



Din Catic is currently in the business development team in the Global Centre of Competence for Cities at Siemens Corporation in London, UK. He is managing specific KPIs for worldwide sales opportunities and conducting urban market intelligence. He studied materials engineering at UCLA and business innovation at Birkbeck University of London. His dissertation, "Entrepreneurship in the Circular Economy: Towards innovative business models" focused on new business models that companies and startups can adopt in their transition to a circular economy. His interests include cleantech, smart cities, and creating lasting impacts on energy, food, and water through technology management and sustainable design.

### **The Crystal**

Din will present The Crystal building case study as a role model for sustainable intelligent building focusing on: what it is, why it is sustainable, and what it is used for. It represents a technology and building design showcase that received both LEED Platinum and BREEAM Outstanding certification. In closing Din will present current limitations and a vision for the city of the future.



Dr. Renate Fruchter is the founding director of the PBL Lab and collaboration thrust leader at CIFE in the Civil and Environmental Engineering Department at Stanford University. Her R&D&Edu focuses on collaboration technologies in support of cross-disciplinary, geographically distributed teamwork in education and corporate settings; interactive physical and virtual work spaces, the impact of technology on learning, engagement, knowledge work productivity, team dynamics, and assessment. She is the leader and developer of the innovative "Architecture, Engineering, Construction (AEC) Global Teamwork" course launched in 1993 engaging university and industry partners worldwide. Her current R&D projects focus on: (1) uncovering cognitive demands on global learners and knowledge workers, engagement, well-being and knowledge work productivity; and (2) monitoring, modeling, simulating, and visualizing occupant and building cooperative sustainable performance. She received her Engineering Diploma from the Civil Engineering Institute, Bucharest, Romania in 1981; MSc in 1986 and Ph.D. in 1990 from Technion Israel Institute of Technology, and Honorary Doctorate in 2011 from AAU Denmark.

### **Can We Talk?**

#### **Harmonizing Occupant Well-being and Sustainable Building Performance**

Knowledge workers are the greatest asset of any corporation. Environmental factors like air quality and temperature impact knowledge workers' well-being, and influence concentration and motivation to work. Built environment research focuses on occupant comfort which typically prioritizes tangible factors, such as temperature, over imperceptible yet impactful factors like indoor air carbon dioxide (CO<sub>2</sub>) concentration levels. Well-being offers a comprehensive perspective that includes occupants' comfort and psycho-physiological states. The accuracy of current models to predict building performance and occupant well-being is compromised by assumptions and simplifications leading to discrepancies between model results and measured performance. What can we learn by monitoring, modeling, analyzing, and visualizing the dynamic interaction between building performance and occupant well-being?