

Adaptive Architectures and Smart Materials
Conference

**OCTOBER 1-2, 2015** 

GSD Alumni + Friends Weekend

**OCTOBER 2-3, 2015** 



# Welcome.

Dear GSD Alumni, Faculty, and Friends,

Thank you for joining us for *Harvard Design: Chicago*. We are pleased that you are able to take part in this annual celebration of the Harvard University Graduate School of Design, even further energized this year with the explosion of creative activity that is overflowing throughout the city during the inaugural Chicago Architecture Biennial. Over the next few days, we will have the opportunity to explore this vibrant city and engage in exciting discussions with thought leaders from our extended GSD community around the world.

This weekend, while reconnecting with classmates and colleagues, we will draw on our combined experience and insight to identify further ways to imagine and construct a better future. I look forward to your participation in these vital conversations.

Warm regards,

**Beth Kramer** 

Associate Dean, Development and Alumni Relations Harvard University Graduate School of Design



# Overview.

#### Adaptive Architectures and Smart Materials Conference October 1–2, 2015

The integration of new communication, interactivity, and display technologies fundamentally transforms spaces and places into networked, responsive environments. Within this context, architecture has become "smart" at scales that range from materials to equipment to façades. A building envelope is currently the site of intense speculation; the introduction of CNC fabrication techniques allows for increased formal complexity, while new material properties in glass, polymers, and fabrics offer new spatial, visual, and thermal properties. These new materials have the capacity to transform architecture—its optical properties, configuration, thermal qualities, and even architecture's ability to regulate its appearance. They demand a radical rethinking of interior versus exterior, private versus public, exposure and (in)visibility within architecture and design.

#### GSD Alumni + Friends Weekend October 2–3, 2015

For the last three years, the Harvard University Graduate School of Design has brought its annual Alumni + Friends Weekend to a new host city to examine design challenges of the area, and showcase the projects of regional alumni. Following in the footsteps of Los Angeles, Hong Kong, and Miami, this year we're in the windy city of Chicago, an urban environment defined by its architecture and design, and teeming with intellectual and creative capital. Heading into the inaugural Chicago Architecture Biennial, the Alumni + Friends Weekend provides a platform for discussing the exciting research conducted by the GSD's extended community and how creativity and innovation can radically transform our lived experience.

# General Information.

#### **Main Locations**

#### **Hotel Headquarters**

Renaissance Blackstone Chicago 636 South Michigan Avenue

#### **Conference Location**

Venue SIX10 610 South Michigan Avenue

#### Friday Alumni Reception

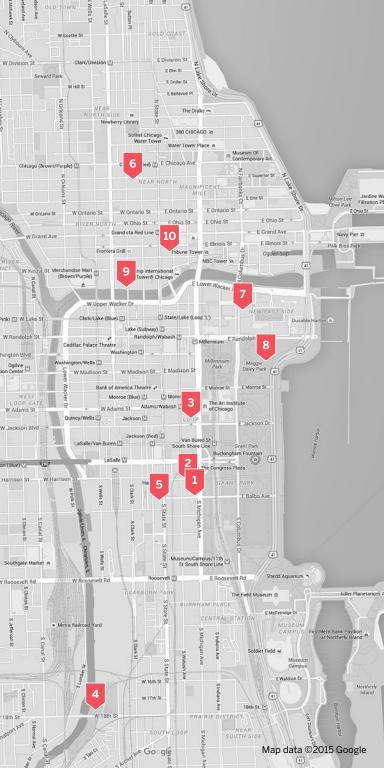
Offices of Skidmore, Owings & Merrill 224 South Michigan Avenue #1000

#### **Saturday Tours**

- Ping Tom Memorial Park 300 West 19th Street
- William Jones College Preparatory High School (Jones College Prep) 700 South State Street
- Poetry Foundation 61 West Superior Street
- Aqua Tower
  225 North Columbus Drive #220
- Maggie Daley Park
  337 East Randolph Street

#### **Saturday Dining**

- The Kitchen 316 North Clark Street
- Benny's Chop House 444 North Wabash Avenue



#### Registration

For activities on Thursday and Friday, you may pick up your registration packet and badge in the Lobby of Venue SIX10. For activities on Saturday, you may pick up your registration packet and badge at the Historic Art Hall on the 5th Floor of Renaissance Blackstone Chicago. We ask that you please keep your packet and badge through the entire weekend, and wear to all registered events for entry.

On the pages that follow we offer detailed information on the many events and activities that will occur over the course of *Harvard Design: Chicago*. If you have any questions at all, please contact Sarah Knight at 207.659.8073 or by email at sknight@gsd.harvard.edu.

# Schedule of Events.

# **Thursday 10.1.15**

#### Conference Registration + Exhibition Walk-Through

12:00 – 3:30 pm Venue SIX10, Lobby

# Chicago Athletic Association Hotel Tour 1:00 pm

Optional activity, leaving from Venue SIX10, Lobby, will end at CAF's office (about a 10–15 minute walk from Venue SIX10). First come, first served.

Experience the allure of a historic, exclusive men's club transformed into a 21st century luxury hotel. You will see old world craftsmanship restored to its original elegance, plus renovated and newly added spaces, all part of a rebirth befitting this Venetian Gothic building located on Chicago's landmark Michigan Avenue. In addition to public spaces, such as the Grand Staircase Lobby and Drawing Room, the tour will also take you to view the landmarked Madison Street exterior.

#### Art Institute of Chicago Exhibition Pass

#### 1:00 pm

Optional activity, leaving from Venue SIX10, Lobby Making Place, The Architecture of David Adjaye—Capturing a significant moment in Adjaye's career, this exhibition spans projects from furniture and housing to public buildings and master plans and features a short film, drawings, sketches, and models, helping bring the projects alive. This is a curated tour led by the AIC. Please meet at registration table in the Lobby of Venue SIX10 to begin the tour.

# Adaptive Architectures and Smart Materials Conference

Venue SIX10, Feinberg Theater. 6 AIA learning units and 6 APA CM credits offered. ASLA credits pending.

The "Adaptive Architectures and Smart Materials Conference" at *Harvard Design: Chicago* investigates the potential of innovative processes and technology for architecture and industry. Made possible through the generous support of Merck KGaA, Darmstadt, Germany, the Conference will feature over 20 thought leaders, academics, building scientists, and practitioners as presenters and discussion participants.

3:30 pm **Welcome** by Inese Lowenstein, Executive Vice President, Merck KGaA and Mohsen Mostafavi, Dean and Alexander and Victoria Wiley Professor of Design at Harvard University Graduate School of Design.

4:00 pm **Histories**, a panel discussion that examines contemporary material innovations within the context of historic investigations. Featuring Aaron Betsky, Eve Blau, Blaine Brownell, Todd Gannon, and Terence Riley. Moderated by Eric Höweler.

#### 6:00 pm Break

6:30 pm **Keynote** by Elizabeth Diller, Professor of Architecture at Princeton University and founding partner of Diller, Scofidio + Renfro.

8:00 pm Conclusion of Day One by Eric Höweler, Assistant Professor of Architecture at Harvard University Graduate School of Design.

#### Smart Design Cocktail Reception

8:00 - 9:30 pm

Venue SIX10, Landing and Lobby

Discuss the day's events and connect with fellow GSD alumni and friends at a relaxing and fun reception to close Day One of *Harvard Design: Chicago*.

# Friday 10.2.15

#### **Conference Registration Opens**

9:00 am

Venue SIX10, Lobby

#### Adaptive Architectures and Smart Materials Conference

10:00 am - 6:15 pm

Venue SIX10, Feinberg Theater, 8 AIA learning units and 8 APA CM credits offered. ASLA credits pending.

Join us for Day Two of the Conference, which continues the conversations exploring innovative technologies for the design industry.

10:00 am **Welcome** by Eric Höweler, Assistant Professor of Architecture at the Harvard University Graduate School of Design.

10:15 am Materials, a panel discussion examining the emergence of a new approach to materials—moving from a more traditional view of their evocative qualities to a contemporary focus on performance. Featuring Gail Peter Borden MArch '00, Sheila Kennedy MArch '85, Jan Knippers, Monica Ponce de Leon MAUD '91, and Skylar Tibbits. Moderated by Kiel Moe MDesS '03.

12:15 pm Lunch break (buffet provided).

1:45 pm **Technologies**, a discussion on the interest in the surfaces of architecture as sites of expression, thermal performance, and material invention. Speakers include Chuck Hoberman, Hanif Kara, Dennis R. Shelden, and Marc Simmons. Moderated by Mariana Ibañez.

#### 3:45 pm Break

4:15 pm **Ecologies**, which links projects that incorporate new materials, systems and strategies, including smart glass, kinetic envelopes, and innovative building systems. Panelists for the discussion include Frank Barkow MArch '90, Jeanne Gang MArch '93, Martin Henn, Michael Meredith MArch '00, and Matthias Schuler. Moderated by Florian Idenburg.

6:15 pm Conclusion of Day Two by Eric Höweler, Assistant Professor of Architecture at the Harvard University Graduate School of Design.

#### **GSD Alumni Reception**

6:45 - 9:00 pm

Skidmore, Owings & Merrill, 224 South Michigan Avenue #1000. Please note: transportation is not provided on this evening. The reception is a short walk from Venue SIX10.

Connect with fellow alumni and GSD faculty at a reception to close the Conference and kick off the Alumni + Friends Weekend activities.

# **Saturday 10.3.15**

# Alumni + Friends Weekend Registration Opens

8:30 am

Renaissance Blackstone Chicago, Historic Art Hall, 5th Floor. Breakfast provided.

#### **Chicago Site Tours**

10:00 am - 4:30 pm

Bus will depart from Renaissance Blackstone Chicago. Lunch provided at William Jones College Preparatory High School.

Visit thought-provoking structures and landscapes designed by local GSD alumni. This private, curated tour will highlight the challenges, opportunities, and innovations of each project within Chicago's distinct built environment.

#### **Ping Tom Memorial Park Boathouse**

Frank Christopher Lee MAUD '79 Johnson & Lee

#### William Jones College Preparatory High School

Ralph Johnson MArch '73

Perkins+Will

#### **Poetry Foundation**

John Ronan MArch '91 John Ronan Architects

#### Aqua Tower

Jeanne Gang MArch '93 Studio Gang

#### **Maggie Daley Park**

Matthew Urbanski MLA '89

Michael Van Valkenburgh Associates

#### **Culinary Revelry**

7:30 – 10:30 pm

Immerse yourself in Chicago's foodie culture, and select one of the stellar restaurants below for an enjoyable dining experience with classmates, colleagues, and friends. *Please note that transportation is not provided, though both restaurants are a short taxi ride from Downtown.* 

#### The Kitchen

316 North Clark Street

This River North New American sources its ingredients from local farmers, turning out modern brasserie fare, including raw-bar items, paired with craft cocktails and a beer list heavy on Colorado and European imports. The rustic-chic setting brings together natural and industrial elements, and also has lots of windows and an open kitchen to view the action. —Zagat

#### Benny's Chop House

444 North Wabash Avenue

For a top-notch steakhouse experience, fans swear by this River North "beefery" where perfect finishing crusts make for even more delicious chops and the cocktails are worth the trip too; frequent live music keeps things upbeat in the white-tablecloth surrounds, and unpretentious service earns it even more bonus points. —Zagat

# Conference Sessions.

#### **Histories**

The Histories panel will situate contemporary material innovations and material based discourses within the context of historical material investigation. The panel will discuss topics such as the avant garde's recurring obsession with new materials, its waning interest in the 1980s, and its return as marked by the Light Construction exhibition in 1995 at the Museum of Modern Art. Panelists, including Terence Riley, curator of the Light Construction exhibit and author of the publication of the same title, will discuss the particular moment in architectural discourse when there was a marked shift—moving from form to surface, and from theory to matter. The Histories panel will also examine the role of materials in contemporary architectural discourse, in particular the possibilities opened up by new, smart materials and how these material cultures reframe larger attitudes towards the relationship between nature and architecture.

#### **Participants**

Aaron Betsky, Eve Blau, Blaine Brownell, Todd Gannon, and Terence Riley. Moderated by Eric Höweler.

Thursday, October 1, 2015 at 4:00 pm Venue SIX10, Feinberg Theater

#### **Materials**

The Materials panel will address the impact of the emergence of a "non-sentimental" approach to materials. Both designers and engineers have examined this change in attitude towards material as less about their essential or evocative qualities, phenomenal and material associations, and more about a performance-based approach to materials in architecture. This post-phenomenological, post-tectonic approach to matter sees material as a site of invention and a driver for design. The panel will consider matter, thickness, weight, heft, thermal mass, and conductivity as material concerns for contemporary designers.

#### **Participants**

Gail Peter Borden MArch '00, Sheila Kennedy MArch'85, Jan Knippers, Monica Ponce de Leon MAUD '91, and Skylar Tibbits. Moderated by Kiel Moe MDesS '03.

Friday, October 2, 2015 at 10:15 am Venue SIX10, Feinberg Theater

#### **Technologies**

The Technologies panel will investigate contemporary interest in the surfaces of architecture as sites of expression, thermal performance, and material invention. Contemporary architecture can no longer afford to conceive of the mechanical system and the cladding systems as distinct. An integrated approach to both has become not only inevitable but advantageous, where a building envelope is today understood as an extension of a building's mechanical and energy systems. The panel will discuss innovative approaches generated to assemble and mobilize these complex material and surface networks through kinetic systems, smart materials systems, and assemblies.

#### **Participants**

Chuck Hoberman, Hanif Kara, Dennis R. Shelden, and Marc Simmons. Moderated by Mariana Ibañez.

Friday, October 2, 2015 at 1:45 pm Venue SIX10, Feinberg Theater

#### **Ecologies**

Ecology can be defined as understanding an organism in relation to others and to its surroundings, but it is also used to convey a sense of comprehensiveness. Speakers will illustrate this comprehensive thinking through projects that incorporate new materials, systems, and strategies, including smart glass, kinetic envelopes, and innovative building systems. Ecological thinking is allencompassing, incorporating a range of issues from thermal performance, to social enabling, to visual access. The panel will speak to the relationship of these material technologies with each other, and with the greater environment in which they conspire to perform.

#### **Participants**

Frank Barkow MArch '90, Jeanne Gang MArch '93, Martin Henn, Michael Meredith MArch '00, and Matthias Schuler. Moderated by Florian Idenburg.

Friday, October 2, 2015 at 4:15 pm Venue SIX10, Feinberg Theater

# Speaker Bios.



# Brandon Andow

Brandon Andow is a recent PhD graduate from Rensselaer Polytechnic Institute's Center for Architecture Science and Ecology (CASE). His research focuses on multifunctional dynamic glazing materials and solar responsive facade systems, which aims to improve building energy efficiency and indoor environmental quality, with expanded possibilities for occupant and urban interactions. This includes the co-modeling of complex fenestration systems' impact on daylighting, visual comfort, and building energy use, along with the development of new switchable transparency and solar energy harvesting materials. For six years prior to graduate research, Andow worked in New York City renovating existing buildings and facades for residential, commercial, and institutional projects. He also took a year long hiatus to repair buildings at McMurdo station in Antarctica. Andow received his MS and PhD in Architectural Science from Rensselaer in 2015 and his BArch and BFA from the Rhode Island School of Design in 2004.



# Aaron Betsky

Aaron Betsky is Dean of the Frank Lloyd Wright School of Architecture. A critic of art, architecture, and design, Betsky is the author of over a dozen books on those subjects, including a forthcoming survey of modernism in architecture and design. He writes a twice-weekly blog for architectmagazine.com, Beyond Buildings.

Trained as an architect and in the humanities at Yale University, Betsky was previously Director of the Cincinnati Art Museum (2006–2014) and the Netherlands Architecture Institute (2001–2006), and Curator of Architecture and Design at the San Francisco Museum of Modern Art (1995–2001). In 2008, he also directed the 11th Venice International Biennale of Architecture.



# Frank Barkow MArch '90

Frank Barkow studied architecture at Montana State University and the GSD, where he recently taught as John T. Dunlop Design Critic of Housing and Urbanization. In 1993, Barkow and Regine Leibinger founded their practice in Berlin. Their interdisciplinary, discursive attitude allows their work to expand and respond to advancing knowledge and technology. This know-how contributes to various projects including the TRUTEC Office Building in Seoul and Tour Total, Berlin. Recently completed projects include a research campus for the Fraunhofer Institute and the Fellows Pavilion for the American Academy in Berlin. Barkow Leibinger's work has been shown at the Venice Architecture Biennale 2008 and 2014. at the Marrakech Biennale 2012, and is included in the collections of MoMA, New York, amongst others. They have won National AIA Honor Awards for Architecture, the prestigious Marcus Prize for Architecture and a Global Holcim Innovation Award for sustainability.



# Eve Blau

Eve Blau is Adjunct Professor of the History of Urban Form at the GSD. She has written extensively on modern architecture and urbanism, including on transparency and experimentalist practices, and has curated numerous exhibitions. Her books include The Architecture of Red Vienna (1999/2014), Project Zagreb: Transition as Condition, Strategy, Practice (2007), Shaping the Great City: Modern Architecture in Central Europe (2000) and Baku: Oil and Urban-ism (2016). She is a Principal Investigator of the Harvard Mellon Urban Initiative, Reconceptualizing the Urban: Interdisciplinary Study of Urban Environments, Societies, and Cultures, (2013-2017). Her books have received a number of awards, including the 2015 Victor Adler State Prize from the Republic of Austria, the Alice Davis Hitchcock Book Award, Spiro Kostof Award, Philip Johnson Exhibition Catalogue Award, and the AIA Citation for Excellence in International Architectural Book Publishing.



#### Gail Peter Borden MArch '00

Gail Peter Borden attended Rice University, simultaneously receiving Bachelor of Arts degrees in fine arts, art history, and architecture as well as his BArch. He went on to the GSD to complete a post-professional Master's of Architecture with distinction. In addition to holding a tenured position as associate professor at the USC, Borden is the Associate Dean for Faculty Affairs, Architecture Discipline Head, and Director of the Graduate Architecture Programs.

As principal of Borden Partnership, his design work has won numerous recognitions including the Architectural League Prize, AIA Young Architect Award, BD+C "40 Under 40" award, and numerous AIA, ACSA, and RADA awards, Borden received artist-in-residence awards from the Chinati Foundation, Atlantic Center for the Arts, Borchard Fellowship, and MacDowell Colony. His teaching has been nationally recognized with an ACSA/ AIAS New Faculty Teaching Award. His books: Material Precedent: The Typology of Modern Tectonics (2010, Wiley); Matter: Material Processes in Architectural Production (2011, Routledge); Principia: Architectural Principles of Material Form (2013, Pearson); and Process: Material and Representation in Architecture (2014, Routledge) all focus on materiality. As an artist, theoretician, and practitioner, Borden's research and practice focuses on the role of materiality and architecture in contemporary culture.



### Blaine Brownell

Blaine Brownell is an architect and former Fulbright scholar with a focus on emergent materials and applications. He is an associate professor and director of graduate studies at the University of Minnesota School of Architecture and principal of the design and research practice Transstudio. Brownell authored the Transmaterial series as well as the books Matter in the Floating World and Material Strategies with Princeton Architectural Press. He also writes the "Mind & Matter" column for Architect Magazine. Considered a preeminent scholar on advanced materials for architecture and design, Brownell has been published in over forty design, business, and science journals including The New York Times, The London Times, The Wall Street Journal, New Scientist, and Discover, and he has lectured widely in the Americas, Europe, and Asia. Brownell's latest book with co-author Marc Swackhamer is entitled Hypernatural: Architecture's New Relationship with Nature.



# Elizabeth Diller

Elizabeth Diller is a founding principal of Diller Scofidio + Renfro, an interdisciplinary design studio that integrates architecture, the visual arts, and the performing arts. Diller is a recipient of the MacArthur Foundation "genius" award (the first in the field of architecture), the National Design Award from the Smithsonian, and the Brunner Prize from the American Academy of the Arts and Letters. She is a Royal Institute of British Architects Fellow, and has been inducted into the American Academy of Arts and Sciences. In 2003, the Whitney Museum of American Art held a retrospective of DS+R's work, recognizing her studio's unorthodox practice. DS+R's projects include the Blur Pavilion for the Swiss Expo, Lincoln Center for the Performing Arts expansion and renovation, Institute of Contemporary Art in Boston, High Line in New York, The Broad Museum in Los Angeles, and Columbia University Medical School Building. Diller is a Professor at the Princeton School of Architecture.



Jeanne Gang MArch '93

American architect Jeanne Gang, FAIA, LEED AP is Founder and Principal of the award-winning design practice Studio Gang. A graduate of the University of Illinois, Gang received her Master of Architecture degree from the GSD. She is a MacArthur Fellow and recipient of the Cooper-Hewitt National Design Award. Through architecture and urban design, Gang champions an ecological approach, addressing global issues through local, community-based action. Under her leadership, Studio Gang has produced some of today's most compelling works, noted for their striking formal qualities and material sensibility. Recent built projects include the Aqua Tower, the Nature Boardwalk at Lincoln Park Zoo, the WMS Boathouse at Clark Park, and the Arcus Center for Social Justice Leadership. She is currently engaged in major international projects, including the expansion of the American Museum of Natural History in New York.



# Todd Gannon

Todd Gannon is an architect and writer based in Los Angeles. He teaches history, theory, and design studio; serves as Graduate Thesis Research Advisor: and coordinates the Cultural Studies curriculum at SCI-Arc, where he has taught since 2008. His published books include The Light Construction Reader (2002), Pendulum Plane/Oyler Wu Collaborative (2009), Et in Suburbia Ego: José Oubrerie's Miller House (2013), and monographs on the work of Morphosis, Bernard Tschumi, UN Studio, Steven Holl, Mack Scogin/Merrill Elam, Zaha Hadid, Peter Eisenman, and others. His essays have appeared in The SAGE Handbook for Architectural Theory (2012), The Mourning After: Attending the Wake of Post-modernism (2007), and in periodicals including Log, The Architect's Newspaper, and Offramp. In collaboration with Ewan Branda and Andrew Zago, he curated the 2013 exhibition "A Confederacy of Heretics" at SCI-Arc. which examines the legacy of Thom Mayne's 1979 "Architecture Gallery" in Venice, California.



## Martin Henn

Martin Henn studied architecture at the University of Stuttgart and at the ETH, Zurich. He received his Master's Degree in Architecture from the ETH, Zurich in 2006, and his Post-Professional Master of Advanced Architectural Design from Columbia University, New York in 2008. Prior to HENN, he was working for Zaha Hadid Architects in London and Asymptote Architecture in New York. Today, Henn is partner and head of design at HENN, an international architectural practice with more than 65 years of expertise in the design and realization of buildings and masterplans. The office is led by his father Gunter Henn and thirteen partners with branches in Munich, Berlin, Beijing, and Shanghai.



# Chuck Hoberman

Nowhere do the disciplines of art, architecture, and engineering fuse as seamlessly as in the work of inventor Chuck Hoberman, internationally known for his "transformable structures." Through his products, patents, and structures, Hoberman demonstrates how objects can be foldable, retractable, or shape-shifting. Hoberman is the founder of Hoberman Associates, a multidisciplinary practice that utilizes transformable principles for a wide range of applications including dynamic architecture, transformable stage sets, consumer products, deployable shelters, and structures for aerospace.

Examples of his commissioned work include the transforming video screen for the U2 360° world tour (2009–2011), the Hoberman Arch in Salt Lake City, installed at Medals Plaza for the Winter Olympic Games (2002), a retractable dome for the World's Fair in Hanover, Germany (2000), and 'Emergent Surface' (2008) shown at The Museum of Modern Art in New York. Hoberman has over twenty patents for his transformable inventions, and has won numerous awards for his designs. He is a Visiting Scholar at Harvard University's Wyss Institute for Biologically Inspired Engineering, and teaches at the GSD.



## Eric Höweler

Eric Höweler, AIA, LEED AP is currently an Assistant Professor at the GSD and a co-founder of Höweler + Yoon Architecture LLP, a multidisciplinary practice working between architecture, public space, and media. Höweler + Yoon Architecture was the winner of the 2012 Audi Urban Future Award, with their proposal for the Boswash Shareway 2030, a comprehensive proposal for the future of urban mobility in the Boston-Washington urbanized corridor. Höweler is a registered architect in state of New York, Massachusetts, Virginia, New Jersey, Rhode Island, and the District of Columbia. He is the co-author of Expanded Practice: Höweler + Yoon Architecture / MY Studio (2009, Princeton Architectural Press), and author of Skyscraper: Vertical Now (2003, Rizzoli/Universe). He received a Bachelor of Architecture and a Master of Architecture from Cornell University.



## Mariana Ibañez

Mariana Ibañez is an architect in Argentina, and Associate Professor at the GSD, where she is part of the Responsive Environments and Artifacts Lab. She is also on the awards jury of the Boston Society of Architects and the MacDowell Colony. Ibañez received her MArch from the Architectural Association in London, before joining the offices of Arup Advanced Geometry Unit and Zaha Hadid Architects. As a principal of IK Studio, Ibañez continues her thesis interests in adaptable urban organizations and tectonics as the synthesis between architecture, computation, and emergent technologies for design and fabrication.

As an academic and editor, Ibañez's research is in the disciplinary core of architecture and its growing periphery. Her recent publication by Actar D, *Paradigms in Computing*, is an inquiry into design agency and revitalizing its scope of work. Her theater work continues with the collaboration with Grace Kelly Jazz, The Dufala Brothers, and Opera Philadelphia, as well as exhibiting at the MoMA, Milan Fashion Week, and National Art Museum in Beijing.



# Florian Idenburg

Florian Idenberg is an Associate Professor of Practice at the GSD and a licensed architect with 17 years of professional experience. In 2008, he founded SO-IL with Jing Liu, an office that focuses on the development of new ideas and their viability in the world. Idenburg has lead the firm to become one of the most recognized emerging practices in recent years around the world. Prior to this, Idenburg served as Associate at SANAA—the practice of Pritzker Prize winners Kazuyo Sejima and Ryue Nishizawa—where he was charged with the design and realization of two internationally acclaimed museums (the Glass Pavilion at the Toledo Museum of Art and the New Museum of Contemporary Art in New York). He is a strong team player able to tackle complicated projects in a collaborative and balanced manner. Idenburg recognizes the merit of combining practice with academia, allowing cross-pollination to stimulate innovation. Through his endeavors he has become a recognized voice in both worlds.

Idenburg is the 2010 recipient of the Charlotte Köhler Prize, an award from the Prince Bernhard Royal Cultural Fund in the Netherlands for exceptional talent, and a 2014 finalist for the Prix de Rome.



## Hanif Kara

Hanif Kara combines practice with teaching, currently appointed as Professor in Practice of Architectural Technology at the GSD. He is a fellow of RAE, RIBA, ICE, IStructE, RSA, on the board of trustees of the Architecture Foundation, formerly a CABE Commissioner, and served as a member of the Design for London Advisory Group to the Mayor of London. As Design Director and co-founder of AKT II, his particular 'design-led' approach and interest in innovative form, material uses, and complex analysis methods have allowed him to work on numerous award-winning, pioneering projects.

Projects include; Peckham Library, MASDAR City, Pheano Science Centre, British Pavilion Shanghai Expo, and Bloomberg Headquarters London. He has also widely published works including Design Engineering (2008), a retrospective of AKT's first decade; Interdisciplinary Design: New Lessons from Architecture and Engineering (2012, co-published with Harvard); and most recently edited deliverance of Design—making, mending and revitalizing structures, a look at the works of AKT II from 1996–2016.



Sheila Kennedy MArch '81

Sheila Kennedy, FAIA is an American architect, innovator, and Professor of Architecture at MIT. She is a Principal of KVA MATx, an interdisciplinary practice that is widely recognized for innovation in architecture and explorations of material culture. Work at KVA includes the Soft House, a new model for low carbon living in Germany; the Public Ferry Terminal in Manhattan, an interactive, environmental sensing architecture and; the Tozzer Anthropology Building at Harvard University, which explores digital brick. Kennedy is the recipient of the Innovator Award and the 2014 Rupp Prize, one of the most significant awards for a practitioner in architecture.

Kennedy's projects at KVA Matx have received many design awards and have been exhibited at the US Pavilion of the Venice Biennale, the International Bau Austellung Hamburg, the Rotterdam Biennial, the Vitra Design Museum, MoMA, and the TED conference. Kennedy's work is widely published and she has been invited to share her work at the United Nations, on National Public Radio, BBC World News, CBS Spotlight on Design, The Discovery Channel, and CNN Principal Voices.



### Jan Knippers

Jan Knippers, Prof. Dr.-Ing., specializes in complex parametrical generated structures for roofs and facades, as well as the use of innovative materials such as glass-fibre reinforced polymers. Since 2000, Knippers is head of the Institute for Building Structures and Structural Design (itke) at the Faculty for Architecture and Urban Design at the University of Stuttgart and involved in many research projects on fiber based materials and biomimetics in architecture. He is also partner and co-founder of Knippers Helbig Advanced Engineering with offices in Stuttgart, New York City (since 2009), and Berlin (since 2014). The focus of their work is on efficient structural design for international and architecturally demanding projects. Knippers completed his studies of civil engineering at the Technical University of Berlin in 1992 with the award of a PhD.



### Inese Lowenstein

Inese Lowenstein is leading the Display Materials business unit that belongs to Merck's Performance Materials business sector. Being the global market and technology leader in liquid crystal mixtures, Display Materials stands for innovation, customer proximity, and superior profitability. From 2012 to 2014, Lowenstein was Head of Merck's Pigments & Cosmetics business unit. She joined Performance Materials from Merck Millipore, where she was Marketing Director for Downstream Processing. Prior to that, she held the same position within Biosafety. Before joining Millipore in 2003. Lowenstein held various management positions at two biotechnology companies in Massachusetts and California since 1999. From 1992 to 1996, she had marketing and sales responsibility at an energy supply company in Riga, Latvia. Lowenstein is native of Latvia. She studied Business and Engineering at Riga Technical University. Additionally, she earned an MBA from the Walter A. Haas School of Business, University of California in Berkeley in 1998.



# Michael Meredith

Michael Meredith is a principal of MOS
Architects and an Assistant Professor at
Princeton University School of Architecture. MOS
is an internationally recognized architecture
practice based in New York. His writing has
appeared in Artforum, LOG, Perspecta, Praxis,
Domus, and Harvard Design Magazine. Meredith
previously taught at the GSD, the University of
Toronto, and the University of Michigan, where he
was awarded the Muschenheim Fellowship.



Kiel Moe MDesS '03

Kiel Moe, AIA, FAAR, is a registered practicing architect and Associate Professor of Architecture & Energy in the Department of Architecture at the GSD where he is Co-Director of both the MDes design research program and the Energy, Environments, & Design research lab. He has authored several book publications, including most recently *Insulating Modernism: Isolated and Nonisolated Thermodynamics in Architecture* (2014, Birkhauser).



### Mohsen Mostafavi

Mohsen Mostafavi, architect and educator, is the Dean of the Harvard University Graduate School of Design and the Alexander and Victoria Wiley Professor of Design. He was formerly Dean of the College of Architecture, Art, and Planning at Cornell University and Chairman of the Architectural Association School of Architecture in London, He has taught at numerous institutions including the University of Pennsylvania, University of Cambridge, and the Frankfurt Academy of Fine Arts (Städelschule). Dean Mostafavi serves on the steering committee of the Aga Khan Award for Architecture, and has served on the design committees of the London Development Agency (LDA) and the RIBA Gold Medal. He is a consultant on a number of international architectural and urban projects. His publications include On Weathering: The Life of Buildings in Time (coauthored 1993), which received the American Institute of Architects prize for writing on architectural theory; Delayed Space (co-authored 1994); Approximations (2002); Surface Architecture (2002); Logique Visuelle (2003); Landscape Urbanism: A Manual for the Machinic Landscape (2004); Structure as Space (2006); Ecological Urbanism (co-edited 2010 and recently translated into Chinese, Portuguese, and Spanish); Implicate & Explicate (2011); Louis Vuitton: Architecture and Interiors (2011); In the Life of Cities (2012); Instigations: Engaging Architecture, Landscape and the City (co-edited 2012); Architecture Is Life (2013): and Nicholas Hawksmoor: The London Churches (2015).



### Monica Ponce de Leon MAUD '91

Monica Ponce de Leon, AIA, was appointed Dean and Eliel Saarinen Collegiate Professor of Architecture and Urban Planning of University of Michigan's Taubman College of Architecture and Urban Planning in September 2008. In 1991, she co-founded Office dA and in 2011 launched her own design practice: Monica Ponce de Leon Studio. Ponce de Leon received a Bachelor of Architecture degree in 1989 from the University of Miami and a Master of Architecture in Urban Design degree from the GSD in 1991. She joined the GSD faculty in 1996, where she was a Professor of Architecture and the Director of the Digital Lab. She has received honors from the Architectural League of New York, the American Academy of Arts and Letters, the Smithsonian Institution's Cooper- Hewitt National Design Museum, and the United States Artists. Her practice has received over 60 design awards.



### Terence Riley

Terence Riley is a founding partner of K/R (Keenen/ Riley, 1984), an architectural studio well-known for its designs for art museums, galleries, artists, and collectors. Currently, K/R has five projects under way in the Miami Design District, as well as other projects in Miami Beach, Coconut Grove, New York City, and elsewhere. In addition to designing buildings and interiors, K/R is providing master planning and programming for the Museum of Art, Design and the Environment (Murcia, Spain), the Hangzhou Urban Cultural Center (Hangzhou, China), and the Oficina Francisco Brennand (Recife, Brazil). He was the Chief Curator of the 2011 Shenzhen-Hong Kong Biennale of Urbanism/Architecture. Riley served as the Philip Johnson Chief Curator for Architecture and Design at the Museum of Modern Art (1991-2006), where he curated critical exhibitions on both historical figures. Frank Lloyd Wright and Mies van der Rohe, as well as contemporary architects: Rem Koolhaas, Jacques Herzog, Pierre DeMeuron, and Bernard Tschumi. From 2006–2010, Riley was director and design consultant for the Miami Art Museum (MAM), leading the institution through a transformative process of planning and designing a new waterfront facility.



### Matthias Schuler

Matthias Schuler is one of the managing directors of TRANSSOLAR Energietechnik in Stuttgart. Born 1958, he is educated as a mechanical engineer at University Stuttgart. In 1992, he founded the company TRANSSOLAR Climate Engineering in Stuttgart. TRANSSOLAR's focus is on new energy saving and comfort optimizing strategies by an integral approach in building and urban design. Presently—with 50 employees in Stuttgart, Munich, Paris, and New York-Schuler works on national and international projects with architects like Kazuyo Sejima, Frank O. Gehry, Steven Holl, Peter Zumthor, and Renzo Piano. Since 2001, he has been teaching as a Visiting Professor at the GSD; he was Professor in Practice on Environmental Technologies 2008-2014.



### Dennis R. Shelden

Dennis R. Shelden, AIA, Ph.D. is a Founder and Director of Global Services for Gehry Technologies. a building industry technology company formed in 2001 by the R&D team of Frank Gehry Partners, and acquired by Trimble Navigation in 2014. He joined Gehry Partners in 1997 and became Director of Computing and Research in 2000. He has previously performed structural engineering, energy systems, and technology development work at firms including: Arup, Consultants' Computation Bureau, and Cyra Systems. He is concurrently an Associate Professor of the Practice in Computation and Design at MIT, and holds a B.S. in Architectural Design, an M.S. in Civil and Environmental Engineering, and a Ph.D. in Computation and Architectural Design from MIT. He is a licensed Architect in the State of California.



### Marc Simmons

Marc Simmons is a founding partner of Front Inc., a design and façade engineering firm that engages in numerous aspects of the architectural design industry, including façade consulting, system design, energy analysis, procurement and project management services, as well as the authorship of its own design work. Additionally, he is the Thomas W. Ventulett, III Distinguished Chair in Architectural Design at the Georgia Institute of Technology. He has also formerly taught at the Princeton University School of Architecture and Columbia University School of Architecture, and holds both Bachelor of Environmental Studies and professional Bachelor of Architecture degrees from the University of Waterloo, Canada. His specialist façade knowledge and experience in custom curtain wall and hybrid cladding system design is built upon previous work at Foster and Partners, Meinhardt Façade Technology, and the structural glass & façade consulting group at Dewhurst Macfarlane & Partners in New York.

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### Skylar Tibbits

Skylar Tibbits is the director of the Self-Assembly Lab housed at MIT's International Design Center. The Self-Assembly Lab focuses on self-assembly and programmable material technologies for novel manufacturing, products and construction processes. Tibbits is faculty in the Department of Architecture where he teaches graduate and undergraduate design studios and co-teaches "How to Make (Almost) Anything," a seminar at MIT's Media Lab with Neil Gershenfeld. Tibbits was recently awarded a 2014 Inaugural WIRED Fellowship, a 2014 Gifted Citizen award, a Fast Company Innovation by Design Award in 2013, a 2013 Architectural League Prize, The Next Idea Award at Ars Electronica 2013, the Visionary Innovation Award at the Manufacturing Leadership Summit, a 2012 TED Senior Fellowship and was named a Revolutionary Mind in SEED Magazine's 2008 Design Issue.

Tibbits is currently the Editor-In-Chief of the *3D Printing and Additive Manufacturing Journal*. He is also the founder and principal of a multidisciplinary design practice founded in 2007, SJET LLC.

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