纪念Dr. Andrew J. Alpert 国际研讨会 Dr. Andrew J. Alpert Memorial Symposium



Sep. 13th-15th, 2023 (Zoom)

The organizers (主办单位)





Dear Friends,

It is with heavy hearts and profound respect that we organize this memorial symposium to honor the life and legacy of the esteemed Dr. Andrew J. Alpert. Dr. Alpert is a brilliant scientist, a dedicated mentor, a devoted collaborator, and a legend in the field of chromatography. Dr. Alpert's significant contributions left an indelible mark on the world of chromatography! Andy is a very kind person! Andy touched the lives of so many, he was always willing to stop what he was doing and help others. Dr. Alpert was also a talented artist, linguist (four languages), musician (pianist), sportsman (pole vaulter), chef, naturalist, and above all – a beloved husband, father, brother, and grandfather to five grandchildren.

The symposium features distinguished speakers, colleagues, and friends together with his family members to celebrate his legacy by highlighting the extraordinary contributions he made to the field of chromatography and mass spectrometry-based proteomics as well as the personal connections he forged throughout his life. In addition to the speakers, there will be opportunities for attendees to participate in the virtual receptions and pay their respects through heartfelt tributes. The symposium aims to foster an atmosphere of intellectual exchange, inspiration, and remembrance, just as Dr. Alpert did throughout his distinguished career.

The symposium website is available. <u>https://labs.wisc.edu/aams/</u>. Everyone is welcome. Let us come together to celebrate the life and legacy of Dr. Andrew J. Alpert!

With deepest respect,



纪念 Dr. Andrew J. Alpert 国际研讨会

10

Sep. 13th-15th,2023(Zoom)

Dr. Andrew J. Alpert Memorial Symposium



Stacey Keen, MD, FACR



The organizers

Michael Alpert, MD Son of Dr. Andrew Alpert 艾瑞祥医生



Rachel Alpert, JD Daughter of Dr. Andrew Alpert 艾瑞琪



Yi He, PhD

John Jay College of Criminal Justice, The City University of New York

🚯 仪器信息网



Fred Regnier, PhD



David McCalley, PhD



Ron Orlando, PhD Molecular Biology and Carbohydrate Research



Mark Schure, PhD Chief Technology Officer, Kroungold Analytical, Inc.



Barry Boyes, PhD Chief Technology Officer, Advanced Materials Technology



Naidong Weng, PhD and Biomarkers, GSK President of CASMS



Aihua Liu, PhD Senior Director, Bioanalysis,

David S. Bell, PhD

Restek



Yong Guo, PhD, MBA of Pharmacy and Health Science, Fairleigh Dickinson



Amos Heckendorf, PhD President of The Nest Group Inc.™



Guowang Xu, PhD of Chemical Physics, Chinese Academy of



Ying Ge, PhD



Yan-bo Yang, PhD



Martin Gilar, PhD Separations Research.

Lingjun Li, PhD

and Professor of Chemistry.

Wisconsin-Madisor



Christopher J. Wike

Susan Olesik, PhD Professor and Dean of Sciences. The Ohio State

Si Wu, PhD

Professor of Chemistry, University of Alabama



Bifan Chen, PhD

Earth and Life Studies National Academies of Sciences, Engineering, and Medicine

John Yates III





Xiang Zhang, PhD

Jake Melby, PhD





Biochemistry and Molecular Biophysics, Washington





Nicolas Young, PhD Biology, Baylor College of Medicine



Lihua Zhang, PhD













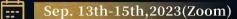


Trisha Tucholski, PhD Program officer, Board on Life Sciences Division on



_ 纪念 Dr. Andrew J. Alpert 国际研讨会

Dr. Andrew J. Alpert Memorial Symposium





Session 1: Innovation Empowered the Chromatography Separations (HILIC/HIC)

Wednesday (Sept. 13) 9:30 AM - 12:00 PM - US Eastern Time (EST) Wednesday (Sept. 13) 3:30 PM - 6:00 PM - Central European Time (CEST) Wednesday (Sept. 13) 9:30 PM - 12:00 AM - Beijing Time (BJ)



Stacey Keen, MD, FACR Wife of Dr. Andrew Alpert



Michael Alpert, MD Son of Dr. Andrew Alpert 艾瑞祥医生



Rachel Alpert, JD Daughter of Dr. Andrew Alpert 艾瑞琪



Yi He, PhD Professor of Chemistry, John Jay College of Criminal Justice, The City University of New York



Ron Orlando, PhD

Professor of Biochemistry & Molecular Biology and Chemistry, Complex Carbohydrate Research Center, University of Georgia



Fred Regnier, PhD CTO- Novilytic, LLC & Distinguished Professor of Chemistry, Emeritus at Purdue University



Mark Schure, PhD Chief Technology Officer, Kroungold Analytical, Inc.



David McCalley, PhD Professor in Bioanalytical Science, University of the West of England, UK



Barry Boyes, PhD Chief Technology Officer, Advanced Materials Technology

Dr. Andrew J. Alpert Memorial Symposium The organizers POLC CONTRACTOR OF CONTRACTOR

Session 1: Wednesday (Sept. 13) 9:30 AM – 12:00 PM - US Eastern Time (EST) Wednesday (Sept. 13) 3:30 PM – 6:00 PM – Central European Time (CEST) Wednesday (Sept. 13) 9:30 PM – 12:00 AM – Beijing Time (BJ)

Innovation Empowered Chromatography Separations (HILIC/HIC)

Session Chair – Chuping Luo and Yan-bo Yang, CACA former Presidents

9:30 AM – 10:00 AM EST	Virtual Reception
10:00AM – 10: 05AM EST	Opening Remarks from CACA President Yi He, PhD, Professor of Chemistry, John Jay College of Criminal Justice, The City University of New York
10:05 AM – 10:20AM EST	Greetings from the Alpert family Stacey Keen, MD, FACR Wife of Dr. Andrew Alpert Rachel Alpert, JD, Daughter of Dr. Andrew Alpert
10:20 AM – 10:40AM EST	Andy: The Business Man/Scientist I Knew! Fred Regnier, PhD, CTO, Novilytic, LLC & Distinguished Professor of Chemistry, Emeritus at Purdue University
10:40 AM – 11:00AM EST	Dr. Andy Alpert-polymath and father of hydrophilic interaction chromatography David McCalley, PhD, Professor in Bioanalytical Science, University of the West of England, UK
11:00 AM - 11:20AM EST	Andy and Glycans, my introduction to chromatography Ron Orlando, PhD, Professor of Biochemistry & Molecular Biology and Chemistry, Complex Carbohydrate Research Center, University of Georgia
11:20 AM – 11:40 AM EST	Hydrophobic Interaction Chromatography (HIC): A molecular interpretation of the process Mark Schure, PhD, Chief Technology Officer, Kroungold Analytical, Inc.
11:40 AM – 12:00 PM EST	Use of HILIC for Protein Structure Analysis Barry Boyes, PhD, CTO at Advanced Materials Technology



纪念 Dr. Andrew J. Alpert 国际研讨会

Dr. Andrew J. Alpert Memorial Symposium





Session 2: HILIC and the Applications

Wednesday (Sept. 13) 9:00 PM - 11:15 PM - US Eastern Time (EST) Thursday (Sept. 14) 3:00 AM - 5:15 AM - Central European Time (CEST) Thursday (Sept. 14) 9:00 AM - 11:15 AM - Beijing Time (BJ)



Michael Alpert, MD Son of Dr. Andrew Alpert 艾瑞祥医生



Rachel Alpert, JD aughter of Dr. Andrew Alper 艾瑞琪



Yi He, PhD Professor of Chemistry, John Jay College of Criminal Justice, The City University of New York



Naidong Weng, PhD

Senior Director, Global Head of LC-MS Bioanalysis and Biomarkers, GSK, Former President of CACA & President of CASMS



Aihua Liu, PhD Senior Director, Bioanalysi Resolian

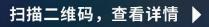


Yan-bo Yang, PhD President & CEO at BioPharmaDev, Inc., Founder of CACA



Yong Guo, PhD, MBA

Professor of Pharmaceutical Sciences, Department Chair, School of Pharmacy and Health Science, Fairleigh Dickinson University



仪器信息网@信立方旗下网站



Dr. Andrew J. Alpert Memorial Symposium

The organizers

Session 2*: Wednesday (Sept. 13) 9:00 PM – 11:15 PM - US Eastern Time (EST) Thursday (Sept. 14) 3:00 AM – 5:15 AM – Central European Time (CEST) Thursday (Sept. 14) 9:00 AM – 11:15 AM – Beijing Time (BJ)

HILIC and the Applications

Sep. 13th-15th, 2023 (Zoom)

Session Chairs - Chuping Luo, PhD, CACA Former President

Yuanyuan Song, Instrument.com.cn 仪器信息网

9:00 PM – 9:10 PM EST	Greetings from the Alpert family Michael Alpert, MD, Son of Dr. Andrew Alpert, 艾瑞祥医生 Rachel Alpert, JD, Daughter of Dr. Andrew Alpert, 艾瑞琪
9:10 PM – 9:15 PM EST	Opening Remarks from CACA President Yi He, PhD, Professor of Chemistry, John Jay College of Criminal Justice, The City University of New York
9:15 PM - 9:45 PM EST	Beauty and Beast of HILIC in Quantitative LC-MS Bioanalysis Naidong Weng, PhD, Senior Director, Global Head of LC-MS Bioanalysis and Biomarkers, GSK, Former President of CACA & President of CASMS
9:45 PM - 10:15 PM EST	Analytical Challenges and Case Studies for Bioanalysis of Oligonucleotide Therapeutics using Reverse-phase and HILIC LC-MS/MS Aihua Liu, PhD, Senior Director of Bioanalysis, Resolian
10:15 PM - 10:45 PM EST	Partitioning or Adsorption? A quantitative assessment of retention mechanisms in hydrophilic interaction chromatography Yong Guo, PhD, Professor of Pharmaceutical Sciences, Department Chair, School of Pharmacy and Health Science, Fairleigh Dickinson University
10:45 PM - 11:15 PM EST	Relationship with Dr. Andy J. Alpert and HILIC Yan-bo Yang, PhD, President and CEO at BioPharmaDev, Inc., Founder of CACA

* This session is in Chinese and will be hosted by instrument.com.cn in their platform. This is the only session that will not be in Zoom.



Session 3: Innovation Empowered the Chromatography Separations

Thursday (Sept. 14) 9:00 AM - 12:00 PM - US Eastern Time (EST) Thursday (Sept. 14) 3:00 PM - 6:00 PM - Central European Time (CEST) Thursday (Sept. 14) 9:00 PM - 12:00 AM - Beijing Time (BJ)



Christopher J. Wike Vice President PolyLC INC.



Yan-bo Yang, PhD President & CEO at BioPharmaDev, Inc., Founder of CACA



Bifan Chen, PhD Principal Scientist at Genentech



Xiang Zhang, PhD Professor of Chemistry, University of Louisville, Former President of CACA



David S. Bell, PhD Column Watch Editor, LCGC, Research Fellow, Restek



Amos Heckendorf, PhD President of The Nest Group Inc.™



Martin Gilar, PhD

Scientific Fellow, Separations Research, Waters Corporation



Susan Olesik, PhD

Distinguished University Professor and Dean of Natural and Mathematical Sciences, The Ohio State University

Dr. Andrew J. Alpert Memorial Symposium The organizers PolyLC K (2000)

Session 3: Thursday (Sept. 14) 9:00 AM – 12:00 PM - US Eastern Time (EST) Thursday (Sept. 14) 3:00 PM – 6:00 PM – Central European Time (CEST) Thursday (Sept. 14) 9:00 PM – 12:00 AM – Beijing Time (BJ)

Innovation Empowered Chromatography Separations

Session Chair – Christopher Wike, PolyLC INC. and Xiang Zhang, University of Louisville

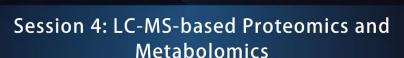
9:00 AM – 9:30 AM EST	Virtual Reception
9:30 AM – 9:40 AM EST	Opening Remarks from PolyLC INC. Christopher Wike Vice President, PolyLC INC.
9:40 AM – 10:00AM EST	My Relationship with Dr. Andy J. Alpert and HILIC Yan-bo Yang, PhD, President and CEO at BioPharmaDev, Inc., Founder of CACA
10:00 AM – 10:20 AM EST	HILIC: A versatile method for pharmaceutical analysis Bifan Chen, PhD, Principal Scientist at Genentech
10:20 AM - 10:40AM EST	Systems urine metabolomics of alcohol-associated liver disease Xiang Zhang, PhD, Professor of Chemistry, University of Louisville, Former President of CACA
10:40 AM – 11:00AM EST	All (my) models are wrong: essential learnings from Andy Alpert David Bell, PhD Column Watch Editor, LCGC, Research Fellow, Restek
11:00 AM – 11:20AM EST	The arc of polyaspartic acid chemistry applications Amos Heckendorf, PhD President of the Nest Group Inc.™
11:20 AM – 11:40 AM EST	Chromatographic attractions and repulsions Martin Gilar, PhD, Separations Research, Waters Corporation
11:40 AM – 12:00 PM EST For registration and detai	Enhanced Fluidity Hydrophilic and Hydrophobic Liquid Chromatography with Kind Collaborations from Dr. Andy Alpert Susan Olesik, PhD, Distinguished University Professor and Dean of Natural and Mathematical Sciences, The Ohio State University s, please visit symposium website: https://labs.wisc.edu/aams/

Dr. Andrew J. Alpert Memorial Symposium

仪器信息网

纪念 Dr. Andrew J. Alpert 国际研讨会

Sep. 13th-15th,2023(Zoom)



Thurs. (Sept. 14) 8:30 PM - 11:00 PM - US Eastern Time (EST) Friday (Sept. 15) 2:30 AM - 5:00 AM - Central European Time (CEST) Friday (Sept. 15) 8:30 AM - 11:00 AM - Beijing Time (BJ)



The organized

Trisha Tucholski, PhD Program officer, Board on Life Sciences Division on

Earth and Life Studies National Academies of Sciences, Engineering, and Medicine



Lingjun Li, PhD

Charles Melbourne Johnson Distinguished Chair in Pharmaceutical Sciences and Professor of Chemistry, University of Wisconsin-Madison



Jake Melby, PhD Senior Scientist Biopharmaceuticals R&D Analytical Sciences AstraZeneca



Guowang Xu, PhD

Professor, Dalian Institute of Chemical Physics, Chinese Academy of Sciences



Lihua Zhang, PhD Professor, Dalian Institute of Chemical Physics, Chinese Academy of Sciences



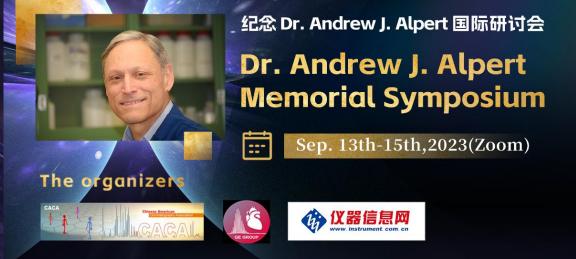
Si Wu, PhD Professor of Chemistry, University of Alabama

Session 4: Thurs. (Sept. 14) 8:30 PM – 11:00 PM - US Eastern Time (EST) Friday (Sept. 15) 2:30 AM – 5:00 AM – Central European Time (CEST) Friday (Sept. 15) 8:30 AM – 11:00 AM – Beijing Time (BJ)

LC/MS-based Proteomics and Metabolomics

Session Chairs – Si Wu, PhD, University of Alabama Jake Melby, PhD, AstraZeneca

8:30 PM – 9:00 PM EST	Virtual Reception
9:00 PM – 9:20 PM EST	Remembering Andy Trisha Tucholski, PhD Program officer, Board on Life Sciences National Academies of Sciences, Engineering, and Medicine
9:20 PM – 9:40 PM EST	Small-scale SEC and lessons learned from Andy Jake Melby, PhD Senior Scientist, Biopharmaceuticals R&D Analytical Sciences, AstraZeneca
9:40 PM – 10:00 PM EST	New methods for deep coverage proteome analysis Lihua Zhang, PhD Professor, Dalian Institute of Chemical Physics, Chinese Academy of Sciences
10:00 PM – 10:20 PM EST	Advancing protein post-translational modification analysis via electrostatic repulsion-hydrophilic interaction chromatography (ERLIC) coupled with mass spectrometry Lingjun Li, PhD Charles Melbourne Johnson Distinguished Chair in Pharmaceutical Sciences and Professor of Chemistry, University of Wisconsin-Madison
10:20 PM – 10:40 PM EST	Multi-dimensional separation and analysis of small molecules Guowang Xu, PhD Professor, Dalian Institute of Chemical Physics, Chinese Academy of Sciences
10:40 PM – 11:00 PM EST	Multidimensional separation in top-down proteomics Si Wu, PhD Professor of Chemistry, University of Alabama



Session 5: Chromatography Innovation Enabled Mass Spectrometry-based Proteomics

Friday (Sept. 15) 9:30 AM - 12:00 PM - US Eastern Time (EST) Friday (Sept. 15) 3:30 PM - 6:00 PM - Central European Time (CEST) Friday (Sept. 15) 9:30 PM - 12:00 AM - Beijing Time (BJ)



John Yates III Ernest W. Hahn Professor, The Scripps Research Institute



Ben Garcia, PhD Raymond H. Wittcoff Distinguished Professor and Head, Department of Biochemistry and Molecular Biophysics, Washington University St. Louis



Newman Sze, PhD

Professor of Health Sciences, Canada Research Chair in Mechanisms of Health and Disease, Brock University



Nicolas Young, PhD

Associate Professor, Biochemistry & Molecular Biology, Baylor College of Medicine



Ying Ge, PhD Professor of Cell and Regenerative Biology and Chemistry, University of Wisconsin-Madison

Dr. Andrew J. Alpert Memorial Symposium

Session 5: Friday (Sept. 15) 9:30 AM – 12:00 PM - US Eastern Time (EST) Friday (Sept. 15) 3:30 PM – 6:00 PM – Central European Time (CEST) Friday (Sept. 15) 9:30 PM – 12:00 AM – Beijing Time (BJ)

Chromatography Innovation Enabled Mass Spectrometry-based Proteomics

Session Chairs – Ying Ge, PhD, and Melissa Pergande, PhD University of Wisconsin-Madison, Wisconsin, USA

Sep. 13th-15th, 2023 (Zoom)

9:30 AM – 10:00 AM EST	Virtual Reception
10:00 AM – 10:20AM EST	Andy and MudPIT John Yates III, PhD Ernest W. Hahn Professor, The Scripps Research Institute
10:20 AM – 10:40AM EST	Towards understanding the complexity of the histone code Ben Garcia, PhD Raymond H. Wittcoff Distinguished Professor and Head, Department of Biochemistry and Molecular Biophysics, Washington University St. Louis
10:40 AM – 11:00AM EST	Unveiling DPMs Drug Targets Through ERLIC: A Journey from Proteomics Insight to Immunotherapy for Chronic Inflammation Newman Sze, PhD Professor of Health Sciences, Canada Research Chair in Mechanisms of Health and Disease, Brock University
11:00 AM – 11:20AM EST	Andy Alpert: Chromatography Innovator, Collaborator, and Mentor Nicolas Young, PhD Associate Professor, Biochemistry & Molecular Biology, Baylor College of Medicine
11:20 AM – 11:40 AM EST	Remembering Andy: "MudPIT" in Top-down Proteomics Ying Ge, PhD Professor of Cell and Regenerative Biology and Chemistry, University of Wisconsin-Madison
11:40 AM - 12:00 PM EST	Final Discussion and Closing Remarks

Photo Gallery

The HPLC Separation Specialis

5

Columns and Packings
Worldwide Service and Support
Over 35
C Technology Innova







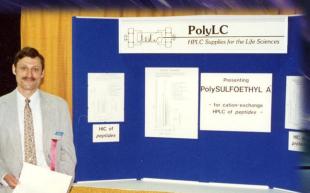




































1070

100

Dr. Andrew J. Alpert Memorial Symposium (Sept. 13-15, 2023)







Photo Gallery

2



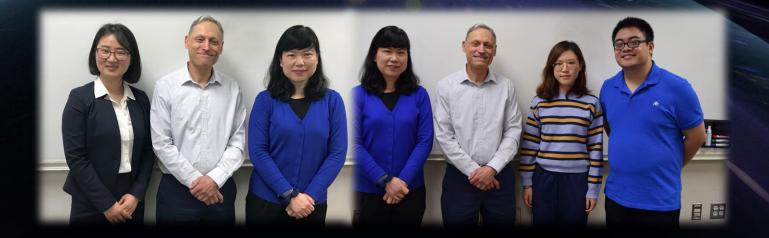


























ChupingLuo@Advanced-

Polylc.com

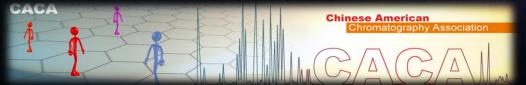
Aaterials-Tech.com

Pov

Symposium Organizers

Ying Ge, PhD, University of Wisconsin-Madison Yi He, PhD, Current President of CACA Chuping Luo, PhD, Former President of CACA Christopher J. Wike, Vice President <u>of PolyLC</u>

Acknowledgement



Bingchuan Wei, PhD, Senior Principal Scientist, Genentech, Inc., Dujuan Lu, PhD, Global E&L Leader, SGS, Fengjian Shi, PhD, Data Product Owner, Oncology Data Science, AstraZeneca, Howard Guo, PhD; Principal scientist, Sanofi; Michael Dong, PhD, Principal Consultant, MWD Consulting Mingming Ma, PhD, Analytical R&D Leader, Corteva Agriscience Tao Chen, PhD, Senior Principal Scientist, Genentech, Inc.

仪器信息网 www.instrument.com.cn 宋苑苑 Yuanyuan Song

编辑 赵仪 Yi Zhao; 会议运营 张家英 Jiaying Zhang; 直播转播 刘亚伟 Yawei Liu 美工 赵宇杰 Yujie Zhao;





GE GROUP

INC.

HPLC Supplies for the Life Sciences