panijpan, B. (2010). Addressing widespread iodine deficiency disorders: A serious health problem in Thailand and beyond. *Journal of Chemical Education*, 87(7), 662-664.
10. **Ketpichainarong, W.**, Ruenwongsa, P., & Panijpan, B. (2009). Enhanced learning of biotechnology students by an inquiry based cellulase laboratory. *International Journal of Environmental and Science Education*, 5(2), 169-187.

11. **Ketpichainarong, W.**, Ruenwongsa, P.*, & Panijpan, B. (2009). Enhancing student conceptualization of enzyme activity using a cellulose digesting enzyme. *The International Journal of Learning*, 16(2), 17-31.

National paper

1. Jeenjenkit, U.*, Ruenwongsa, P., Jittam, P., **Ketpichainarong, W.**, & Panijpan, B. (2011). A Guided-inquiry learning unit on the Dushman reaction for determining iodate in salt. *Journal of Srinakharinwirot University*, 3(1), 327-331.

Conference Proceedings

1. Jittam, P.*, & **Ketpichainarong, W.** (2011). A hand-held device to help understand the spectroscopic principle. *Proceeding of The Asian Conference on Education 2011 (ACE2011)*, 920-930. Available online at http://iafor.org/ace_proceedings.html
2. Noyudom, A., Ketpichainarong, W*, & Ruenwongsa, P. (2011). Development of a computer-based simulation unit on tracheal suctioning to enhance nursing students' knowledge and practical skills. *Proceedings of ThaiSim 2011*.
3. Limpornsema, S., Jittam, P.*, Ketpichainarong, W., & Ruenwongsa, P. (2010, 1-2 April). Fostering Thai ninth grade students' higher order thinking through urban ecosystem learning module. *Proceedings of the 2nd International Graduate Research Conference on Social Science and Humanities*.
4. Wongtanom, N., Jittam, P.*, Ketpichainarong, W., & Ruenwongsa, P. (2010, 1-2 April). Encouraging eight grade secondary school students' learning motivation for testing dietary food through bingo game. *Proceedings of the 2nd International Graduate Research Conference on Social Science and Humanities*.
5. Saensawang, E., Ketpichainarong, W.*, Jittam, P., & Ruenwongsa, P. (2010, 1-2 April). Improving learning science through game activities: Energy transfer in the ecosystem. *Proceedings of the 2nd International Graduate Research Conference on Social Science and Humanities*.
6. Klunklueng, A., To-em, J.*, Jittam, P., Ketpichainarong, W., Sriwattanothai, N., & Ruenwongsa, P. (2010, 1-2 April). Firefly learning module for environmental sustainable development in Samut Songkhram province. *Proceedings of the 2nd International Graduate Research Conference on Social Science and Humanities*.
7. Tianchai, C., Tianchai, N., To-em, J.*, Ketpichainarong, W., Jittam, P., Sriwattanothai, N., & Ruenwongsa, P. (2010, 1-2 April). Using a local water problem as case-based scenario to encourage Thai grade 8 students' learning of science. *Proceedings of the 2nd International Graduate Research Conference on Social Science and Humanities*.
8. Jittam, P., Kaewkhong, K., Chenprakhon, P., Srisawasdi, N., Ketpichainarong, W., Panijpan, B., & Ruenwongsa, P. (2006, November). A simple spectroscope for chemical and biochemical analysis. Paper presented at ICASE Asian Symposium, Singapore.

9. Panijpan, B., Ruenwongsa, P., Jittam, P., Ketpichainarong, W., & Sachadecha, P. (2005, April). Community-based hands-on integrated science/technology projects. Paper presented at The ICASE International Workshop on Promoting Scientific and Technological Literacy through Science Toys and Out-of-School Science Activities, Cholburi province, Thailand.

Conference Abstracts

1. **Ketpichainarong, W.**, Wongsangchantra, P.Y., Ruenwongsa, P. & Panijpan, B. (2011, 27-30 October). Enhancing Students' Knowledge and Skills by Using Project-Based Industrial Biotechnology Laboratory Unit: A Case Study. Paper presented at Asian Conference on Education 2011, Japan.
2. Wachiraporn, C., **Ketpichainarong, W.**, Panijpan, B. (2011, 10 – 12 October). A demonstration set-up for high school students simulating the detection of an exoplanet by the transit method. Paper presented at The 37th Congress on Science and Technology of Thailand (STT 37), Bangkok, Thailand.
3. **Ketpichainarong, W.**, Wongsangchantra, P.Y., & Ruenwongsa, P. (2010, 6-9 July). A Project-Based Industrial Biotechnology Laboratory Unit: A Case Study. Paper presented at the 17th Learning Conference, Hong Kong.
4. **Ketpichainarong, W.**, Ruenwongsa, P., Panijpan, & Coll, R. K. (2009, 19-22 March). An Enzyme Laboratory Investigation Based on Inquiry Approach. Paper presented at the NSTA: National Conference on Science Education 2009, New Orleans, Louisiana, USA
5. **Ketpichainarong, W.**, Ruenwongsa, P., Panijpan, B., Hongboontri, C., & Coll, R. K. (2008, 2-5 July). Using an inquiry-based cellulase enzyme laboratory to enhance students' understandings of enzyme activity. Paper presented at the Australian Science Education Research Association (ASERA) 39 th Conference, Brisbane, Australia.
6. **Ketpichainarong, W.**, Ruenwongsa, P., Panijpan, B., Hongboontri, C., & Coll, R. K. (2008, 10-12 April). Using inquiry-based approach to enhance students' understandings of biological concepts. Paper presented at the the 7 th Science Education Research Symposium., Wellington, New Zealand.
7. Jittivadhna, K., **Ketpichainarong, W.**, Somsook, E., Ruenwongsa, P., & Panijpan B. (2008, 24-25 July). A new method for following enzymatic hydrolysis of bacterial cellulose: An undergraduate laboratory to enhance students manipulating skills and thinking green. Paper presented at the ThaiPOD Conference: New Paradigms in Higher Education Teaching and Learning, Bangkok, Thailand.