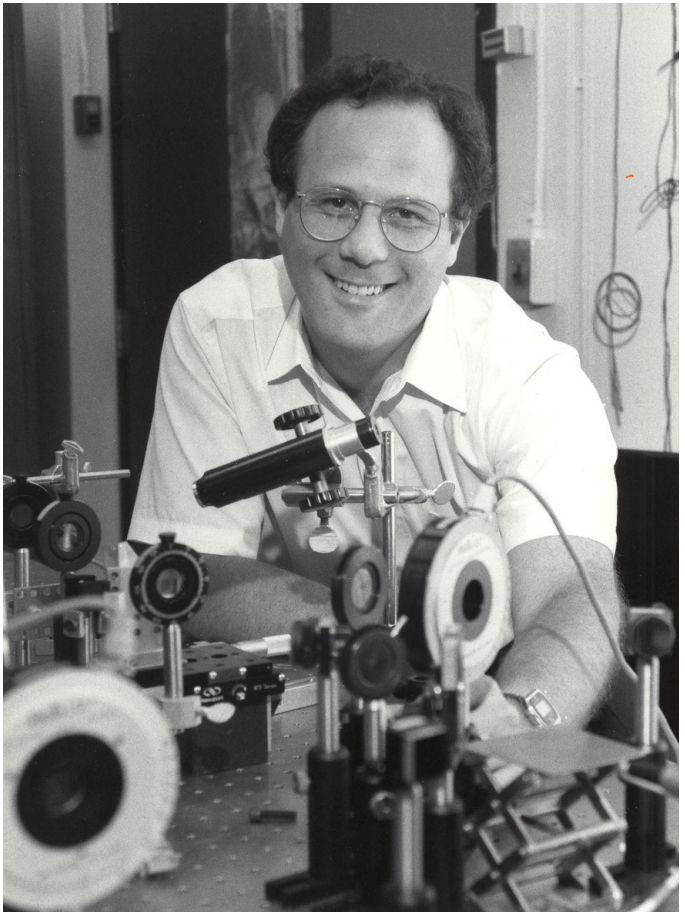
Symposium to Celebrate the Career of Lewis Rothberg

University of Rochester
Department of Chemistry



Saturday, October 17, 2026
Goergen 101
9:00 a.m. to 5:15 p.m.

SYMPOSIUM INTRODUCTION | 9:00 AM to 9:30 AM
Speaker: Professor Lewis Rothberg

RESEARCH SESSION | 9:30 AM to 12:00 PM
Moderator: Chris Collison

9:30 | Tingjuan Gao | Professor at the Central China Normal University | "Azo-Enhanced Raman Scattering Measurements in Biomedicine and Environmental Chemistry"

10:00 |Frank Nüesch | Ecole Polytechnique Fédérale de Lausanne | "From NIR Photodetection to Infrared-to-Visible Upconversion: Molecular Design and Photomultiplication in Organic Devices"

10:30 | Break

11:00 | Shanlin Pan | Professor at the University of Alabama | "The Heritage of Light: Lessons in Chemistry and Life from the Rothberg Lab, 2001 - 2006"

11:30 | Zhenjia Wang | Empire Innovation Professor of Pharmaceutical Sciences at the University of Buffalo| "Design of Cell-based Drug Delivery Systems"

LUNCH | 12:00 PM Munnerlyn Atrium

TEACHING SESSION | 1:00 PM to 2:40 PM
Moderator: Lewis Rothberg

1:00 | Chris Collison | Professor & Director of AI Hub and Initiatives at the Rochester Institute of Technology | "Teaching in the Age of Generative AI: From TutorBots to Student-Designed Learning"

1:25 | Juliane L. Fry | Associate Professor of Air Quality & Environmental Chemistry at Wageningen University (Netherlands) | "From Spectators to Scientists: Student-driven Field and Data Analysis Projects in Analytical and Environmental Chemistry"

1:50 | Jane Wesely | Upper Division Science Teacher, Horace Mann School | "Lessons from Two Decades of High School Science Teaching"

2:15 | Erin Stockdale | PhD Candidate, University of North Carolina, Chapel Hill | "Creating Educational Interview Videos Relating Environmental Chemistry Research to General Chemistry Principles", sharing video from 2:25 - 2:45.

COMMERCIALIZATION SESSION | 3:00 PM to 4:15 PM
Moderator: Ben Martin

3:00 | Benjamin Miller | Professor of Dermatology & Bioengineering, URochester | "From Reflectometry to Regenerative Medicine: Translational Efforts Driven by Optics and Photonics Applied to Biosensing"

3:25 | Fakhraddin Akbari Dourbash | Scientist, Sartorius Bioanalytical Instruments Inc. | "From Interferometric Biosensing to Commercial Bioanalytical Platforms: Translating Optical Assays into Robust products"

3:50 | Zonglun Li | PhD Student, Chemical Engineering, URochester | "Brewster Angle Straddle Interferometry for In Situ Metrology of Atomic Layer Deposition Applications"

CAREER PATHS SESSION | 4:15 PM to 5:15 PM
Moderator: Shanlin Pan

Dr. Mark Roberson | President of Goldfinch Sensor Technologies and Analytics, LLC | "Lessons from Lewis"

Dr. Ming Yan | Chief Technology Officer of Cytek Biosciences | "Fluorescent Polymers and the Transformation of Full-Spectrum Flow Cytometry"

Dr. Christine Liberatore | Lead Target Fabrication Engineer at the Lawrence Livermore National Laboratory

Dr. Chris Melnychuk | Senior Systems Engineer at Swift Group LLC

Dr. Yong Zhang | Director of Project Management at Repligen Corporation

Dr. Ben Martin | Research Scientist & Group Leader at the URochester Laboratory for Laser Energetics

Lewis Rothberg

"Symposium Welcome and Introduction"



Abstract: Today's symposium is focused on the current work and career paths of Rothberg group alumni. The breakdown into sections about research, attempts at commercialization and teaching mirrors some of my personal journey in science. I will provide an overview of some of the intellectual threads spun by the UR research group. Beyond that, I share some things I have learned about research and about myself. I also I also want to explain how today is also a beginning for me and discuss the future.

Bio: Lewis is a URochester alumnus with a BS in Physics (1977). He was Nico Bloembergen's final PhD student at Harvard, his thesis on how damping should be treated in quantum theory. Lewis worked at Bell Labs from 1983 – 1996, collaborating on projects in surface science, conjugated polymer excitations, charge transport in organics, protein conformations and development of mid-IR laser technology. He came to UR in 1996 and established a research group working on organic electronics, plasmonics and biomolecular sensing. Lewis directed the Photoinduced Charge Transfer NSF STC (1997 – 2000) and was head of the Materials Science Program (2006 – 2012). He taught a variety of Physical Chemistry courses and became passionate about reforming General Chemistry. He retired in 2024 to harness some of the same energy to communicate environmentally important aspects of Chemistry to the general public.

Ting Juan Gao

"Azo-Enhanced Raman Scattering Measurements in Biomedicine and Environmental Chemistry"



Abstract: Raman spectroscopy, as a molecular vibrational spectroscopy, can reveal the breaking and formation of chemical bonds in real time. Azo-enhanced Raman scattering (AERS) is an emerging intramolecular Raman enhancement strategy. It achieves an order-of-magnitude enhancement of intramolecular characteristic Raman signals by conjugating azobenzene with a central group, which enables the electronic excited states of the chemical bonds in the central group to resonate with the molecular vibrational energy levels, and simultaneously suppresses fluorescence emission from the excited state to the ground state through the cis–trans isomerization of azobenzene. We have developed a new AERS method and used it as a measurement tool to accomplish multicolor dynamic imaging of living cells and high-throughput input and output for peptide library screening. Furthermore, we employed this method to perform in situ measurements of proton transfer at (sub)nanometer-scale solid–liquid interfaces at the microscopic level, providing new research approaches and measurement tools for understanding and regulating chemical behaviors at environmental and catalytic interfaces.

Bio: Prof. Gao's research is dedicated to developing novel spectroscopic methods for intramolecular enhanced Raman scattering and high-sensitivity, fast multicolor imaging, and applying these new approaches to in situ optoelectronic measurements at interfaces in environmental chemistry and cellular biophysical chemistry. She holds eight authorized patents (both domestic and international) as an inventor.

Frank Nüesch

"From NIR Photodetection to Infrared-to-Visible Upconversion: Molecular Design and Photomultiplication in Organic Devices"



Abstract: Near-infrared (NIR) and shortwave-infrared (SWIR) photodetection is important for imaging, sensing, machine vision, and biomedical applications. Organic semiconductor-based photodetectors offer an attractive alternative to conventional inorganic technologies because of their tunable optical properties, narrow-band response, solution processability, mechanical flexibility, and potential for large-area fabrication. We discuss the development of squaraine-based organic photodetectors and their integration with light-emitting devices to realize direct infrared-to-visible upconversion. Solution-processed organic upconversion devices have been demonstrated in which a squaraine-based 980 nm NIR photodetector is monolithically integrated with an organic light-emitting unit to achieve upconversion efficiencies approaching 19%.

Bio: Frank Nüesch graduated the ETH Zurich in 1989 and received a PhD in 1995 wiith Michael Grätzel at EPFL in Lausanne. He did postdoctoral work on OLEDs with Libero Zuppiroli at EPFL and then moved to Rochester as a visiting scientist in the Rothberg group to do surface spectroscopic studies of chemically modified ITO surfaces. He became a lecturer at EPFL in 2001 with research focused on organic optoelectronic devices. In 2004, he was appointed Head of the Functional Polymers Laboratory at Empa to lead R&D activities in organic optoelectonics, printed electronics and elastomer transducers. Since 2011, he has been an Adjunct Professor at EPFL where he teaches courses on optical properties of materials, organic semiconductors and modern photovoltaics. He has authored more than 200 scientific publications and holds 10 patents.

Shanlin Pan

"The Heritage of Light: Lessons in Chemistry and Life from the Rothberg Lab, 2001-2006"



Abstract: I will reflect on my formative period of 2001-2006 within the Rothberg Lab-a time defined by the rigorous pursuit of optical spectroscopy and the exploration of plasmonic structures in radiative engineering and organic semiconductors. My current research is primarily focused on understanding the photophysics and electrochemistry of metal and semiconductor catalytic materials. The "light" emitted from Professor Rothberg's mentorship transcends the electromagnetic spectrum, representing a dual legacy: the technical mastery of light-matter interactions for energy conversions and the enduring "life lessons" in leading by example, resilience, intellectual curiosity, commitment and academic integrity. By revisiting the pivotal research milestones of the early 2000s, I will present how Rothberg's foundational teaching and training have illuminated my academic career.

Bio: Shanlin Pan received his PhD in Chemistry from UR in 2006. He went to UT-Austin for a Sigal postdoctoral fellowship with Prof. Allen Bard and started a faculty position at University of Alabama in 2008. His research focuses on developing electrochemical techniques for chemical imaging and detection, as well as functional materials for clean energy applications. He has published over 100 journal articles, organized many symposia at ACS National and Regional meetings, and chairs the Alabama ACS local section. Prof. Pan is director of Alabama's NSF EPSCoR Communities program (RII-BEC) which enables students from HBCUs to participate in renewable energy research.

Zhenjia Wang

"Design of Cell-based Drug Delivery Systems"



Abstract: Efficient delivery of nanotherapeutics to solid tumors remains limited by the endothelial barrier of tumor blood vessels. Current strategies largely rely on enhanced permeability and retention (EPR) effect, but it is heterogeneous and often inefficient in drug transport. Neutrophils, a major population of circulating white blood cells, play central roles in inflammation and cancer progression. Because neutrophils can actively cross endothelial barriers during inflammatory responses, they represent promising natural carriers for transporting nanoparticles (NPs) into tumors. Our laboratory pioneered developing neutrophil-mediated drug delivery systems that enhance tumor penetration and therapeutic efficacy of nanomedicine. In this presentation, I will discuss several strategies for neutrophil-mediated transport of nanotherapeutics across the blood–brain barrier to improve glioma treatment. I will also present our work on developing neutrophil membrane–derived nanovesicles to target inflammatory vasculature for improved therapies of acute respiratory distress syndrome (ARDS) and stroke.

Bio: Dr. Zhenjia Wang is an Empire Innovation Professor in the Department of Pharmaceutical Sciences at the University of Buffalo. His research integrates material sciences, bioengineering, molecular biology, immunology and pharmaceutical sciences to understand and devise better ways to deliver drugs for improving current therapies.

Chris Collison

"Teaching in the Age of Generative AI: From TutorBots to Student-Designed Learning"



Abstract: Generative AI is changing what students can produce, how they seek help, and how instructors interpret evidence of learning. This creates both challenges and opportunities. On the one hand, traditional assignments may no longer reveal a student's actual understanding, while on the other hand AI can support tutoring, guided inquiry, coding, visualization, and reflection. This seminar will explore several experiments with AI in chemistry education including course-specific TutorBots and an upper-level physical chemistry project in which students used generative and agentic AI to identify areas of incomplete understanding and build learning tools for their peers.

Bio: Christopher J. Collison is the Harris Professor of Chemistry and Materials Science and the Director of the AI Hub and Initiatives at Rochester Institute of Technology. He earned his B.Sc. and Ph.D. in Chemistry from Imperial College London, completing his Ph.D. in 1996 before crossing the Atlantic to join Lewis Rothberg's group at the University of Rochester as a postdoctoral researcher from 1996-1999. He briefly then served as a photophysics research scientist at UR before moving into industry at Richardson Grating Laboratory. He joined RIT in 2004, where his research has spanned molecular photophysics, conjugated polymers, organic photovoltaics, and advanced materials. More recently, his work has increasingly focused on the intersection of chemistry, machine learning, and artificial intelligence, including their use in scientific research and education.

Juliane Fry

"From Spectators to Scientists: Student-Driven Field and Data Analysis Projects in Analytical and Environmental Chemistry"



Abstract: Analytical and environmental chemistry provide powerful opportunities to connect chemical concepts with real-world questions, from measurement and data interpretation to environmental impacts. In this talk, I will show several examples of interactive teaching activities developed for chemistry and interdisciplinary environmental studies courses at Reed College and Wageningen University (Netherlands). Examples will demonstrate how active learning, real-world datasets, and collaborative problem-solving can help students develop deeper understanding and stronger connections between chemistry and the world around them.

Bio: Juliane L. Fry is associate professor of air quality and atmospheric chemistry at Wageningen University, where she moved in 2021 from the United States. Her research program has two major tracks: (1) understanding drivers of street-level urban air pollution and investigating opportunities to mitigate it, and (2) elucidating the chemical interactions between human-produced reactive nitrogen (nitrogen oxides and amines) and climate-relevant atmospheric aerosol particles.

Julie earned a BS in chemistry from the University of Rochester in 2000, and a PhD in chemistry from the California Institute of Technology in 2005. After a postdoctoral fellowship at the University of California at Berkeley, she joined the faculty of Reed College in Portland, Oregon in 2008. In 2021, Julie moved to the Department of Environmental Sciences at Wageningen University in the Netherlands.

Jane Wesely

"Lessons from Two Decades of High School Science Teaching"



Abstract: As a high school teacher, I teach students of ages fifteen to eighteen. There is a tremendous amount of mental development that happens over these years and this necessitates a unique teaching approach to engage students at various stages. In my nearly twenty years of practical experience teaching students of this age range, I have learned methods that engage young developing minds in both introductory and advanced science courses. In this talk these methods will be shared including some practices for neurodiverse students.

Bio: Dr. E. Jane Wesely earned her doctorate in physics from the University of Rochester in 2007. For the last eighteen years, she has been teaching high school level physics, chemistry and astronomy at Horace Mann School in New York City, where she lives with her family.

Erin Stockdale

"Creating Educational Interview Videos Relating Environmental Chemistry Research to General Chemistry Videos"



Abstract: A reflection on the development of sustainable chemistry communication videos led by Professor Rothberg. In the summer of 2023, Professor Rothberg and I teamed up with four professional chemists to conduct interviews and create three videos that linked general chemistry topics with higher-level environmental issues that the scientific community is currently aiming to resolve. We discussed the monitoring of atmospheric greenhouse gases through ice core research with Professor Vasilii Petrenko, the production of solar fuels with Professors Kara Bren and Todd Krauss, and redox flow battery development with Dr. Mamta Dagar. The videos bridged subjects that University of Rochester general chemistry students encounter in class with active research topics, while also providing a basis for the development of a library of videos intended to make accessible general chemistry content and how it applies to important climate change remediation work.

Bio: Erin Stockdale graduated from the University of Rochester in 2024 with a B.S. in Chemistry and a B.A. in Environmental Studies, where she worked in Professor Ellen Matson's lab synthesizing and characterizing non-aqueous redox active actinide complexes. As a workshop leader, teaching assistant, and course development intern for the chemistry department, she developed an interest in chemistry communication and accessibility. Erin is now a 3rd-year Ph.D. candidate in Professor Megan Jackson's lab at UNC Chapel Hill, where she studies the molecular-level design of electrocatalysts for the oxygen evolution reaction.

Benjamin Miller

"From Reflectometry to Regenerative Medicine: Translational Efforts Driven by Optics and Photonics Applied to Biosensing"



Abstract: In the late 1990s, the Rothberg and Miller groups invented a technology based on the creation and destruction of near-perfect antireflective conditions on the surface of a silicon chip. As applied to array-based biosensing, Arrayed Imaging Reflectometry (AIR) turned out to be highly versatile, driving applications ranging from serotyping influenza viruses to diagnosing orthopedic infections. AIR was commercialized by Adarza BioSystems, a venture capital-funded startup that at its height had 40 employees. This talk will briefly describe AIR, the history of Adarza, and how lessons learned from that history have informed current efforts by the Miller group to commercialize technologies in integrated photonic sensing.

Bio: Prof. Benjamin L. Miller is currently Dean's Professor of Dermatology, Biochemistry and Biophysics, Biomedical Engineering, Materials Science, and Optics. His laboratory works on novel optical chem- and biosensors, with particular interests in integrated photonics, sensors for continuous monitoring of microphysiological systems, and as diagnostics for cost- and resource-sensitive applications. Miller served as the Academic Lead for Integrated Photonic Sensors at AIM Photonics and is currently a member of the AIM Photonics Leadership Council. He is a Fellow of the AAAS, Optica, and AIMBE, and is a member of the National Academy of Inventors. He is also an active entrepreneur, having founded 6 companies to date based on his group's research.

Fakhraddin Akbari Dourbash

"From Interferometric Biosensing to Commercial Bioanalytical Platforms: Translating Optical Assays into Robust Products"



Abstract: This talk will describe my path from Ph.D. research in portable interferometric biosensing to commercial bioanalytical instrumentation and assay development. During my doctoral work in the Rothberg group, I developed Brewster's angle straddle interferometry approaches for label-free immunoassays, including surface chemistry, antifouling strategies, multiplexed optical detection, and portable diagnostic concepts. Since then, my work at Sartorius has focused on translating related bioanalytical principles into commercial Biolayer Interferometry (Octet BLI) platforms and Octet consumables. I will discuss the practical transition from academic biosensor innovation to product commercialization: how optical detection concepts become reliable workflows, how assays are stress-tested for real users, and how scientific development connects to manufacturing, customer support, and market needs.

Bio: Fakhraddin Akbari Dourbash earned his PhD in Materials Science from the University of Rochester in 2023 under the mentorship of Professor Lewis Rothberg, where his research focused on label-free immunoassay using Brewster's Angle Straddle Interferometry. He later joined Sartorius, where he helped develop and launch biomolecular-analysis products including the Octet R8e platform and Octet ARC biosensors, working across BLI, SPR, assay development, and high-throughput applications. He is now the Founder and CEO of Corrsin Inc., a scientific technology company building software and data infrastructure for modern research, including scientific robotics training data, experimental analysis, scientific product discovery, and research knowledge management.

Zonglun Li

"Brewster Angle Straddle Interferometry for In Situ Metrology of Atomic Layer Deposition Applications"



Abstract: Brewster-angle straddle interferometry (BASI) uses reflectivity changes to quantify surface film topology on silicon. Developed by the Rothberg group, BASI has been demonstrated for biomolecular sensing applications. However, its sensitivity to nanoscale changes, imaging capability, ease of setup, and non-destructive nature also make it a promising tool for characterizing thin-film growth and surface modification in semiconductor manufacturing. Here we explore application to atomic layer deposition (ALD) using BASI to monitor of growth kinetics and characterization of surface patterns in area-selective ALD (AS-ALD).

Bio: Zonglun Li was born in Dagang, Tianjin, China. He received his B.E. degree in Chemical Engineering and Technology from Tianjin University, including a period of study abroad at the University of Edinburgh, Scotland. He subsequently earned his M.S. degree in Chemical Engineering from the University of Washington, Seattle, where his research focused on developing plasmonic nanostructures for surface-enhanced Raman spectroscopy (SERS) applications. He is currently pursuing his Ph.D. in Chemical Engineering at the University of Rochester under the supervision of Professors Lewis Rothberg and Alexander Shestopalov. His current research focuses on optical reflectometry, surface chemistry, and laser-assisted surface modification, with applications in area-selective atomic layer deposition (AS-ALD) and biosensing.

Mark Roberson

"Lessons from Lewis"



Bio: Mark W. Roberson, Ph.D, PMP, received his Ph.D. in Physics from Princeton University and his B.S. in Physics from Wake Forest University. Dr. Roberson founded GSTA, and he develops and deploys next generation sensors and analytics, using electromagnetic, optical, and geophysical sensors for persistent surveillance and monitoring. He has 30+ years of experience in bench and field technology development, directing staff, and writing proposals. He has won and led over $30M in sponsored research and development programs with both internal and external partners. He has technical experience working as Principle Investigator on commercial sensor development programs, as well as the Department of Defense (DoD), Department of Energy (DoE), and United States Department of Agriculture (USDA). He is inventor or co-inventor on 52 issued US patents and numerous foreign patents.

Ming Yan

"Fluorescent Polymers and the Transformation of Full-Spectrum Flow Cytometry"



Bio: Ming Yan, Ph.D. has served as the Chief Technology Officer of Cytek Biosciences and as a member of their board of directors since 2015. Dr. Yan is also a co-founder of the company. Dr. Yan has over 20 years of experience in research and development. Prior to joining our company, Dr. Yan held research and development positions at AT&T Bell Laboratories, a research and development division of AT&T Communications, a telecommunications company, Lawrence Livermore National Labs, a federal research facility, and BD Biosciences, a biotechnology company. Dr. Yan has published several research papers relating to laser spectroscopy and cell analysis in top peer-reviewed journals. He has over a dozen patents and pending patent applications for his innovations. Dr. Yan holds a B.S. in Physics from Fudan University and a Ph.D. in Electrical Engineering from the City University of New York.

Christine Liberatore

Lead Target Fabrication Engineer at the Lawrence Livermore National Laboratory



Bio: Understanding the interactions of light and materials has been the unifying theme of my career, beginning with Lewis and my graduate research on organic light-emitting diodes and progressing through work in photovoltaics, polymeric semiconductors, radiation detection, and thin-film coatings for optical applications. Across more than two decades of materials research and government-funded programs, I have developed, processed, and characterized materials across a wide range of wavelengths and technologies. Today, as a lead target fabrication engineer at LLNL, I apply that technical foundation to X-ray and ultraviolet applications for the National Ignition Facility, while coordinating engineers, physicists, machinists, and technicians to meet demanding production goals. This journey has shown me that technical expertise may shape a career, but collaboration, shared problem-solving, and strong teams are what make the work meaningful.

Chris Melnychuk

Senior Systems Engineer at Swift Group LLC



Bio: Chris Melnychuk earned his BA at the University of Rochester where, with Lewis Rothberg, he studied the photophysics of the conjugated polymer MEH-PPV under spectrally-selective photooxidation. He then earned his PhD at the University of Chicago with Philippe Guyot-Sionnest, where he stood up a variety of near- and mid-infrared picosecond laser spectroscopy capabilities tailored to fundamental studies of multicarrier dynamics and energy transfer in mercury chalcogenide colloidal quantum dots. The investigations motivated new device models and synthetic protocols contributing to the eventual commercialization of these materials for drone-based thermal imaging. After a brief stint co-founding a software platform startup, he returned to hard technology with a transition to quantum information science. He presently supports federal efforts to understand the technological advancements needed to achieve quantum computing at scale.

Yong Zhang

Director of Project Management
at Repligen Corporation



Bio: Yong Zhang, Ph.D., MBA is a product and business leader with nearly 20 years of experience driving innovation and commercialization across materials sciences, life sciences and analytical instrumentation. He currently is product management director for the Process Analytical Technology business unit at Repligen - a Massachusetts-based bioprocessing company, and has previously held roles at 908 Devices, Waters Corporation, MilliporeSigma, Cabot and Praxair Inc. Throughout his career, he has worked at the intersection of science, engineering, and business, translating innovative technologies into successful products for global markets. Yong earned his Chemistry degree from Peking University in China, Ph.D. in Chemical Engineering at UR from the Lewis's research group in 2007 and later received his MBA from Indiana University.

Ben Martin

Research Scientist & Group Leader at the URochester Laboratory for Laser Energetics



Bio: Dr Martin has a diverse background with a mix across several scientific disciplines. He completed his Ph.D. in the chemistry department at the University of Rochester under Lewis Rothberg, where he developed a love for instrumentation and creating experimental methods. This love of instrumentation led to a job at Sydor Technologies where he progressed from a technology development scientist to the technology development manager and oversaw the creation of several products funded by grants he secured. After leaving Sydor, he joined the Laboratory for Laser Energetics as the experimental lead and after a year and half in this role, he was named the project manager/ principal investigator and group leader. His goal is to take on projects of importance at the early stage of conception and develop a team and infrastructure to delivery rapid results. In order to achieve this goal of rapid development, Dr Martin utilizes a self funding model, securing diverse sources of outside funding through networking and business development best practices, to ensure adequate funding and rapid community acceptance of the projects he is leading.

Thanks from Lewis Rothberg

I want to take the opportunity to express my gratitude to all of you for participating in today's group reunion and symposium. First, to my students who have done so much to enrich my life and career. In addition, to the many excellent collaborators from whom the students and I have learned so much. I also want thank our current students who are interested in carrying on the beautiful work of science, helping to understand, appreciate and shape the world around us. What I hope you take away from today is how science and technology can be used in myriad ways and that it is up to all of us to see to it that it is used in ways that make the world more just and peaceful.

The collegiality of the Chemistry department has been a blessing for me. Outstanding and dedicated colleagues and staff have made this a friendly and stimulating place to work with as little drama as I can imagine in a large organization. I have learned so much about Chemistry and about teaching from my faculty friends Jim Farrar, John Muenter, Rich Eisenberg, Misha Ovchinnikov and Ellen Matson. Our work would literally not be possible without the amazing technical staff, many of whom have been with me for the entirety of my 30 years here – Ken Simolo, Ted O'Connell, Mark Henry, Pete Serrino, Jason Holt and Ray Teng come to mind. Likewise, the devoted staff who helped with everything from accounting to grant applications to postdoctoral visas and a myriad of other tasks essential to running an education program. A special thanks to Debbie Shannon, Lynda McGarry, Donna Dolan and Barb Snaith for going above and beyond in my behalf.

I am also grateful to the many departmental chairs who have supported our culture of education and scholarship, often sacrificing their own time and ambitions. During my time at Rochester, this has included Dave Whitten, Jim Farrar, Bill Jones, Bob Boeckman, Todd Krauss and now Kara Bren.

Additional thanks to Kara and Jeff Tschirhart for approving today's celebration and supplying the resources, financial and otherwise. I want to thank Brie Coyne for assembling and publishing the brochure that you are reading. Today's events – food, communications, A/V technology and a hundred other things you may not even notice would not have been possible without the outstanding organizational skills and tireless attention of Barb Snaith. I am deeply grateful to her for the central role she has played in making this group reunion a reality and facilitating the opportunity for us to be together.

Frequently in life the greatest heroes are the unseen ones and I want to thank my family for enabling me to pursue so many of my dreams for better and worse. I want to especially thank Shelby who has been there at every turn with love, sound advice, cheerful encouragement and immense flexibility regarding some of the crazier things I have done like start Diffinity Genomics and decide to take up something of a second career in science communication following my retirement.

