
Christoph F. Reinhart

PROFESSOR



Massachusetts Institute of Technology

77 MASSACHUSETTS AVE,
RM 5-418, CAMBRIDGE,
MA 02139, USA

• TEL. (617) 253-7714
• FAX. (617) 253-6152
• creinhart@mit.edu

• www.mit.edu/SustainableDesignLab
• www.solemma.com
• <https://buildingtechnologypress.com>

EDUCATION

- 2001 **Dr. Ing.** Architecture, Technical University of Karlsruhe, Germany
Dissertation: *Daylight Availability and Manual Lighting Control in Office Buildings*
- 1997 **Dipl.-Phys.**, Albert-Ludwigs Universität, Freiburg, Germany
M.Sc. Physics, Simon Fraser University, Vancouver, Canada

ACADEMIC POSITIONS HELD

- since 2022 **Inaugural Alan and Terri Spoon Chair of Architecture and Climate**
Massachusetts Institute of Technology, Department of Architecture
- since 2017 **Professor in Building Technology**
Massachusetts Institute of Technology, Department of Architecture
- 2017 – 2024 **Director Building Technology Program**
Massachusetts Institute of Technology, Department of Architecture
- 2012 – 2017 **Associate Professor in Building Technology (with tenure)**
Massachusetts Institute of Technology, Department of Architecture
- 2008 – 2011 **Associate Professor of Architectural Technology**
Harvard University, Graduate School of Design
- 2005 – 2007 **Adjunct Professor**
McGill University, School of Architecture

NON ACADEMIC POSITIONS

- Since 2012 **Solemma LLC** – Managing Member
Harvard University spinoff: Creators of the ClimateStudio environmental design tool; ClimateStudio is the industry-standard for daylighting analysis and taught in over 400 schools of architecture worldwide, (www.solemma.com)
- 2013 – 2021 **mapdwell LLC** – Founding Partner and Strategic Development Advisor
MIT spinoff: Developer and distributor of urban solar mapping tools; mapdwell was merged into Palmetto Clean Technology in 2021 (www.mapdwell.com)
- 2001 – 2008 **Research Officer (staff scientist)**
National Research Council Canada

RESEARCH PROJECTS

- Since 2026 Towards coordinated and affordable building-grid operation and planning, PI
MIT Future Energy Systems Center, \$300,000 over 2 yr
- Since 2025 Massachusetts Building Sector Model, Policy Analysis and Electric Grid Impact, PI
MA Executive Office of Energy and Environmental Affairs, \$200,000 over 1 yr
- Since 2024 Building Investment Roadmap for Energy and Climate Resilience, PI
MIT Lincoln Laboratory, \$200,000 over 2 yr
- 2024 – 2025 An Equitable, Affordable Resilient Nationwide Energy System Transition
(EARNEST), Co-PI
US Department of Energy, \$85,000 over 1 yr
- 2019 – 2024 MIT Portugal Program Faculty Lead
MIT Portugal Program Seed Grant; \$450,000 over 5 yr
- 2023 – 2024 Energy, Equity and Design for Mexico City’s Neighborhoods, Co-PI with R Segal
Norman B. Leventhal Center for Advanced Urbanism; \$75,000 over 1 yr
- 2022 – 2024 Development of a Building Retrofit Adoption Model, PI
MIT Energy Initiative Future Low Carbon Center; \$225,000 over 2 yr
- 2022 – 2024 Synthetic electricity and gas load profiles for buildings, PI
Department of Defense with MIT Lincoln Laboratories; \$250,000 over 2 yr
- 2020 – 2023 C-Tech CLIMATE DRIVEN TECHNOLOGIES FOR LOW CARBON CITIES, PI
MIT Portugal Program; \$900,000 over 3 yr
- 2020 – 2022 Towards Zero-Emissions Neighborhoods: A Novel Building-Grid Optimization
Framework, Co-PI with Audun Botterud
MIT Energy Initiative; \$150,000 over 2 yr
- 2019 – 2021 FOOD FOR THOUGHT, PI
Center for Complex Engineering Systems (CCES) at KACST and MIT; \$330,000 over 2 yr
- 2019 – 2021 DEVELOPMENT OF A CO2 BUILDING PORTFOLIO MANAGER, PI
Shell Germany; \$120,000 over 1 yr
- 2018 – 2020 URBAN FOOD ANALYSIS, PI
Arup Global Research Challenge; \$58,000 over 2 yr
- 2017 – 2020 ENERGY BAZAR, PI
Exelon Corporation; \$400,000 over 3 years
- 2002 – 2020 DAYSIM, PI
Main developer of the daylighting design tool DAYSIM. (www.daysim.com); PI
- 2017 – 2019 DECARBONIZED ENERGY SYSTEMS FOR NEW VOLPE CENTER, Co-PI
*MIT Environmental Solutions Initiative; Seed grant over \$150,000 over 2 years; Co-PI with Prof Les
Norford (MIT Architecture) and David Hsu (MIT Urban Planning)*
- 2016 – 2019 STRATEGIC RESEARCH, PI
Behnisch Architekten; \$105,000 over 3 years
- 2017 – 2019 WATER| ENERGY | FOOD, PI
Center for Complex Engineering Systems (CCES) at KACST and MIT; \$330,000 over 2 yr
- 2017 – 2018 URBAN PERSONAS, PI
Philips Lighting; \$125,000 over 1 year
- 2014 – 2018 SUSCITY: URBAN DATA DRIVEN MODELS FOR CREATIVE AND
RESOURCEFUL URBAN TRANSITIONS, CO-PI
*MIT Portugal Program \$395,000 over 4 years; Co-PI with Prof John Fernandez, Leon Glicksman, Marta
Gonzales, Kent Larson and Richard de Neufville*

- 2015 – 2017 **RIYADH ENERGY STUDY, Co-PI**
Center for Complex Engineering Systems (CCES) at KACST and MIT; \$450,000 over 2 years; Co-PI with Prof Marta Gonzales (MIT CEE)
- 2014 – 2017 **MIT – MASDAR INSTITUTE SIGNATURE PROJECT: LINKING SENSOR NETWORKS TO URBAN ENERGY MODELS, Co-PI**
Masdar Institute \$1,800,000 over 3 years; Co-PIs with Prof Les Norford and Steven Leeb (MIT EE)
- 2013 – 2016 **KUWAIT SIGNATURE PROJECT - ENHANCED OPERATIONAL ENERGY EFFICIENCY AND LIFE CYCLE PERFORMANCE OF BUILDINGS AND NEIGHBORHOODS IN KUWAIT, Co-PI**
Government of Kuwait \$3,700,000 over 3 yr for MIT; The project involve faculty in several MIT Department and is led by Prof Oral Buyukozturk (MIT Civil Engineering)
- 2014 – 2016 **BOSTON ENRGY MODEL, PI**
Massachusetts Clean Energy Center and the Boston Redevelopment Authority, \$75,000 over 1 yr; Development of a city-wide energy model for the City of Boston, PI
- 2013 – 2015 **MIT-KACST - CITYSCHEMA, Co-PI**
Center for Complex Engineering Systems (CCES) at KACST and MIT; \$450,000 over 2 yrs; Co-PI with Kent Larson (MIT Media Lab)
- 2012 – 2014 **MIT ENERGY INITIATIVE – URBAN MODELING INITIATIVE, PI**
MITEI and United Technology Corporation \$150,000 over 2 years; Co-PI with Prof Les Norford
- 2010 – 2014 **EFRI-SEED: CREATING OPPORTUNITIES FOR ADAPTATION BASED ON PULSE (POPULATION IN URBAN LANDSCAPE FOR SUSTAINABLE BUILT ENVIRONMENT), Co-PI**
National Science Foundation \$2,000,000 over 4 year; Co-PI with Prof Jelena Srebric (Penn State) and Prof Jack Spengler (Harvard School of Public Health).
- 2012 **US DOE – GPIC HUB- DEVELOPMENT OF A DAYSIM API, PI**
US-DOE and GPIC \$75,000 over 1 year; PI
- 2010 – 2011 **DEVELOPMENT OF A CERMAIC SHADING SYSTEM, Co-PI**
ASCER (Tiles of Spain) \$100,000 over 1 yr; Co-PI with Prof Martin Bechthold (Harvard GSD)
- 2009 – 2011 **THE USE OF BUILDING ENERGY SIMULATIONS DURING DESIGN, CONSTRUCTION AND OPERATION – AN OWNER’S PERSPECTIVE, PI**
Development of Energy Modeling Guidelines for Harvard University; collaboration with the Harvard Office for Sustainability. Harvard Real Estate Academic Initiative \$37,000 over 2 yr; PI
- 2009 – 2010 **VISUAL COMFORT IN OPEN PLAN ENVIRONMENTS, PI**
Dean’s Annual Research Grant Program \$27,000 over 1 yr; PI
- 2009 – 2010 **THE DAYLIGHTING DASHBOARD, PI**
Daylight research funded by Autodesk; \$20,000 over 1 yr; PI
- 2009 – 2010 **A RULE-OF-THUMB BASED DESIGN SEQUENCE FOR DAYLIGHTING, PI**
William F Milton Fund. \$35,000 over 1 yr; PI
- 2008 – 2010 **SUSTAINABLE DESIGN TUTORIALS**
Development of teaching material for sustainable design. Office of the President \$18,000 over 3 yr; PI
- 2007 – 2009 **DEVELOPMENT OF A VALIDATION METHODOLOGY FOR DAYLIGHT SIMULATION ENGINES**
Development of test cases for software validation and compliance purposes. Autodesk \$100,000; PI
- 2007 – 2008 **PIER PROGRAM - DAYLIGHTING METRICS PROJECT**
Analysis of 61 daylit spaces. California Energy Commission and the New York State Energy Research and Development Authority \$1,800,000; Co-PI: Lisa Heschong and Prof Joel Loveland
- 2004 – 2008 **OPTIMIZING OVERALL ENERGY USE AND OCCUPANT COMFORT IN THE PERIMETER ZONE**
Field studies to monitor occupant use of lighting and shading controls in commercial buildings. Natural Resources Canada and BC Hydro; \$800,00 over 4 years; PI

2004 – 2008	DEVELOPMENT OF A DAYLIGHTING DESIGN GUIDE <i>Canadian Technology & Innovation Initiative \$290,000 over 4 yr; PI</i>
2005 – 2006	DYNAMIC DAYLIGHT PERFORMANCE METRICS <i>Development of climate-based daylighting performance metrics. Kalwall \$30,000 over 2 yr; PI</i>
2003 – 2005	MODELING CLASSROOMS IN LIGHTSWITCH WIZARD <i>BC Hydro and the Canadian Technology & Innovation Initiative \$60,000 over 3 yr; PI</i>
2004 – 2005	DAYLIGHT SIMULATIONS OF A TRANSLUCENT GLAZING SYSTEM <i>Development of a Radiance model for a translucent panel. Kalwall \$60,000 over 1 yr; PI</i>
2003 – 2005	TRANSLUCENT GLAZING SYSTEMS FOR DAYLIGHTING <i>Laboratory study on health and task performance in daylight spaces. Kalwall \$150,000 over 2 yr; Co-PI with Dr. Jennifer Veitch (National Research Council Canada)</i>
2001- 2004	DAYLIGHTING CREDITS FOR CODES <i>Evaluation of daylighting technologies. Natural Resources Canada \$150,000 over 3 yr; PI</i>
2002 - 2003	NEW NRC DAYLIGHTING LAB <i>Setup of NRC's daylighting laboratory (two identical south-facing test offices that are equipped with extensive monitoring equipment). National Research Council \$100,000 over 1 yr; PI</i>
2003	LIGHTSWITCH WIZARD, PI <i>Development of an online daylighting tool. Natural Resources Canada \$70,000 over 1 yr; PI</i>

AWARDS AND SCHOLARSHIPS

2025	Best Paper Award International Conference on Structures and Architecture (with L Sory and C Mueller)
2018	Fraunhofer Bessel Prize by the Alexander von Humboldt Foundation
2017	Best Paper Award 2017 Building and Environment Journal (with N L Jones)
2017	Commended Paper Award Passive Low Energy Architecture (PLEA) 2017 in Edinburgh (with I Turan, J E Fernández, P Ferrão and E Olivetti)
2016	IBPSA-USA Award for Distinguished Achievement in Building Simulation
2016	Georgios Kazas Best Paper Award 8 th International Conference on Sustainability in Energy and Buildings, SEB-16 (with C S Monteiro, A Pinaa, C Cerezo Davila and P Ferrão)
2015	SUSTAINIA 10 2015: winner of the IT category (with mapdwell LLC)
2014	FastCompany Design by Innovation Award 2014: category Data Visualization for mapdwell Solar Systems (with mapdwell LLC)
2013	Star of Building Science, Inaugural Virtual Academy of Excellence, Buildings4Change magazine
2011	Best Paper Award Symposium on Simulation for Architecture and Urban Design (with J Niemasz and J Sargent)
2010	Leon Gaster Award for the Best Lighting Application Paper of the Year, awarded by the CIBSE Society of Light and <i>Lighting</i> (with V LoVerso)
2009	Faculty of the Year, Harvard Graduate School of Design, Architecture
2009	ARUP Prize - Best paper on the Application of Building Performance Simulation in the Design Process (with H Wasilowski)
2005	Lorne W. Gold Award for the best IRC publication of the year
2005	NRC Industrial Partnership Award (with COPE team)

- 2004 **IRC Public Awareness Award** (with A Laouadi)
2004 **IRC Industrial Partnership Award** (with COPE team)
1998 - 2001 **Deutsche Forschungs Gemeinschaft (DFG)doctoral scholarship**
1994 **DAAD scholarship (German Academic Exchange Service)**
1993 **Erasmus Scholarship (European Union)** (to study for a year in Paris)

TEACHING EXPERIENCE

- Since 2012 **Massachusetts Institute of Technology**
4.401./4.464 Environmental Technologies in Buildings (2012 – 2025)
4.430 Daylighting & Solar Gain Control – High Performance Facades (2012, 2014, 2019)
4.433 Modeling Urban Energy Flows – Towards Sustainable Cities and Neighborhoods (2013, 2015, 2016, 2017, 2020, 2022, 2026)
4.4s42 How ot decarbonize the MIT campus (2024)
4.4s46 Food for Thought (2019)
4.481 Building Technology Seminar (since 2012)
4.4s42 Comfort in Motion (2015)
- 2008 – 2011 **Harvard University, Graduate School of Design**
GSD 6112.m2 Energy Technology and Buildings
GSD 6205 Environmental Technologies in Buildings
GSD 6332 Daylighting Buildings
GSD 6417 Building Performance Simulation – Energy
GSD 6420 Thermal Analysis of Buildings
HBS Harvard Advanced Management Development Program - Sustainable Building Design
- 2005 – 2007 **McGill University, School of Architecture**
ARCH 447 Lighting (with C. Sampson)
ARCH 676 Building Simulation

ACADEMIC PROFESSIONAL AND PUBLIC SERVICE

Member of the Editorial Board

Building Simulation – An International Journal (since 2008); Building and Environment (2020 –2025); Building Research and Information (2018 – 2020); Journal of Building Performance Simulation (2008 – 2017)

External Reviewer for the following journals

Nature Energy, ASHRAE Journal, Energy & Buildings, Building and Environment, Building Research & Information, Journal of Building Performance Simulation, Building Simulation – An International Journal, Solar Energy, LEUKOS, Lighting Research & Technology

- 2006 – 2017 **Member of the IESNA and CIE Daylighting Committees**
- 2013 **Organizer of the Symposium on Sustainable Urban Design at MIT**
- 2011 – 2013 **IBPSA-USA Board of Directors**
- 2010 **Expert Witness: National Academy of Sciences Institute of Medicine**
- 2005, 2009 **Organizer of the International Radiance Workshop**
- 2008 **Scientific Chair for esim 2008**
- 2006 – 2008 **IBPSA-Canada Board of Directors**
- 2005 – 2007 **Member of the Technical Advisory Group for LEED-Canada**
- 2006 **Guest Editor *Energy & Buildings Journal*** (with S Selkowitz, LBNL)
Special issue on “Daylighting”, Energy & Buildings 38:7, 2006.
- 2002 – 2005 **Subtask Leader, IEA Task 31 *Daylighting Buildings in the 21st Century***

POSTDOC AND STUDENTS

POSTDOCS AND RESEARCH SCIENTISTS SUPERVISED

Name	Program	Time Period
Shireen Bader Alqadi	MIT At Risk Fellow	Sep 2025 – Dec 2025
Ata Chokhachian	Feodor Lynen Fellow Humboldt Foundation	Nov 2023 – Oct 2025
Sam Letellier-Duchesne	NSERC Postdoctoral Fellow	Jan 2020 – Jul 2021
Khadija Benis	Research Scientist	Jan 2018 – Jul 2021
Carlos Cerezo	Research Scientist	Oct 2017 – Jul 2018
Jay Dhariwal	Postdoc	Jan 2016 – Jul 2017
Cody Rose	Research Scientist	Jul 2015 – Jun 2016
Valerio LoVerso	NSERC Postdoctoral Fellow	Aug 2006 – Jul 2007
Denis Bourgeois	NSERC Postdoctoral Fellow	Jun 2005 – Dec 2006

GRADUATE STUDENTS (CO-) SUPERVISED

Student	Degree Program	Graduated
Nada Tarkhan	PhD Building Technology, MIT	2026
Ali Irani	PhD Building Technology, MIT	2025
Kiley Feickert	PhD Building Technology, MIT (co-advise C Mueller)	2025
Ramon Weber	PhD Building Technology, MIT	2025
Zach Berzolla	PhD Building Technology, MIT	2024
Yu Qian Ang	PhD Building Technology, MIT	2022
Alpha Arsano	PhD Building Technology, MIT	2022
Irmak Turan	PhD Building Technology, MIT	2020
Shreshth Nagpal	PhD Building Technology, MIT	2019
Nathaniel Jones	PhD Building Technology, MIT	2017
Carlos Cerezo	PhD Building Technology, MIT	2017
Nan Zhao	PhD MIT Media Lab (co-advise J Paradiso)	2017
Timur Dogan	PhD Building Technology, MIT	2015
Tarek Rakha	PhD Building Technology, MIT	2015
Matt Aldrich	PhD MIT Media Lab (co-advise J Paradiso)	2014
J. Alstan Jakubiec	PhD Building Technology, MIT	2014
Diego Ibarra	Doctor in Design Studies, Harvard	2014
Memo Cedeno	Harvard School of Public Health (co-advise J Spengler)	2014
Holly W Samuelson	Doctor in Design Studies, Harvard	2013
Huang Jianxiang	Doctor in Design Studies, Harvard (co-advise S Pollalis)	2013
Sam Wolk	SMBT	2024
Zoe Le Hong	SMBT	2024
Svenja Herb	SMBT	2024
Amanda Kirkeby	SMBT	2024
Zoe De Simone	SMArchS BT	2024
Tristan Searight	MArch	2023
Leilah Sory	SMBT (co-advise C Mueller)	2023
Elizabeth Young	SMBT	2021
Mariana Liebman-Pelaez	SMBT	2020
Jiamin Sun	SMArchS BT	2018
Jamie Farrell	SMArchS	2017

Christoph F. Reinhart

Bradley Tran	SMBT	2017
Alpha Arsano	SMArchS	2017
Norhan Bayomi	SMArchS (co-advise J Fernandez)	2017
Jamie Bemis	Master in City Planning, MIT	2016
Irmak Turan	SMArchS (co-advise J Fernandez)	2016
Cody Rose	SMBT	2015
Manos Saratsis	SMArchS	2015
Jeff Geisinger	SMArchS	2015
Chris Mackey	MArch I/SMBT, MIT (co-advise S Tibbits)	2015
Trygve Vasted	MArch, MIT (co-advise J Lamere)	2015
Carlos Cerezo	Master in Design Studies, Harvard	2013
Krista Palen	Master in Design Studies, Harvard	2013
Amanda Webb	SMARCHS, MIT (Fernandez)	2012
Timur Dogan	Master in Design Studies, Harvard	2012
Debashree Pal	Master in Design Studies, Harvard	2012
Elliot Glassman	Master in Design Studies, Harvard	2012
Jeff Niemasz	Master in Design Studies, Harvard	2011
Jon Sargent	Master in Design Studies, Harvard	2011
Seth Holmes	Master in Design Studies, Harvard	2011
Azadeh Omidfar	Master in Design Studies, Harvard	2011
Rashida Mogri	Master in Design Studies, Harvard	2011
Eduardo Berlin	Master in Design Studies, Harvard	2011
Andrea Dorotan	Master in Design Studies, Harvard	2011
Rohit Manudhane	Master in Design Studies, Harvard	2010
Tiffany Otis	Master in Design Studies, Harvard	2010
Diego Ibarra	Master in Design Studies, Harvard	2009
Holly Wasilowski	Master in Design Studies, Harvard	2009
Jennifer Sze	Master in Design Studies, Harvard	2009
Cynthia Kwok	Master in Design Studies, Harvard	2009

EXTERNAL EXAMINER/READER

Student	Degree Program	Defense Date
Jingfeng Zhou	University College London	2025
Jiayu Pan	University of Cambridge	2024
Valeria Picconi	ETH Zurich	2024
Ata Chokhachian	Technical University of Munich	2022
Daniele Santucci	Technical University of Munich	2021
Niloufar Emami	PhD, University of Michigan	2018
Khadija Benis	Instituto Superior Técnico Lisbon	2018
Claudia Sousa Monteiro	Instituto Superior Técnico Lisbon	2018
Nelson Soares	PhD, Universidad de Coimbra	2015
Frederic Haldi	PhD, Ecole Polytechnique Fédérale de Lausanne	2009
Sian Kleindienst	PhD, Massachusetts Institute of Technology	2009
Denis Bourgeois	PhD, Université de Laval	2005

PRESENTATIONS

KEYNOTE LECTURES

Aug 24	<i>Int. Association of Building Physics (IBPC) 2024</i> , Toronto, Canada
May 24	<i>KPF TECH Week 2024</i> , New York City
Mar 24	<i>Int. Conference on Refrigeration and Air Conditioning (NCRAC)</i> , Chennai, India
Jun 23	<i>Record on the Road - Boston</i> , with Matt Noblett, organized by Architectural Record
Oct 22	<i>Annual Conference of the Daylight Academy</i> , Zurich, Switzerland
Jun 22	<i>European Façade Network Conference</i> , Lisbon, Portugal
Oct 21	<i>ITECON CEES 2021</i> , Coimbra, Portugal
Sep 19	<i>Building Simulation 2019</i> , Rome, Italy
Sep 18	<i>IBPSA Regional Conference - South America</i> , Santiago, Chile
Sep 17	<i>National Conference on Comfort in the Built Environment (ENCAC) 2017</i> , Brazil
Sep 16	<i>Urban Transitions</i> , Shanghai
Jul 16	<i>BauChina 2016</i> , Beijing
May 16	<i>esim 2016</i> , McMaster University, Canada
Oct 14	<i>Syracuse Center of Excellence, Annual Symposium</i> , Syracuse, NY, USA
Mar 14	<i>Urban Integration 2014</i> , Sheffield Hallam University, Sheffield, UK
Aug 12	<i>SimBuild 2012</i> , University of Wisconsin, Madison, USA
May 12	<i>esim 2012</i> , Dalhousie University, Halifax, Canada
Apr 11	<i>Simulation for Architecture and Urban Design</i> , Boston, USA,
Nov 09	<i>1st Swiss Building and Urban Simulation Conference</i> , organized by IBPSA-CH, CH
Oct 09	<i>2nd Symposium on Sustainable Healthy Buildings</i> , Seoul, South Korea
Aug 07	<i>IX National Meeting on Environmental Comfort in Buildings</i> , Ouro Preto, Brazil
May 06	<i>esim 2006</i> , University of Toronto, Toronto, Canada

INVITED PRESENTATIONS AND LECTURES

Apr 25	<u>Department Seminar</u> Northwestern University, IL
Apr 25	<u>Distinguished Speaker Series</u> University of Illinois Chicago, IL
Mar 25	<u>Seminar on Critical Cooling</u> Harvard Law School, MA
Jan 25	<u>Urban Redevelopment Authority</u> Singapore
Jan 25	<u>College of Design and Engineering</u> National University of Singapore
Jan 25	<u>Int. Workshop</u> PolyU Academy for Interdisciplinary Research (PAIR), Hongkong
Oct 24	<u>Seminar on Cooling as a Human Right</u> Harvard Law School, MA
Jan 24	<u>Center for the Built Environment</u> UC Berkeley, CA
Dec 23	<u>ESTCP Symposium Decarbonization Technical Session</u> , Washington, DC
Nov 23	<u>School of Architecture at Universidad Politécnica de Madrid</u> , Spain

Oct 23 [Clean-IT Conference 2023, Hass Plattner Institute, Potsdam, Germany](#)

May 23 [Center for Energy and Environmental Policy Research \(CEEPR\), Cambridge, MA](#)

Mar 23 [MIT China Innovation and Entrepreneurship Forum, Cambridge, MA](#)

Feb 23 [Normal Foster Foundation Energy workshop Madrid, Spain](#)

Jan 22 [DOE Solid State Lighting workshop Lighting Application Efficiency](#)

Oct 21 [XLIII \(43rd\) MIT Global Change Forum Urban Transition Session](#)

Oct 21 [Misui Mission Invited research Presentation](#)

Oct 21 [University of California Berkeley Virtual Window View Quality Symposium](#)

Sep 21 [DOE Lighting R&D Program LED Advanced Luminaires and Manufacturing](#)

May 21 [Bauhaus of the Seas Roundtable, Circular Economy for Coastal Regions, Lisbon](#)

May 21 [The Architect's Newspaper Tech+ Panel Future of Simulation in Design](#)

May 21 [University of Oregon Invited lecture on Daylighting](#)

May 21 [Climate Information for Adaptation Workshop Caltech Climate Modeling Alliance](#)

Apr 21 [MIT Center for Energy and Environmental Policy Research Decarbonizing Heating](#)

Mar 21 [KPF Tech week Enabling a net-zero global building stock, NYC](#)

Feb 21 [MIT Industrial Liaison Program Energy Talks, Decarbonizing Building](#)

Feb 21 [MIT Alumni Energy Environment & Sustainability Network](#)

Jan 21 [Florida Atlantic University spring lecture series: Technology in Architecture](#)

Dec 20 [YPO@MIT program: Technology + Innovation: real estate in a time of change](#)

Jul 20 [C. R.E Retrofitting buildings, MIT Center for Real Estate Annual Conference](#)

Oct 20 [MIT Global Change Forum](#)

Nov 19 [ConCave Talks, Georgia Tech, Atlanta](#)

Nov 19 [Panel Presentation, GreenBuild, Atlanta](#)

Nov 19 [Panel Presentation, MIT Energy Initiative Annual Conference](#)

Oct 19 [Public Lecture, ETH Zürich ITA, Zürich, Switzerland](#)

Oct 19 [International Daylighting Symposium, VELUX Foundation, Paris](#)

Sep 19 [Annual Research Conference, MIT Portugal Program, The Azores](#)

May 19 [Building for the Future Panel, MIT Center for Real Estate Annual Conference](#)

Mar 19 [Panel Presentation, CERA Week, Houston](#)

Dec 18 [Archizoom Lecture Series, Ecole Polytechnique Federale de Lausanne, Switzerland](#)

Nov 18 [Panel Presentation, GreenBuild, Chicago](#)

Oct 18 [Solemnia Symposium, Cornell University, New York City](#)

Apr 18 [Public Lecture, University College London, UK](#)

Apr 18 [Public Lecture, Summer School on Computing Resilience, TU Munich, Germany](#)

Apr 18 [Brown Bag Seminar, Karlsruhe Institute of Technology, Germany](#)

Apr 18 [Invited Lecture, Fraunhofer Institute for Solar Energy Systems, Germany](#)

Oct 17 [DIVA Day Daylighting Symposium, University of California Berkeley, CA, USA](#)

Oct 17 [Department Lecture Series, Roger Williams University, Bristol, RI](#)

May 17 International Daylighting Symposium, [VELUX Foundation](#), Berlin

Oct 16 DIVA Day Daylighting Symposium, [University of Toronto](#), Canada

Jul 16 Research Seminar, [Tsinghua University](#), Beijing, China

Dec 15 Research Seminar, [IIT Bombay](#), Mumbai, India

Dec 15 Research Seminar, [Universidade de Coimbra](#), Portugal

Oct 15 Plenum Presentation, [New England Clean Energy Center](#), Boston

Oct 15 DIVA Day Daylighting Symposium, [Architecture Association](#), London

Sep 15 International Daylighting Symposium, [VELUX Foundation](#), London

Sep 15 MIT Solar Day, [MIT Energy Initiative](#)

Sep 15 Urbanization and Sustainable Development, [China World Development Bank](#)

Aug 15 Sustainable Urban Modeling, [MIT Executive Education Program](#)

Jun 15 Beyond Smart Cities Symposium, [MIT Media Lab](#)

Jun 15 Smart Buildings Symposium, [German American Chamber of Commerce](#)

Apr 15 Book Talk, [PG&E Center](#), San Francisco

Apr 15 EFRI Closing Panel, [National Science Foundation Workshop](#), San Francisco

Mar 15 Department Lecture Series, [University of British Columbia](#), BC, Canada

Jan 15 Internal Research Seminar, [ViewGlass](#), CA, USA

Oct 14 Inaugural Department Lecture, [University of Washington](#), Seattle, WA, USA

Oct 14 Smart Cities Symposium, [French American Chamber of Commerce](#) Boston

Sep 14 Brown Bag Lunch, [Synapse Energy](#), Cambridge, Ma, USA

Feb 14 Designing For Future Weather, online seminar organized by [BuidingGreen Inc.](#)

Feb 14 Executive Education Seminar, [Charles Institute](#), Cambridge, MA

Feb 14 Lunch Series, [MIT Concourse](#) – Freshmen Organization

Feb 14 Annual Meeting of the [North American Glass Association](#), Orlando, FL

Jan 14 Energy Accounts: Designing the Future, [University of Pennsylvania](#)

Dec 13 Stars of Building Science, [Royal Academy of Engineering](#), London, UK

Oct 13 External Advisory Board Meeting, [MIT Energy Initiative](#)

Sep 13 Guest Lecture, [Yale University](#)

Jun 13 MIT 20th Reunion Dinner Evening Speaker

May 13 [b_TEC/CIT UPC](#) Annual Meeting, Barcelona, Spain

May 13 Daylighting Symposium, [Velux Foundation](#), Copenhagen Denmark

May 13 Lighting Institute at [Lightfair](#) 2013, Philadelphia, USA

Apr 13 Lunch Series [MIT City Science Lab](#)

Mar 13 Interdisciplinary Student Sustainability Summit, [Harvard University](#)

Nov 12 Guest Lecture, [Northeastern University](#)

Nov 12 Software as a Design Choice, Women in Design Panel, [ABX Boston](#)

Oct 12 External Advisory Board Meeting, [MIT Energy Initiative](#)

Sep 12 Cambridge Public Library, Release of the Cambridge Solar Map

- Aug 12 Evening Lecture, [IBPSA New York Chapter](#)
- Jun 12 Das Haus, Building Technology Forum, [German Chamber Network](#)
- Jun 12 Cambridge Day, [City of Cambridge](#), MA, USA
- May 12 Brown Bag Seminar, [EYP Architecture & Engineering](#), Boston
- Apr 12 Symposium on Sustainability and the Built Environment, [Harvard University](#)
- Apr 12 Guest Lecture, [University of Pennsylvania](#), PA, USA
- Apr 12 Panel on Energy and the Built Environment, [MIT Energy Initiative](#)
- Mar 12 Building Technology Lecture Series, [MIT](#), MA, USA
- Feb 12 Guest Lecture, [Boston Society of Architects](#), Sustainable Education Committee
- Jan 12 Guest Lecture, [Transsolar](#), New York Office, New York, USA
- Jan 12 Guest Lecture, [Atelier Ten](#), New York Office, New York, USA
- Dec 11 Ted Talk “Harvard Thinks Green”, [Harvard University](#)
- May 11 VELUX 4th Daylight Symposium, [Velux Foundation](#), Lausanne, Switzerland
- Apr 11 Guest Lecture, [Catholic University of America](#), Washington DC, USA
- Mar 11 Seminar Series, [Lawrence Berkeley National Laboratory](#), Berkeley, CA, USA
- Mar 11 Advanced Management Development Program in Real Estate – Class X
- Feb 11 School for Year 2030, GSD/HGSE Advanced Research Seminar, [Harvard GSD](#)
- Feb 11 [IBPSA USA](#) – Boston Regional Chapter Kickoff Meeting
- Nov 10 Ecological Practices: New Directions in Sustainability Research, [Harvard GSD](#)
- Nov 10 National Science Foundation: When Engineering Design Meets Architecture, [University of Pennsylvania](#), USA
- Oct 10 Building Technology Lecture Series, [University of Toronto](#), ON
- Oct 10 Seminar, [National Organization of Minority Architects](#) (NOMA) conference
- Oct 10 Building Technology Lecture Series, [MIT](#), MA, USA
- Jul 10 Guest Lecture, [University of California at Berkeley](#), CA, USA
- Jun 10 Climate Change & Indoor Environment Workshop, [National Academy of Sciences](#), Washington DC, USA
- May 10 Daylighting Forum, [IESNA](#), Las Vegas, NV, USA
- Apr 10 Panel Discussion at Design, Infrastructure Sustainability & Social Responsibility,
- Mar 10 Materials Science Seminar Series, [Harvard FAS](#), Cambridge, MA, USA
- Mar 10 Faculty Seminar on Sustainable Housing, [Joint Center for Housing Studies](#), USA
- Feb 10 Guest Lecture, Advanced Management Development Program in Real Estate
- Feb 10 Evening Lecture, [Harvard Club of New York City](#), NY, USA
- Jan 10 Building Ecology, S & T Lecture Series, [University of Toronto](#), Canada
- Sep 09 Building Technology Lecture Series, [MIT](#)
- Sep 09 [Harvard](#) Graduate Consortium on Energy and the Environment
- Aug 09 [Fraunhofer](#) Institute for Solar Energy Systems, Freiburg, Germany
- Aug 09 Panel Discussion at Building Simulation Conference 2009, Glasgow, UK
- Aug 09 Building Simulation Conference 2009, [IBPSA](#), Glasgow, UK

May 09 [AIA Philadelphia Chapter](#), Philadelphia, PA, USA

May 09 Full-day workshop at [KlingStubbins](#), Philadelphia, PA, USA

May 09 Daylighting Institute at Lightfair 2009, New York City, NY, USA

May 09 Daylight Boston 1 - Lecture Series on Daylighting, [Harvard University](#), MA, USA

Apr 09 Panel Leader Ecological Urbanism conference, [Harvard University](#), MA, USA

Mar 09 Brownbag Seminar at [Simpson Gumbertz & Heger](#), Waltham Office, MA, USA

Nov 08 [Greenbuild](#) 2008 Offsite Educational Session at the GSD (with a MDesS students)

Oct 08 Public GSD Panel Discussion (with J. Kayden, C. Werthmann & T. Schroepfer)

Oct 08 Policy Advisory Board, [Harvard Center for Housing Studies](#) (with J. Spengler)

Oct 08 MArch II Proseminar (with Lluís Ortega), [Harvard University](#), MA, USA

Jul 08 Seminar [Universitaet Stuttgart](#), Stuttgart, Germany,

May 08 Daylighting Institute at Lightfair 2008, Las Vegas, USA

Dec 07 [Canadian Green Building Council](#), Ottawa Chapter, Ottawa, Canada

Oct 07 MArch II Proseminar (with Toshiko Mori), Harvard University, MA, USA

Oct 07 [CIE/Canada and CIE/USA](#) Annual Technical Conference, Ottawa, Canada

Jun 07 Building Technology Transfer Forum, Annual meeting, Toronto, Canada

Apr 07 [Harvard University](#), Cambridge, MA, USA

Mar 07 [Cornell University](#), Ithaca, NY, USA

Jan 07 [University of Toronto](#), Toronto, Canada

Nov 06 [IEA Task 31](#), Final presentation to the Executive Committee, Rome, Italy

Sep 06 Canada-Japan Research & Development Workshop, Ottawa, Canada

Sep 06 Professional Engineers of Ontario, Ottawa, Canada

May 06 Lighting Institute at Lightfair 2006 (with Lisa Heshong), Las Vegas, USA

Apr 06 Green Building Exposition, Ottawa, Canada

Mar 06 [McGill University](#), Montreal, Canada

Oct 05 [Massachusetts Institute of Technology](#), Cambridge, MA, USA

Jul 05 [University of Washington](#), Seattle, WA, USA

Apr 05 [Lawrence Berkeley National Laboratory](#), Berkeley, CA, USA

Jun 04 [Dalhousie University](#), Halifax, Canada

Jun 04 Building Technology Transfer Forum, Annual meeting, Halifax, Canada

Oct 03 [École Polytechnique](#), Mechanical Engineering, Montréal, Canada

Oct 03 CIE/Canada and CIE/USA Annual Technical Conference, Montreal, Canada

Jan 03 [Dalhousie University](#), Halifax, Canada

Apr 02 International Energy Agency, Workshop of Task 27 and 31, Copenhagen, Denmark

Oct 01 International Energy Agency, Expert meeting of Task 31, Berlin, Germany

Aug 01 Illuminating Engineering Society of North America, Annual Meeting, Ottawa

Oct 00 Lecture Series at Goethe Institutes in Beirut, Damascus, and Amman

CONFERENCE PRESENTATIONS

- Nov 11 "Learning by doing - Teaching energy simulation as a game", *IBPSA Conference 2011*, Sydney, Australia
- Nov 11 "Shaderade: Combining Rhinoceros and EnergyPlus for the design of static exterior shading devices", *IBPSA Conference 2011*, Sydney, Australia
- Nov 11 "Climate change risks form a building owner's perspective: Assessing future climate and price scenarios", *IBPSA Conference 2011*, Sydney, Australia
- Nov 11 "A 'PICASA' for BPS – An interactive data organization and visualization system for building performance simulation", *IBPSA Conference 2011*, Sydney, Australia
- Sep 07 "Daylight 1-2-3 – A state-of-the-art daylighting design software for initial design investigations", *IBPSA Conference 2009*, Beijing, China.
- Sep 07 "The daylight coefficient method and complex fenestration", *IBPSA Conference 2008*, Beijing, China.
- Aug 05 "A simulation-based review of the ubiquitous window-head-height to daylit zone depth rule of thumb", *IBPSA Conference 2005*, Montreal, Canada.
- Aug 05 "Development and Validation of a Radiance model for a Translucent Panel", *4th Annual Radiance Workshop*, Montreal, Canada.
- Aug 05 "A file format for Dynamic Daylight Simulations", *4th Annual Radiance Workshop*, Montreal, Canada.
- Sep 04 "The Use of Daysim in Building Design", *École Polytechnique*, Turin, Italy.
- June 04 "Key findings from an online survey on the use of daylight simulation programs", *esim 2004* conference, Vancouver, Canada.
- June 04 "Lightswitch – DOE2: A comparison of two manual blind control algorithms", *esim 2004* conference, Vancouver, Canada.
- Mar 04 "Key findings from a survey on the use of daylight simulation programs", *IEA International Daylighting Symposium*, Tokyo, Japan.
- Oct 03 "Lightswitch: A Model for Manual Control of Lighting and Blinds." *CISBAT conference*, Lausanne, Switzerland.
- Aug 03 "The Lightswitch Wizard – Reliable daylight simulations for initial design investigation." *IBPSA Conference 2003*, Eindhoven, The Netherlands.
- Aug 02 "Effects of interior design on the daylight availability in open plan offices.", *ACE³ 2002 Summer Study on Energy Efficient Buildings*, Pacific Grove, California.
- Oct 02 "Effects of Blind Control on the Electric Lighting Energy Demand in Offices." *Joint meeting of Task 31 and CIE Division 3*, Ottawa, Canada.
- Jan 01 "Monitoring and Analysis of Manual Control Strategies for Artificial Lighting and Venetian Blinds of 20 users – Experimental Setup and Preliminary Results.", *7th Symposium on Lighting Buildings* in Staffelstein, Germany.
- Aug 00 "Lean buildings: Energy Efficient Commercial Buildings in Germany.", *ACE³ 2000 Summer Study on Energy Efficient Buildings*, Pacific Grove, California.
- Jan 00 "RADIANCE – Jahressimulationen des Tageslichtangebotes in Gebäuden – Ein Raytracer viele Ergebnisse." *6th Symp. on Lighting Buildings*, Staffelstein, Germany.

- Sep 99 “An Evaluation of RADIANCE Based Simulations of Annual Indoor Illuminance Distributions due to Daylight.” *IBPSA Conference 99*, Kyoto, Japan.
- Jun 99 “Die Beleuchtungskonzepte der SolarBau:MONITOR TK 3 Projekte – Eine Übersicht.” *SolarBau:MONITOR daylighting workshop*, Kassel, Germany.
- Jan 99 “Planung eines Büroneubaus – Tageslichtsimulation als Entscheidungshilfe in der Entwurfsphase.” *5th Symposium on Lighting Buildings*, Staffelstein, Germany.

EXHIBITIONS

- Apr 11 “Ceramic Futures”, *Harvard University GSD* (with M Bechthold)
- Nov 08 “Modeling Gund Hall”, *Harvard University GSD*

PUBLICATIONS

BOOKS AND BOOK CHAPTERS

1. A Y Arsano, R Elowe, P Freeman and C Reinhart, “Evaluating how peer review can scale online assessments for sustainable building design,” book chapter in *Energy Education in a Transitioning World*, edited by V Pappa, A Danielson and A S Weber, Cambridge University Press, 2026
2. C Reinhart, “Pathways towards a Net-zero Global Building Stock, *Architecture and Technology Volume II Cities in Climate Crisis*, Norman Foster Foundation, 2026
3. C Reinhart, *Climate-Driven Design I*, Building Technology Press, Cambridge, 2025
4. A Irani, E Reinhard E and C Reinhart, *HVAC Design for Architects*, Building Technology Press, Cambridge, 2025
5. C Reinhart, *Daylighting Handbook II – Daylight Simulations & Dynamic Facades*, Building Technology Press, Cambridge, 2018
6. C Reinhart and C Davila Cerezo, “Urban Building Energy Modeling,” book chapter in *Building Performance Simulation for Design and Operation*, 2nd edition, Editors J Hensen and R Lamberts, Taylor & Francis, 2019
7. C Reinhart, “Daylight Performance Predictions,” book chapter in *Building Performance Simulation for Design and Operation*, 2nd edition, Editors J Hensen and R Lamberts, Taylor & Francis, 2019
8. C Reinhart, *Daylighting Handbook I – Fundamentals & Designing with the Sun*, Building Technology Press, Cambridge, April 2014
9. C Reinhart, “Simulation-based Daylight Performance Predictions,” book chapter in *Building Performance Simulation for Design and Operation*, Editors J Hensen and R Lamberts, Taylor & Francis, 2011
10. C Reinhart and M Wambsganß, “Zusammenspiel Kunstlicht/Tageslicht.“ chapter in *Bürogebäude mit Zukunft – Konzepte, Erfahrungen, Analysen*, TÜV Verlag, Colon, Germany, pp.118-130, 2005 (The book won the 2005 Innovation Price of the German Printing Industry.)
11. C Reinhart, “Energy Efficient Solar Buildings.” chapter in *The Future for Renewable Energies: Prospects and Directions*, James & James, London, pp. 79-114, 2002
12. C Reinhart, *Daylight Availability and Manual Lighting Control in Office Buildings – Simulation Studies and Analysis of Measurements*. Fraunhofer IRB Verlag, Stuttgart, Germany, 2001

PAPERS IN REFEREED JOURNALS

1. Z. De Simone, M. Arcaya and C. Reinhart, 2025, “Energy transition and equity: Quantifying pathways to building decarbonization based on notions of fairness, *Energy Policy*, 206, article 114798, <https://doi.org/10.1016/j.enpol.2025.114798>
2. W Castro, J Barrelas, M P Mendes, C Reinhart and A Silva, 2025, Towards optimal energy efficiency: analysing generalized and tailored retrofitting decisions, *Discover Applied Sciences*, 7, article 773, 2025 <https://doi.org/10.1007/s42452-025-07440-0>
3. N. Tarkhan, D B Crawley, L K Lawrie and C Reinhart, 2025, Generation of representative meteorological years through anomaly-based detection of extreme events, *Journal of Building Performance Simulation*, 1–18, <https://doi.org/10.1080/19401493.2025.2499687>
4. N Tarkhan, N Klimenka, K Fang, F Duarte, C Ratti and C Reinhart, 2025, Mapping facade materials utilizing zero-shot segmentation for applications in urban microclimate research, *Nature Scientific Reports*, 15, 5492, <https://doi.org/10.1038/s41598-025-86307-1>
5. Z Berzolla, T Meng and C Reinhart, 2025, Deal or no deal: U.S. homeowners’ willingness to pay for residential building retrofits, *Environmental Research: Infrastructure and Sustainability*, 5, 015007, <https://iopscience.iop.org/article/10.1088/2634-4505/adac09>
6. T Wang, C Reinhart and YQ Ang, 2025, sat2shp: Extracting key building features from a single satellite image for urban building energy modelling and beyond, *Sustainable Cities and Society*, 118, 106054, <https://doi.org/10.1016/j.scs.2024.106054>
7. S Herb, S Wolk and C Reinhart, 2025, “Beyond the Bioclimatic Chart: An Automated Simulation-Based Method for the Assessment of Natural Ventilation and Passive Design Potential,” *Building and Environment*, 112362, <https://doi.org/10.1016/j.buildenv.2024.112362>
8. R E Weber, C Mueller and C Reinhart, 2024, “A hypergraph model shows the carbon reduction potential of effective space use in housing,” *Nature Communications*, 15, 8327, <https://doi.org/10.1038/s41467-024-52506-z>
9. N Tarkhan, J T Szcześniak and C Reinhart, 2024, Façade Feature Extraction for Urban Performance Assessments: Evaluating algorithm applicability across diverse building morphologies, *Sustainable Cities and Society*, <https://doi.org/10.1016/j.scs.2024.105280>
10. M Vahid-Ghavidel, M Jafari, S Letellier-Duchesne, Z Berzolla, C Reinhart, A Botterud, 2024, Integrated energy demand-supply modeling for low-carbon neighborhood planning, *Applied Energy*, 358, <https://doi.org/10.1016/j.apenergy.2023.122560>
11. C Reinhart, 2023, Linking Energy Use to Local Data, *Nature Energy*, 8, p.1311–1312, <https://doi.org/10.1038/s41560-023-01407-4>
12. Z Berzolla, Y Q Ang, S Letellier-Duchesne and C Reinhart, 2023, An eight-step simulation-based framework to help cities reach building-related emissions reduction goals, *Environmental Research: Infrastructure and Sustainability*, 4:3, pp.2634–4505, <https://doi.org/10.1088/2634-4505/ad025d>
13. Y Q Ang, Z Berzolla and C Reinhart, 2023, Smart meter-based archetypes for socioeconomically sensitive urban building energy modeling, *Building and Environment*, 246, <https://doi.org/10.1016/j.buildenv.2023.110991>

14. S Mokhtar and C Reinhart, 2022, Towards Scalable and Actionable Pedestrian Outdoor Thermal Comfort Estimation: A Progressive Modelling Approach, *Building and Environment*, 242, <https://doi.org/10.1016/j.buildenv.2023.110547>
15. Y Nidan, A Irani, J Bemis and C F Reinhart, 2023, Census-Based Urban Building Energy Modeling to Evaluate the Effectiveness of Retrofit Programs, *Environment and Planning B: Urban Analytics and City Science*, pp. 1 - 13, <https://doi.org/10.1177/23998083231154576>
16. YQ Ang, ZM Berzolla, S Letellier-Duchesne and C F Reinhart, 2023, Carbon reduction technology pathways for existing buildings in eight cities, *Nature Communications*, 14, 1689, <https://doi.org/10.1038/s41467-023-37131-6>
17. R A Weber, C Mueller and C Reinhart, 2022, Solar exoskeletons – An integrated building system combining solar gain control with structural efficiency, *Solar Energy*, 240, pp. 301 – 314, <https://doi.org/10.1016/j.solener.2022.05.048>
18. R A Weber, C Mueller and C Reinhart, 2022, Automated floorplan generation in architectural design: A review of methods and applications, *Automation in Construction*, 140, article 104385, <https://doi.org/10.1016/j.autcon.2022.104385>
19. Y Q Ang, Z Berzolla, S Letellier-Duchesne, V Jusiega and C Reinhart, 2022, UBEM.io: A web-based Framework to Rapidly Generate Urban Building Energy Models for Carbon Reduction Technology Pathways, *Sustainable Cities and Society*, 2022, 77, <https://doi.org/10.1016/j.scs.2021.103534>
20. E Young, P Kastner, T Dogan, A Chokhachian, S Mokhtar and C Reinhart, 2022, Modeling Outdoor Thermal Comfort Along Cycling Routes At Varying Levels Of Physical Accuracy To Predict Bike Ridership In Cambridge, MA, *Building and Environment*, 208, <https://doi.org/10.1016/j.buildenv.2021.108577>
21. J T Szcześniak, Y Q Ang, S Letellier-Duchesne and C F Reinhart, 2022, “A Method for Using Street View Imagery to Auto-extract Window-To-Wall Ratios and its Relevance for Urban-level Daylighting and Energy Simulations,” *Building and Environment*, 207, Part B, <https://doi.org/10.1016/j.buildenv.2021.108108>
22. M Liebman-Pelaez, J Kongoletos, L K Norford and C F Reinhart, 2021, “Validation of a Building Energy Model of a Hydroponic Container Farm and its Application in Urban Design,” *Energy and Buildings*, 250, <https://doi.org/10.1016/j.enbuild.2021.111192>
23. I Turan, A Chegut, D Fink and C Reinhart, 2021, “Development of View Analysis Metrics and Their Financial Impacts on Office Rents,” *Landscape and Urban Planning*, 215, <https://doi.org/10.1016/j.landurbplan.2021.104193>
24. N Buckley, G Mills, C Reinhart and Z M Berzolla, 2021, “Using Urban Building Energy Modelling (UBEM) to support the new European Union’s Green Deal: Case study of Dublin Ireland,” *Energy and Buildings*, 247, 2021, 111115, <https://doi.org/10.1016/j.enbuild.2021.111115>
25. K Benis, W Alhayaza, A Alsaati and C Reinhart, 2021, “What's the carbon content of your food?": Development of an interactive online foodprint simulator,” *WIT Transactions on Ecology and the Environment*, 243, 2020, pp. 123 – 132, <https://doi.org/10.2495/UA200111>
26. Y Q Ang, Z M Berzolla and C Reinhart, 2020, “From concept to application: A review of use cases in urban building energy modeling,” *Applied Energy*, 279:1, <https://doi.org/10.1016/j.apenergy.2020.115738>
27. R Weber, N Oxman, C Reinhart, 2020, “Photon Mapping of Geometrically Complex Glass Structures: Methods and Experimental Evaluation,” *Building and Environment*, Volume 180, <https://doi.org/10.1016/j.buildenv.2020.106957>

28. I Turan, A Chegut, D Fink and C Reinhart, 2020, "The Value of Daylight in Office Spaces," *Building and Environment*, 168, <https://doi.org/10.1016/j.buildenv.2019.106503>
29. Schweiker, M., Abdul-Zahra, A., André, M. et al., 2019, "The Scales Project, a cross-national dataset on the interpretation of thermal perception scales," *Sci Data*, 6, 289, <https://doi.org/10.6084/m9.figshare.9805289>
30. E Barbour, C Davila Cerezo, S Gupta, C Reinhart, J Kaur and M Gonzalez, 2019, "Planning for sustainable cities by estimating building occupancy with mobile phones," *Nature Communications*, 10, <https://doi.org/10.1038/s41467-019-11685-w>
31. S Nagpal, J Hanson and C F Reinhart, 2019, "A framework for using calibrated campus-wide building energy models for continuous planning and greenhouse gas emissions reduction tracking," *Applied Energy*, 241, pp. 82-96, <https://doi.org/10.1016/j.apenergy.2019.03.010>
32. N L Jones and C F Reinhart, 2019, "Effects of real-time simulation feedback on design for visual comfort," *Journal of Building Performance Simulation*, 12:3, pp. 343-361, <https://doi.org/10.1080/19401493.2018.1449889>
33. J Dhariwal, P Manandhar, L Bande, P Marpu, P Armstrong and C F Reinhart, 2019, Evaluating the effectiveness of outdoor evaporative cooling in a hot, arid climate, *Building and Environment*, 150, pp. 281–288, <https://doi.org/10.1016/j.buildenv.2019.01.016>
34. S Nagpal and C F Reinhart, 2018, "A comparison of two modeling approaches for establishing and implementing energy use reduction targets for a university campus," *Energy and Buildings*, 173, pp. 103–116, <https://doi.org/10.1016/j.enbuild.2018.05.035>
35. P Gianniou, C F Reinhart, D Hsu, A Heller and C Rode, 2018, "Estimation of temperature setpoints and heat transfer coefficients among residential buildings in Denmark based on smart meter data," *Building and Environment*, 139, pp. 125–133, <https://doi.org/10.1016/j.buildenv.2018.05.016>
36. S Nagpal, C Mueller, A Aijazi and C F Reinhart, 2018, "A methodology for auto-calibrating urban building energy models using surrogate modeling techniques," *Journal of Building Performance Simulation*, 12:1, pp. 1–16, <https://doi.org/10.1080/19401493.2018.1457722>
37. S Letellier-Duchesne, S Nagpal, M Kummert and C F Reinhart, 2018, "Balancing demand and supply: Linking neighborhood-level building load calculations with detailed district energy network analysis models," *Energy*, 150, pp. 913-925, <https://doi.org/10.1016/j.energy.2018.02.138>
38. K Benis, I Turan, C F Reinhart and P Ferrão, 2018, "Putting Rooftops to Use – a Cost-Benefit Analysis of Food Production vs. Energy Generation under Mediterranean Climates," *Cities*, 78, pp. 166-179, <https://doi.org/10.1016/j.cities.2018.02.011>
39. Freitas, C F Reinhart, M C Brito, 2018, "Minimizing storage needs for large scale photovoltaics in the urban environment," *Solar Energy*, 159:1, pp.375–389, <https://doi.org/10.1016/j.solener.2017.11.011>
40. C F Reinhart, J Dhariwal and K Gero, 2017, "Biometeorological indices explain outside dwelling patterns based on Wi-Fi data in support of sustainable urban planning," *Building and Environment*, 137, pp. 422-430, <https://doi.org/10.1016/j.buildenv.2017.10.026>
41. K Benis, R Gashgari, A Alsaati and C F Reinhart, 2018, "Urban Foodprints (UF) – Establishing baseline scenarios for the sustainability assessment of high-yield

- urban agriculture," *International Journal of Design & Nature and Ecodynamics*, 13:4, pp. 349-360, <https://doi.org/10.2495/DNE-V13-N4-349-360>
42. C S Monteiro, A Pinaa, C Cerezo Davila, C F Reinhart and P Ferrão, 2017, "The Use of Multi-detail Building Archetypes in Urban Energy Modelling," *Energy Procedia*, 111, pp. 817-825, <https://doi.org/10.1016/j.egypro.2017.03.244>
43. C Cerezo, J Sokol, S AlKhaled, C F Reinhart, A Al-Mumin, A Hajiah, 2017, "Comparison of four building archetype characterization methods in urban building energy modeling (UBEM): A residential case study in Kuwait City," *Energy and Buildings*, 154: 1, pp. 321–334, <https://doi.org/10.1016/j.enbuild.2017.08.029>
44. C De Wolf, C Cerezo, Z Murtadhawi, A Hajiah, A Al Mumin, J Ochsendorf, C F Reinhart, 2017, "Life Cycle Building Impact of a Middle Eastern Residential Neighborhood," *Energy*, 134, pp. 336–348, <https://doi.org/10.1016/j.energy.2017.06.026>
45. T Dogan and C F Reinhart, 2017, "Shoebos: An algorithm for abstracted rapid multi-zone urban building energy model generation and simulation," *Energy and Building*, 140, pp. 140–153, <https://doi.org/10.1016/j.enbuild.2017.01.030>
46. K Benis, C F Reinhart and P Ferrão, 2017, "Development of a simulation-based decision support workflow for the implementation of Building-Integrated Agriculture (BIA) in urban contexts," *Journal of Cleaner Production*, 147, pp. 589–602, <https://doi.org/10.1016/j.jclepro.2017.01.130>
47. N Soares and C F Reinhart, 2017, "Simulation-based analysis of the use of PCM-wallboards to reduce cooling energy demand and peak-loads in low-rise residential heavyweight buildings in Kuwait," *Building Simulation: An International Journal*, 10, pp. 481–495, <https://doi.org/10.1007/s12273-017-0347-2>
48. J A Sokol, C Cerezo and C F Reinhart, 2017, "Validation of a Bayesian-Based Method for Defining Archetypes for Urban Building Energy Modeling," *Energy and Buildings*, 134, pp. 11–24, <https://doi.org/10.1016/j.enbuild.2016.10.050>
49. C Cerezo Davila, C F Reinhart and J Bemis, 2017, "Modeling Boston: A workflow for the efficient generation and maintenance of urban building energy models from existing geospatial datasets," *Energy*, 117, pp. 237-250, <https://doi.org/10.1016/j.energy.2016.10.057>
50. E Saratsis, T Dogan and C F Reinhart, 2017, "Daylit Density – A simulation-based framework for the development of urban zoning rules for daylighting," *Building Research and Information*, 45:5, pp. 478-491, <https://doi.org/10.1080/09613218.2016.1159850>
51. C F Reinhart and C Cerezo Davila, 2016, "Urban Building Energy Modeling – A Review of a Nascent Field," *Building and Environment*, 97, pp. 196-202, <http://dx.doi.org/10.1016/j.buildenv.2015.12.001>
52. J A Jakubiec and C F Reinhart, A Concept for Predicting Occupants' Long-term Visual Comfort within Daylit Spaces, *LEUKOS*, pp. 1-19, 12:4, pp. 185-202, <https://doi.org/10.1080/15502724.2015.1090880>
53. T Dogan, P Michelatos and C F Reinhart, 2015, "Autozoner: An algorithm for automatic thermal zoning of buildings with unknown interior space definitions," *Journal of Building Performance Simulation*, 9:2, pp. 176-189, <https://doi.org/10.1080/19401493.2015.1006527>
54. H W Samuelson, A Ghorayshi and C F Reinhart, 2015, "Analysis of a Simplified Calibration Procedure for 18 Design-Phase Building Energy Models," *Journal of*

- Building Performance Simulation*, 9:1, pp. 17-29, <https://doi.org/10.1080/19401493.2014.988752>
55. C F Reinhart, "Opinion: Climate-based daylighting metrics in LEEDv4 – A fragile progress," *Lighting Research and Technology*, 47, p. 388, 2015
 56. C F Reinhart, T Rakha and D Weissman, 2014, "Predicting the Daylit Area — A Comparison of Students Assessments and Simulations at Eleven Schools of Architecture," *LEUKOS*, 10[4], pp. 193-206, <https://doi.org/10.1177/1477153515587613>
 57. J A Jakubiec and C F Reinhart, 2014, "Assessing Disability Glare Potential of Reflections from New Construction," *Transportation Research Record: Journal of the Transportation Research Board* 2449.1, pp. 114-122, <https://doi.org/10.3141/2449-13>
 58. J Niemasz, J Sargent and C F Reinhart, 2013, "Solar Zoning and Energy in Detached Residential Dwellings," *Environment & Planning B: Planning and Design*, 40[5], pp. 801–813, <https://doi.org/10.1068/b38055>
 59. J A Jakubiec and C F Reinhart, 2013, "A Method for Predicting City-Wide Electricity Gains from Photovoltaic Panels Based on LiDAR and GIS Data Combined with Hourly Daysim Simulations", *Solar Energy*, 94, pp. 127-143, <https://doi.org/10.1016/j.solener.2013.03.022>
 60. S H Holmes and C F Reinhart, 2013, "Assessing future climate change and energy price scenarios for institutional building investment and HVAC operation", *Building Research and Information*, 41[2], pp. 209-222, <https://doi.org/10.1080/09613218.2013.769297>
 61. C F Reinhart, T Dogan, D Ibarra and H W Samuelson, 2012, "Learning by doing - Teaching energy simulation as a game", *Journal of Building Performance Simulation*, 5[6], pp 359-368, <https://doi.org/10.1080/19401493.2011.619668>
 62. H W Samuelson, A Lantz and C F Reinhart, 2012, "Non-technical barriers to energy model sharing and reuse", *Building and Environment*, 54, pp. 71-76, <https://doi.org/10.1016/j.buildenv.2012.02.001>
 63. C F Reinhart and D Weissman, 2012, "The Daylit Area – Correlating architectural student assessments with current and emerging daylight availability metrics", *Building and Environment*, 50, pp. 155-162, <https://doi.org/10.1016/j.buildenv.2011.10.024>
 64. J A Jakubiec and C F Reinhart, 2011, "The 'adaptive zone' – A concept for assessing glare throughout daylit spaces", *Lighting Research and Technology*, 44, pp. 149-170, <https://doi.org/10.1016/j.buildenv.2011.10.024>
 65. C F Reinhart and J Wienold, 2011, "The Daylighting Dashboard - A Simulation-Based Design Analysis for Daylit Spaces", *Building & Environment*, 46:2, pp. 386-396, <https://doi.org/10.1016/j.buildenv.2010.08.001>
 66. C F Reinhart and V LoVerso, 2010, "A Rules of Thumb Based Design Sequence for Diffuse Daylight". *Lighting Research and Technology*, 42:1, pp.7-32, <https://doi.org/10.1177/1477153509104765>
 67. C F Reinhart and P-F Breton, 2009, "Experimental Validation of Autodesk® 3ds Max® Design 2009 and Daysim3.0". *LEUKOS*, 6:1, <https://doi.org/10.1582/LEUKOS.2009.06.01001>
 68. A Laouadi, C F Reinhart and D Bourgeois, 2008, "Efficient calculation of daylight coefficients for rooms with dissimilar complex fenestration systems," *Journal of Building Performance Simulation*, 1:1 pp. 3-15, <https://doi.org/10.1080/19401490701868299>

69. C F Reinhart, 2008, "Discussion of Mardaljevic and Nabil's paper: Electrochromic glazing and facade photovoltaic panels: a strategic assessment of the potential energy benefits", *Lighting Research & Technology*, 40:1, pp. 55-76, <https://doi.org/10.1177/1477153507083906>
70. A D Galasiu and C F Reinhart, 2008, "Current Daylighting Design Practice: A Survey", *Building Research & Information*, 36:2 pp. 159 – 174, <https://doi.org/10.1080/09613210701549748>
71. D Bourgeois, C F Reinhart and G Ward, 2008, "A Standard Daylight Coefficient Model for Dynamic Daylighting Simulations," *Building Research & Information*, 36:1 pp. 68 – 82, <https://doi.org/10.1080/09613210701446325>
72. C F Reinhart, J Mardaljevic and Z Rogers, 2006, "Dynamic Daylight Performance Metrics for Sustainable Building Design", *LEUKOS*, 3:1, pp. 7 – 31, <https://doi.org/10.1582/LEUKOS.2006.03.01.001>
73. C F Reinhart and S E Selkowitz, 2006, "Guest Editorial: Daylighting – Light, Form, and People", *Energy and Buildings*, 38:7 pp. 715-717, <https://doi.org/10.1016/j.enbuild.2006.03.005>
74. C F Reinhart and M Andersen, 2006, "Development and validation of a Radiance model for a translucent panel", *Energy and Buildings*, 38:7 pp. 890-904, <https://doi.org/10.1016/j.enbuild.2006.03.006>
75. C F Reinhart and A Fitz, 2006, "Findings from a survey on the current use of daylight simulations during building design", *Energy and Buildings*, 38:7 pp. 824-835, <https://doi.org/10.1016/j.enbuild.2006.03.012>
76. D Bourgeois, I MacDonald and C F Reinhart, 2006, "Adding advanced behavioral models in whole building energy simulation: a study on the total energy impact of manual and automated lighting control", *Energy and Buildings*, 38:7 pp. 814-823, <https://doi.org/10.1016/j.enbuild.2006.03.002>
77. C F Reinhart, 2004, "Discussion of Mardaljevic's paper: Verification of Program Accuracy for Illuminance Modelling: Assumptions, Methodology and an Examination of Conflicting Findings", *Lighting Research & Technology*, 36:3 pp. 239-240, <https://doi.org/10.1177/136578280403600312>
78. C F Reinhart, 2004, "Lightswitch 2002: A model for manual control of electric lighting and blinds", *Solar Energy*, 77:1 pp. 15-28, <https://doi.org/10.1016/j.solener.2004.04.003>
79. C F Reinhart and K Voss, 2003, "Monitoring manual control of electric lighting and blinds." *Lighting Research & Technology*, 35:3 pp. 243-260, <https://doi.org/10.1191/1365782803li064oa>
80. C F Reinhart, 2002, "Comment on Mardaljevic's: Simulation of annual daylighting profiles for internal illuminance." *Lighting Research & Technology*, 34:1 pp.79-81, <https://doi.org/10.1191/1365782802li032xx>
81. O Walkenhorst, J Luther, C F Reinhart and J Timmer, 2002, "Dynamic annual daylight simulations based on one-hour and one-minute means of irradiance data," *Solar Energy*, 72:5 pp. 385-395, [https://doi.org/10.1016/S0038-092X\(02\)00019-1](https://doi.org/10.1016/S0038-092X(02)00019-1)
82. C F Reinhart and O Walkenhorst, 2001, "Dynamic RADIANCE-based daylight simulations for a full-scale test office with outer venetian blinds." *Energy & Buildings*, 33:7 pp. 683-697, [https://doi.org/10.1016/S0378-7788\(01\)00058-5](https://doi.org/10.1016/S0378-7788(01)00058-5)
83. Reinhart C F and S Herkel, 2000, "The simulation of annual daylight illuminance distributions- A state of the art comparison of six RADIANCE based methods," *Energy & Buildings*, 32:2 pp. 167-187, [https://doi.org/10.1016/S0378-7788\(00\)00042-6](https://doi.org/10.1016/S0378-7788(00)00042-6)

84. M L W Thewalt, D A Harrison, C F Reinhart, J A Wolk and H Lafontaine, 1997, "Type II band alignment in Si_{1-x}Ge_x/Si(001) quantum wells: The ubiquitous type II luminescence results from band bending," *Physical Review Letters*, 79:2 pp. 269-273, <https://doi.org/10.1103/PhysRevLett.79.269>
85. W F J Evans, C F Reinhart and E Puckrin, 1995, "A ground-based measurement of the anomalous cloud absorption effect," *Geophysical Research Letters*, 22:16, pp. 2135-38, <https://doi.org/10.1029/95GL02084>

Papers in Refereed Conference Proceedings

1. L Sory, C Mueller and C Reinhart, "Estimating Early-stage Embodied Carbon in Structural Systems of Urban Building Stocks," International Conference On Structures & Architecture, Antwerp, Belgium, July 2025
2. S Wolk, Z Berzolla, L Carethers and C Reinhart, "Accelerating photovoltaic potential simulations for urban building energy modeling to inform policymakers," Building Simulation 2023, Shanghai, September 4-6, 2023
3. K Kharbanda, Y Lyu, K V Pelton and C Reinhart, "A pilot study for modeling urban energy flows: Sandy Springs as a self-sustainable heart in the city of Atlanta," Building Simulation 2023, Shanghai, September 4-6, 2023
4. Z Le Hong, Z Berzolla and C Reinhart, "The more the better? Archetype segmentation in urban building energy modelling," cisbat 2023, Lausanne, Switzerland, 13-15 September 2023
5. Z Berzolla, YQ Ang and C F Reinhart, 2022, "Combining Urban Building Energy Models with Retrofit Adoption Models for Time-Dependent Carbon Emission Projections," ACEEE Summer Study on Energy Efficiency in Buildings, Asilomar, CA, August 2022
6. N Tarkhan, S Mokhtar, R Weber and C F Reinhart, 2022, "Natural Ventilation In A Warming Climate: An Evaluation Of Computational Simulation Methods And Metrics," SimAUD 2022, San Diego, pp. 694 - 705
7. N Tarkhan, S Letellier-Duchesne and C F Reinhart, 2022, "Capturing Façade Diversity in Urban Settings Using an Automated Window to Wall Ratio Extraction and Detection Workflow," SimAUD 2022, San Diego, pp. 706 – 717
8. R E Weber, C Mueller and C F Reinhart, 2021, Generative Structural Design for Embodied Carbon Estimation, Proceedings of the IASS Annual Symposium 2020/21 and the 7th International Conference on Spatial Structures Inspiring the Next Generation, 23 – 27 August 2021, Guilford, UK
9. G Mills, N Buckley, C Reinhart, J Ching, D Niyogi and D Aliaga, "Generating Urban - Scale Building Data To Support Climate Modeling," Proceedings of the 100th American Meteorological Society Annual Meeting, Boston , January 2020
10. A Y Arsano, C Cerezo Davila, C Reinhart, 'Early-Design Optimization of Target Ventilation Rates for Hybrid Buildings Using Single-Node Analytical Model, Building simulation 2019, 16th International IBPSA Conference, Rome, Italy, Sep 2019
11. I Turan, M Kocher, C Reinhart, "A New Framework for Evaluating Views throughout Open Plan Work Spaces," Building simulation 2019, 16th International IBPSA Conference, Rome, Italy, Sep 2019
12. S Nagpal, J Hanson and C F Reinhart, 2018, Auto-Calibrated Urban Building Energy Models as Continuous Planning Tools, Proceedings of the Symposium on Simulation for Architecture and Urban Design 2018, Delft, The Netherlands, June 4 – 7 2018

13. J Min Han, C F Reinhart, "Development of the Urban Surfacer Management Software for PVs and Stormwater with Connectivity to Urban Modeling Interface," Proceedings of *2018 Building Performance Analysis Conference and SimBuild*, Chicago, IL, Sep 26-28, 2018
14. N L Jones and C F Reinhart, 2017, "Speedup Potential of Climate-Based Daylight Modelling on GPUs," Proceedings of *Building Simulation 2017*, San Francisco, August 2017
15. C Cerezo Davila, N L Jones, C F Reinhart, A Al Mumin and A Hajiah, 2017, "Implementation of a Calibrated Urban Building Energy Model (UBEM) for the Evaluation of Energy Efficiency Scenarios in a Kuwaiti Residential Neighborhood," Proceedings of *Building Simulation 2017*, San Francisco, August 2017
16. T Rakha, P Zhand and C F Reinhart, "A Framework for Annual Outdoor Thermal Comfort Simulation," Proceedings of *Building Simulation 2017*, San Francisco, August 2017
17. K Benis, C F Reinhart and Paulo Ferrão, 2017, "Building-Integrated Agriculture (BIA) in Urban Contexts: Testing a Simulation-Based Decision Support Workflow," Proceedings of *Building Simulation 2017*, San Francisco, August 2017
18. A Yacob Arsano and C F Reinhart, 2017, "A Comparison of Climate-File and Energy-Simulation Based Methods for Evaluating the Natural Ventilation Cooling Potential of Buildings," Proceedings of *Building Simulation 2017*, San Francisco, August 2017
19. I Turan, A Chegut and C F Reinhart, 2017, "Connecting Environmental Performance Analysis to Cash Flow Modeling for Financial Valuation of Buildings in Early Design," Proceedings of *Building Simulation 2017*, San Francisco, August 2017
20. I Turan, J E. Fernández, C F Reinhart, P Ferrão, E Olivetti, 2017, "From Sink to Stock: The Potential for Recycling Materials from the Existing Built Environment," *33rd International Conference on Passive and Low Energy Architecture*, Edinburgh, July 2017, pp. 1-8
21. N L Jones and C F Reinhart, "Real-time visual comfort feedback for architectural design," *32nd International Conference on Passive and Low Energy Architecture*, Los Angeles, California, July 11-13, pp. 1-6, 2016
22. N L Jones and C F Reinhart, "Parallel multiple-bounce irradiance caching," *Computer Graphics Forum* 35:4, pp. 57-66, 2016
23. S Monteiroa, A Pinaa, C Cerezo Davila, C F Reinhart, P Ferrãoa, 2016, "The use of multi-detail building archetypes in urban energy modelling," *8th International Conference on Sustainability in Energy and Buildings*, SEB-16, 11-13 September 2016, Turin, ITALY
24. C F Reinhart, J Geisinger, T Dogan and E Saratsis, 2015, "Lessons learned from a simulation-based approach to teaching building science to designers," Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015
25. J A Jakubiec, C F Reinhart and K Van Den Wymelenberg, 2015, "Towards an Integrated Framework for Predicting Visual Comfort Conditions from Luminance-based Metrics in Daylit Spaces," Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015
26. T Dogan, E Saratsis and C F Reinhart, 2015, "Towards An Energy Simulation-Informed Design Process," Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015
27. C M Rose, E Saratsis, S Aldawood, Salma, T Dogan and C F Reinhart, 2015, "A Tangible Interface for Collaborative Urban Design for Energy Efficiency,

- Daylighting, and Walkability,” Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015
28. C Cerezo Davila, J A Sokol, C F Reinhart and A Al-Mumin, 2015, "Comparison Of Three Methods For The Characterization Of Building Archetypes In Urban Scale Energy Simulation. The Case Study Of A Residential Neighborhood In Kuwait,” Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015
 29. T Dogan, E Saratsis and C F Reinhart, 2015, "The Optimization Potential Of Floorplan Typologies In Early Design Energy Modeling," Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015
 30. N L Jones and C F Reinhart, 2015, “Validation of GPU Lighting Simulation in Naturally and Artificially Lit Spaces”, Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015
 31. N L Jones and C F Reinhart, 2015, “Fast Daylight Coefficient Calculation using Graphics Hardware”, Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015.
 32. A Nakano, B Nueno, L Norford and C F Reinhart, 2015, “Urban Weather Generator – A Novel Workflow for Integrating Urban Heat Island Effect Within Urban Design Process”, Proceedings of *Building Simulation 2015*, Hyderabad, India, December 2015
 33. A Nakano, Bruno Bueno L Norford, C F Reinhart, 2015, “Urban Weather Generator User Interface Development: New Workflow for Integrating Urban Heat Island Effect in Urban Design Process,” *9th International Conference on Urban Climate* jointly with 12th Symposium on the Urban Environment, July 24, 2015
 34. N. Zhao, M. H. Aldrich, C. F. Reinhart and J. A. Paradiso,”A Multidimensional Continuous Contextual Lighting Control System Using Google Glass,” Proceedings of the 2nd ACM International Conference, Seoul, South Korea, November 2015, pp. 1–10
 35. T Rakha, C M Rose, and C F Reinhart, 2014, “A Framework for Modelling Occupancy Schedules and Local trips based on Activity Based Surveys,” *2014 ASHRAE/IBPSA-USA Building Simulation Conference*, Atlanta, GA, September 10-12, 2014
 36. H W Samuelson , A Ghorayshi and C F Reinhart, 2014, “Post-Occupancy Evaluation and Partial-Calibration of 18 Design Phase Energy Models,” *ASHRAE/IBPSA-USA Building Simulation Conference*, Atlanta, GA, September 10-12, 2014
 37. N L Jones and C F Reinhart, 2014, “Irradiance Caching for Global Illumination Calculation On Graphics Hardware,” *2014 ASHRAE/IBPSA-USA Building Simulation Conference*, Atlanta, GA, September 10-12, 2014
 38. C Cerezo, T Dogan and C. Reinhart, 2014, “Towards standardized building properties template files for early design energy model generation,” *ASHRAE/IBPSA-USA Building Simulation Conference*, Atlanta, GA, September 10-12, 2014
 39. N L Jones and C F Reinhart, 2014, “Physically Based Global Illumination Calculation Using Graphics Hardware,” *esim 2014*, IBPSA Canada, Ottawa, ON, May 7-10, 2014
 40. T Dogan, C F Reinhart and P Michelatos, 2014, “Automated multi-zone building energy model generation for schematic design and urban massing studies,” *esim 2014*, IBPSA Canada, Ottawa, ON, May 7-10, 2014

41. C F Reinhart, T Dogan, J A Jakubiec, T Rakha and A Sang, “umi – An urban simulation environment for building energy use, daylighting and walkability”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013
42. C F Reinhart J A Jakubiec and D Ibarra, “Definition of a Reference Office for standardized evaluations of façade and lighting technologies”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013
43. J A Jakubiec and C F Reinhart, “Predicting visual comfort conditions in a large daylit space based on long-term occupant evaluations: A field study”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013
44. E Glassman and C F Reinhart, “Facade Optimization Using Parametric Design and Future Climate Scenarios”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013
45. C Cerezo Davila and C F Reinhart, “Urban energy lifecycle: An analytical framework to evaluate the embodied energy use of urban developments”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013
46. M Street, C F Reinhart, L Norford and J Ochsendorf, “Urban Heat Island Effect in Boston – An evaluation of urban temperature models for predicting building energy use”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013.
47. D Ibarra and C F Reinhart, “Teaching Daylight Simulations – Improving Modeling Workflows For Simulation Novices”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013
48. T Dogan and C F Reinhart, “Automated conversion of architectural massing models into thermal ‘shoebox’ models”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013
49. T Rakha and C F Reinhart, “A carbon impact simulation-based framework for land use planning and non-motorized travel behavior interactions”, Proceedings of *Building Simulation 2013*, Chambéry, France, August 2013
50. J A Jakubiec and C F Reinhart, “Towards validated urban solar radiation maps based on LiDAR measurements, GIS data and hourly Daysim simulations”, Proceedings of *SimBuild 2012*, Madison, Wisconsin, USA, 2012
51. T Dogan, C F Reinhart and P Michelatos, “Urban daylight simulation: Calculating the daylit area of urban designs”, Proceedings of *SimBuild 2012*, Madison, Wisconsin, USA.
52. T Rakha and C F Reinhart, “Generative Urban Modeling: A Design Work Flow for walkability-optimized cities”, Proceedings of *SimBuild 2012*, Madison, Wisconsin, USA, 2012
53. H Jianxiang, J G Cedeño Laurent, J Spengler and C F Reinhart, “A GIS-based assessment method for mean radiant temperature in dense urban areas”, Proceedings of *SimBuild 2012*, Madison, Wisconsin, USA, 2012
54. B Wang, T Dogan, D Pal and C F Reinhart, “Simulating naturally ventilated buildings with detailed CFD-based wind pressure database”, Proceedings of *SimBuild 2012*, Madison, Wisconsin, USA, 2012
55. K Dondeti and C F Reinhart, "A 'PICASA' for BPS – An interactive data organization and visualization system for building performance simulation", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011
56. D Ibarra and C F Reinhart, "Solar availability: A comparison study of irradiation distribution methods", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011

57. S H Holmes and C F Reinhart, "Climate change risks form a building owner's perspective: Assessing future climate and price scenarios", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011
58. J A Jakubiec and C F Reinhart, "The adaptive zone – A concept for assessing glare throughout daylight spaces", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011
59. J A Jakubiec and C F Reinhart, "DIVA-FOR-RHINO 2.0: Environmental parametric modeling in Rhinoceros/Grasshopper using Radiance, Daysim and EnergyPlus", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011
60. A Bakshi, J A Jakubiec, "A simple cost-benefit estimation for daylighting design and analysis during the design process", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011
61. C F Reinhart, T Dogan, D Ibarra and H W Samuelson, "Learning by doing - Teaching energy simulation as a game", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011
62. H W Samuelson, A Lantz and C F Reinhart, "Identifying non-technical barriers to energy model sharing and reuse", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011
63. J Sargent, J Niemasz and C F Reinhart, "Shaderade: Combining Rhinoceros and EnergyPlus for the design of static exterior shading devices", Proceedings of *Building Simulation 2011*, Sydney, Australia, 2011
64. M Bechthold, J King, A Kane, J Niemasz and C F Reinhart, Integrated Environmental Design and Robotic Fabrication Workflow for Ceramic Shading Systems, Proceedings of the *International Symposium on Algorithms and Computation (ISAAC 2011)* in June, South Korea, 2011
65. J Niemasz, J Sargent, C F Reinhart, "Solar Envelope and Energy in Single Family Detached Housing", *SimAUD 2011*, April 2011, Boston, 2011
66. R Manudhane and C F Reinhart, "Daylighting Nomographs Revisited - Rules-of-Thumb to Predict Energy Savings from Photocell Controlled Dimming Systems", Proceedings of *SimBuild 2010*, New York City, August 2010
67. C F Reinhart and J Wienold, "The Daylighting Dashboard - A Simulation-Based Design Analysis for Daylit Spaces", Proceedings of *SimBuild 2010*, New York City, August 2010
68. K Lagios, J Niemasz and C F Reinhart, "Animated Building Performance Simulation (ABPS) - Linking Rhinoceros/Grasshopper with Radiance/Daysim", Proceedings of *SimBuild 2010*, New York City, August 2010
69. Lo Verso V R M, Reinhart, C F, "Validation of the Lynes mean daylight factor formula and the daylight feasibility study in toplit spaces, Conf. Proceedings of *Lighting Quality & Energy Efficiency* (CIE conference), Vienna, Austria, March 17-17 2010
70. Reinhart C F, Breton PF, "Experimental Validation of 3ds Max® Design 2009 and Daysim 3.0", Proceedings of *Building Simulation 2009*, Glasgow, July 2009
71. Wasilowski H A, Reinhart C F, "Modeling an existing building using customized weather data and internal load schedules as opposed to default assumptions - A Case Study", Proceedings of *Building Simulation 2009*, Glasgow, July 2009
72. Ibarra D, Reinhart C F, "Daylight factor simulations - 'How close do simulation beginners 'really' get?'"', Proceedings of *Building Simulation 2009*, Glasgow, July 2009
73. Reinhart C F, Bourgeois D, Dubrous F, Laouadi A, Lopez P, Stelescu O, "Daylight 1-2-3 – A stat-of-the-art daylighting design software for initial design

- investigations”. *Proceedings of the Buildings Simulation 2007 (IBPSA)*, Beijing, China, September 3-6 2007
74. Bourgeois D, Reinhart C F. 2007. “Multiple time scale solutions for dynamic boundary conditions within whole-building energy simulation”, *Proceedings of the Buildings Simulation 2007 (IBPSA)*, Beijing, China, September 3-6 2007
 75. Laouadi A, Reinhart C F, Bourgeois D, “The daylight coefficient method and complex fenestration”. *Proceedings of the Buildings Simulation 2007 (IBPSA)*, Beijing, China, September 3-6 2007
 76. Bourgeois D, Reinhart C F, Ward G, "An inter-model comparison of DDS and Daysim Daylight coefficient methods", *Proceedings of the European Conference on Energy Performance & Indoor Climate in Buildings (EPIC)*, Lyon, France, November 2006
 77. Reinhart C F, “A simulation-based review of the ubiquitous window-head-height to daylit zone depth rule of thumb”, *Proceedings of the Buildings Simulation 2005*, Montreal, Canada, August 15-18 2005
 78. Bourgeois D, Reinhart C F, Macdonald I A, “ Assessing the total energy impact of occupant behavioral response to manual and automated lighting systems”, *Proceedings of the Buildings Simulation 2005*, Montreal, Canada, August 15-18 2005
 79. Reinhart C F, Jones C, “Lightswitch – DOE2: A comparison of two manual blind control algorithms”, *Proceedings of esim 2004*, pp. 183-189, Vancouver, Canada, June 2004
 80. Reinhart C F , Fitz A, “Key findings from a survey on the use of daylight simulation programs”, *Proceedings of esim 2004*, pp. 175-182, Vancouver, Canada, June 2004
 81. Bourgeois D, Reinhart C F, Hand J, MacDonald I, “Adding sub-hourly occupancy prediction, occupancy-sensing control and manual environmental control to whole-building energy simulation”, *Proceedings of esim 2004*, pp. 119-126, Vancouver, Canada, June 2004
 82. Veitch J A, Charles K E, Newsham G N, Bradley J S, Shaw C, Sander D M, Reinhart C F, “The intersection of disciplines: NRC’s cost-effective-open-plan-environments”, Canadian Psychological Association 65th Annual Convention, June 2004
 83. Bourgeois D, MacDonald I, Hand J, Reinhart C F, “Adding sub-hourly occupancy prediction, occupancy-sensing control and manual environmental control to whole-building energy simulation”, *Proceedings of IAQVEC 2004*, the 5th International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings, held during the CIB World Building Congress 2004, Toronto, Canada, May 2004
 84. Reinhart C F, Morrison M, Dubrous F, “The Lightswitch Wizard – Reliable daylight simulations for initial design investigation.” *Proceedings of the Buildings Simulation 2003*, III pp.1093-1100, Eindhoven, The Netherlands, August 11- 14, 2003
 85. Reinhart C F, “Effects of interior design on the daylight availability in open plan offices.” *Proceedings of the ACE³ 2002 Summer Study on Energy Efficiency in Buildings*, 14 pp., Pacific Grove, USA, August 2002
 86. Reinhart C F, Voss K, Wagner A, Löhnert G, “Lean buildings: Energy-efficient commercial buildings in Germany.”, *Proceedings of the ACE³ 2000 Summer Study on Energy Efficiency in Buildings* 3 pp. 3.287-3.298, Pacific Grove, USA, August 2000

87. Reinhart C F, Herkel S, “An evaluation of RADIANCE based simulations of annual indoor illuminance distributions due to daylight.” *Proceedings of the IBPSA '99 Buildings Simulation, II* pp. 563 - 570, Kyoto, Japan, September 1999

Other Major Publications

1. Reinhart C F and E Saratsis, “Evaluating Urban Resource-Efficiency,” chapter in *Energy Accounts: Architectural Representations of Energy, Climate, and the Future*, Editors D Willis, W Braham, K Muramoto and D Barber, to be published by *Routledge* in 2017
2. Reinhart, C.F, “Simulation-based Daylight Performance Predictions“ book chapter in *Building Performance Simulation for Design and Operation*, Editors J. Hensen, and R. Lamberts, Taylor & Francis, 2011
3. Reinhart, C.F, “Energy Efficient Solar Buildings. ”chapter in *The Future for Renewable Energies: Prospects and Directions*, James & James, London, pp. 79-114, 2002
4. J.A, Jakubiec, C.F, Reinhart, “The Use of Glare Metrics in the Design of Daylit Spaces: Recommendations for Practice”, *9th International Radiance Workshop* in Freiburg, Germany, September 2010
5. Reinhart, C.F, Lagios, K., Niemasz, J., “ABPS - Animated Building Performance Simulation”, in *A View On Harvard GSD2*, published by Tank, London, vol. 2, 2010.
6. Wasilowski ,H.A., Reinhart, C.F, Simulating Gund Hall, in *A View On Harvard GSD*, published by Tank, London, vol. 1 p. 645, 2009
7. LoVerso VRM, Reinhart , C.F, Bourgeois, D., Dubrous, F., Laouadi, A., Lopez, P., Stelescu .O, Daylight 1-2-3: a text guide and a software as integrated tools for initial daylight/energy design, CISBAT conference, Lausanne, Switzerland, September 2007
8. LoVerso VRM, Reinhart, C.F, A 3-steps sequence for early daylight design, CISBAT conference, Lausanne, Switzerland, September 2007
9. Tzempelikos, A., Laouadi, A., Reinhart, C.F, Athienitis, A., “Determining the Optical Properties of Shading Devices: Current Modeling Approaches and Future Directions”, Solar Building Conference, Montreal, Canada, August 2006
10. Reinhart, C.F, Wambsgan, M., “Zusammenspiel Kunstlicht/Tageslicht.“ chapter in *Bürogebäude mit Zukunft–Konzepte, Erfahrungen, Analysen*, TÜV Verlag, Colon, Germany, pp. 118-130, 2005 (The book won the 2005 Innovation Price of the German Printing Industry.)
11. Veitch, J.A, Reinhart, C.F, “Researchers study effects of daylighting with translucent sandwich panels. ”*Construction & Innovation*, Fall 2005
12. Newsham, G.R, Veitch, J.A, Reinhart, C.F, Sander, D.M, “ Lighting Design for Open-Plan Offices”, *Construction Technology Update*, (62), pp. 4, October 01, 2004
13. Reinhart, C.F, ”Daylighting Prediction Tool Online”, *Architecture Weeks Notes* No.193, www.ArchitectureWeek.com/2004/0519/tools_1-1.html
14. Reinhart, C.F, Fitz, A., “Key findings from a survey on the use of daylight simulation programs”, *International Daylighting Symposium (IEATask31)*, pp. 1-13, Tokyo, Japan, March 25th 2004
15. Reinhart, C.F, “Lightswitch Wizard provides reliable daylight simulations for design investigation.” *Construction & Innovation*, Spring 2003
16. Reinhart, C.F, Bourgeois, D., Dubrous, F., “Lightswitch: A Model for Manual Control of Lighting and Blinds.” CISBAT conference, 1 pp. 253-258, Lausanne, Switzerland, October 8th 2003

- 17.Reinhart, C.F, Laouadi, A., Galasiu, A.,“Recent daylighting activities at the Institute for Research in Construction. ”Construction & Innovation, 8 (1) pp.4, March 2003.
- 18.Reinhart, C.F, “Towards realistic daylighting energy savings in office buildings.” Construction & Innovation, Spring 2002
- 19.Reinhart, C.F, Wienold, J., “Monitoring user behavior: monitoring and analysis of manual control strategies for lighting and blinds. ”International Daylighting, pp.1-3, 2001
- 20.Reinhart, C.F, “Monitoring and analysis of the manual control strategies for artificial lighting and venetian blinds of 20 users–Experimental setup and preliminary results.” Proceedings 7th Symposium on Innovative Lighting Systems in Buildings, Staffelstein, Germany, January 2001
- 21.Walkenhorst, O., Reinhart, C.F, Timmer, J., “Jahres simulation en des Tageslichtangebotesin Gebäuden auf der Basisvon stündlichen und minütlichen Strahlungsdaten.” Proceedings 7th Symposium on Innovative Lighting Systems in Buildings, Germany, January 2001
- 22.Voss, K., Reinhart, C.F, Löhnert, G. ,Wagner, A., “Energie effizien zund Solar energie nutzung im Nicht wohnungsbau – Erfahrung genund Ergebnisseaus Demonstrations projekten.”, Proceedings German Solar Energy Society Sonnenforum, Freiburg, Germany, July 2000
- 23.Voss, K., Reinhart, C.F, Löhnert, G., Wagner, A., “Towards Lean Buildings – Examples and Experience from a German Demonstration Program for Energy Efficiency and Solar Energy use in Commercial Buildings. ”Proceedings EUROSUN, June 2000
- 24.Reinhart, C.F, Herkel, S., “RADIANCE – Jahres simulation endes Tageslichtangebotes in Gebäuden–Ein Raytracerviele Ergebnisse. ”Proceedings 6th Symposium on Innovative Lighting Systems in Buildings, pp. 189-194, Staffelstein, Germany, January 2000
- 25.Voss, K., Reinhart, C.F, “10 Projekte/10 Konzepte – Tageslichtund Beleuchtungs konzepte aus der Praxis. ”Proceedings 6th Symposium on Innovative Lighting Systems in Buildings, pp.279-283, Staffelstein, Germany, January 2000
- 26.Voss,K.,Reinhart,C.F,Altmann,K.,Apian-Bennewitz,P.,Herkel,S.,Wienold,J., “Neubau des Fraunhofer Institutes für Solare Energie systeme–Ein Demonstrations projekt im Rahmen der IEA Task 21, Daylight in Buildings.” Proceedings: Daylighting in Buildings, Berlin, Germany, July 1999
- 27.Reinhart, C.F, Altmann, K, Apian-Bennewitz, P.,Herkel,S. , Wienold,J., Voss,K., “Planung eines Büroneubaus–Tageslicht simulationals Entscheidung shilfeinder Entwurfsphase.” Proceedings 5th Symposium on Innovative Lighting Systems in Buildings pp. 193–197, Staffelstein, Germany, January 1999
- 28.Wienold,J., Beckinger,K., Apian-Bennewitz, P. ,Reetz. C, Reinhart C.F, “Stationary Virtual Reality (SVR) – a new method for predicting user acceptance o f daylighting systems.” CIE Symposium, Ottawa, Canada, pp. 178–182, May 1998



Christoph Reinhart, Thursday, June 18, 2026