

Main Topics

The symposium is for all chromatographers who want to stay updated with the latest developments in the field. Throughout the day the application and use of hydrophilic interaction liquid chromatography (HILIC) will be explained. This chromatographic technology opens up unique possibilities for the separation of polar and hydrophilic substances by the use of simple buffer systems, that are usually MS compatible. Examples include compounds such as nucleotides, amino acids, amines, phenols, acids, peptides, carbohydrates, flavonoids, glycosylated compounds, phosphorylated analytes, etc.

Travelling

Umeå City Airport [UME] is conveniently located 4 km from the university campus, accessible by airport/local bus or taxi. Airlines operating from and to Stockholm are:

- <http://www.flysas.com/en/us/> (SAS)
- <http://www.norwegian.com/> (Norwegian)
- <http://www.malmoaviation.se/> (Malmö Aviation)*
- <http://www.umeaflug.se/> (Umeåflyg)

* Note that Malmö Aviation operates from Stockholm Bromma [BMA] instead of Arlanda [ARN] airport. Ground transfer takes 3 h and is rather difficult.

Accommodation

Umeå has a reasonable number of hotels, most of them located close to the city center. Here are links to some of them:

- <http://www.clarionhotel.com/hotel-umea-sweden-SE019>
- <http://www.scandichotels.com/Hotels/Countries/Sweden/Umea/Hotels/Scandic-Plaza-Umea>
- <http://www.nordicchoicehotels.se/Comfort/Comfort-Hotel-Winn>
- <http://www.profilhotels.se/hotelaveny>
- <http://www.hotelldragonen.se>
- <http://www.hotellgf.se> (Budget, closer to the venue)
- <http://www.hotellpilen.se> (Budget, closer to the venue)

Organizing Committee

Prof. Knut Irgum, Umeå University
Dr. Tobias Jonsson, Merck SeQuant AB
Prof. Börje Sellergren, Malmö University

HILIC Day Series

The HILIC Day symposium series have, since the start in 2005, been arranged all over the world 27 times. Although the topics vary between the symposia, the overall aim remains the same; to facilitate knowledge transfer about tools and techniques for separation of polar hydrophilic compounds. This is the 5th time the symposium is arranged as an international meeting with speakers and participants from many countries. A full list of previous and upcoming HILIC Days is available at:

<http://www.sequant.com/hilicday>

Co-organized with PepMIP

The symposium is co-organized with the EU-supported FP7 Initial Training Network PepMIP, which aims to develop of the next generation of dedicated separation materials, designed to recognize peptides and proteins, and to implement these materials in new high performance methods for peptide and protein analysis. The project addresses several bioanalytical fields, such as metabolomics, and glyco- and phosphoproteomics. Surface chemistries based on HILIC type functional groups constitute a key technology for creating highly specific, oriented interaction patterns characteristic of molecularly imprinted networks, while avoiding non-specific hydrophobic interactions.



Background image: Northern lights hemisphere above Umeå, March 17th, 2013.

International HILIC Day 2013

Invitation to participate in the

5th International HILIC Day

May 2nd 2013
Umeå, Sweden

An international mini-symposium on liquid chromatographic separation and analysis of polar hydrophilic compounds



Sponsors:



Keynote Speakers

Dr. Andrew Alpert, PolyLC Inc., Columbia, MD, USA
The inventor of HILIC, presenting the seminal paper on HILIC in 1990 and its electrostatic extension ERLIC in 2008.

Prof. David McCalley, University of West England, UK
Awarded and top-cited author of papers and book chapters on fundamental aspects of HILIC and HPLC.

Prof. Tyge Greibrokk, University of Oslo, Norway
Honored analytical chemist with many decades of research merits in chromatography, including applications of HILIC.

Symposium Date

Thursday, May 2nd, 2013

Venue

Umeå University
Chemical Biological Centre (KBC)
KBC Level 3; Lecture Hall KB3A9
Linnaeus väg 6
S-90187 Umeå, Sweden

<http://www.kbc.umu.se>

<http://www.chemistry.umu.se>

<http://tinyurl.com/UmU-KBC> (Link to Google Maps)

Registration and Costs

The registration fee is 400 SEK, which includes lunch and beverages during the breaks, plus electronic copies of the tutorial lectures from Session 1.

Last day to register is **April 25, 2013**.

To register send an email with contact details to:

hilicday@sequant.com

Morning Program

09:00 Registration with Exhibition

Session 1 - HILIC Tutorial

Chairperson: Dr. Wen Jiang, Merck SeQuant AB, Sweden

09:30 Understanding the HILIC Hype
Dr. Einar Pontén, QAS&T AB, Söderåkra, Sweden

10:00 HILIC Method Development
Dr. Petrus Hemström, Merck SeQuant AB, Sweden

10:30 Fika* with Exhibition

Session 2 - Optimizing HILIC Selectivity

Chairperson: Dr. Wen Jiang, Merck SeQuant AB, Sweden

11:00 Factors Affecting Selectivity in HILIC
Prof. David McCalley, Univ of West England, UK

11:30 Electrostatic Effects in HILIC and Applications to Proteomics
Dr. Andrew Alpert, PolyLC Inc., USA

12:00 Complementary Zwitterionic Selectivities for Tuning HILIC Separations
Dr. Tobias Jonsson, Merck SeQuant AB, Sweden



* Fika is the Swedish expression for a social break where coffee, tea, and kanelbullar (cinnamon buns) are served.

Afternoon Program

12:30 Lunch with Exhibition

Session 3 - Advanced HILIC Applications

Chairperson: Dr. Einar Pontén, QAS&T AB, Sweden

13:30 HILIC in Multidimensional HPLC
Prof. Tyge Greibrokk, University of Oslo, Norway

14:00 HILIC in LC-MS based Metabolomics to Study Bacterial and Tumor Drug Resistance
Dr. Anders Nordström, Umeå University, Sweden

14:20 Determination of Methylmalonic Acid in Human Plasma Using HILIC Separation and MS Detection
Hans-Åke Lakso, Norrland University Hospital, Umeå, Sweden

14:40 Short-Chain Organic Acid Analysis in Beverages by HILIC-UV
Dr. Giorgio Marrubini, University of Pavia, Italy

15:00 Fika* with Exhibition

Session 4 - Materials and Mechanisms in HILIC

Chairperson: Dr. Einar Pontén, QAS&T AB, Sweden

15:30 Recent Development in HILIC Stationary Phases
Prof. Knut Irgum, Umeå University, Sweden

16:00 Investigation of Retention Mechanisms in HILIC
Phuoc Dinh, Umeå University, Sweden

Webpage

The symposium webpage is:

<http://www.sequant.com/hilicday-sweden2013>