



TOMMY ZAKRZEWSKI  
PhD, BEMP, CEM, CMVP, WELL  
AP, LEED O+M, LEED AP BD+C,  
UN CC:Learn Accredited  
Climate Change Teacher,  
Assoc. AIA  
**PRINCIPAL, DIRECTOR OF  
BUILDING ENGINEERING PHYSICS**

“A low carbon future is forged by integrative architecture and engineering. Our purpose is to reimagine the built environment as an opportunity to be regenerative and adaptive for a more sustainable tomorrow.”

As Director of Building Engineering Physics, Dr. Tommy Zakrzewski leads HKS in the integration of optimizing the physical characteristics of buildings and their systems to balance energy demands, exploit natural energy sources and minimize the reliance on carbon-based energy sources as a primary practice focus. As a subject matter expert for integrated, high-performance sustainable design, he provides technical leadership, leads sustainable design research, and informs strategic design decisions through building performance simulation and detailed engineering analysis at all stages of design including continuous occupancy evaluations. He has a track record of leading energy focused projects, globally, with deep dives in computational behavioral design sciences (modeling and analysis) while providing for creative and holistic approaches to sustainable, resilient and well-being design. Additionally, he helps to create, advance, and manage annual Environmental, Social & Governance objectives, key results and actions at HKS. Dr. Zakrzewski completed his Master of Architectural Engineering and Ph.D. in Civil Engineering at the Illinois Institute of Technology advancing design sizing and performance optimization methods for building integrated thermal and electrical energy generation systems. Furthermore, Dr. Zakrzewski is an Adjunct Professor in the Department of Civil, Architectural, and Environmental Engineering at the Illinois Institute of Technology (Armour College of Engineering).

## EXPERIENCE

01/2019 – Present	Adjunct Professor, <i>Illinois Institute of Technology</i> (10 W 35 <sup>th</sup> Street, Chicago, IL 60616)
10/2016 – Present	Director of Building Engineering Physics, <i>HKS, Inc.</i> (125 South Clark St, Chicago, IL 60603)
05/2012 – 10/2016	Senior Energy Analyst, <i>BuroHappold Engineering</i> (801 West Adams St, Chicago, IL 60607)
07/2010 – 04/2012	Building Analyst, <i>Building Momentum Group</i> (4849 South Austin, Chicago, IL 60638)
02/2010 – 06/2010	Energy Engineer, <i>Goby</i> (211 West Wacker Drive, Chicago, IL 60606)
08/2007 – 01/2010	Acoustics Consultant, <i>PMK Consultants</i> (1074 West Taylor St, Chicago, IL 60607)

## EDUCATION

01/2011 – 07/2017	Doctor of Philosophy (Ph.D.) of Civil Engineering, <i>Illinois Institute of Technology</i>
08/2007 – 05/2010	Masters (MAS) of Architectural Engineering, <i>Illinois Institute of Technology</i>
01/2005 – 05/2007	Bachelor of Arts (B.A), Audio Arts and Acoustics, <i>Columbia College Chicago</i>

## PUBLICATIONS

11/2023	Vitro Architectural Glass – COTE Award Winning UC San Diego’s Living Learning Neighborhood taps Solarban 70 Glass for Daylighting, Views and Occupant Comfort
10/2023	Fall Issue of Urban Land Urban Land Magazine – Practical Decarbonization
08/2023	Architectural Record - Design for Extreme Heat
07/2023	How LEED Sustainable Site Credits Create Health and Well-being at UC San Diego
11/2022	Impact of technology Network Design on Building Sustainability: How a Fiber to the Edge network can reduce carbon footprint, CORNING

10/2022	Designing for Health: WELL-certified Chicago Living Lab, HKS Architects
11/2020	Conquering Carbon, Façade designs are key to meeting stringent New York City carbon reduction requirements, Ornamental Metal Institute of New York
09/2020	A Common Language to Design Carbon Neutral Projects by 2030, 2020 Building Performance Analysis Conference and SimBuild
12/2019	Assessing Building Envelope Performance and Resiliency with Forcing Climate Projections, 2019 ASHRAE Buildings XIV International Conference
01/2019	Historic Building, High-tech HVAC, Is displacement ventilation an option for you? How one firm made it work, Buildings
09/2018	Building Integrated Cogeneration System Design Sizing and Analysis for Climate Disruption, 2018 Building Performance Analysis Conference and SimBuild
08/2018	Living and Learning Green: Can a university campus reach net zero by 2025?, College Planning & Management
07/2017	Advancing Design Sizing and Performance Optimization Methods for Building Integrated Thermal and Electrical Energy Generation Systems, <i>Illinois Institute of Technology</i>
01/2017	Updated Generalized Natural Gas Reciprocating Engine Part-load Performance Curves for Cogeneration Applications, <i>Science and Technology for the Built Environment</i>
08/2012	The Renovation and Rehabilitation of Historic Building Envelopes: An In-Depth Building Performance and Thermal Comfort Analysis, 2012 Building Performance Analysis Conference and SimBuild

## ACCREDITATIONS

UN CC:Learn Accredited Climate Change Teacher  
 Building Energy Modeling Professional (BEMP) – ASHRAE  
 Certified Measurement & Verification Professional (CMVP) – Association of Energy Engineers  
 Certified Energy Manager (CEM) – Association of Energy Engineers  
 LEED AP Building Design + Construction (LEED AP BD+C) – GBCI  
 LEED AP Operations + Maintenance (LEED AP O+M) – GBCI  
 WELL Accredited Professional (WELL AP) - GBCI  
 Associate AIA (Assoc. AIA) – American Institute of Architects

## PROFESSIONAL ASSOCIATIONS

ASHRAE (Associate Member)  
 International Building Performance Simulation Association (IBPSA-USA)  
 Chicago Chapter of IBPSA (Board Member)  
 Association of Energy Engineers (AEE)  
 American Institute of Architects (AIA)  
 USGBC - ILLINOIS Green Alliance

## REVIEWER

2023 IIT IPRO Program (Interprofessional Projects Program) Judge  
 2018 COTE Top Ten AIA Technical Reviewer (ENERGY)  
 2017 COTE Top Ten AIA Technical Reviewer (ENERGY)

## AWARDS

2023 APOLAN Evangelist Award – February 2023  
 2019 ILLUMINATION AWARD – MERIT AWARD RECIPIENT (HKS Chicago Living Lab)  
 2016 Outstanding Volunteer Award – November 2016, USGBC-Illinois

## MENTORSHIP

2023 U.S. Department of Energy (DOE) Solar Decathlon Advisor & Mentor  
 2022 U.S. Department of Energy (DOE) Solar Decathlon Advisor & Mentor  
 2020 U.S. Department of Energy (DOE) Solar District Cup Advisor & Mentor  
 2021 U.S. Department of Energy (DOE) Solar District Cup Advisor & Mentor

## SPEAKING ENGAGEMENTS

### **Legat Architects Biophilic Design Think Tank**

Relationship between biophilic design and workplace productivity  
 July 28<sup>th</sup>, 2016 (30-minute presentation, 75+ People)

### **Cushman and Wakefield – PDS Development Service Monthly Call**

Smart Buildings – “Introduction to Smart Buildings”  
 October 20<sup>th</sup>, 2017 (60-minute presentation, 50+ People)

### **AIA Chicago’s Environment KC, 2030 Working Group**

The role of energy modeling in the design process and AIA 2030 Commitment  
 11/06/2017

November 6<sup>th</sup>, 2017 (60-minute presentation, 40+ People)

**Energy Innovators Forum, DOE and Seventhwave**

This event will be new opportunity to share energy efficiency success stories and proven strategies for overcoming common barriers and saving money and resources.

February 28<sup>th</sup>, 2018 (45 min moderated panel presentation and discussion, 60+ People)

**IFMA Facility Fusion Conference 2018**

Displacement Ventilation Workplace Innovation: Improving Indoor Environmental Quality and Occupant Wellbeing

March 21<sup>st</sup>, 2018 (60-minute presentation, 50+ People)

**NEOCON 2018**

LEEDING & Living WELL: A case study in delivering a high-performance workplace

June 12<sup>th</sup>, 2018 (60-minute presentation, 50+ People)

**FEFPA Summer Conference 2018**

A Living and Learning Neighborhood Community

July 10<sup>th</sup>, 2018 (60-minute presentation, 40+ People)

**2018 Building Performance Analysis Conference and SimBuild**

Building Integrated Cogeneration System Design Sizing and Analysis for Climate Disruption

September 27<sup>th</sup>, 2018 (30-minute presentation, 50+ People)

**2018 GreenBuild Conference**

WELL and LEED v4 Drives Displacement Ventilation Workplace IEQ Innovation

November 16<sup>th</sup>, 2018 (60-minute presentation, 100+ People)

**2019 Energy Harvesting from Infrastructure and Ocean Systems (EHIOS) Conference**

Kklai-muht CHanj (Climate Change)

November 4<sup>th</sup>, 2019 (60-minute Keynote presentation, 50+ People)

**2020 USGBC Healthy Economy Forum (HEF) Forum**

Reboot Readiness & Resilience

November 4<sup>th</sup>, 2020 (90-minute Presentation and Panel Discussion, 1200+ People)

**2020 Building Performance Analysis Conference and SimBuild**

A Common Language to Design Carbon Neutral Projects by 2030

September 29<sup>th</sup>, 2020 (30-minute presentation, 50+ People)

**2020 Building Performance Analysis Conference and SimBuild**

2030 Building Simulation Competency: Crowded Curricula, Demanding Profession

September 29<sup>th</sup>, 2020 (60-minute presentation, 100+ People)

**2021 7x24 Exchange Lone Star Chapter Spring Sustainability Event**

Decarbonizing Data Centers through Performative Building Enclosure Design

March 24<sup>th</sup>, 2021 (50-minute presentation, 150+ People)

**2021 REJournals National Tech in Commercial Real Estate Virtual Summit**

Developing A Smart Building

April 7<sup>th</sup>, 2021 (50-minute presentation and Panel Discussion, 50+ People)

**2021 Corning Smart Building Summit II**

Smart Buildings

June 8<sup>th</sup>, 2021 (60-minute presentation and Panel Discussion, 100+ People)

**Building Innovation Hub and Clark Construction Group, What Will It Take? The Path to 2050 and Carbon-Free Buildings**

Designing Carbon-free Buildings

June 8<sup>th</sup>, 2021 (60-minute presentation and Panel Discussion, 50+ People)

**2022 PEG Companies Annual Investor Meeting**

Environmental Social Governance

March 24<sup>th</sup>, 2022 (15-minute presentation, 100+ People)

**CORNING Smart Building Emerging Technologies Summit**

Networks and Sustainability

November 3<sup>rd</sup>, 2022 (60-minute presentation, 50+ People)

**BICSI 2023 ICT Direct Winter Conference**

Building De-carbonization Using a Fiber-to-the-Edge Network

January 20<sup>th</sup>, 2023 (60-minute presentation, 50+ People)

**CORNING GKO Training IBN Session: Industry Presentation**

Impact of Technology Design on Building Sustainability  
January 30<sup>th</sup>, 2023 (60-minute presentation, 100+ People)

**International Well Building Institute Panel Event**

Investing in Health Pays Back  
March 2<sup>nd</sup>, 2023 (60-minute presentation and Panel Discussion, 150+ People)

**AIA A'23 Conference on Architecture**

Performing Beautifully  
June 8<sup>th</sup>, 2023 (90-minute presentation and Panel Discussion, 150+ People)

**ASHRAE Decarbonization Conference for the Built Environment**

Decarbonizing Data Centers through Performative Building Enclosure Design  
October 24<sup>th</sup>, 2023 (30-minute presentation, 100+ People)

**Corning Power Hour**

Becoming a Sustainable, Smart Building  
December 6<sup>th</sup>, 2023 (60-minute presentation and Panel Discussion, 250+ People)

**GUEST LECTURER**

**UC San Diego USP-169 Introduction to Green Building**

UCSD Climate Resiliency  
November 20<sup>th</sup>, 2019 (60-minute presentation)

**UC San Diego USP-169 Introduction to Green Building**

Integrated Design  
October 22<sup>nd</sup>, 2020 (60-minute presentation)

**CodeRVA Regional High School (Architecture Club Meeting)**

Sustainability and the Built Environment  
February 3<sup>rd</sup>, 2021 (60-minute presentation, 15 People)

**Dallas SISD (City Lab High School)**

Adaptive Reuse Panel Discussion  
February 10<sup>th</sup>, 2021 (60-minute presentation, 50+ People)

**University of Cincinnati SAID Sustainability Initiative**

Decarbonizing Architecture  
July 13<sup>th</sup>, 2021 (60-minute presentation, 15 People)