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ISPPP CELEBRATES ITS 25TH ANNIVERSARY!

See www.isppp.org for further details

The ISPPP (International Symposium on the separation of Proteins, Peptides and Polynucleotides) conference will celebrate it's 25th meeting in St Pete's Beach, Florida November 6-9, 2005. Further details of the conference are given on the conference web page at **www.isppp.org**

This conference started in 1980 led by Professors Fred Regnier and Milton Hearn. The original intention was to discuss and promote bioanalytical separation science that was leading edge in nature. The subject matter has continued with emphasis on separations used in biotechology, biomedical, and bioanalytical chemistry. Emphasis in recent years has included mass spectrometry and other detection methodologies.

ISPPP has taken place in the United States at a number of locations such as Philadelphia, DelRay beach, and Orlando among others. On odd-numbered years the conference has taken place in the United States. On even-numbered years the conference has been held in Europe.

Please join us for ISPPP 2005 in St. Pete's beach, Florida. Flights are still inexpensive and there is still time to register. I have been told the weather will be beautiful and spectacular.

Best Regards,
Mark Schure, Chairman ISPPP 2005

2-D chromatography technique maps tumor proteins

A recent article from Chemical and Engineering News (p. 37, September 19, 2005) highlighted the research of Professor David M. Lubman, M. T. Lane Professor of Surgery, University of Michigan. This technique uses two-dimensional liquid chromatography from denatured proteins obtained from cells. In the first dimension, proteins are separated according to their isoelectric points via a chromatofocusing type of chromatography. The second dimension is essentially reversed phase HPLC with mass spectrometry detection. Lubman has presented this type of instrumentation at previous ISPPP meetings. However, now Lubman is demonstrating the types of mass maps that can be

utilized to precisely describe the type of cancer and in quantitative terms. Lubman believes that these mass maps can be used to guide clinicians in devising individual treatments for a variety of diseases. Although other biomarker researchers have advocated using purely mass spectrometry methods Lubman is a devotee of advanced and high performance liquid chromatographic techniques. Professor Lubman, who recently had his gall bladder removed, will be giving a talk at ISPPP entitled "Proteomics of Prostate and Ovarian Tumor Cells Using Multidimensional Liquid Separations and Mass Mapping."

ISPPP Golf

The traditional ISPPP Golf Outing is planned for Sunday, November 6, 2005 at the Bardmoor Golf and Tennis Club in St. Petersburg, Florida. This informal golfing experience is held to provide an opportunity for those of us who love golf to join together for some fun in the sun before the serious activities of the conference begin. The tee times begin at 8:30 a.m - we will leave the hotel at around 7:30 a.m. and the earliest you could expect to return to the conference venue would be 2:00 pm. Unfortunately, the golf event will conflict with the conference short courses that are also held on this day, so choices must be made.

The greens fee and cart charges for this event are expected to total around $85 per person. Golf clubs are available for rent at $40 per set but must be requested prior to the event. Transportation to and from the golf course can be arranged if you do not have your own way to get there. If you are interested in participating in this golf event, you must contact one of the undersigned BEFORE October 27th.

For information please contact Joe DeStefano at joedestefano@advanced-materials-tech.com or call 302-477-2510 or Barry Boyes at barryboyes@comcast.net

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Dr. Yoshio Kato to receive the ISPPP Lifetime Achievement Award

Dr. Yoshio Kato of Tosoh Corporation will receive the ISPPP Lifetime Achievement Award in St Pete's Beach on November 8, 2005. A short reception in his honor will follow the presentation of this award. Dr. Kato is best known for his lifelong pursuit of the synthesis of resins for gel permeation and gel filtration chromatography, adsorption chromatography, and other media for the analysis and purification of biomolecules. He will be retiring from Tosoh later this year after 35 years of service.

Dr. Kato is responsible for a host of innovative high performance TSK-GEL and Toyopearl products that have been developed over the years in his research group. Chief among those are silica and polymer-based columns for high performance gel filtration of proteins and water-soluble polymers, non-porous resins, and stationary phases for hydrophobic interaction and ion exchange chromatography. Much of Dr. Kato's work

was first presented at ISPPP meetings, which he faithfully attended since the start of the meetings in 1981.

In the 1970's Dr. Kato was instrumental in the development of high performance size exclusion columns for organic soluble polymers (TSKgel H-type), for proteins (TSKgel SW-type) and water soluble polymers (TSKgel PW-type), and the introduction of Toyopearl resins for large scale purification of biopolymers.

In the early 1980's Dr. Kato's research group developed the first high performance HIC column, Phenyl-5PW, based on highly porous, spherical, methacrylic beads of 10 micron particle size. This was followed by the introduction of 2.5 micron non-porous resins for fast analysis of proteins and PCR fragments by reversed phase, ion exchange and hydrophobic interaction. Another first from Dr. Kato's group was the development of 2 micron silica-based reversed phase columns in 1995, a concept that only recently has attracted broad acceptance in high speed/high pressure applications.

Dr. Kato and his research group have received several awards over the years, among them the Award of Chemical Technology by The Chemical Society of Japan, the Award of Technology Progress by The Japanese Society of Powder and Powder Metallurgy and, most recently, the Award of Chemical Technology Contribution from the Japanese Society for Analytical Chemistry (1990).

Although Dr. Kato is most well known for his research, he has also worked in business as vice-president of TosoHaas in the Philadelphia area (1996-1998) and in the same capacity at Japan Organo in Tokyo (1998-2001). During the last five years he has been active as a researcher at the Tosoh Nanyo Research Institute.

Dr. Kato and his wife Naomi, who is present at this meeting, have been married for over 35 years. They are the parents of two grown sons and the proud grandparents of a grandson.

Short courses

There are 4 short courses being featured this year in the ISPPP 2005 conference.

Multidimensional LC/MS in Proteomics: Potential and Limitations 9:00 am to noon Sunday Egidijus Machtejevas and Klaus K. Unger, Johannes Gutenburg University, Mainz, Germany and Rainer Bischoff, University of Groningen, The Netherlands

Preparative-scale Separation of Biomolecules 9:00 am to noon Sunday Prof. Alois Jungbauer, University of Natural Resources and Applied Life Sciences, Vienna, Austria

Monolithic Columns: How to Make and Use Them 1:30 pm to 4:30 pm Sunday Prof. Frantisek Svec, University of California, Berkeley, CA, USA

Basics in Biopolymer Mass Spectrometry 1:30 - 4:30 pm Sunday Prof. Guenter Allmaier, Institute of Chemical Technology and Analytics, Vienna University of Technology, Vienna, Austria

Please see the web page www.isppp.org for further details.

Some of the Featured Talks for ISPPP

The Evolution of High Performance Bioseparation Science from the Nano- to the Macro-scale. A Twenty Five Year ISPPP Perspective. Milton T. W. Hearn

Fast, Two-Dimensional Gradient Elution High Performance Liquid Chromatography of Peptides. Dwight Stoll, Xiaoli Wang, Adam Schellinger and Peter W. Carr

Proteomics of Prostate and Ovarian Tumor Cells Using Multidimensional Liquid Separations and Mass Mapping. David M. Lubman, Yi Zhu, Hye-yeung Kim, Yanfei Wang, Rong Wu, Kathleen Cho, Manoj Pal, Arun Sreekumar, and Arul Chinnaiyan

Mining Gold in Serum Proteomes: Discovery of Disease Biomarkers Using Multi-dimensional Protein and Peptide Separation Strategies. David W. Speicher

Past, Present, and Future of Monolithic Columns. Frantisek Svec

Mass transfer Properties of Plasmids and Nanoparticles on Monoliths and Chromatography Particles with Giga Pores. Tina Tarmann and Alois Jungbauer

Monolithic Silica Columns in Liquid Phase Separation Techniques for Proteomics: Design, Potential and Limitations. Egidijus Machtejevas, Klaus K. Unger and D. Lubda

Macroporous Hydrophilic Gels as New Materials for Monolithic Chromatography. Igor Yu. Galaev, and Bo Mattiasson

Activity-based Proteomics of Metalloproteases. J.R. Freije, T. Klein and R. Bischoff

Specificity in Non-enzymatic Post-translational Modifications; The Case of Oxidative Stress. Fred Regnier and Hamid Mirzaei

Structural and Functional Glycomics: Trolling for Carbohydrate-Binding Proteins with Well-Characterized Bait. Steven B. Levery, David J. Ashline, Hailong Zhang, Anthony J. Lapadula, Suddham Singh, Andy Hannemann, Heather Eichert, Emma A. Arigi, Vernon N. Reinhold

A Novel Countercurrent Continuous Chromatographic Solvent Gradient Process for Biomolecule Purification. Lars Aumann, Guido Stroehlein, Abhijit Tarafder, Lena Melter, Marco Mazzotti, Massimo Morbidelli

Membrane Chromatography of Nanometer-Sized Bio-Therapeutics Mark Etzel and William Riordan

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