

*NSF NANOSCALE SCIENCE AND ENGINEERING GRANTEES CONFERENCE:
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**“Molecules by (Human-Centered) Design:
Applying Design Thinking to AI and Chemistry”**

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Bio: Rachel Switzky is the inaugural director of the Siebel Center for Design at the University of Illinois at Urbana-Champaign, a position she has held since 2018. The Siebel Center for Design is dedicated to practicing, modeling, and teaching design thinking, leveraging human-centered design principles to reimagine the campus, community, and the world at large. She also leads the education and outreach work at the Molecule Maker Lab Institute, an NSF-funded AI Institute based at the University of Illinois.

Before assuming her current role, Rachel spent over two decades as a global design leader, collaborating with Fortune 100 companies. Most recently, she served as an Executive Director at IDEO, the company that pioneered the concept of design thinking. Throughout the last decade in this capacity, Rachel aided teams in envisioning futures and translating those visions into tangible actions, with a particular emphasis on digital design, emerging technologies, and achieving impact at scale.

Abstract: I will share how design thinking transforms both molecule discovery and education in AI-driven chemistry. Through the Molecule Maker Lab Institute, we are reimagining how chemistry and AI are taught at all levels using digital tools that provide an interactive, accessible platform for learning. This talk will highlight how design thinking—emphasizing empathy, prototyping, and iteration—enriches our approach, empowering students and researchers to engage deeply with molecular science. Key examples will showcase how human-centered design makes complex concepts more approachable, creating a more inclusive, impactful learning environment in chemistry.