Speakers’ Profile

Dr. Eike Reich is Head of CAMAG Laboratory. He studied chemistry and earned his PhD from Humboldt University Berlin for the isolation and identification of Crinum alkaloids. Dr. Reich was Associate Professor of Chemistry at Longwood College, Virginia, where his research fields included chromatography of pheromones and plant constituents. Currently he is specialized in the application of HPTLC for the analysis of medicinal plants. Dr. Reich is member of the European Pharmacopoeia and the USP Expert committee on Dietary Supplements (General Chapters). He works closely with the American Herbal Pharmacopoeia.

Below are some of his publications:


- **Modern TLC: A Key Technique for Identification and Quality Control of Botanicals and Dietary Supplements.** Schibli, A., Reich, E. (2005) J. Planar Chromatogr. 18, 34-38


For complete listing of his publications, please visit http://www.camag.com/laboratory/publications/own-publications.html

Location Map

Location
DK4, Level 2, Block J, Faculty of Pharmacy, Universiti Kebangsaan Malaysia Kampus KL, Jalan Raja Muda Abdul Aziz, 50300 Kuala Lumpur.

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Venue: DK4, Level 2, Block J, Faculty of Pharmacy, UKM KL Campus
Date: June 3-4, 2009
Time: 8:30am - 5:00pm
Introduction

Instrumental Thin-Layer Chromatography (or Planar Chromatography) is a modern separation technique, established worldwide and distinguished by flexibility, reliability and cost efficiency. Together with HPLC and GC it belongs to the microanalytical methods, which play an important role in research and routine laboratories. In many cases instrumental Thin-Layer Chromatography offers a more suitable solution and often it is used as confirmatory or alternative technique.

Performing thin-layer chromatographic separation on HPTLC layers has several advantages over those on conventional layers:
- Higher resolution of zones due to higher number of theoretical plates
- Shorter developing times
- Less solvent consumption
- Less background noise due to narrow size distribution of particles

However, suitable instruments are required to get the best results.

Objective

This workshop aims to provide basic concepts on HPTLC as well as further understanding on the method development and troubleshooting.

Registration Fee

Student  RM50 per person
Non-student  RM100 per person

Workshop agenda

Day 1 - June 3, 2009 (Wednesday)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30am - 9:15am</td>
<td>Registration</td>
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<tr>
<td>9:15am - 9:30am</td>
<td>Welcome speech</td>
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| 9:30am - 10:45am | Lecture 1: Modern TLC and HPTLC  
- Parameters of the invidual TLC steps  
- The state of the art in HPTLC  
- Standardized methodology and SOP for HPTLC  
- HPTLC in a cGMP environment     |
| 10:45am - 11:00am | Tea break                  |
| 11:00am - 1:00pm | Lecture 2: Utilization of TLC-Fingerprints for ID of botanicals  
- TLC in the pharmacopoeias  
- Botanical ID vs. chemical profile  
- Requirements for “HPTLC fingerprints”  
- Working with compendial methods |
| 1:00pm - 2:00pm | Lunch                      |
| 2:00pm - 3:30pm | Demonstration 1: Practical aspects of modern TLC/HPTLC  
- The tools  
- HPTLC methodology  
- The software  
- Creating methods |
| 3:30pm - 3:45pm | Tea break                  |
| 3:45pm - 5:00pm | Demonstration 2: Identification of botanicals by HPTLC  
- Running an analysis  
- Performing image comparison |

Day 2 - June 4, 2009 (Thursday)

Method development and troubleshooting

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<tr>
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<th>Activity</th>
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<tbody>
<tr>
<td>8:30am - 9:00am</td>
<td>Registration</td>
</tr>
</tbody>
</table>
| 9:00am - 10:45am | Lecture 3 : Optimizing the separation  
- Separation in HPTLC  
- Stationary and mobile phase  
- General optimizing strategies          |
| 10:45am - 11:00am | Tea break                  |
| 11:00am - 1:00pm | Demonstration 3: Quantitative determinations  
- Scanning densitometry  
- Video densitometry                        |
| 1:00pm - 2:00pm | Lunch                      |
| 2:00pm - 3:30pm | Demonstration 4: Method development and validation  
- SOP for method evaluation / development?  
- Validation protocol - qualitative methods |
| 3:30pm - 3:45pm | Tea break                  |
| 3:45pm - 5:00pm | Lecture 4: Development and validation of a method  
- Setting the goal  
- Sample preparation  
- The CAMAG-Optimizaiton Scheme  
- Validation concepts                     |