**University of Pittsburgh Infrastructure Collaboration Workshop 2024:**

**An NAE Member Led Workshop on Infrastructure Sensing**

Day 1: November 12th

Location: [Energy Innovation Center Pittsburgh (eicpittsburgh.org)](https://www.eicpittsburgh.org/)

The first day of the UPISC 2024 workshop will include a closed door steering committee meeting including organizers from the **University of Pittsburgh, National Energy Technology Laboratory (NETL),** and **workshop steering committee members** as well as selected representatives of the National Academy of Engineering (NAE). Selected invited speakers, government representatives, and other stakeholders will also be invited to attend and inform the discussion by the steering committee.

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| ***Time*** | ***Activity*** |
| **Innovation Hall** | **Steering Committee and Conference Organizers Only** |
| 9:00 a.m. | **Welcome Remarks** |
| 9:05 a.m. | **Workshop Planning Updates and Discussion** |
| 9:30 a.m. | **Status Update of UPISC – Action Items and Progress** |
| 10:30 a.m. | **Coffee Break** |
| 10:45 a.m. | **Plans for Follow-On Outcomes and Action Items After the Workshop** |
| 11:45 a.m. | **Lunch Break and Networking Prior to the Open Session** |

Following the initial closed-door session, the kickoff of the UPISC 2024 workshop open session will be held on the first day with the intent to set the tone, foundation, and objectives of the event. High profile speakers will be sought from across sectors and agencies to establish the importance of the topic at hand and the urgency with which the emerging challenges must be addressed. A social hour and networking event will allow for attendees to engage with one another as well as with invited guests and speakers.

The open workshop program will include all registered attendees.

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| ***Time*** | ***Activity*** |
| **DLC Bright Room** | **All Registered Workshop Attendees** |
| 1:00 p.m. | **Welcome Remarks** |
| 1:05 p.m. | **Workshop Overview, Background, and Objectives** |
| 1:30 p.m. | **Plenary Speaker: Infrastructure Investments and US National Priorities** |
| 2:30 p.m. | **Plenary Panel: Synergies and Opportunities in Infrastructure Sensing Across Sectors**  **Moderator: Robert Lieberman, National Academy of Engineering Member** |
| 3:30 p.m. | **Coffee Break** |
| 3:45 p.m. | **Keynote Panel: National, State, and Regional Perspectives on Infrastructure Sensing**  **Moderator : Rory Cooper, National Academy of Engineering Member** |
| 4:45 – 6:00 p.m. | **Networking Social Hour and Light Refreshments** |

**University of Pittsburgh Infrastructure Collaboration Workshop 2024:**

**A Member Led Workshop on Infrastructure Sensing**

Day 2: November 13th

Location: [Energy Innovation Center Pittsburgh (eicpittsburgh.org)](https://www.eicpittsburgh.org/)

**All events of the open workshop day will be held in the DLC Bright Space Room**

The open workshop program will include all registered attendees.

*Morning Agenda*

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| *Time* | *Activity* |
| 8:00 a.m. | **Welcome Remarks and Introduction to the Workshop (Objective, Scope, Steering Committee)** |
| 8:10 a.m. | **University, NAE, and National Energy Technology Laboratory Welcome Comments** |
| 8:30 a.m. | **Keynote NAE Speaker: The National Academies Perspective on Infrastructure and Sensing** |
| 9:30 a.m. | **Invited Industry Speaker: State-of-Art in Sensing, Data, Analytics, and Digital Twins** |
| 10:00 a.m. | **Coffee and Networking Break** |
| 10:15 a.m. | **Infrastructure Sensing Technology Overview Presentations (U. Pitt. and NETL)** |
| 11:00 a.m. | **Panel on Quantum Sensing and Related Technologies for Infrastructure (Dr. Wright Moderator)**  **Industry, University and National Lab Perspective** |
| 12:00 p.m. | **Logistical Announcements / Lunch / Networking Break** |

*Afternoon Agenda*

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| ***Time*** | ***Activity*** |
| 1:00 p.m. | **Keynote Industry Speaker: Networks and Systems of Digital Twins for Infrastructure Sensing** |
| 2:00 p.m. | **Invited Industry Speaker: On-Chip Photonics, Fiber Optics, and Infrastructure Sensing** |
| 2:30 p.m. | **Coffee Break** |
| 2:45 p.m. | **Keynote Industry Speaker: Cybersecurity and Infrastructure Sensing** |
| 3:45 p.m. | **Panel on Synergies in Need and Opportunity Across Infrastructure Segments (Dr. Ohodnicki Moderator)** |
| 4:45 p.m. | **Looking to the Future and Next Steps** |
| 5:00 p.m. | **Final Remarks and Poster Session Summary** |
| 5:15 p.m. – 6:30 p.m. | **Poster Session with a Social Hour and Light Refreshments** |