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Tri-State CACS 2007 Annual Symposium

“Chemistry Frontiers: Challenges and Opportunities in Global Competition”

Co-sponsored by
The Department of Pharmaceutical Chemistry
Ernest Mario School of Pharmacy, Rutgers University

8:30 am – 4:00 pm
Saturday, June 16, 2007
Rutgers Fiber Optics Auditorium
Fiber Optics Materials Research Building
Rutgers Busch Campus, Piscataway, NJ
Street Address:
101 Bevier Rd, Piscataway, NJ 08854

Acknowledgement

Tri-State CACS gratefully acknowledges the following sponsors for their support of Tri-State CACS and this symposium:

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Forward

Welcome to the CACS Annual Symposium of 2007!

On behalf of the Tri-State CACS, we would like to express our sincere gratitude to our sponsors, and to our volunteers for their support and contributions to the cause of our organization.

For over a quarter of a century the CACS has continued to promote cohesion among Chinese-American chemical professionals, and to address their common interest and concerns. In addition to holding events like this, in the past several years the Tri-State CACS has added Young Chemist Award to help cultivate interests of high school students in chemical sciences. We have also initiated a mentor program to help new comers gain a quick footing in their professional careers in the US.

As the world is witnessing fast economic development in Asia, particularly in China, the American chemical and pharmaceutical industries as a whole and the Chinese-American chemical professionals in particular, are presented with unprecedented challenges and opportunities. In organizing successful 2006 Beijing International Pharmaceutical & Chemical Intellectual Property Forum and 2007 2nd International Pharmaceutical R&D Forum in Beijing, the CACS has started a new mission to promote dialogue and collaborations in chemical and pharmaceutical R&D between the US and China. The focus of 2007 Annual Symposium is “Chemistry Frontiers: Challenges and Opportunities in Global Competition”.

We are honored to have, among a group of distinguished speakers, Dr. Mauricio Futran, Vice President of Process R & D, Bristol-Myers Squibb, as a keynote speaker at our symposium. He will deliver a speech on “Opportunities in Small Molecule Process Development”. Other speakers include senior technical leaders and executive managers from major pharmaceutical companies. The latest analytical technology advances and start-up companies in the outsourcing business will also be featured at the symposium.

We hope that you will enjoy this symposium. Once again, thank you for your participation!



Guodong Chen, Ph.D.

President of Tri-State CACS



Longqin Hu, Ph.D.

President-Elect of Tri-State CACS

Program

8:30	Registration / Breakfast & Coffee	
	Morning Session (Session Chairs: Longqin Hu & Daniel Wang)	
9:00	Opening Remarks	Guodong Chen
9:10	Dr. Mauricio Futran, Vice President, Bristol-Myers Squibb “Opportunities in Small Molecule Process Development”	
9:50	Dr. George Njoroge, Director, Schering-Plough “Challenges & Successes in Discovering Protease Inhibitors for Treatment of Hepatitis C Virus”	
10:30	Coffee Break	
10:50	Dr. John Ellingboe, Assistant Vice President, Wyeth “The Impact of New Chemical and Screening Technologies on Improving the Quality of Drug Candidates and Reducing Cycle Time”	
11:30	Dr. Walter Korfmacher, Distinguished Fellow, Schering-Plough “Speeding the Lead Optimization Process: Using Mass Spectrometry Strategies to Increase the Throughput for ADME/PK Screening”	
12:10	Lunch	
	Afternoon Session (Session Chairs: Fangbiao Li & Yong Huang)	
1:00	Mr. Edward Aig, Principal Technical Support Specialist and Laboratory Manager, Waters Corporation “Ultra Performance LC™ Redefining Separation Science”	
1:25	Dr. James Kapron, Product Specialist, Thermo Fisher Scientific “Advances in Bioanalytical Method Robustness”	
1:50	Dr. Limin Sun, Application Scientist, TASCAN USA, Inc. “ToF-SIMS - a Chemical Microscope: Applications in the Biomedical and Pharmaceutical Industry”	
2:15	Dr. Bing Yu, Chief Operating Officer, AstaTech, Inc. “A Premier Provider of Advanced Chemistry Solution”	
2:40	Ms. Ping Cao, Marketing Manager, Tyger Scientific, Inc. “Key to Success - Tale of a Growing Tyger”	
3:05	Mr. Michael Hui, Chief Executive Officer, Chempartner “Integrated Service: Solution for the Future in Pharmaceutical Outsourcing”	
3:30	Dr. Xiongwei Shi, Chief Executive Officer, United Pharmatech “United Pharmatech's Strategies and Steps towards Meeting US Pharmaceutical Company's Requirements for Outsourcing Service”	
3:55	Closing Remarks	Longqin Hu

Speakers

Dr. Mauricio Futran, Bristol-Myers Squibb Company Research and Development (Formerly Pharmaceutical Research Institute): Since September 1998, Dr. Mauricio Futran holds the office of Vice President, Process Research and Development. In this capacity, he is responsible for small molecule API development from interface with Discovery to manufacturing validation. He leads formalization of business processes, ensures full regulatory compliance of area, and drives development based on mechanistic understanding. In addition, he enhances efficiency through new technology, parallels experimentation and strategic leveraging of outsourcing. He has established the department as a premier organization among peer companies and the chemistry, engineering and biotransformation communities.

Before joining BMS in 1997, Dr. Futran worked for Merck Research Labs, Merck & Co., Inc. Covering all aspects of bulk active process development, including laboratory development, piloting and introduction to manufacturing. Responsibilities included process safety lab, material compatibility lab, reaction engineering lab, pilot plant operations, construction and startup of new pilot facilities.

Education:

BSChE, Rice University, 1976

MChE, Rice University, 1977

Ph.D., Chemical Engineering, Princeton University, 1985

Memberships

National Academy of Engineering (since 2003)

Peer Committee (since 2005)

Board on Chemical Sciences and Technology, National Research Council (since 2003)

American Institute of Chemical Engineers (since 1983)

Food, Pharmaceutical and Biotechnology Section (since 1983)

Awards Committee (since 2001)

American Chemical Society (since 1997)

Georgia Institute of Technology Advisory Board, Chemical Engineering Department (since 2005)

Rutgers Advisory Board, Chemical Engineering Department (since 1998)

Princeton University, Chairman of Chemical Engineering Advisory Board (since 2003)

Society of Biological Engineering, Managing Board (since 2004)

Dr. George Njoroge is a Director in the Department of Medicinal Chemistry at Schering-Plough Research Institute in Kenilworth, New Jersey. Currently, he leads a medicinal chemistry program to identify novel antiviral agents for the treatment of Hepatitis C viral infection. Through his research, an anti-HCV viral drug Boceprevir (SCH 503034) has been discovered – this molecule is in Phase II studies as a cure for hepatitis C infection. He has also worked extensively in the oncology area, especially in the discovery of therapeutic agents that are geared towards intervention of signal transduction process in proliferating cells.

After graduating from University of Nairobi, Kenya, George completed his Ph.D. in organic chemistry at Case Western Reserve University, Cleveland, Ohio in 1985 and joined SPRI in 1988. Dr. Njoroge's research at SPRI has focused on the design and synthesis of orally bioavailable small molecules for treatment of viral diseases and cancer.

This work led to the discovery of SARASAR, a potent farnesyl protein transferase inhibitor that is currently in phase III clinical trials for treatment of cancer.

Dr. Njoroge has published extensively in professional journals on synthetic organic chemistry and drug design. Dr. Njoroge is an author or co-author of more than one hundred and ten (110) patent and scientific papers. He is recipient of numerous awards, including Emerald Award for Professional Achievement in Industry and Thomas Alva Edison Patent Award for emerging therapies. He is a member of the Medicinal Chemistry Section of the American Chemical Society and AAAS.

Dr. John Ellingboe received his Ph.D. from MIT in 1985, working with Prof. Satoru Masamune. He then joined Ayerst Laboratories in Princeton, NJ in 1985, and worked as a medicinal chemist on cardiovascular and diabetes projects, including several that delivered clinical candidates. Ayerst later merged with Wyeth to become Wyeth Research. In 1995, he moved to Wyeth's Pearl River, NY site to become Associate Director of Combinatorial Chemistry. Currently, he is Assistant Vice President of the Exploratory Medicinal Chemistry department. This department is responsible for lead identification in all exploratory projects for all of Wyeth's therapeutic areas.

Dr. Walter A. Korfmacher is a Distinguished Fellow of Exploratory Drug Metabolism at Schering-Plough Research Institute in Kenilworth, New Jersey. He received his B.S. in Chemistry degree from St. Louis University in 1973. He then went on to obtain his M.S. in Chemistry in 1975, and Ph.D. in Chemistry in 1978, both from the University of Illinois in Urbana. In 1978, he

joined the FDA and was employed at the National Center for Toxicological Research (NCTR) in Jefferson, Arkansas. While at the NCTR, he also held Adjunct Associate Professor positions at the College of Pharmacy in the University of Tennessee (Memphis) and the Department of Toxicology in the University of Arkansas for Medical Sciences (Little Rock). After 13 years at the NCTR, Dr. Korfmacher joined Schering-Plough Research Institute as a Principal Scientist in October, 1991. He is currently a Distinguished Fellow and the leader for a group of eighteen scientists. His research interests include the application of mass spectrometry to the analysis of various sample types, particularly metabolite identification and trace organic quantitative methodology. His most recent applications are in the use of HPLC combined with atmospheric pressure ionization mass spectrometry and tandem mass spectrometry for both metabolite identification as well as nanogram/ml quantitative assay development for various pharmaceutical molecules in plasma. He is also a leader in the field of developing strategies for the application of new MS techniques for drug metabolism participation in new drug discovery and is frequently invited to speak at scientific conferences. In 1999-2000, Dr. Korfmacher was the chairperson of the North Jersey Mass Spectrometry Discussion Group and in 2002, Dr. Korfmacher received the New Jersey Regional Award for Achievements in Mass Spectrometry. Dr. Korfmacher is a member of the editorial board for both Rapid Communications in Mass Spectrometry and Current Drug Metabolism. Dr. Korfmacher has edited a book entitled "Using Mass Spectrometry for Drug Metabolism Studies" (CRC Press, 2005). Dr. Korfmacher has over 125 publications in the scientific literature and has made over 75 presentations at various scientific forums.

Edward Aig has been working with Waters Corporation as a Principal Technical Support Specialist and Laboratory Manager in the New Jersey Regional Office for over 20 years. Mr. Aig specializes in ACQUITY UPLC™, Preparative Chromatography, Millennium/Empower Software, Photodiode Array detection and LC applications. Previously he was employed as a Medicinal Chemist for Wellcome Research Labs and Hoffmann La Roche, until 1985 when he joined Waters Corporation. He received his Bachelor of Science degree in Chemistry at Long Island University, Brooklyn Center in 1969.

Dr. Jim Kapron received his Ph.D. in Chemistry from the University of Alberta. After post-doctoral appointments in Switzerland and Lake Placid, NY, he joined Advion BioSciences, a contract research organization, where he performed bioanalysis in GLP drug development and drug discovery laboratories and eventually he transferred to the new technologies department.

In 2004, he joined Ionalytics to develop the market for FAIMS as a selectivity enhancer for LC-MS. His work led to the eventual sale of Ionalytics to Thermo Fisher where he has been actively engaged in the marketing department ever since. A sought after speaker, Jim travels the world in support of the Quantum triple quadrupole mass spec. When he is not paddling his prospector canoe, he may be found applying novel technologies to solve challenging bioanalytical problems.

Dr. Limin Sun is employed as a Senior Application Scientist at TASCAN USA, an analytical services and

consulting company specializing in Time of Flight Secondary Ions Mass Spectrometry (ToF-SIMS) analysis.

Dr. Limin Sun received her B.Sc degree from University of Science and Technology of China (USTC), M.Sc degree from Institute of Chemistry, Academia Sinica, and Ph.D degree in Chemistry from the State University of New York at Buffalo. She also finished two Postdoctoral Research Fellowships at the University of British Columbia and the University of Toronto. Limin started to work as an application scientist at TASCAN USA in 2001.

TASCAN USA is the North American subsidiary of tascon GmbH, the leading European ToF-SIMS analytical laboratory located in Muenster in Germany. Tascon GmbH has years of experiences and expertise in analyzing the surface chemistry on coatings, glass, electronics, polymer etc. using ToF-SIMS. With the latest advancement of ToF-SIMS instrumentation, which is developed by ION-TOF GmbH, a sister company of Tascon GmbH, it becomes routine to acquire high quality mass spectra and chemical images of materials in a variety of industries. Currently, TASCAN GmbH and TASCAN USA have a promising business perspective to develop new applications in the pharmaceutical industry.

Dr. Bing Yu, Chief Operating Officer, AstaTech, Inc.

Education:

MS in Chem Eng, 1982 - 1985

Ph.D. in Chem Eng, 1985 - 1987

MBA Training, 1995 - 1997, Wharton Business School, University of Penn.

Experience:

Post-doc, Chemistry Dept., Clarkson University, 1987-1991, New York

1991-2002, Rohm and Haas Company, the increasing responsibility from Sr. Scientist, R&D Group Leader, Product Manager, Quality Manager, Asia Pacific Operations, and Six Sigma Project Leader

2002-2004, Honeywell International, Plant Technical/Six Sigma Manager

2004-March, 2006, Chiral Quest, Inc., Director of Global Operations

4/2006 to now, AstaTech, Inc., Chief Operating Officer

Headquartered in Bristol, PA, USA, AstaTech, Inc., has served pharmaceutical and biotech industries worldwide for 10 years. It offers high-value intermediates ranging from grams, kilos, to metric tons, along with its services in custom synthesis and manufacturing, contract R&D (including FTE), and process development. It is specialized in advanced unnatural amino acids and their derivatives, N-based heterocyclic compounds such as pyrrolidines, piperidines, piperazines, pyrimidines, novel indoles and quinolines, thiazoles, boronic acids, and azetidines. It has established an optimal global value chain out of US, Canada and China and has become a leader in the development of new chiral chemistries.

Ping Cao, Marketing Manager of Tyger Scientific Inc.

Serving the pharmaceutical, biotechnology and chemical industries, Tyger Scientific Inc. has gained a strong reputation in the most challenging organic synthesis field for reliable quality, on time delivery and competitive pricing. The key of our business success - caring about our customer just like we care about friends. Examples of Tyger's chemistry expertise - Heterocyclic chemistry,

Chiral compounds and selective hydrogenation will be presented.

Ping is responsible for business development, sales, and marketing at Tyger Scientific. She graduated from Tianjin University in China with a master degree in engineering. She also received a master degree in science from Michigan State University in 2004.

Michael Hui is a successful entrepreneur, having founded Shanghai ChemExplorer, ChemPartner and BioExplorer which, in less than four years since its inception, has grown into one of the leading integrated R&D service providers in China with over 880 professional employees servicing multinational clients. Previously Michael was Vice President of Investment Banking with Softbank Investment E2 Capital, a subsidiary of the leading Japanese investment and venture firm. He was responsible for managing the Shanghai office operation as well as executing IPO, M&A and private placement deals in China. In addition, he provided financial advisory services to companies in China, including identifying potential joint venture or collaboration partners, developing restructuring and financing strategies, and preparing strategic investment proposals. Michael received his bachelor and master degrees in chemistry from Oregon State University and Tulane University, respectively. He worked as a research scientist at American Home Products (now Wyeth) and went on to complete his MBA training in the Stern School of Business of New York University.

Dr. Xiongwei Shi received his Ph.D. in synthetic organic chemistry in 1993 from Sate University of New York.

Then he moved to Cornell University as a postdoctoral research associate in synthetic organic chemistry.

In 1996, Dr. Shi started his industrial career as a senior chemical process scientist in Schering-Plough Research Institute. During the period of 1996-2004, Dr. Shi involved in many development projects to support phase I, II, III clinical studies and commercial production of intermediates and APIs. These projects included new synthesis and process development of Anti-Fungal and Anti-Cancer drugs and other drug candidates for Alzheimer's disease, Parkinson's disease, AIDS disease.

In 2004, Dr. Shi established United Pharmatech, a joint-venture offering global pharmaceutical company's diverse custom synthesis, process research, development and scale-up outsourcing services as well as manufacturing of pharmaceutical intermediates and APIs in cGMP environment. United Pharmatech became the first China-based company who can deliver clinical APIs (FDA cGMP) for human trails in U.S. Currently United Pharmatech has more than 50 Ph.D, MS, and BS employees and are rapidly expanding to 100. Many of them are oversea returnees.

Dr. Shi has been an Executive Committee Member of Sino-American Pharmaceutical Professionals Association (SAPA), Lifetime Member of SAPA and Member of American Chemical Society for many years. He has published more 30 peer-reviewed papers in international journals and holds many patents.

Tri-State CACS Officers (2007)

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