



What is “Building Science” Right Now?

2026 AIANY Building Science Committee Summit
November 13, 2026, 9am–6pm

About the Speakers:

Lauren Alger is vice president and national director of sustainable design at STV, one of the top infrastructure-focused professional services firms in North America. An ENR National Top 20 Under 40 award winner and ENR East Top 20 Young Professional, she leads the firm’s strategy to measure and reduce greenhouse gas emissions across infrastructure projects. She is the co-founder and chair of ASCE Infrastructure 2050, an industry-wide initiative to reduce embodied carbon emissions of infrastructure assets. Alger is dedicated to transforming how infrastructure is designed, built, and measured, so it becomes a driver of climate solutions, not emissions, for our communities.

Peter Arbour is a New York-based architect and building envelope designer with over 20 years of experience specializing in facade system design, consulting, and construction. Arbour’s work has included concept design, detailing, fabrication, and construction coordination of custom façades for projects all over the world. He is known for the expert integration of architectural, engineering and manufacturing principles from system design through project delivery. Arbour is an alumnus of the Yale School of Architecture and has played key design and management roles at Dewhurst Macfarlane and Partners, RFR Engineers (Paris), seele, Inc., Socotec (previously Vidaris), and most recently the Elicc Group. Arbour is the creator and patent holder of Liquid Wall—a prefabricated, unitized curtain wall system made of ultra-high-performance concrete (UHPC).

Nitsan Bartov is an architect, computational designer, and Industrial PhD Fellow at Henning Larsen and the Royal Danish Academy, where his research explores AI, urban data, and regenerative design. At Henning Larsen, he is involved in the firm’s approach to AI adoption, strategy, and professional training. He teaches and lectures internationally, including at Cornell University, and works with architecture practices and professionals on understanding and applying emerging AI technologies critically and effectively.

Jonathan Ehrlich currently serves as the CEO of T2D2.ai, the AI building inspection



software platform. Engineers, architects, building owners and drone pilots use T2D2 to make their inspection workflow faster, cheaper and more accurate. Ehrlich is a serial entrepreneur who has started three technology and real estate companies. He has a background in commercial real estate and infrastructure development, having previously served in numerous roles in both the private and public sectors.

Joseph Gentile is a Senior Project Consultant with Simpson Gumpertz & Heger's (SGH) Fire Engineering Group. He is a consultant and educator who brings his extensive expertise on the application of building codes and accessibility standards to design teams and his students. His background in architecture, understanding of building codes, and experience collaborating with interdisciplinary design teams allow him to develop comprehensive and project-specific approaches when applying building codes, accessibility requirements, and other key standards. Joseph's project work includes adaptive reuse, mass timber, high-rise, cultural, aviation, health care, higher education, residential, and performing arts buildings. He has supported design teams and worked with authorities having jurisdiction (AHJs) across the United States, and he has significant experience in the Middle and Far East. This includes advising architectural teams at all phases of the design and construction process on fire protection and life safety considerations, including material performance under fire exposure and provisions related to fire department intervention.

Jim Dray is Chief Information Officer at Thornton Tomasetti, where he is responsible for global IT operations, strategy, and digital innovation. With more than 30 years in information technology spanning architecture, engineering, construction, and global leadership roles, he is a frequent industry speaker focused on integrating technology for business advantage. His current work includes helping shape Thornton Tomasetti's approach to artificial intelligence—covering firm-wide policy and governance, secure enterprise tools, AI adoption and education, experimentation, and emerging applications for AEC workflows. He also leads or participates in broader industry conversations, bringing a practical perspective on using AI responsibly while preserving professional judgment, data security, and quality.

Gizem Karagoz is Assistant Vice President of Green Economy at the New York City Economic Development Corporation (NYCEDC). She leads a portfolio of projects to derisk circular construction practices, low carbon building materials, and emerging climate technologies. Her work focuses on unlocking regulatory, financial, and industry barriers to scale climate innovation through catalytic real estate and policy interventions.



Karagoz holds a Master of Architecture and Master of Science in Urban Planning from Columbia University GSAPP and a Bachelor of Arts in Architecture and Environmental Science from Barnard College.

Bobby Johnston is a founding partner at CO Adaptive, an unbuild-design-build practice, that focuses on converting existing buildings from a linear economy to a circular one. He is passionate about connecting disparate technologies and systems; alongside forming new business models that can reshape the industry for more circular, healthier, and regenerative environments. This year, Johnston led the launch of a new division of the practice, Disassembly, which serves as a deconstruction contractor and matchmaker for architects, CMs, and building owners to achieve their circularity goals on projects. It also provides consulting and training for the industry around designing with reused materials and design for disassembly. Johnston and CO Adaptive's work has received numerous awards and recognition including the Architectural League's Emerging Voices Award in 2026, A|N's 2025 Best of Practice Award, 2025 Trust for Governors Island Climate Solutions Challenge winner, MoMA's Inaugural New York New Publics exhibition in 2023, the Architectural League's Beaux Arts Ball 2023 Annual Installation, MASTerworks Design Award for Adaptive Reuse in 2023, and the Design Vanguard Award in 2022. He is a frequent lecturer on circular design, currently teaching a graduate studio at MIT, and has previously taught studios at Columbia GSAPP and Pratt SoA. Johnston is a registered architect in New York State and a licensed general contractor in NYC, with over 25 years of practice in the industry. He holds a Master of Architecture degree from Columbia University and a Bachelors of Arts in Architecture from UC Berkeley.

Joseph Rakowski is an architect and engineering manager at New Hudson Facades with more than 25 years of experience in architecture, façade engineering, and construction. Throughout his career, he has specialized in large-scale building projects with a particular focus on façade systems, exterior skin development, design-assist collaboration, and construction administration. Joe has collaborated on several landmark projects including 909 Half Street, 35 Hudson Yards, 50 Hudson Yards, and 270 Park Avenue as Technical Project Manager. His expertise bridges architectural design intent with the technical and construction realities required to deliver complex façade systems. Prior to joining New Hudson Facades, Rakowski held leadership and design roles at Wiss, Janney, Elstner Associates and Ballinger, where he led multidisciplinary teams on the development, detailing, and delivery of innovative architectural projects. Known for his collaborative approach and technical precision,



Rakowski brings a deep understanding of façade design, engineering coordination, and project execution.

Emma Ramsden is a Project Consultant with SGH's Structural Engineering Design Group. She has broad experience designing new structures, rehabilitating existing ones, and investigating deteriorated and historic buildings. Her experience spans residential, commercial, institutional, and cultural projects, giving her a versatile perspective on structural challenges. As chair of SGH's sustainability group, Ramsden champions integrating sustainable design principles across projects. She is also a trained industrial rope access technician, using these skills to perform hands-on facade surveys and inspections for structural and building enclosure deterioration. Combining her rope access expertise with her sustainability work, Ramsden offers practical insight into the critical intersection of structure and enclosure, delivering solutions that balance structural integrity, energy efficiency, and long-term resilience.

Dan Reynolds is the AI Leader at Walter P Moore and a structural engineer with expertise in specialty structures. After delivering numerous complex and high-profile projects, Reynolds now leads a pioneering team of engineers and AI developers reimagining how buildings are conceived, designed, and delivered. The promise of a more sustainable and responsive built environment has inspired the team to pursue a design process that is more creative, intuitive and holistic. To support this vision, they are developing next-generation tools that empower designers with real-time insights, generative solutions, and a deep computational intuition. Their custom software applications and APIs bring data-driven decision-making directly into the heart of the design process, reshaping what's possible at every scale. As AI capabilities continue to accelerate, the team is not only exploring new ways for humans to engage with design—naturally, meaningfully, and enjoyably—but also embracing the profound responsibility of guiding these tools toward ethical, transparent, and trusted use.

As a Senior Associate and Sustainability Director at Gensler, **Liz Resenic** works with clients and design teams to optimize the sustainable features of projects, ensuring their sensitivity to the environment and responsible consumption of resources. Since joining Gensler in 2015, she has worked on multiple projects ranging in scale from small retail interiors to large multi-building corporate campuses, totaling over 16 million sf of work with teams in across the US. Her project work has included commercial interior, laboratory, clinical, hotel, airport, data center, government facilities and university and corporate campus typologies. Working alongside these diverse teams and organizations



to develop place-based and sustainable solutions in alignment with decarbonization targets and design standards, these projects have led her to cultivate strong relationships with leading corporate clients. From the early days of conceptual design through technical analysis to construction and the optimization of facility operations, Resenic exercises vision, creativity and passion to craft innovative solutions to the problems of future habitation that are scalable and accessible to every project.

Cheryl Saldanha leads SGH's Building Science and Passive House practice and has extensive experience in the design, evaluation, and commissioning of high-performance building enclosure systems, including facades, roofing, and below-grade waterproofing. Saldanha works closely with project teams to identify and mitigate risks related to air, water, and moisture infiltration through detailed design review, performance analysis, and field verification. Her expertise in thermal and hygrothermal analysis supports compliance with New York City energy codes and Local Laws while promoting durable, maintainable, and constructible solutions that protect facilities and ensure long-term performance. Saldanha is a member of the NYC Commercial Energy Code Technical Advisory Committee and the AIANY Building Science Committee, and is on the Board of Directors for NY Passive House.

Marc Simmons is a founding principal at Front and is a licensed architect in New York State and has over 30 years of experience in Architecture and Façade Consulting. Simmons has also been teaching for the past 17 years serving as Associate Professor of the Practice at the MIT School of Architecture + Planning, as Ventulett Chair in Architectural Design at the Georgia Institute of Technology School of Architecture, and as Lecturer and Studio Instructor at the Princeton University School of Architecture. He holds both Bachelor of Environmental Studies and professional Bachelor of Architecture degrees from the University of Waterloo, Canada. Simmons is currently teaching a design studio and a seminar class at the Harvard Graduate School of Design. Simmons has been responsible as lead facade consultant for many seminal projects over the past decades. Representative projects include the Seattle Public Library with OMA/LMN, the new Canadian House of Commons at West Block on Parliament Hill in Ottawa with A49/EVOQ, the Stavros Niarchos Foundation National Library of Greece and the National Greek Opera with Renzo Piano Building Workshop/Betaplan, the Perelman Center for the Performing Arts with RE X/Page, the Juilliard School Tianjin with DSR/ECADI and the China Central Television HQ in Beijing with OMA/ECADI. Prior to establishing Front in 2002, Simmons worked with Foster and Partners, KPMB Architects, Dewhurst Macfarlane and Meinhardt Façade Technology.



Melody Stein is a director at External Affairs, a strategy and creative studio for organizations building with emerging science and technology. She specializes in projects that bridge policy, design, and implementation strategy to further ambitious climate and sustainability goals. Stein is a Visiting Assistant Professor at Pratt Institute, where she leads a studio course focused on green infrastructure in the public realm in partnership with the NYC Department of Environmental Protection (DEP). She previously worked at Michael Van Valkenburgh Associates on large-scale public space design and project delivery. Stein is a licensed landscape architect, a member of the American Society of Landscape Architects (ASLA), and a Waterfront Edge Design Guidelines (WEDG) Associate.

Jen Switala believes that architecture evokes different responses in each individual, and that this results in a meaningful complexity to the urban realm. With a diverse background of project experience, Switala has designed affordable and supportive housing, commercial buildings, and comprehensive master plans. She leads Dattner Architects' R&D Co:Lab, which is focused on examining vital issues confronting the built environment. Switala holds a Bachelor of Science in Architecture from the University of Minnesota and a Master of Architecture from New Jersey Institute of Technology.

Angela Tarng is a Consulting Engineer with SGH's Building Technology Group. Her structural engineering background and her experience with both building enclosure and structural engineering projects allow her to provide clients with an understanding of the trade-offs and limitations when designing components with both structural and waterproofing performance requirements. She regularly investigates and provides design consulting for historic and contemporary building enclosures. Tarng supports design teams through all phases of the design and construction process on issues related to the building enclosure. Her projects have spanned multiple building types, including museums, airports, apartments, residential homes, offices, commercial studio spaces, and schools.

Chris Van de Voorde is the founder of the Circular Value Institute, a nonprofit accelerating the circular economy by quantifying the economic value of circular products and developing new reuse business models. A designer at heart, Van de Voorde has earned more than 20 patents and design awards, including three Red Dot awards. Products designed for high circular value win on productivity, function, and long-term profitability. As an entrepreneur, Van de Voorde grew JUUNOO from a product designed



in his garage into an international circular interior wall company and a successful exit. Deloitte named it Belgium's fastest-growing sustainable company in 2022 and 2023. At the institute, he applies the Circular Value Index (CVI), which weighs Residual Value against Cost of Reuse and Risk, to show when reuse pays off and help companies scale circular business models that earn more from every product.

Magnus Westergren is a practicing Architect with 16 years of experience. As an Associate at Marvel, he has led the design of a wide range of projects since joining the firm in 2010, spanning new construction, renovation, and preservation from concept through construction. His work includes the adaptive reuse of the Central King Building at the New Jersey Institute of Technology, the new Innovation & Entrepreneurship Center at the Masters School in Dobbs Ferry, and the Red Creek Road House, an expansive villa in East Hampton. He is currently leading the design of a 244-unit affordable seniors housing project on a NYCHA campus, adding a guesthouse to the Red Creek Road project, while overseeing construction of a 424-unit, 14-story mixed-use tower in Brooklyn. Westergren studied architecture at Parsons School of Design, and Fine Arts and Political Science at SUNY Purchase, and his practice remains rooted in that dual foundation. An avid watercolorist and draftsman, he draws obsessively from life, using observation and hand-drawing not merely to document but to understand—a discipline he brings directly into his architectural work through diagrams, sketches, and renderings that carry as much poetic intent as technical precision.