

The 10th International Symposium of The Protein Society of Thailand

15 July 2015

08.00 - 08.30 Registration & posters set up

08.30 - 09.00 Opening ceremony
[Prof.MR.Jisnuson Svasti](#)

Chair: Prof.MR.Jisnuson Svasti

09.00 - 09.30 Lysine carbamylation for enzymatic function: metal and structural requirements for post-translational modification
[Dr. Chun-Jung Chen](#)
 Department of Physics, National Tsing Hua University, Taiwan

09.30 - 10.00
[Dr. Ajay Kohli](#)
 International Rice Research Institute, Philippines

10.00 - 10.30 **Coffee/ tea break**

Chair: Prof. Worachart Sirawaraporn

10.30 - 10.50 Recombinant protein expression of cystein-rich venom allergen-like protein of carcinogenic liver fluke *Opisthorchis viverrini*
[Dr. Sutas Suttiaprapa](#)

10.50 - 11.10 Purification and biological activities of recombinant human bone morphogenetic protein-2
[Dr. Waraporn Kasekarn](#)

11.10 - 11.40 Epithelial chloride channels as drug targets
[Dr. Chatchai Muanprasat](#)
 Department of Physiology, Faculty of Science, Mahidol University, Thailand

12.00 - 13.00 **Luncheon Lecture:**
 The importance and subsequent analysis of post-translational modifications in proteomics
[Tan Chor Teck](#)
 Agilent Technologies

13.00 - 14.00 **PST Annual Meeting**

Chair: Assist. Prof. Dr. Kittisak Yokthongwattana

14.00 - 14.20 Exploring the origin of catalytic power of chitinase B enzyme from *Serratia marcescens*: a comprehensive computational investigation
[Dr. Jitrayut Jitonom](#)

14.20 - 14.40 Crosstalk between alpha6-containing nicotinic acetylcholine receptors and P2X receptors
[Dr. Walrati Limapichat](#)

14.40 - 15.10 Ligand-specific NOTCH decoys disrupt angiogenesis by unique mechanisms to inhibit tumor growth
[Dr. Thaned Kangsamaksin](#)
 Department of Biochemistry, Faculty of Science, Mahidol University, Thailand

15.10 - 15.30	Coffee/ tea break
15.30 - 16.30	Poster Session
16.30 - 17.30	Welcome Reception
16 July 2015	
Chair: Prof. James Ketudat-Cairns	
09.00 - 09.30	Blockage of EGFR activity: a combined simulation and experimental method Dr. Kiattawee Choowongkamon Department of Biochemistry Faculty of Science Kasetsart University, Thailand
09.30 - 10.00	Effective saccharification of biomass by cellulolytic and xylanolytic enzymes and application of the enzymes Dr. Khanok Ratanakhanokchai Division of Biochemical Technology, School of Bioresources and Technology King Mongkut's University of Technology Thonburi, Thailand
10.00 - 10.30	Coffee/ tea break
Chair: Assoc. Prof. Dr. Polkit Sangvanich	
10.30 - 10.50	Molecular basis of ion selectivity in membrane protein channels: the statistical mechanics study Dr. Saree Phongphanphanee
10.50 - 11.10	A novel monomeric chitoporin facilitates chitin uptake in <i>Escherichia coli</i> Dr. Wipa Suginta
11.10 - 11.30	Identification of the catalytic base/nucleophile of the GH20 β -n-acetylglucosaminidase from <i>Vibrio harveyi</i> through chemical rescue of inactive mutants Mr. Piyanat Meekrathok
12.00 - 13.00	Luncheon Lecture : An Introduction to BioLayer Interferometry and its application in protein kinetics study Dr. Shenglan Cao Pall Corporation Filtration & Separation (Thailand)
13.00 - 14.00	Poster Session
Bioinformatics and Systems Biology	
Chair: Assoc. Prof. Dr. Palangopn Kongsaree	
14.00 - 14.30	Structural and site-directed mutagenesis enzyme activity studies of <i>Polygonum minus</i> nerol dehydrogenase (PmNeDH) Dr. Chyan Leong Ng Institute of Systems Biology, Universiti Kebangsaan, Malaysia
14.30 - 15.00	Integrating patient specific information in rare disorder analysis Dr. Asif Javed Genome Institute of Singapore, A*STAR, Singapore
15.00 - 15.30	Coffee/tea break

15.30 - 15.50	Redox enzymes in <i>Pseudomonas aeruginosa</i> : novel mechanisms for drug-targeting design against infectious diseases Dr. Adisak Romsang
15.50 - 16.20	Cytogenomics array for clinical copy number variation (CNV) detection Dr. Natini Jinawath Ramathibodi Hospital, Mahidol University, Thailand
16.20 - 16.50	Identification of novel genomic sequences in a de novo human genome assembly Dr. Benjarath Pupacdi Chulabhorn Research Institute, Thailand
16.50 - 17.20	Structure and function of SET and MYND domain containing (SMYD) proteins Dr. Nualpun Sirinupong Nutraceutical and Functional Food R&D Center Faculty of Agro-Industry, Prince of Songkla University, Thailand

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Human Diseases

Chair: Assoc. Prof. Dr. Rudee Surarit

09.00 - 09.30	Inborn errors of metabolism: molecular research on lysosomal storage disorders in Thailand Dr. Lukana Ngiwsara Laboratory of Biochemistry, Chulabhorn Research Institute, Thailand
09.30 - 10.00	Therapeutic potential of P38 MAPK inhibitor in Ischaemic heart disease: from mitochondria to the heart Dr. Sarawut Kumphune Biomedical Research Unit in Cardiovascular Sciences, Naresuan University, Thailand
10.00 - 10.30	Coffee/tea break

Disease Proteomics

Chair: Assist. Prof. Dr. Nonlawat Boonyalai

10.30 - 10.50	A gas phase cleavage reaction of cross-linked peptides for topology studies of macromolecular assemblies in complex mixtures Dr. Hansuk Buncherd
10.50 - 11.20	Three-dimensional structure of a novel circular bacteriocin from <i>Enterococcus faecium</i> isolated from Thai fermented fish. Dr. David J Craik Institute for Molecular Bioscience, The University of Queensland, Brisbane, Qld 4072, Australia
11.20 - 11.50	Oxidized alpha-1 antitrypsin in cholangiocarcinoma : from proteomic study to community screening Dr. Puangrat Yongvanich Department of Biochemistry, Faculty of Medicine, Khon Kaen University,

	Thailand
12.00 - 13.00	Luncheon Lecture Advanced Technologies for Insightful Cell Imaging & Live Cell Analysis: Novel proteomic high speed, high content multi-spectral imaging cytometry and a micro-fluidic system for precise control in live cell culture experiments George McBride Director of Bioscience - Asia Pacific Merck KGaA, Merck Millipore Division, Bioscience Business Area
13.00 - 14.00	Poster session <i>Chair: Assist. Prof. Dr. Surapong Pinitglang</i>
14.00 - 14.20	Discovery of O-glcNacylation of extracellular vesicle proteins derived from non-metastasis and metastasis colorectal cancer cell lines Ms. Parunya Chaiyawat
14.20 - 14.50	Specific expression of O-glycoprotein glycans in cholangiocarcinoma cell lines Dr. Krajang Talabnin Department of Parasitology, Suranaree University of Technology, Thailand
15.00 - 15.30	Coffee/tea break <i>Chair: Dr. Sittiruk Roytrakul</i>
15.30 - 15.50	Humanized-VHH transbodies that inhibit HCV protease and replication Mr. Surasak Jittavisutthikul
15.50 - 16.20	Numbing” responses of macrophages to inflammation Dr. Tanapat Palaga Department of Microbiology, Faculty of Science, Chulalongkorn University, Thailand
16.20 - 17.00	Poster Award and Closing Prof. M.R. Jisnuson Svasti