HPTLC Asia 2018: Full Program

November 27-30, 2018

Short-Course Program

Venue: Pharmacy Innovation Building, 7th Floor, Faculty of Pharmaceutical Sciences, Chulalongkorn University

Tuesday, November 27[,] 2018

ROOM 1 HERBAL STANDARDIZATION (SC-1, SC-2)

9:00-12:00 SC-1: HPTLC METHOD DEVELOPMENT

Saikat Mallick

Chief Chemist, ANCHROM Lab, Mumbai, India 13:00-16:00 SC-2: ANALYSIS OF BOTANICALS IN COMPLIANCE WITH USP AND PHEUR Eike Reich Director, CAMAG Laboratory, Muttenz Switzerland; President, HPTLC ASSOCIATION, Rheinfelden, Switzerland

ROOM 2 QUANTITATIVE ANALYSIS OF HPTLC (SC-3, SC-4)

9:00-12:00 SC-3: QUANTIFICATION AND VALIDATION IN HPTLC

Pierre Bernard-Savary

Chairman of Chromacim and French Club for Thin-Layer Chromatography, Moirans, France Jean-Marc Roussel

Universities of Aix-Marseille and Bordeaux I, Analytical Methods Development and Validation Consulting, Co-Designer, NeoLiCy Software for Statistical Assessment of Analytical Method's Life Cycle, Mâcon, France

13:00-16:00 SC-4: LIPID CHARACTERIZATION AND QUANTIFICATION

Vicente L. Cebolla

Instituto de Carboquímica (ICB), Spanish National Research Council (CSIC), Zaragoza, Spain **Pierre Bernard-Savary** Chairman of Chromacim and French Club for Thin-Layer Chromatography, Moirans, France

ROOM 3 HPTLC FOR RESEARCH (SC-5, SC-6)

9:00-12:00 SC-5: HPTLC-DIRECT BIOAUTOGRAPHY Gertrud Morlock,

Chair of Food Science, Justus Liebig University Giessen, Giessen, Germany

13:00-16:00 SC-6: HPTLC - MS FOR CHARACTERIZATION OF COMPOUNDS

Michaela Oberle

TLC Specialist and Project Leader R&D, Merck KGaA, Darmstadt, Germany **Ivan Ng**

Manager, System Solutions Business Development, Southeast Asia, Waters Pacific Pte. Ltd., Singapore

18:30-20:30 Welcome Cocktail Dinner for All Symposium and Short-Course Participants (Pathumwan Princess Hotel, 8th Floor)

International Symposium Program

Venue: Pharmacy Innovation Building, 10th Floor, Faculty of Pharmaceutical Sciences, Chulalongkorn University

Wednesday, November 28, 2018

- 8:00 Registration
- 9:00 Opening

SESSION 1: BOTANICALS AND TRADITIONAL MEDICINES

Chair: Prof. Dr. Wanchai De-Eknamkul

- 9:30-10:15 **Plenary Lecture (PL-1)**
 - PL-1: APPLICATION OF HPTLC TECHNIQUE FOR HERBAL QUALITY CONTROL

Prof. Dr. De-an Guo

Chair Professor of Shanghai Institute of Materia Medica, Chinese Academy of Sciences; Director of National Engineering Laboratory for TCM Standardization Technology; Director of Shanghai Research Center for Modernization of Traditional Chinese Medicine, PR China

10:15-10:45 Coffee break

10:45-12:15 **6 Oral Presentations (OP-1 – OP-6**)

- OP-1: COMPREHENSIVE HPLTC FINGERPRINTING OFFERS ALTERNATIVES
 TO THE MARKER APPROACH FOR QUALITY CONTROL OF HERBAL
 MATERIALS
 Eike Reich
 Director, CAMAG Laboratory, Muttenz Switzerland; President, HPTLC Association,
 - Rheinfelden, Switzerland
- OP-2: HPTLC AUTHENTICATION OF MULTI-ORIGINATED CHINESE HERBAL MEDICINES Zhengtao Wang Institute of Chinese Materia Medica, Key Laboratory of Standardization of Chinese

Medicines of Ministry of Education; Shanghai University of Traditional Chinese Medicine, Shanghai, China

• **OP-3**: HPTLC IMAGE ANALYSIS FOR ASSESSING THE FEASIBILITY OF THE EXTRACTIVE REFERENCE SUBSTANCE (ERS) OF CHINESE HERBAL MEDICINES IN QUALITY CONTROL *Longgang Guo* Guangdong Natural Medicine Engineering Technology Center and Guangzhou ImVin Pharmaceutical Co. Ltd., Guangzhou, China

- OP-4: COMPARABILITY SPECTROSCOPIC AND CHROMATOGRAPHIC FINGERPRINT ANALYSIS OF GELSEMIUM ELEGANS Mun Fei Yam School of Pharmaceutical Sciences, Universiti Sains Malaysia, 11800, Pulau Pinang, Malaysia
- OP-5: HPTLC FINGERPRINT-BASED RAPID CHEMOTAXONOMIC DISCRIMINATION OF DIFFERENT CLERODENDRUM SPECIES USING CHEMOMETRIC DATA ANALYSIS Madhunita Srivastava CSIR Central Institute of Medicinal and Aromatic Plants, Digras, India
- OP-6: DEVELOPMENT OF SIMPLIFIED HPTLC SOLVENT SYSTEMS FOR THAI MEDICINAL PLANTS Sornkanok Vimolmangkang Head, Department of Pharmacognosy and Pharmaceutical Botany, Faculty of Pharmaceutical Sciences, Chulalongkorn University, Bangkok, Thailand
- 12:15-13:30 Lunch

SESSION 2: EFFECT-DIRECTED DETECTION

Chair: Prof. Dr. Gertrud Morlock

- 13:30-14:15 Plenary Lecture (PL-2)
 - PL-2: EFFECT-DIRECTED ANALYSIS OF FUNCTIONAL FOOD INGREDIENTS
 Prof. Dr. Gertrud Morlock
 Chair of Food Science, Justus Liebig University Giessen, Giessen, Germany
- 14:15-15:15 **4 Oral Presentations (OP-7 OP-10)**
 - OP-7: TLC SCREENING AND EFFECT DIRECTED ANALYSIS OF CHOSEN
 PLANTS USED IN DEMENTIA TREATMENT
 Irena M. Choma Faculty of Chemistry, Maria Curie-Sklodowska University, Lublin, Poland
 - OP-8: A NOVEL HPTLC-HYPHENATED BIOAUTOGRAPHIC METHOD FOR IDENTIFICATION OF CARBOHYDRATE DIGESTING ENZYME INHIBITORY METABOLITES Sayeed Ahmad Bioactive Natural Product Laboratory, Faculty of Pharmacy, Jamia Hamdard, New Delhi, India
 - **OP-9**: EFFECT DIRECTED IDENTIFICATION OF ESTROGENIC SUBSTANCES IN FOOD CONTACT MATERIALS WITH HPTLC-BIOASSAYS AND HRMS

Alan Bergmann

Ecotox Center Eawag-EPFL, Dübendorf, Canton of Zürich, Switzerland

OP-10: HPTLC-EDA-UV/VIS/FLD-HESI-HRMS FOR TRACKING OF BIOACTIVE
 METABOLITES IN *PRIMULA BOVEANA*^{,,}

Ehab Mahran

Philipps University of Marburg, Marburg, and Justus Liebig University Giessen, Giessen, Germany

15:15-15:30 Coffee break

15:30-16:00 MANUFACTURER'S PRESENTATIONS (MP-1 – MP-2)

Chair: Pierre Bernard-Savary

- MP-1: TLC/HPTLC PLATES -RECENT DEVELOPMENTS AND APPLICATIONS
 Monika Bäumle
 Merck KGaA, Darmstadt, Sigma-Aldrich Chemie GmbH
- MP-2: ARE THERE TRULY ESSENTIAL ROSE OILS IN COSMETICS AND FOOD?
 Pia Altenhofer Biostep GmbH, Glockenstr., Chemnitz, Germany
- 16:00-17:30 **Poster Presentations (PP-1 PP-45**)

Thursday, November 29, 2018

- SESSION 3: PHARMACEUTICAL AND TOXICOLOGICAL ANALYSIS
- 9:00-9:45 **Plenary Lecture (PL-3)**
 - PL-3
- 9:45-10:45 **4 Oral Presentations (OP-11 OP-14)**
 - OP-11: WHY IS IT NECESSARY TO USE HPTLC IN API MANUFACTURING PROCESS? - A REVIEW OF CASE STUDIES Pierre Bernard-Savary, Chairman of Chromacim and French Club for Thin-Layer Chromatography, Moirans, France
 - OP-12: HPTLC ASSAY METHODS VALIDATION: WILL ICH MEET FDA/EMA/ USP?

Jean-Marc Roussel

Universities of Aix-Marseille and Bordeaux I, Analytical Methods Development and Validation Consulting, Co-Designer, NeoLiCy Software for Statistical Assessment of Analytical Method's Life Cycle, Mâcon, France

• **OP-13**: USE OF BIOMARKERS AS QUALITY CONTROL INDICES FOR AYURVEDIC FORMULATIONS

Sunita Shailajan

Herbal Research Lab, Ramnarain Ruia College, Matunga (East), Mumbai, India

10:45-11:00 Coffee break

SESSION 4: FOOD, DIETARY SUPPLEMENTS, COSMETICS AND BIOSAMPLES

Chair: Dr. Vicente L. Cebolla

11:00-11:45 Plenary Lecture (PL-4)

 PL-4: HPTLC OF LIPID-BASED MIXTURES IN DIFFERENT MATRICES: COMBINATION OF DENSITOMETRY AND MS FOR OBTAINING QUALITATIVE AND QUANTITATIVE SAMPLE INFORMATION Dr. Vicente L. Cebolla Instituto de Carboquímica (ICB), Spanish National Research Council (CSIC), Zaragoza, Spain

11:45-12:30 3 Oral Presentations (OP-15 – OP-17)

OP-15: HPTLC-FLD-SERS DETERMINATION OF FOLIC ACID WITH OZONE-INDUCED FLUORESCENCE

Yisheng Chen

The Key Laboratory of Food Science and Technology, School of Food Science and Technology, Collaborative Innovation Centre of Food Safety and Quality Control in Jiangsu Province, Jiangsu University, Wuxi, China

• **OP-16**: HPTLC METHOD DEVELOPMENT AND VALIDATION FOR SIMULTANEOUS EVALUATION OF PHENOLIC ACIDS AND FLAVONOIDS TO STUDY THE PROCESSING EFFECTS IN DIFFERENT MILLET GRAINS *Giridhar Goudar*

TATA-NIN Center for Excellence in Nutrition, National Institute of Nutrition, Hyderabad, Telangana, India

- OP-17 HIGH-PERFORMANCE THIN-LAYER CHROMATOGRAPHY: THE PERFECT ANALYTICAL TOOL FOR FOOD ANALYSIS Mario Aranda Department of Food Science, Nutrition and Dietetic, Faculty of Pharmacy, University of Concepcion, Concepcion, Chile
- 12:30-13:30 Lunch

Session 5: HPTLC -MS FOR COMPOUND CHARACTERIZATION

Chairs: Prof. Dr. Jentaie Shiea

13:30-14:15 Plenary Lecture (PL-5)

• **PL-5**: HIGH PERFORMANCE THIN LAYER CHROMATOGRAPHY_MASS SPECTROMETRY (HPTLC-MS): A SIMPLE INTERFACE TO COMBINE HPTLC WITH ELECTROSPRAY IONIZATION MASS SPECTROMETRY

Prof. Dr. Jentaie Shiea

Department of Chemistry, National Sun Yat-Sen University, Kaohsiung, Taiwan

- 14:15-15:15 **4 Oral Presentations (OP-18 OP-21**)
 - OP-18: HPTLC BASED METHOD DEVELOPMENT FOR CARDIOVASCULAR DISEASE CONTROLLING COMPOUNDS CONTAINING PLANT COLEUS FORSKOLII & COMPARISON OF SEPARATION EFFICIENCY OF TWO DIFFERENT HPTLC PLATES Ajai Prakash Gupta QC & QA, Indian Institute of Integrative Medicine, (CSIR-IIIM), Jammu, India
 - OP-19: SIMPLE INTERFACE FOR SCANNING CHEMICAL COMPOUNDS ON DEVELOPED THIN LAYER CHROMATOGRAPHY PLATES USING ELECTROSPRAY IONIZATION MASS SPECTROMETRY Sychyi Cheng (will be presented by Suhail Muzaffar Bhat) Department of Chemistry, National Sun Yat-Sen University, Kaohsiung, Taiwan.
 - OP-20: TARGET BASED METHOD DEVELOPMENT USING EFFECT DIRECTED TLC - A STRAIGHT WAY FOR COMPOUND PURIFICATION *Michaela Oberle TLC Specialist and Project Leader R&D, Merck KGaA, Darmstadt, Germany*
 - **OP-21**: HPTLC-MS IN API CLINICAL BATCHES MANUFACTURING **Amélie Havard** (will be presented by **Pierre Bernard-Savary**) Research Scientist, Oril Industrie, Servier, Bolbec, Le Havre Area, France
- 15:15-15:30 Coffee break

15:30-16:00 Association/Manufacturer's Presentations (MP-3 and MP-4)

Chair: Prof. Dr. Wanchai De-Eknamkul

MP-3: SHAPING THE FUTURE OF HPTLC: THE INTERNATIONAL
 ASSOCIATION FOR ADVANCEMENT OF HIGH PERFORMANCE THIN LAYER
 CHROMATOGRAPHY
 Eike Reich
 President, HPTLC Association, Rheinfelden, Switzerland

MP-4: MASS DETECTION FOR ROUTINE ANALYSIS

Ivan Ng Manager, System Solutions Business Development, Southeast Asia Waters Pacific Pte. Ltd., Singapore

16:00-17:30 Poster Presentations (**PP-1** – **PP-45**)

Friday, November 30, 2018

SESSION 6: STRONG FEATURES OF HPTLC

Chair: Dr. Irena Vovk

9:00-9:45 Plenary Lecture (PL-6)

 PL-6: HPTLC – DO WE REALLY KNOW IT AND HOW TO MAKE IT MORE POPULAR
 Dr. Irena Vovk
 Head, Department of Food Chemistry, National Institute of Chemistry, Ljubljana, Slovenia

9:45-10:15 **2 Oral Presentations (OP-22 – OP-23**)

- OP-22: DEVELOPMENT OF A UNIVERSAL SET OF SYSTEM SUITABILITY TESTING (SST) STANDARDS FOR HIGH-PERFORMANCE THIN-LAYER CHROMATOGRAPHY Manjusha Phanse Anchrom Enterprises (India) Pvt. Ltd., Mumbai, India
- OP-23: VALIDATED TLC DENSITOMETRIC METHOD FOR SIMULTANEOUS QUANTIFICATION OF SIX TERPENOIDS IN PUTRANJIVA ROXBURGHII-A PLANT USED IN INDIAN SYSTEM OF MEDICINE Sonali Mishra Analytical Chemistry Department, CSIR-Central Institute of Medicinal and Aromatic Plants, Lucknow-226015, India
- 10:15-10:30 Coffee break
- 10:30-10:45 Highlights (*Prof. Dr. Gertrud Morlock*)
- 10:45-11:15 Poster Presentation Awards and Closure (**Prof. Dr. Wanchai De-Eknamkul and Pierre** Bernard-Savary)
- 11:15-20:00 Start Bangkok Tour (with lunch box in the coach) to Grand Palace, a cruise to Icon-Siam, and Gala Dinner along Chaopraya River