



COMPRESSORS | REFRIGERATION | BUILDINGS

2026 HERRICK CONFERENCES

INTERNATIONAL COMPRESSOR ENGINEERING
INTERNATIONAL REFRIGERATION & AIR CONDITIONING
INTERNATIONAL HIGH-PERFORMANCE BUILDINGS

JULY 12-16
2026



Purdue University | West Lafayette
chpb.engineering.purdue.edu/herrick-conferences/



COMPRESSORS | REFRIGERATION | BUILDINGS

2026 HERRICK CONFERENCES

July 13-16, 2026 | Purdue University, West Lafayette

3 Conferences • **1** Registration

700+
Attendees

30+
Countries

400+
Papers

4 Days

4 Plenary Sessions

Sponsor Expo | Welcome Reception | All Conference Luncheon | Student Mixer | BBQ Dinner

COMPRESSORS

REFRIGERATION & AC

BUILDINGS



WHY HERRICK **CONFERENCES?**

A LEGACY OF INNOVATION

1972

The first **International Compressor Conference** is held at Purdue University

1986

The inaugural **Refrigeration and Air Conditioning Conference** is held.

2010

The **International High Performance Buildings Conference** is added to form the current **Herrick Conferences**.

2026

700+ will gather for the 28th iteration of the **Herrick Conferences**.

SHORT COURSES & WORKSHOPS

System Modeling Short Course: Dynamic Modeling, Reduced Order Models and AI-Integration

Coordinated by: Davide Ziviani (Purdue University), Riley Barta (Purdue University)

Refrigeration Short Course: Heat Pumps - Technology and Policies Update

Coordinated by: Prof. Craig Bradshaw (UIUC), Prof. Stefan Elbel (TU Berlin) and the U.S. National Committee of the IIR in collaboration with Herrick Laboratories Faculty

Intelligent Building Operation (IBO) Workshop

Coordinated by: Kevin Kircher (Purdue University), Jim Braun (Purdue University), Gregor Henze (University of Colorado)

2026 **STUDENT PAPER AWARDS**

The conference organizing committee is pleased to invite students to submit abstracts for the 2026 Student Best Paper Award Competition. Please note the following eligibility information and other guidelines:

- Students at the undergraduate level and graduate level at the time of submission are eligible to compete.
- Students must be the first author on the submitted papers and must present their work **in-person** at the conferences to compete.
- Every student paper submission to the 2026 Student Best Paper Award Competition must be accompanied by a separate nomination statement by the advising professor.

Every advising professor may nominate a maximum of two student paper submissions to the 2026 Student Best Paper Award Competition. Cash prizes for each conference will be presented to the top three papers in the amounts of \$1000, \$500 & \$250.

CONFERENCE ORGANIZATION

General Organization



Eckhard Groll
General Chair



Jim Braun
Honorary Chair



Brian Barrett
Conference Coordinator



Mingjie Zhu
ConfTool Chair



Yuanzhi Yang
ConfTool Student Chair

International Compressor Engineering Conference



Travis Horton
Co-Chair



Riley Barta
Co-Chair



Yash Parmar
Student Chair

International High Performance Buildings Conference



Thanos Tzempilikos
Co-Chair



Kevin Kircher
Co-Chair | IBO Chair



Zhihao Ma
Student Chair



Gregor Henze
IBO Chair

International Refrigeration & Air Conditioning Conference



Davide Ziviani
Co-Chair



Jie Cai
Co-Chair



John Huby
Student Chair

2026 REGISTRATION & FEES

AUTHORS	NON-AUTHORS	VIRTUAL
\$850 Presenting Author	\$950 Attendee Registration	\$300 Virtual Author Registration
\$400 Student Presenting Author	\$500 Student Attendee Registration	\$150 Virtual Student Author Registration
\$1,000 Presenting Author + IBO Workshop	\$1,100 Attendee + IBO Workshop	\$200 Virtual Attendee Registration
\$600 Student Presenting Author + IBO Workshop	\$700 Student Attendee + IBO Workshop	\$100 Virtual Student Attendee Registration

All registration rates **will increase by \$150** after the deadline date, May 31, 2026. Group Registrations from the same organization receive 1 complimentary registration for every 5 paid registrations. Group registration fees are \$4,250 before May 31, 2026 and \$5,000 starting June 1, 2026.

Short Courses **Registration**

System Modeling Short Course **\$800** Refrigeration Short Course **\$800**
 Student Short Course **\$400**

TRAVEL **ACCOMMODATIONS**



Nearest Airports

Indianapolis International (70 mi.)
 Chicago O'Hare International (145 mi.)



Area Hotels

Purdue Union Club Hotel
 University Residences
 Hampton Inn & Suites West Lafayette
 Hilton Garden Inn West Lafayette
 Holiday Inn City Centre Lafayette

VISA **INFORMATION**

NEW FOR 2026! As part of Purdue University's current policies for international visitors, all international attendees of the 2026 Herrick Conferences will be required to complete a short screening process prior to arriving on campus. Screenings are conducted by Purdue's department of Research Security and Export Controls.

Contact Conference Coordinator Brian Barrett, barret71@purdue.edu for more information and request a VISA Invitation letter.

MONDAY | JULY 13

OPENING SESSION | KEYNOTE

9:00 AM | Loeb Playhouse · Stewart Center

12:00 PM | Author's Luncheon · West Faculty Lounge, Purdue Memorial Union

COMPRESSORS

1:00PM - 3:00 PM

- C-01:** Scroll Compressors I
- C-02:** Novel Compressors

REFRIGERATION & AC

1:00PM - 3:00 PM

- R-01:** Single- and Two-Phase Flow Modeling
- R-02:** Residential and Commercial HP & AC Systems I
- R-03:** High Temperature Heat Pump Systems I
- R-04:** Automotive and Transportation HVAC&R
- R-05:** Heat Exchanger Analysis I

BUILDINGS

1:00PM - 3:00 PM

- B-01:** Building Performance Modeling & Simulation
- B-02:** Energy Storage Modeling & Design

3:00 PM | Break & Sponsor Tech Lounge

COMPRESSORS

3:30PM - 5:30 PM

- C-03:** Scroll Compressors II
- C-04:** Lubricants & Tribology I

REFRIGERATION & AC

3:30PM - 5:30 PM

- R-06:** CO2 Applications I
- R-07:** Thermal Energy Storage Applications I
- R-08:** Emerging HVAC&R Technologies I
- R-09:** Advanced Control in HVAC&R Systems (IBO)
- R-10:** Applications of Hydrocarbons & their Mixtures I

BUILDINGS

3:30PM - 5:30 PM

- B-03:** Indoor Environment, Air Quality and Human Comfort
- B-04:** Model Predictive Control and Reinforcement Learning (IBO)

6:00 PM | Opening Night Reception : Neon Cactus

TUESDAY | JULY 14

PLENARY SESSION

7:15 AM Author's Breakfast · West Faculty Lounge, Purdue Memorial Union

8:30 AM Loeb Playhouse · Stewart Center

COMPRESSORS

9:40 AM - 11:40 AM

- C-05:** Rotary Compressors I
- C-06:** Reciprocating Compressors I

REFRIGERATION & AC

9:40 AM - 11:40 AM

- R-11:** Two-Phase Heat Transfer Analyses I
- R-12:** Fault Detection, Diagnostics and Sensing (IBO)
- R-13:** HVAC&R System Modeling I
- R-14:** Emerging HVAC&R Technologies II

BUILDINGS

9:40 AM - 11:40 AM

- B-05:** Data-driven Modeling & Methods (IBO)
- B-06:** Efficient Building Design/Operation and Retrofit

12:00 PM All Conference Luncheon · Purdue Memorial Union

COMPRESSORS

1:30PM - 3:30 PM

- C-07:** Compressor Valves
- C-08:** Scroll Compressors III

REFRIGERATION & AC

1:30PM - 3:30 PM

- R-15:** Frost & Defrost Characterization and Modeling I
- R-16:** Thermal Management of Data Centers
- R-17:** Next-Generation Refrigerants I
- R-18:** Novel Heat Exchangers

BUILDINGS

1:30PM - 3:30 PM

- B-07:** Heat Pump Modeling & Control (IBO)

3:30 PM Break & Sponsor Tech Lounge

COMPRESSORS

4:00PM - 6:00 PM

- C-09:** Lubricants & Tribology II
- C-10:** Reciprocating Compressors II

REFRIGERATION & AC

4:00PM - 6:00 PM

- R-19:** CO2 Applications II
- R-20:** Heat Pump Water Heaters & Dryers
- R-21:** Commercial and Industrial Refrigeration I
- R-22:** Heat Exchanger Flow Distribution

BUILDINGS

4:00PM - 6:00 PM

- B-SPC:** Student Paper Competition

6:00 PM Herrick Laboratories Tours

7:00 PM Student Mixer : Where Else?

WEDNESDAY | JULY 15

PLENARY SESSION

7:15 AM Author's Breakfast · West Faculty Lounge, Purdue Memorial Union

8:30 AM Loeb Playhouse · Stewart Center

COMPRESSORS

9:40 AM - 11:40 AM

- C-11:** Rotary Compressors II
- C-12:** Lubricants & Tribology III

REFRIGERATION & AC

9:40 AM - 11:40 AM

- R-23:** Next-Generation Refrigerants II
- R-24:** Thermal Energy Storage Applications II
- R-25:** Residential and Commercial HP & AC Systems II
- R-26:** Frost and Defrost Characterization and Modeling II
- R-27:** Heat Exchanger Analysis II

BUILDINGS

9:40 AM - 11:40 AM

- B-08:** Human-centered Building Operation, Smart Sensing and Data-driven Control (IBO)

12:00 PM Lunch Break

COMPRESSORS

1:00PM - 3:00 PM

- C-13:** Noise Vibration Sound I
- C-14:** Oil Management

REFRIGERATION & AC

1:00PM - 3:00 PM

- R-28:** Applications of Hydrocarbons & their Mixtures II
- R-29:** HVAC&R System Modeling II
- R-30:** High Temperature Heat Pump Systems II
- R-31:** Extreme Climate AC & HP
- R-32:** Two-Phase Heat Transfer Analyses II

BUILDINGS

1:00PM - 3:00 PM

- B-09:** Thermal Energy Systems and Control (IBO)

3:30 PM Break & Sponsor Tech Lounge

COMPRESSORS

3:30PM - 5:30 PM

- C-15:** Centrifugal Compressors
- C-16:** Compressor Testing Evaluation

REFRIGERATION & AC

3:30PM - 5:30 PM

- R-33:** Commercial & Industrial Refrigeration II
- R-34:** Dehumidification, ERV, Membrane I
- R-35:** Thermal Energy Storage Applications III
- R-36:** New Standards & Performance Rating Methods I
- R-37:** EV HVAC& Thermal Management

BUILDINGS

3:30PM - 5:30 PM

- B-10:** Data Centers Performance and Smart Controls (IBO)

6:00 PM All Conference BBQ Dinner : The Stables

THURSDAY | JULY 16

PLENARY SESSION

7:15 AM | Author's Breakfast · West Faculty Lounge, Purdue Memorial Union

8:30 AM | Loeb Playhouse · Stewart Center

COMPRESSORS

9:40 AM - 12:00 PM

- C-17:** Screw Compressor
- C-18:** Noise Vibration Sound II
- C-19:** Expanders
- C-20:** Compressor Testing Evaluation II
- C-21:** Compressor Modeling

REFRIGERATION & AC

9:40 AM - 12:00 PM

- R-38:** Thermally-Driven HVAC&R Systems
- R-39:** Reduced Order Models for HVAC&R
- R-40:** Dehumidification, ERV, Membrane II
- R-41:** New Standards & Performance Rating Methods II

12:00 PM | Conference Ends

1:00 PM | Advisory Committee Post Conference Meeting

CONFERENCE COORDINATOR CONTACTS

Brian Barrett

Conference Programming

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Amanda Pedroza

Registration / Payments

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2026 HERRICK CONFERENCES

FOR OVER 50 YEARS

Purdue University has proudly hosted the internationally renowned Herrick Conferences—three premier events that showcase the future of energy, refrigeration, and building technologies. What began in 1972 with the International Compressor Engineering Conference has since grown to include the International Refrigeration and Air Conditioning Conference (added in 1986) and the International High Performance Buildings Conference (added in 2010). Together, these events have become the global stage where groundbreaking research, visionary ideas, and practical innovations are unveiled.

The Herrick Conferences attract top minds from across academia, industry, and government, creating a powerful environment for knowledge exchange and collaboration. Attendees have the unique opportunity to explore technical sessions across all three conferences, tailoring their experience to their interests—whether compressors, sustainable building design, or next-generation refrigeration and air conditioning systems. Just as valuable as the research presented are the networking opportunities: from dynamic social events to one-on-one conversations with thought leaders, the conferences foster relationships that inspire new projects, partnerships, and business opportunities.

Sponsors and participants alike benefit from being part of a community at the forefront of global innovation. Registration includes full access to the conference schedule, published papers, and networking activities, ensuring attendees leave with both knowledge and connections that advance their work. Conducted in English and welcoming an international audience, the Herrick Conferences continue to set the standard for excellence, relevance, and impact in the HVACR and high-performance building industries.



Ray W. Herrick Laboratories

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