

CURRICULUM VITAE

Biography

Name Dr. Pirom Chenprakhon
Birth September 8, 1981, Buri Ram, Thailand
Affiliation Institute for innovative learning
Mahidol University
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Education:

2000-2004 B.SC. (First-Class Honours) Chemistry,
Ubon Ratchathani University, Ubon Ratchathani, Thailand.
2004-2005 Diploma of Science Teaching Profession,
Department of Curriculum and Instruction, Silpakorn University,
Nakornphathom, Thailand.
2005- 2011 Ph.D. (Science and Technology Education)
Mahidol University, Bangkok, Thailand.

Awards and Distinctions:

2000-2011 Recipient of a scholarship from The Promotion of Science and
Mathematics Talented Teacher Project (PATM).
2004 Recipient of the Dr. Tap Nilaniti Graduate award.
2008 Recipient of the Young Traveler award from 16th International
Symposium on flavin and flavoprotein 2008, Palacio de Congressos,
Jaca, Spain.
2010 Recipient of Outstanding poster award from Pure and Apply
Chemistry International Conference 2010 (PACCON), Ubon
Ratchathani, Thailand.
2011 Recipient of the Young Traveler award from 17th International
Symposium on flavin and flavoprotein 2011, University of
California San Francisco, San Francisco, USA.

2012 Recipient of distinguished poster presentation award from 1st International Conference on Innovation in Education (ICIE 2012), Bangkok, Thailand.

Professional Experiences:

2007-2008 Teaching assistant in Biomolecular and Spectroscopy Techniques (SCID 508) for graduate students, Mahidol University, Bangkok, Thailand.

2009-2010 -Science education research training with Dr. Kevin Niemi, Center for Biology Education, Office for Science Outreach, and Wisconsin Teacher Enhancement Program, University of Wisconsin-Madison, USA.

- Scientific research training with Prof. Dr. Brian G. Fox, Department of Biochemistry, University of Wisconsin-Madison, USA.

Field of Interest:

- Development of novel laboratory experiments for inquiry teaching in chemistry and biochemistry
- Enzyme kinetic; pre-steady state kinetic
- Thermodynamic and kinetic studies of Flavoproteins

Publications:

Journal articles

1. Baron, R., Riley, C. *, **Chenprakhon, P.***, Thotsaporn, K., Winter, R., Alfieri, A., Forneris, F., van Berkel, W. J. H., Chaiyen, P., Fraaije, M. W., Mattevi, A., and McCammon, J. A. Multiple pathways guide oxygen diffusion into flavoenzyme active sites. *Proceedings of the National Academy of Sciences of the United States of America*. **2009**; 106: 10603-10608. (Cited in *Research Highlights, Nature Chemistry*, 2009) (*Contributed equally to this article)
2. **Chenprakhon, P.**, Sucharitakul, J., Panijpan, B., and Chaiyen, P. Measuring Binding Affinity of Protein-Ligand Interaction Using Spectrophotometry: Binding of Neutral Red to Riboflavin Binding Protein. *J. Chem. Educ.*, **2010**; 87: 829–831.

3. Thotsaporn, K., **Chenprakhon, P.**, Sucharitakul, J., Mattevi, A., Chaiyen, P. Stabilization of C4a-hydroperoxy-flavin in a two-component flavin-dependent monooxygenase is achieved through interaction at flavin N5 and C4a atoms. *The Journal of Biological Chemistry*, **2011**; 286(32); 28170-80.
4. **Chenprakhon, P.**, Panijpan, B., and Chaiyen, P. An Experiment Illustrating the Change in Ligand pK_a upon Protein Binding, *Submitted to Journal of Chemical Education. J. Chem. Educ.*, **2012**; *89*: 791–795.

Conference Proceeding:

1. Jittam, P., Kaewkhong, K., **Chenprakhon, P.**, Srisawasdi, N., Ketpichainarong, W., Panijpan, B., and Ruenwongsa, P. (2006). A Simple Spectroscope for Chemical and Biochemical Analysis. *ICASE Asian Symposium*, Singapore.

Research presentation

Poster presentations:

1. Promarak, V., Pankuang, A., Sahapong, D., Thaweechat, J. and **Chenprakhon, P.**, (2003) The Synthesis and Characterisation of *meso*-stilbene Dendronised porphyrins as Red Light-emitter for Organic Light-Emitting Diodes(OLEDs), *29th Congress on Science and Technology of Thailand*, Khonkean, Thailand.
2. **Chenprakhon, P.**, Sucharitakul, J., and Chaiyen, P. (2007). Investigation on the Residue Gating Oxygen Entrance into the Active Site of the Oxygenase Component (C2) of *p*-Hydroxyphenylacetate 3-hydroxylase. *Second Annual Symposium of Protein Society of Thailand*, Bangkok, Thailand.
3. **Chenprakhon, P.**, Sucharitakul, J., Mattevi, A., Baron, R., and Chaiyen, P. (2008). Investigation on the Residue Gating Oxygen Entrance into the Active Site of the Oxygenase Component (C2) of *p*-Hydroxyphenylacetate 3-hydroxylase. *16th Symposium on Flavins and Flavoproteins*, Universidad de Zaragoza, Zaragoza, Spain.
4. Baron, R., Riley, C., **Chenprakhon, P.**, Thotsaporn, K., Winter, R., Alfieri, A., Forneris, F., van Berkel, W. J. H., Chaiyen, P., Fraaije, M. W., Mattevi, A., and McCammon, J. A. (2009). A Combined Computational and Biochemical Analysis

of Oxygen Diffusion and Reactivity in a Flavoprotein Monooxygenase and Oxidase. *238th American Chemical Society National Meeting and Exposition*, Washington, DC, USA.

5. **Chenprakhon, P.**, Sucharitakul, J., Paniipan, B., and Chaiyen, P.(2010) Measuring Binding Affinity of Protein-Ligand Interaction Using Spectrophotometry: Binding of Neutral Red to Riboflavin Binding Protein. *Pure and Apply Chemistry International Conference 2010*, Ubon Ratchathani, Thailand.
6. Fox, B. G., Arabshahi, A., Riederer, A., Elsen, N. L., **Chenprakhon, P.**, Stephenson, D., Weimer, P., and Bukhman, Y.(2010). Combinatorial Discovery of Enzymes for Biomass Deconstruction. *2010 Genomic Science Contractor-Grantee and Knowledgebase Workshop*. Hyatt Regency Crystal City, Arlington, Virginia, USA.
7. **Chenprakhon, P.**, Sucharitakul, J., Paniipan, B., and Chaiyen, P.(2010) Measuring Binding Affinity of Protein-Ligand Interaction Using Spectrophotometry: Binding of Neutral Red to Riboflavin Binding Protein. *5th Annual Symposium of Protein Society of Thailand*, Bangkok, Thailand.
8. **Chenprakhon, P.**, Thotsaporn, K. Chaiyen, P.(2011) Control of protonation in the oxygenase component of *p*-hydroxyphenyl acetate-3-hydroxylase (HPAH) (C₂) from *Acinetobacter buamannii*. *17th Symposium on Flavins and Flavoproteins*, University of California San Francisco, San Francisco, USA.
9. **Chenprakhon, P.**, Sugjaisomran, W., Maenpuen, S., Chaiyen, P.(2012) Inhibition of *Carica papaya* lipase by alcohol: an experiment for undergraduate students. *1st International Conference on Innovation in Education (ICIE 2012)*, Bangkok, Thailand.