CAREER ACCELERATOR

What they don’t teach you in the lab.

22 - 26 January 2023
Westgate River Ranch Resort & Rodeo
Polk County, Florida, USA

optica.org/CareerAccelerator
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Welcome to the Career Accelerator.

Get ready to explore the core skills and expectations for the corporate environment you will need to advance your career.

Our goal is to fill a training and education gap by focusing on career paths and the professional and personal skills needed to acclimate you to the culture, language and methodology of the corporate world. Topics we will explore include:

- Budgeting & Financial Management
- Management & Decision Making
- Effective Communication
- Innovation & Product Development
- Team Building & Group Dynamics
- Business Strategy
- Marketing and Branding
- Negotiating
- Project Management
- Leadership Development

Explore other resources and engagement opportunities with the Optica Foundation.

Funding Opportunities & Meeting Grants
The Optica Foundation provides a variety of scholarships and grants to students and early career professionals in addition to several with the aim of improving equity and inclusion including family care grants to assist members attending Optica meetings.

Student chapters
Our chapters receive numerous benefits and participate in activities such as educational outreach, Student Leadership, IONS, and many other programs.

Level Up Leadership
Are you leading a team for the first time? Do you know how to handle conflicts? Are you feeling like an imposter? This program for early-career professionals explores these questions and the communication and leadership skills necessary to advance your career to the next level.

Siegman International School on Lasers
Created in honor of laser pioneer Anthony Siegman, you will experience an overview of laser science and technology like no other. For graduate students, attendees have the opportunity to connect with laser luminaries and are able to present their own research.

Innovation School
Learn how to take a great idea and turn it into product… and how to take an idea that isn’t working and pivot to something else. Here, early-career professionals and students explore the lean-canvas model and customer problem fit on a team racing towards a pitch at the end of the four-day program.
Anti-Harassment Policy and Code of Conduct

Optica is committed to providing an environment that is conducive to the free and robust exchange of scientific ideas. This environment requires that all participants be treated with equal consideration and respect. While Optica encourages vigorous debate of ideas, personal attacks create an environment in which people feel threatened or intimidated. This is not productive and does not advance the cause of science. All participants in Optica and Optica-managed events and activities are therefore expected to conduct themselves professionally and respectfully. It is the policy of Optica that all forms of bullying, discrimination and harassment, sexual or otherwise, are prohibited in any Optica or Optica-managed events or activities. This policy applies to every individual at the event, whether attendee, speaker, exhibitor, award recipient, staff, contractor or other. It is also a violation of this policy to retaliate against an individual for reporting bullying, discrimination or harassment or to intentionally file a false report of bullying, discrimination or harassment.

Bullying, discrimination and harassment of any sort by someone in a position of power, prestige or authority is particularly harmful since those of lower status or rank may be hesitant to express their objections or discomfort out of fear of retaliation.

Optica may take any disciplinary action it deems appropriate if, after thorough investigation, it finds a violation occurred.

For complete policy information visit optica.org/CodeOfConduct.

If you wish to report bullying, discrimination, or harassment you have witnessed or experienced, you may do so through the following methods:

- Use the online portal optica.org/IncidentReport
- Email CodeOfConduct@optica.org.
Agenda

Sunday, 22 January 2023

14:00  Bus #1  Departing: Orlando International Airport (MCO) en route to Westgate River Ranch Resort & Rodeo

17:00  Bus #2  Departing: Orlando International Airport (MCO) en route to Westgate River Ranch Resort & Rodeo

20:00 – 20:15  Welcome Remarks, Longhorn Center  
Marcia Lesky  
Senior Director, Diversity, Inclusion & Volunteer Cultivation

20:15 – 21:00  Icebreaker

21:00 - 22:00  Reception, Longhorn Center
Monday, 23 January 2023

08:00 – 08:45  Breakfast, Longhorn Center

08:45 – 09:00  Introduction of the Day, Grand Hall
   Alison French  
   Managing Director, Alto Solutions, LLC, USA

09:00 – 10:30  Sustainable Networking for Scientists and Engineers
   Christina Willis  
   Senior Analyst, Infleqtion, USA

   Sustainability applied to networking is about treating professional support and assistance like a resource and creating more of it than you take. This workshop introduces how to use sustainable networking to create mutually beneficial professional relationships and to set and accomplish career goals. Through individual and group activities, participants will come away with personalized goals and a practical action plan for how to incorporate sustainable networking into their professional lives.

10:30 – 10:45  Break

10:45 – 11:45  Leadership Styles and Teams in the Corporate Environment
   Sam Rubin  
   CEO, LightPath Technologies, USA

11:45 – 12:45  Project Management for Engineering, R&D, Technology Teams
   Kenneth Barber  
   Director, Project Management, Edmund Optics, USA

   Discover what it really means to be a Project Manager for Engineering, R&D and Technology Teams. Learn how to apply fundamental project management tools to any project in a practical way. Understand how you can leverage your technical know-how into a career in project management and beyond. Learn about key concepts like the triple constraints with fun examples.
12:45 – 14:00  Lunch, Longhorn Center

14:00 – 15:00  Corporate Strategy
   Loudon Blair
   Corporate Strategy Officer, Ciena, USA

   What is corporate strategy and why is it important? In this session we will discuss the value of corporate strategy and explore many of the functions and best practices that encourage successful business.

15:00 – 16:00  The Role of Marketing and Sales
   Anjul Loiacono
   Vice President, Quantum Signal Processing, Infleqtion, USA

16:00 – 18:00  The Amazing Race

18:00 – 19:00  Dinner, Longhorn Center

19:00 – 20:00  From Physicist to CEO
   Gregory Quarles
   Applied Energetics Inc., USA

   The goal of my presentation will be to give you a glimpse of my 30 plus years in industrial positions and some of the skills and opportunities that are needed for success in pursuing your dreams. These topics will include willingness and skill at pivoting in your research, coping with hearing no, learning how to say no, the necessity of setting boundaries, developing the ability to hone soft skills such as your elevator pitch, and expanding your education to learn critical areas, including finance and marketing. It has been a wonderful and exciting journey for me, and I look forward to sharing how you too can become a leader in industry with your optics and photonics degrees.

20:00 – 20:30  Daily Wrap Up
Tuesday, 24 January 2023

08:00 – 08:45  Breakfast, Longhorn Center

08:45 – 09:00  Introduction of the Day, Grand Hall
   Alison French
   Managing Director, Alto Solutions, LLC, USA

09:00 – 10:00  Identifying Emerging Technology Trends
   Peter Wigley
   Technology Strategy Manager, Corning Optical Communications, USA

Identifying emerging technology trends and successfully mapping those trends into research, development and product plans is a complex process, but critical to the ongoing success of a technology company. This is especially true for a company with diverse markets and established keystone technologies. This talk introduces some useful tips on where to look, how to evaluate trends, and how to persuade others within an organization to act while avoiding some common pitfalls.

10:00 – 11:00  The Role of a Product Line Manager
   Keeley Hurley
   Product Line Manager, Coherent Corp., USA

The product manager finds themself seated at the heart of where business strategy, cutting edge technology, and customer needs overlap. Through a perpetual cycle of listening, learning, and communicating, the product manager unites customer requirements and production capabilities in the present while helping to define and shape the roadmap for future innovations.

11:00 – 11:30  Break

11:30 – 12:30  The Language of Business: Managerial Reporting and Accounting for Decision Making (Part 1)
   George Bayz
   Vice President and General Manager, Synopsys (retired), USA

The art of accounting. We will discuss budgeting, explore the art of accounting, visit the stock market and dive into why this is something all scientists in industry should understand.
12:30 – 14:00 Lunch, Longhorn Center

14:00 – 15:00 The Language of Business: Managerial Reporting and Accounting for Decision Making (Part 2)
George Bayz
Vice President and General Manager, Synopsys (retired), USA

More fun with accounting.

15:00 – 15:30 Break

15:30 – 16:45 Patents and Intellectual Property 101
Thomas A. Franklin
Shareholder, Co-Chair Electrical & Computer Technologies Practice Group, Wolf, Greenfield & Sacks, P.C., USA

Technology companies and institutions at all stages face a variety of intellectual property issues. Addressing these issues well can significantly increase value for the intellectual property owner, while missteps can have the opposite result. We will introduce important forms of intellectual property, including patents, trade secrets, and trademarks, and discuss the role each plays in an intellectual property portfolio.

16:45 – 17:00 Daily Wrap Up

17:00 – 18:00 Break

18:00 – 19:00 Dinner, Longhorn Center

19:00 – 20:00 Putting Theory into Practice: The Financial Scavenger Hunt

After learning about all things around financials, now you get to put your skills to the test. Small groups will review a public company’s financial statement and report out about your organization. Can you find everything in time?
Wednesday, 25 January 2023

08:00 – 08:45  Breakfast, Longhorn Center

08:45 – 09:00  Introduction of the Day, Grand Hall
   Alison French
   Managing Director, Alto Solutions, LLC, USA

09:00 – 10:00  Negotiation Skills
   Eve Griliches
   Senior Product Marketing Manager, Cisco

   The How, When and Why of Negotiation. You’ll learn what to negotiate when you get a job offer, how to negotiate when in a job, and knowing when to leave a job.

10:00 – 11:00  From Resume Review to Final Offer: Inside HR and the Hiring Process
   Alejandro Mendoza
   Director of Human Resources, Optimax, USA

   The hiring process – from submitting your resume to the offer – including tips on the do’s and don’ts during an interview. I will also explore the importance of your role exploring Job Quality topics during the interview process and how HR utilizes this in driving corporate culture as a business partner.

11:00 – 11:30  Break

11:30 – 12:30  Innovation and Product Development
   Matthew Weed
   Senior Director of Product Management, Luminar, USA

   Understanding "value proposition" may seem simple but continual focus on this empathetic idea is essential to successful research and products alike. From fundamental research through customer deployment, join in this exploration of how to identify pain points, enablers, and disruptors as well as how to position each to generate market pull.
12:30 – 14:00  Lunch, Longhorn Center

14:00 – 15:00  The Role of an Optical Engineer
Clara Rivero-Baleine
Lockheed Martin Fellow, Lockheed Martin Corporation, USA

Projects and business contributions of an optical engineer. I will focus on how to find an optical engineer job, your career path, working in a team, and the potential for growth. I will also share my key takeaways of working as an engineer at Lockheed Martin.

15:00 – 15:30  Break

15:30 – 16:30  Wish I'd Known that Sooner
A. Boh Ruffin
Senior Research Manager, Corning Incorporated, USA

Hindsight is a gift that is usually presented after failure and/or calamity. As a consequence of its usual embarrassing circumstances, this gift is selfishly hoarded. This presentation offers a candidate overview of hard-earned intuitions gleaned by the author and his (anonymous) colleagues. The desired outcome is to impart non-obvious insights to an audience of students and upstarts interested in increasing their capacity for risk-taking.

16:45 – 17:00  Daily Wrap Up

17:00 – 18:00  Break

18:00 – 19:00  Dinner, Saddleback Pavillion

19:00 – 20:20  S'mores with Luminar CTO, East Corral
Jason Eichenholz
Chief Technology Officer, Luminar, USA
### Thursday, 26 January 2023

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<td>08:00 – 08:45</td>
<td>Breakfast, Longhorn Center</td>
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<td><strong>Alison French</strong></td>
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<td>Managing Director, Alto Solutions, LLC, USA</td>
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<td>09:00 – 10:00</td>
<td>State of the Optics and Photonics Market</td>
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<td><strong>Jose Pozo</strong></td>
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<td>Chief Technology Officer, Optica, USA</td>
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<td>Jose Pozo, CTO of Optica, will share his vision for the need for a</td>
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<td>global photonics industry network. In addition, Pozo will provide a</td>
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<td>vision of what he expects in the next decade in 3D imaging and</td>
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<td>sensing, laser-based manufacturing, integrated photonics, medical</td>
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<td>devices, and quantum technologies; alongside with examples of current</td>
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<td>photonics trends.</td>
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<td>10:00 – 10:30</td>
<td>Break (Checkout of rooms if needed)</td>
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<td>10:30 – 11:00</td>
<td>Leveraging the Key Learnings to Enhance your Career</td>
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<td><strong>Alison French</strong></td>
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<td>Managing Director, Alto Solutions, LLC, USA</td>
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<td>11:30 – 12:00</td>
<td>Adjournment and Lunch, Longhorn Center</td>
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Facilitator

Alison French
Managing Director, Alto Solutions, LLC, USA

In an increasingly impersonal world, Alison French is passionate about helping organizations and individuals make the right connections to create harmony and success. As managing director of Alto Solutions, LLC, she employs brain science in her approach to organizational change, communications, and leadership. An experienced facilitator, trainer and coach, Alison has helped clients within the government, education, nonprofit, and private sectors for more than 20 years, facilitating strategic planning meetings, corporate retreats, and skills training workshops, as well as in-depth change, leadership, and team assessments and strategic communication campaigns.

Past accomplishments range from being rated as a top instructor for the Deloitte Consulting Milestone Program and launching a career mentoring program for BearingPoint, to building and deploying a comprehensive change plan for a major Defense technology initiative with more than 7,000 end users, which, through direct engagement with top leaders, significantly influenced positive perception of the initiative and elevated its change management program to become recognized as a model within the agency.

"I honestly believe that I am a better and smarter person by having the opportunity to work with you," is how one client summed up his experience working with Alison.

Prior to her work in Big Four consulting, Alison helped build the graduate marketing program for the College
of Arts and Sciences at American University, orchestrated fundraising campaigns and events for a Capitol Hill nonprofit, and helped run a small hospitality consulting startup in New York City.

Alison has been published in the Association for Talent Development's ATD Links, is an authorized DiSC facilitator, has been a featured speaker at numerous industry conferences and organizational events, and has worked with groups around the country to help them improve their leadership and engagement by better understanding the connections between their people and within their brains. Her most recently developed workshops, Won't You Be My Trainer and Won't You Be My Manager, are based on the teachings of Mr. Rogers.

Alison holds a Bachelor’s degree with distinction in communications from Cornell University and a Master of Business Administration from the Kogod School of Business at American University.
Speakers

**Kenneth Barber**  
*Corporate Strategy Office, Ciena, USA*

Kenneth has over 23 years of experience in the photonics industry specializing in Project Management and Product Development. During his career, he founded and help develop Edmund Optics’ Project Management department and New Product Introduction process. As Director of Engineering and Project Management, he leads a global team of Designers and Project Managers in the US, China and Germany in the development of new products. Kenneth holds a graduate certification in Project Management from the New Jersey Institute of Technology and received his BS in Optics from the University of Rochester in Rochester, NY.

- Founder and Co-chair of Edmund Optics' US Diversity, Equity and Inclusion Committee
- Certified Lean Six Sigma Green Belt
- Published Articles contributed to:
- Optics that focus on manufacturing
- Hemispherical Display Uses Single Lens and Digital Projector

[optica.org/CareerAccelerator](http://optica.org/CareerAccelerator)
George Bayz
Vice President & General Manager (retired), Synopsys, USA

George Bayz joined Synopsys as the Vice President and General Manager of the Optical Solutions Group with the Synopsys’ acquisition of Optical Research Associates (ORA) in October 2010. Bayz has over 25 years of senior management experience with high-technology firms. Prior to Synopsys, Bayz was President and CEO of ORA, served on the ORA Board of Directors and chaired the ORA Audit Committee, which provided oversight of the reporting practices of the company and the quality and integrity of the company’s financial statements. Prior to ORA, he was President and CEO of PeoplePoint Systems, Inc., an enterprise software company; General Manager and Executive Vice President at Artemis International Solutions Corp., a provider of advanced project management solutions; President and CEO of Thinque Systems, a workforce automation solutions provider; and President and CEO of MAI Systems Corporation, a provider of information technology to the hospitality industry. Bayz received a B.S. in Business Administration from the University of Southern California and a J.D. from Loyola Marymount University. He is a Member of the California Bar and is a California Certified Public Accountant. Bayz has served as Treasurer of Optica and the Optica Foundation since 2014.
Loudon Blair  
*Corporate Strategy Office, Ciena, USA*

Dr. Loudon Blair is the Senior Director of Corporate Strategy at Ciena. Since joining the company in 1997, he has performed several roles in the development of Ciena’s networking products including the formation of Ciena’s vision for new and evolving network architectures. Today, he is responsible for strategic planning and assessment of industry and technology trends. Prior to joining Ciena, Dr. Blair worked for GORCA Systems Ltd., where he managed a system engineering team within the Iridium low earth orbit satellite system at Motorola Satellite Communications. Dr. Blair also worked for BT Laboratories in the UK, where he focused on the development of novel network architectures, and at Hitachi Central Research Laboratory in Japan, where he investigated the role of Erbium Doped Fiber Amplifiers in 10G WDM transmission systems. Dr. Blair received a B.Sc. degree (with first-class honors) in Electronics from the University of Dundee, Scotland and a D.Phil. degree in Engineering from the University of Oxford, England. He has 24 patents granted with a further 1 patent pending. He is a Member of the IEEE, Member of the IET and has been a long-term contributor to the OFC conference where he has served as general co-chair and steering committee chair.
Jason Eichenholz
Co-Founder and CTO, Luminar, USA

Jason Eichenholz is a serial entrepreneur, executive and recognized pioneer in laser and optics enabled innovation, product development and commercialization. Over the past two decades, he has started and founded multiple companies that raised over a billion dollars of investor funding and went public on Nasdaq.

Eichenholz has led the development of hundreds of millions of dollars of revolutionary products and companies that have enabled a variety of applications from autonomous vehicles, battlefield explosives detection, early cancer detection, new drug delivery systems and environmental studies from the depths of the oceans to the top of Mt. Everest and even on the Moon and Mars.

Eichenholz holds more than seventy-five U.S. patents and is a fellow of SPIE, the international society for optics and photonics, as well as a fellow of the Optica. Eichenholz has an M.S. and Ph.D. in Optical Science and Engineering from CREOL – The College of Optics and Photonics at the University of Central Florida and a B.S. in Physics from Rensselaer Polytechnic Institute. An accomplished public speaker, he has given dozens of plenary and invited talks at major automotive and photonics conferences and universities as well as the commencement address at the University of Central Florida. In his free time, he likes to give back to his community and is especially passionate as an advocate for autism awareness, housing and employment and has served for 25 years as a Reserve Lieutenant and Emergency Medical Technician with Orange County (FL) Fire Rescue.
Thomas A. Franklin
Shareholder, Co-Chair Electrical & Computer Technologies Practice Group, Wolf, Greenfield & Sacks, P.C., USA

Tommy Franklin co-chairs Wolf Greenfield’s Electrical & Computer Technologies Group. He provides a wide range of IP services including strategic patent portfolio development, conducting and defending due diligence, development of licensing agreements, patent validity and infringement opinions, trade secret policy development, and litigation-related counseling for both plaintiffs and defendants. Drawing on his broad technical background, Tommy works with clients spanning numerous technical fields, including photonics, medical devices, electromagnetic sensors, microelectromechanical systems (MEMS), semiconductors and fluidic systems. Tommy represents both large and small companies, and is well versed in the different issues and pressures faced by different organizations. He is committed to understanding the business objectives of each of his clients and developing and implementing IP strategies that meet those objectives. He is particularly experienced at working with startups at many stages of the business, and at developing winning IP strategies that address the various interests brought to the table by the company’s inventors, executives and board members.
Eve Griliches
Senior Product Marketing, Cisco, USA

Eve Griliches is the Product Marketing lead for the Optical BU. Previously, Eve was Director of Solutions Marketing at BTI Systems and Managing Partner of the global research firm ACG Research where she was VP of Optical Networking. Before ACG, Eve served as IDC Program Director for Telecommunications Equipment, where she provided in-depth analysis on key telecom market technologies. Additionally, Eve has more than 10 years of product line management experience at equipment vendors including Marconi (Ericsson), PhotonEx, Nortel Networks, Bay Networks and Wellfleet Communications. She also spent four years at Thinking Machines Corporation, one of the first parallel processing supercomputer companies. Eve currently serves on the Optica Foundation Board of Directors.
Keeley Hurley
Product Line Manager, Coherent Corp., USA

Keeley earned her BSc from the University of Arizona. She started her career at OptoPower/Spectra-Physics doing product development of fiber-coupled and stacked laser diode arrays for medical, industrial and defense applications. She then joined DILAS Diode Laser, Inc. as one of its two founding members in 2005 as a product manager. She continued her career with DILAS taking on roles in both quality and operations management. After DILAS was acquired by Coherent, she returned to her role as Product Line Manager for high-power diode laser component products for defense applications and has also led multiple production ramping efforts to support the expanding needs of the defense industry.
Dr. Anjul Loiacono is the VP of Quantum Signal Processing at ColdQuanta. She brings a deep bench of experience in both the management and marketing of complex optics and photonics systems. During her 12-year tenure at Thorlabs, a designer and manufacturer of photonics equipment for research, manufacturing, and biomedical applications, Anjul oversaw the development and release of their flagship Optical Coherence Tomography product line, developed corporate strategies, managed strategic partnerships, and completed several acquisitions worldwide. Anjul received her Ph.D. from Duke University and also serves on the Optica Corporate Engagement Council, a nonprofit organization dedicated to promoting knowledge in optics and photonics worldwide.
Alejandro “Ale” Mendoza
Director of Human Resources, Optimax, USA

Ale’ holds an associate degree in physical studies from Monroe Community College (MCC), a bachelor’s degree in applied arts and sciences from Rochester Institute of Technology (RIT), and a master’s degree in organizational learning and human resources development from St. John Fisher College. Prior to joining Optimax, Ale’ spent eight-plus years in the United States Air Force where he served as an enlisted member before becoming a commissioned officer and serving a variety of specialized roles. Ale’ works to collaborate and build local and national relationships with institutions, agencies, colleagues, and potential employees. He is currently a board member of the National Fund for Workforce Solutions and the Finger Lakes Community College Foundation. Ale’ also works with the local Veterans Outreach Center’s Veterans Employment Strategy Team (VEST), YMCA’s Human Resources committee, the Rochester Area Senior Human Resources Executive Forum, and the Finger Lakes Advanced Manufacturers Enterprise (FAME). He is a member of both the Rochester Area Senior HR Executive forum and the Executive forum of Upstate New York.
Jose Pozo
Chief Technology Officer, Optica, Netherlands

Based in the Netherlands, Jose Pozo is the architect of Optica’s strategy to serve corporations around the globe. His education and European-focused professional experience place him in an excellent position to connect with and support Photonics21, and his current global portfolio of corporate programs is a valuable asset. In his role as Optica’s Chief Technology Officer, Pozo leads the organization’s international corporate engagement efforts. He and his team focus on building relationships across the diverse community of optics and photonics companies around the globe. They successfully give a voice to innovators and encourage mutually beneficial industry connections. Jose works directly with CEOs to assist them with expanding their trusted network of contacts and collaborators, and partners. Prior to joining Optica, Pozo was the Director of Technology and Innovation with the European Photonics Industry Consortium (EPIC). Originally from Spain, Pozo spent more than 25 years working in photonics in several European countries, including Belgium, the United Kingdom, and the Netherlands. He earned a Ph.D. in quantum physics from the University of Bristol, UK, and an M.Sc. and B.Eng. in telecom engineering from UPNA, Spain / VUB, Belgium. Prior to joining EPIC in 2015 as CTO, he was a Senior Photonics Technology Consultant with PNO Consultants; his clients included: CERN, Thales, and TE Connectivity. Jose also worked with The Netherlands Organization (TNO) for Applied Scientific Research and as a post-doctoral researcher at the Eindhoven University of Technology in the Netherlands.
Dr. Gregory Quarles was hired in May 2019 as the CEO and Board member for Tucson-based Applied Energetics, Inc, a recognized leading company developing ultrashort-pulse lasers, frequency agile optical sources, and laser-guided energy technologies. He was subsequently named President and CEO in 2020. Greg had previously served on the AE Scientific Advisory Board. Prior to joining Applied Energetics, Dr. Quarles served as the Chief Scientific Officer for Optica (formerly the Optical Society of America) since November of 2015. He is an experienced Chief Executive Officer, Board Member and renowned physicist with 25 years of experience driving cutting-edge laser, optics, nanopowder, directed energy devices, and photonics technology development and operations within advanced industrial companies. Greg is a globally recognized leader for his strategic partnerships with the Department of Defense, the U.S. Congress, and his innovative work developing new laser devices for medical, national security, and industrial applications. He has also spent the past fifteen years interacting with global leaders in the optics, photonics, and academic communities discussing policy opportunities. Greg has been awarded five patents related to his research in solid-state lasers, has twelve pending, and has published over 130 peer-reviewed and conference publications. Dr. Quarles has been a member of the U.S. Department of Commerce, Bureau of Industry and Security, Sensors and Instrumentation Technical Advisory Committee (SITAC) since 2015. Earlier in his career, Greg was a founder, COO and Managing Partner of EdgeLight Incorporated, a start-up enterprise pioneering wearable light therapy in Tucson, AZ. He has also managed his own consulting firm since 2013, as President and CEO of Opto-Electronics Management Network. Prior to starting this consulting business, Greg served as the CEO at B.E. Meyers & Co., Inc., and was Director of Corporate Research, Development and Technology for II-VI Incorporated, from 2002 -2010. His previous experience includes serving on eight Corporate and not-for-profit Boards, including the Optica Board of Directors, working at II-VI Incorporated for 18 years, and the U.S. Naval Research Laboratory for 5 years. Dr. Quarles is a graduate of Oklahoma State University and holds a Ph.D. and MS in Physics, and a dual BS in Math and Physics. He has served as Assistant Editor for both Optical Engineering and the IEEE Journal of Quantum Electronics and is a Fellow of both the Optica and SPIE and a Senior Member of IEEE.
Clara Rivero-Baleine
Lockheed Martin Fellow, Lockheed Martin Corporation, USA

Dr. Clara Rivero Baleine is a Lockheed Martin Associate Fellow and a Materials Engineering Manager at Lockheed Martin Missiles and Fire Control (LMMFC) in Orlando, Florida. She has been working in the Applied Research R&D Sensors Systems and Technologies group since joining Lockheed Martin Corporation in 2005. Her research work is focused on advanced material development for optical and photonic applications. Clara received her Ph.D. in Optics in 2005 from CREOL, the College of Optics and Photonics at the University of Central Florida. During this time, she had the opportunity to complete a cotutelle (joint Ph.D.) with the University of Bordeaux in France. She simultaneously received a Ph.D. in Materials Science (Spécialité Physico Chimie de la Matière Condensée) from the Institut de Chimie de la Matière Condensée de Bordeaux (ICMCB), University of Bordeaux 1. Clara is the recipient of the 2007 & 2016 Individual Excellence Award (LMMFC), 2009 National Women of Color Technology Star, 2009 & 2012 Lockheed Martin Innovate the Future Contest team finalist, 2015 Outstanding AlumKnights Award and 2019 CREOL Distinguished Alumni Award from the University of Central Florida, College of Sciences – Physics, 2016 Missiles and Fire Control Technical Innovation Award, and 2016 Lockheed Martin Corporation NOVA Award for Technical Innovation. She is a senior member of Optica (formerly OSA). Dr. Rivero-Baleine has 18 granted patents and others pending.
Sam Rubin  
CEO, LightPath Technologies, USA

In Mr. Rubin’s prior senior executive role at Thorlabs, he was responsible for Thorlabs’ Imaging Systems Division, a standalone organization with its own sales and marketing, as well as global responsibility for all of Thorlabs’ Life Science activities. Among the positions he held at Thorlabs, Mr. Rubin founded and grew Thorlabs’s fast-growing operation in China, and spearheaded Thorlabs’ entry and significant growth in the Life Sciences market. As a member of the senior executive team, Mr. Rubin leads new strategic initiatives for Thorlabs, including new product lines, acquisitions, and growth into new markets. Prior to joining Thorlabs, Mr. Rubin co-founded XLight Photonics, an optical communication startup, which was later sold to a telecommunications private equity firm. Mr. Rubin holds a Bachelor of Science degree in Electronic Engineering from Ben Gurion University, a Master of Business Administration degree from New York University, Stern School of Business, and is a graduate of the Executive Education, Program for Leadership Development at Harvard Business School.
A. Boh Ruffin
Senior Research Manager, Corning Incorporated, USA

Dr. A. Boh Ruffin joined Corning’s Science and Technology Division in 2001 after earning a Ph.D. in Applied Physics from the University of Michigan. His graduate research in ultrafast lasers, nonlinear optics, and electro-optics provided him with the fundamental skills and insights to pursue telecommunication and access networks research within Corning S&T’s Optical Systems and Networks Research department. During the early phase of his Corning career, he established the access networks research test bed for the Fiber-to-the-home (FTTH) program and co-invented various optical fibers with nonlinear thresholds optimized for supercontinuum generation, kilowatt lasers, or analog and coherent modulation formats. As a Corning scientist, Dr. Ruffin developed an appreciation for RDE&M techno-economics and learned to leverage market trends to develop novel applications aligned with Corning's core capabilities. His interest in commercial technologies also grew from his flair for demonstrating the value proposition next-gen products, such as SMF-28e® and ClearCurve® bendable fiber. Due to his technical depth and panache for customer engagements, he was “recruited” by Corning’s Gorilla® Glass sales organization in 2009. As an applications engineer, Dr. Ruffin helped grow the Gorilla Glass brand by teaching customers and system architects how to leverage Corning’s advanced materials and processes for consumer electronics applications. He continued to grow business acumen as a technology strategist for Corning Glass Technologies, where he assessed threats and opportunities for next-gen technologies for display markets. In 2017 he was recruited by Corning’s Manufacturing Technology and Engineering (MT&E) division to lead early-stages programs, applications, and technology transfers for laser processes. Finally, in 2021, Dr. Ruffin returned to Corning’s S&T to lead a world-class research group devoted to high-intensity light-matter interactions and laser applications that are aligned with Corning’s current and future business needs. Dr. Ruffin holds bachelor’s, master’s, and doctorate degrees in Applied Physics from the University of Michigan. He has co-authored 67 proprietary technical reports and 29 peer-reviewed publications. He has filed over 36 invention disclosures, 20 patent applications, and 15 granted patents. Dr. Ruffin is a life member of Alpha Phi Alpha Fraternity, Inc. Additionally, he is active in his community, where he serves or has served as a board member for various non-profits, such as the Corning Children Center, Taipei American School, Science and Discovery Center, and the Corning-Painted Post School district. He is the recipient of various awards and was most recently presented the 2021 MT&E Idea Award and the 2021 CCG Science Spectrum Trailblazer Award. Most notably, Dr. Ruffin’s greatest accomplishments are shared with his wife, Dr. Millicent Ruffin, as evinced by the resolve and well-being of their three sons.
Matthew Weed
Technology Strategy Manager, Corning Optical Communications

Matthew Weed is a member of the original engineering team at Luminar, a leading automotive lidar provider, and is currently focused on the company's future through analysis and roadmapping of the autonomous vehicle and sensor industries. His career has focused on commercializing advanced optics and photonics technologies and he has done so in drug delivery, medical diagnostics, and now automotive. In addition to his work at Luminar, Matthew is an active member of his international technical community sitting as a Board Member of the Florida Photonics Cluster and College of Optics & Photonics at UCF. Academically, he earned his Ph.D. through studies of the integration and fabrication of chip-scale photonic devices at CREOL, the College of Optics at the University of Central Florida and received his Bachelor of Science in physics from Rensselaer Polytechnic Institute. He holds 32 US patents in laser, lidar, and other sensing technologies.
Peter Wigley
Technology Strategy Manager, Corning Optical Communications

Peter Wigley is the Technology Strategy Manager for Corning Optical Communications in Corning, NY. He has held a broad range of technical, product related and strategic roles within Corning since 1995, related to photonics, optical fibers, optical amplifiers, dispersion compensation and optical communication systems. Following the acquisition of Corning Photonic Technologies in 2003 by Avanex he was responsible for the commercialization of their Tunable Optical Dispersion Compensation products. He rejoined Corning Advanced optics in 2012 and became responsible for technology strategy for Corning Optical Communications since 2018. He has contributed to a broad range of optical communications related product innovations resulting in 31 issued patents related to optical components for amplification and signal processing, more recently focusing on user experience and digital transformation in access networks. Peter holds a Ph.D. in Laser Optics from Imperial College, London and has been a senior member of Optica (formerly OSA) since 2000.
Christina Willis
Senior Analyst, Infleqtion, USA

Christina C. C. Willis is a laser scientist, author, and public speaker with a passion for public policy. She served a year in the United States Senate as the 2019-2020 OSA / SPIE Arthur H. Guenther Congressional fellow and currently works as a Senior Analyst at the Boulder-based quantum technology company Infleqtion. In her free time she teaches yoga and volunteers as a firefighter. Founder and Co-chair of Edmund Optics’ US Diversity, Equity and Inclusion Committee. You can download her book Sustainable Networking for Scientists and Engineers for free from SPIE Press (https://spie.org/christinawillisbook) and find her on Twitter @willischristina.
Attendees

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Abhishek Anchal
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