



ดร.พิจักษณ์ สัมพันธ์

วุฒิการศึกษา(ตรี โท เอก) :

- ปรัชญาดุษฎีบัณฑิต (เทคโนโลยีชีวภาพ)
- วิทยาศาสตรบัณฑิต (เทคโนโลยีชีวภาพ) เกียรตินิยมอันดับ 2





งานวิจัยที่เชี่ยวชาญหรือสนใจ :

- Microbial enzymes for industrial applications
- Development of gene expression systems
- Detection of foodborne pathogens




เบอร์โทรศัพท์ : 075672371

E-mail : pijug.su@wu.ac.th

○ **Research Areas**

-  Genetic engineering
-  Microbial enzymes for industrial applications
-  Development of gene expression systems
-  Detection of foodborne pathogens

○ **Research Project**

-  การปรับปรุงระบบจุลินทรีย์เพื่อใช้เป็นแหล่งผลิตโปรตีนหรือชีวภัณฑ์
-  การศึกษาฤทธิ์ทางชีวภาพของข้าวพันธุ์พื้นเมืองในจังหวัดนครศรีธรรมราช
-  การพัฒนาวิธีตรวจสอบเชื้อก่อโรคที่ปนเปื้อนในอาหาร

○ Publications

- ✚ Coker OO, Warit S, Rukseree K, **Summpunn P**, Prammananan T, Palittapongarnpim P. Functional characterization of two members of histidine phosphatase superfamily in *Mycobacterium tuberculosis*. *BMC Microbiol.* 2011; 11: 122.
- ✚ Tu WY, Pohl S, **Summpunn P**, Hering S, Kerstan S, Harwood CR. Comparative analysis of the responses of related pathogenic and environmental bacteria to oxidative stress. *Microbiol.* 2012; 146: 123-124.
- ✚ Jomrit J, Summpunn P, Meevootisom V, Wiyakrutta S. High production of functional D-phenylglycine aminotransferase in *Escherichia coli* by addition of benzyl alcohol, pyridoxine, and co-expression with chaperones. 20th National Grad Research Conference. Mahidol University. Thailand (proceeding).
- ✚ Pandee P, **Summpunn P**, Wiyakrutta S, Isarangkul D and Meevootisom V. A thermostable phytase from *Neosartorya spinosa* BCC 40121 and its expression in *Pichia pastoris*. *J Microbiol.* 2011; 145(12): 123-124.
- ✚ Jomrit J, **Summpunn P**, Meevootisom V and Wiyakrutta S. Sensitive non-radioactive determination of aminotransferases stereospecificity for C- α' hydrogen transfer on the coenzyme. *Biochem Biophys Res Commun.* 2011; 405(4): 123-124.
- ✚ **Summpunn P**, Chaijan S, Isarangkul D, Wiyakrutta S and Meevootisom V. Characterization, gene cloning and heterologous expression of β -mannanase from a thermophilic *Bacillus subtilis*. *J Microbiol.* 2011; 145(12): 123-124.
- ✚ Wang X, Upatham S, Panbangred W, Isarangkul D, **Summpunn P**, Wiyakrutta S, Meevootisom V. Purification, characterization, gene cloning and sequence analysis of a phytase from *Klebsiella pneumoniae* subsp. *pneumoniae* XY-1. *ScienceAsia.* 2012; 38(4): 123-124.

Presentations

- ✚ Kunavong V, **Summpunn P**. Characterization of extracellular protease from *Bacillus* sp. TM1. The 1st Walailak Research National Conference. Walailak University, Thailand, 2011.

- ✚ Yimlamai B, **Summpunn P**. Detection of *Listeria monocytogenes* by Loop-Mediated Isothermal Amplification. The 8th Regional Undergraduate Conference on Agricultural Science and Technology. Walailak University, Thailand, ๒๐๑๖.
- ✚ Thiraphon P, **Summpunn P**. Isolation of endophytic fungi producing anti-*Staphylococcus aureus* metabolites from Thai medicinal plants. The ๑st International Symposium on Sustainable Agriculture and Agro-Industry. Walailak University, Thailand, ๒๐๑๔.
- ✚ Jomrit J, **Summpunn P**, Meevootisom V, Wiyakrutta S. Expression and one-step purification of histidine tagged branched-chain L-amino acid aminotransferase expressed in *E. coli* Tuner (DE๓) pLysS. The ๕th Walailak Research National Conference. Walailak University, Thailand, ๒๐๑๓.
- ✚ Isarangkul D, Pandee P, Rodbumrer J, van Driel KGA, **Summpunn P**, Chaichanan J, Usook P, Khudhair HH, Wiyakrutta S, Laowanapiban P, Sherman K, Otani M, Escobin-Mopera L, Sone T, Azano K, Meevootisom V. Phytases and polysaccharide hydrolases from microbes and metagenomes. JSPS-NRCT Joint Symposium on Bioproduction platform. Osaka University, Japan, ๒๐๑๓.
- ✚ Jomrit J, **Summpunn P**, Meevootisom V and Wiyakrutta S. A sensitive non-radioactive method for determination of stereospecificity of aminotransferases for C-๔' hydrogen transfer of the coenzyme. The IXth European Symposium of the Protein Society. Stockholm University, Sweden, ๒๐๑๑.
- ✚ Jomrit J, **Summpunn P**, Meevootisom V and Wiyakrutta S. High production of functional D-phenylglycine aminotransferase in *Escherichia coli* by addition of benzyl alcohol, pyridoxine, and co-expression with chaperones. The ๒๐th National Graduate Research Conference, Faculty of Graduate Studies, Mahidol University, Salaya, Thailand, ๒๐๑๑.
- ✚ Addinall SG, Homuth G, Mader U, **Summpunn P**, Williams RC, Harwood CR. The insights into *Bacillus anthracis* secondary translocase. The ๖th International Conference on Gram-positive Microorganisms. Montecatini Terme, Tuscany, Italy, ๒๐๑๑.
- ✚ Pohl S, Yung W, Hahn H, Mader U, Read T, Waldrom K, Robinson N, Schrijver R, **Summpunn P** and Harwood CR. Global gene expression analysis in *Bacillus anthracis* under conditions of oxidative stress. The ๑๓th Symposium for Biology Student of Europe (SymBioSE ๒๐๐๙) "Biology: Expansion of Borders". Kazan, Russia, ๒๐๐๙.
- ✚ Pohl S, Gizynski K, Addinall SG, Homuth G, Mader U, **Summpunn P**, Williams RC and Harwood CR. Substrate specificity of the *Bacillus anthracis* accessory protein translocase. ๕th International Conference on Gram-positive Microorganisms, ๑๕th International Conference on *Bacilli*, Catamaran Resort Hotel and Spa, San Diego, CA USA, ๒๐๐๙.

- + **Summpunn P, Wiyakrutta S and Meevootisom V.** Improvement of penicillin G acylase production in *Bacillus megaterium*. The RGJ seminal series L “Valuable products from natural resources and their application”, Mahidol University-Osaka University Collaborative Research Center for Bioscience and Biotechnology (MU-OU: CRC), Faculty of Science, Mahidol University, Thailand, ๒๐๐๗.
- + **Pohl S, Radford DS, Mader U, Summpunn P and Harwood CR.** Response of *Bacillus anthracis* to oxidative stress: a combined proteome and transcriptome analysis. The ๑๕๕th Meeting of the Society for General Microbiology, University of York, York shire, UK, ๒๐๐๖.
- + **Summpunn P, Wiyakrutta S and Meevootisom V.** Identification and characterization of a putative penicillin G acylase repressor gene (*pacR*) of *Bacillus megaterium*. The ๑๕th Annual Meeting of the Thai Society for Biotechnology “Sustainable Development of SMEs Through Biotechnology” and The JSPS-NRCT Symposium on "The Forefront of Bioinformatics Application", Pang Suan Kaew Hotel, Chiang Mai, Thailand, ๒๐๐๔.

○ Teaching Courses

- + Genetic engineering
- + Bioinformatics