

CURRICULUM VITAE

Jelena Srebric

Margaret G. and Frederick H. Kohloss Chair Professor in Mechanical Engineering

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APPOINTMENTS

- 2024-present Associate Dean for Research**
A. James Clark School of Engineering, University of Maryland
- 2021-present Margaret G. and Frederick H. Kohloss Chair Professor**
Department of Mechanical Engineering, University of Maryland
- Current Director**
Center for Sustainability in the Built Environment (City@UMD)
- 2013-present Professor of Mechanical Engineering**
University of Maryland
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EDUCATION

- 2000 Ph.D. in Building Technology**
Massachusetts Institute of Technology
- 1997 M.Sc. in Mechanical Engineering**
University of Belgrade
- 1994 B.Sc. in Mechanical Engineering**
University of Belgrade
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HONORS AND AWARDS

- 2021 American Academy of Teachers of Singing Award for COVID-19 Response**
AATS
- 2020 Board of Regents Faculty Award for Excellence in Innovation**
University System of Maryland
- 2019 Fellow**
International Building Performance Simulation Association (IBPSA)
- 2018 Fellow**
International Society of Indoor Air Quality and Climate (ISIAQ)
- 2013 International Member**
Serbian National Academy of Engineering
- 2005 Yaglou Award**
International Academy of Indoor Air Sciences

2002 **Faculty Early Career Development (CAREER) Award**
National Science Foundation

RESEARCH FUNDING

- 2026** **The Air We Share, A Public Health Revolution for the 21st Century**
University of Maryland Grand Challenges Grants 2.0 (Team Award) · Co-PI
- 2021-2027** **Evaluating Modes of Influenza Transmission (EMIT-2) using Innovative Technologies and Designs in Controlled Environments**
National Institutes of Health (NIAID) · U19 research program; leads its project “Developing and Applying Analytical Models of Influenza Transmission” · Award U19AI162130 · Project lead · With Donald K. Milton (PI of the program)
- 2021** **Translation of UMD Research Findings into an AI Thermostat Prototype for Thermal Comfort and Load Shedding**
Maryland Energy Innovation Institute (MEI2) Energy Seed Grant (partnering company: Build Sci, Inc.) · PI
- 2021** **Air-shield goggles: comfortable PPE alternative to masks for prolonged use (micro air cleaner with HEPA filter)**
Centers for Disease Control and Prevention (CDC)
- 2020-2022** **RAPID: Energy-Efficient Disinfection of Viral Bioaerosols in Public Spaces: Vital for Lifting of the “Stay-at-Home” Orders during the Covid-19 Outbreak**
National Science Foundation · RAPID, Environmental Sustainability · Award 2032107 · PI · \$200,000
- 2020** **International Performing Arts Aerosol Study (aerosols from singing, wind instruments and theater; UMD study parallel to CU Boulder)**
Performing-arts coalition led by the College Band Directors National Association (CBDNA) and the National Federation of State High School Associations (NFHS)
- 2014** **Robotic Personal Conditioning Device (RoCo), ARPA-E DELTA program**
U.S. Department of Energy, ARPA-E · Co-PI
- 2010-2015** **EFRI-SEED: Creating Opportunities for Adaptation Based on Population in Urban Landscape for Sustainable Built Environment (PULSE)**
National Science Foundation · Emerging Frontiers in Research and Innovation (EFRI-SEED) · Award 1038264, continued at the University of Maryland as 1452045 · PI · \$2,000,000 · With John D. Spengler (Harvard University), Christoph Reinhart (MIT)
- 2009-2012** **Modeling of Natural Plant Materials to Enable Performance Evaluation of Environmentally Friendly Buildings**
National Science Foundation · Structural Materials and Mechanics; Environmental Sustainability · Award 0900486 · PI · \$318,236 · With Kevin A. Dressler (Penn State)
- 2003-2006** **An Experimental Pedagogy in Sustainable Building Technologies: Integrating Teaching, Research and Public Scholarship**
National Science Foundation · Engineering Education · Award 0315638 · Co-PI · \$381,485 · With David Riley (PI), Thomas E. Boothby (Penn State)
- 2002-2009** **CAREER: Designing Healthy and Energy-Efficient Buildings Using Computational Fluid Dynamics**
National Science Foundation · Faculty Early Career Development (CAREER) · Award 0134326 · PI · \$390,000

2001-2004

An Indoor Environment Design Tool for Entire Buildings

CDC National Institute for Occupational Safety and Health (NIOSH) · Mentored research scientist development award (K01) · Award K01OH007445 · PI · \$160,079

UV inactivation rate constants (k-values) database

ASHRAE

PUBLICATIONS

The complete, current list is on Google Scholar and ORCID, and searchable at jelenasrebric.com/publications.

TEACHING

ENME 422 /
ENME 753

Indoor Environment and Mechanical Systems

Undergraduate / graduate · Fall 2026 · University of Maryland

ENME 424 /
ENME 742

Urban Microclimate and Energy

Graduate / undergraduate · Spring 2021 · University of Maryland

PROFESSIONAL SERVICE

Current

Editorial Board Member, Building Simulation (Tsinghua University Press / Springer Nature)

Editorial board

Member, ISIAQ STC 21 - Ventilation, International Society of Indoor Air Quality and Climate (ISIAQ)

Professional society

2024

Member, International Scientific Advisory Committee (ISAC), Indoor Air 2024 (ISIAQ flagship conference)

Conference

2022

Member, International Scientific Committee, ROOMVENT 2022 Conference, Xi'an

Conference

2013

Track Chair, Track 1: Research Summit, ASHRAE 2013 Annual Conference, Denver, CO

Conference

2010

Chair, Forum 9 "HVAC&R Research: Buildings and Energy" (sponsored by the HVAC&R Research journal), ASHRAE 2010 Annual Conference, Albuquerque, NM

Conference

2020

Acting Associate Dean for Research, A. James Clark School of Engineering, University of Maryland

University

2022

Expert written testimony in support of HB0686, Safe Schools Indoor Air Act, Maryland House Environment and Transportation Committee

KEYNOTES AND INVITED TALKS

- 2025** **Unlocking Cosmic Potential: Harnessing University Partnerships as Force Multipliers in Our Space Mission**
Panel · Maryland Space Business Roundtable (MSBR) January 2025 Luncheon · Martins Crosswinds, Greenbelt, MD
- 2021** **Safely Reopening Update - Srebric Interview (What's Next for Fall: Updates on Preparing for a Healthy, Safe Reopening)**
Webinar · Chorus America public-health conversation series with Catherine Dehoney · Online
- 2021** **What's Next: Preparing for a Healthy, Safe Reopening**
Panel · Chorus America 2021 Summer Conference
- 2020** **Update on Aerosol Study: Dancers, Singers, Actors**
Webinar · Bringing Performance INDOORS: Performing Artists and Arts Organizations Discuss Performance Challenges with COVID-19 (Performing Arts Medicine Association webinar) · Online
- 2020** **Women in Engineering (panel)**
Panel · ASME InterPACK 2020 Conference & Exhibition · Virtual
- 2020** **Preliminary Study Results on the Safety of Singing**
Webinar · Joint webinar of NATS, ACDA, Chorus America, Barbershop Harmony Society and PAMA (Performing Arts Aerosol Study, second release) · Online
- 2019** **Managing the Operational Needs of the Campus and The Journey to a Campus Living Laboratory (University of Maryland)**
Invited talk · OSIssoft PI World 2019 – Academic Symposium · San Francisco
- 2015** **Green Roofs and Their Potential to Transform Built Environments through the Food-Energy-Water Nexus**
Invited talk · Food-Energy-Water (F-E-W) Nexus Workshop · The World Bank, Washington, DC
- 2011** **Opportunities and Challenges for Multi-Scale Modeling of Sustainable Buildings**
Invited talk · National Academy of Engineering 2011 U.S. Frontiers of Engineering Symposium (Engineering Sustainable Buildings session) · Mountain View, CA (Google headquarters)
- 2011** **Plenary lecture**
Plenary · Indoor Air 2011 conference
- 2004** **Development of New HVAC Design Tools: Search for the Holy Grail of Ventilation Research**
Seminar · EETD Seminar, Lawrence Berkeley National Laboratory · Lawrence Berkeley National Laboratory, Bldg. 90-3148
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MEDIA COVERAGE

- 2026** **UMD scientists keep trying — and failing — to give people the flu**
The Baltimore Banner · January 26, 2026
- 2024** **Welcome to the Hotel Influenza**
Maryland Today (UMD) · October 1, 2024
- 2023** **New 'cooling glass' sends heat into space**
The Engineer · November 14, 2023

- 2022** **Pandemic lessons can lead to more-prosperous communities**
WTOP News · March 9, 2022
- 2021** **COVID-19 Precautions Help Make Music That's Beautiful and Safe**
JAMA (Medical News & Perspectives) · November 2, 2021
- 2021** **With safety in mind, schools are getting their bands back together**
NPR · October 23, 2021
- 2021** **Music classes are back in school this year, finally indoors and off Zoom**
NPR · October 13, 2021
- 2021** **Coronavirus FAQs: What Should I Do With My Vaccine Card? Is Choir Practice OK Now?**
NPR · April 2, 2021
- 2021** **Blown Away**
Maryland Today (UMD) · February 4, 2021
- 2020** **Safe live music performances possible during COVID-19**
FOX 8 WVUE (New Orleans) · December 16, 2020
- 2020** **Musicians Improvise Masks for Wind Instruments**
Chicago Health · October 23, 2020
- 2020** **What will plexiglass dividers do at the VP debate? Not much, experts say**
NBC News · October 7, 2020
- 2020** **Beyond Plexiglass: Scientists Say This Simple Solution Could Keep VP Debate Safer**
NPR · October 7, 2020
- 2020** **Plexiglass Barriers Won't Stop the Virus at the Debate, Experts Warn**
The New York Times · October 7, 2020
- 2020** **Clemson band director helps launch national safety study on musical instruments**
The Post and Courier · August 14, 2020
- 2020** **Is Singing Together Safe In The Era Of Coronavirus? Not Really, Experts Say**
NPR · August 10, 2020
- 2020** **What Happens to Viral Particles on the Subway**
The New York Times · August 10, 2020
- 2020** **Will The Show Still Go On For College Marching Bands During the COVID-19 Era?**
Sports Illustrated · August 3, 2020
- 2020** **Marching bands aren't sure how to handle the pandemic. So they commissioned two studies involving spit.**
Tampa Bay Times · June 26, 2020
- 2020** **Scientists Consider Indoor Ultraviolet Light to Zap Coronavirus in the Air**
The New York Times · May 7, 2020
- 2016** **Instead of air conditioning, a robot could keep you cool**
The Diamondback · July 13, 2016

2016

UMD Dashboard application enables access to campus utility usage

The Diamondback · May 3, 2016

2007

A unifying force

Professional Roofing · November 1, 2007
