

TC 6.1 Hydronic & Steam Heating Equipment and Systems ASHRAE Annual Conference (June 22-26, 2024) in Indianapolis

HYBRID MEETING

(IN-PERSON AND MICROSOFT TEAMS)

Main Committee Meeting

Tuesday, June 25, 2024
1:00 pm – 3:00 pm EDT
Room: JW Marriott, 307 (3)
[Teams Link](#)

Handbook Subcommittee Meeting

Monday, June 24, 2024
3:00 pm – 5:00 pm EDT
Room: JW Marriott, 307 (3)
[Teams Link](#)

Research & Programs Subcommittees Meeting

Monday, June 24, 2024
1:00 pm – 3:00 pm EDT
Room: JW Marriott, 307 (3)
[Teams Link](#)

TC 6.1 Social Happy Hour

Monday, June 24, 2024
5:00 pm EDT (or whenever
Handbook Meeting ends)
High Velocity at JW Marriott

Name	Position	Voting Status	Voting Term
Jessica Mangler	Chair	Voting	07/01/2023 – 06/30/2025
Viral Dharaiya	Vice Chair	Voting	07/01/2023 – 06/30/2024
Sarah Hilden	Secretary	Non-Voting	N/A
Jennifer (Jen) Leach	Program Subcommittee Chair	Non-Voting	N/A
Jeff Farley	Research Subcommittee Chair	Non-Voting	N/A
Theodore (Ted) Duffy	Handbook Subcommittee Chair	Voting	07/01/2023 – 06/30/2025
Frank Myers	Standards Subcommittee Chair	Voting	07/01/2021 – 06/30/2025
Niels Bidstrup	Member Non-Quorum	Non-Quorum Voting	07/01/2020 – 06/30/2024
Lynndy Hedgcoth	Webmaster	Non-Voting	N/A
Rex Scare	Member	Voting	07/01/2023 – 06/30/2026
Mick Schwedler	Member	Voting	07/01/2023 – 06/30/2027

TC 6.1 SPONSORED OR CO-SPONSORED PROGRAMS FOR INDIANAPOLIS

SEMINAR 39: Simplifying the Electrification of Hydronic Systems

Tuesday, June 25, at 11:00am – 12:30pm EDT
JW Marriott – Indianapolis, Grand Ballroom 8 (3)

1. Chair Welcome (*Jessica Mangler*)

- **Committee Scope:** TC 6.1 is concerned with all aspects of hydronic and steam systems. This includes the application of boilers, chillers, terminal units, and all accessories and controls making up the total system as well as the design of the integrated system. In addition to comfort applications of both heating and cooling, snow melting systems are included. Cooperation with other TCs is recognized in areas such as control, noise and vibration, refrigeration, pumps, and hydronic and service water piping.
- ASHRAE Code of Ethics Commitment: In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity, and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>)
- Secretary for the meeting: Sarah Hilden

2. Introductions

- Roll Call of Voting Members (*Viral Dharaiya*)
- Member and Guest Introductions

3. Membership (*Viral Dharaiya*)

- Review Roster Updates
 - Viral Dharaiya will continue as Vice Chair until 06/30/25.
 - Sarah Hilden becomes Voting Member starting 07/01/24.
 - Mick Schwedler changes from Voting Member to Corresponding Member after 07/01/24.
 - Viral Dharaiya and Niels Bidstrup shall have their Voting Member term extended beyond 06/30/2024.
- Quorum Check

4. Review of Meeting Documents (*Jessica Mangler*)

- Approval of Meeting Minutes for 2024 ASHRAE Winter Conference in Chicago.
- Review of Agenda

5. TC Chair Report (*Jessica Mangler*)**6. TC Communications** (*Lynndy Hedgcoth*)

- Website: <https://tc0601.ashraetcs.org/>
- Basecamp: <https://3.basecamp.com/3106353/projects/23183827>

7. Programs (*Jennifer Leach*)

- Update on TC 6.1 sponsored or co-sponsored programs for Indianapolis
 - SEMINAR 39: Simplifying the Electrification of Hydronic Systems
- Report on TC 6.1 sponsored or co-sponsored programs from Chicago in January 2024
 - SEMINAR 1: Driving Towards Decarbonization: Hydronics – The Perfect Transmission
 - SEMINAR 8: The Logical Way to Tap into Decarbonization: Hydronic District Energy Systems
 - AHR EXPO SESSION 2: Beyond the Boiler: Making it Work
 - SEMINAR 40: Modern Pumping Design
- Programs we plan to sponsor or co-sponsor for 2025 Winter Conference in Orlando

- Tracks: <https://www.ashrae.org/conferences/2025-winter-conference-orlando/2025-winter-conference-technical-program>
- Deadline for Seminar proposals: August 2, 2024

8. Research (*Jeff Farley*)

- Update Test Method for Independent Control Valves (Viral Dharaiya)
- The Effects of Magnetic Filtration on Energy Efficiency in Hydronic Systems (Brian Salem, Darren Wilkinson)
- Other ideas?

9. Handbook (*Ted Duffy*)

- HVAC Systems & Equipment
 - Chapter 11 – Steam Systems
 - Chapter 13 – Hydronic Heating and Cooling
 - Chapter 14 – Condenser Water Systems
 - Chapter 15 – Medium and High Temperature Water Heating
 - Chapter 28 – Unit Ventilators, Unit Heaters, and Makeup Air Units
 - Chapter 32 – Boilers
 - Chapter 36 – Hydronic Heat-Distributing Units and Radiators
 - Chapter 44 – Centrifugal Pumps
 - Chapter 46 – Pipes, Tubes, and Fittings
 - Chapter 47 – Valves
 - Chapter 48 – Heat Exchangers
 - Chapter X – Chilled Water Plant Design
- Fundamentals
 - Chapter 22 – Pipe Sizing

10. Standards (*Frank Myers*)

- SSPC 90.1
- SPC 155

11. Recognize Liaisons (*Jessica Mangler*)

- Handbook
 - Derek Crowe [Chs. 11, 28, 32, 36, 44 & 46]
 - Satish Iyengar [Chs. 13, 14 & 15]
 - Ahmed Medhat [Chs. 47 & new ChW]
- Research (Stefan Elbel)
- Standard (Paolo Tronville)
- Chapter Technology Transfer Committee (CTTC) (Elizabeth Zakelj)
- TAC Chairman (Craig Messmer)
- TAC Section Head (Douglas Reindl)
- Staff (Steve Hammerling)

12. Liaison Reports from other TCs and Organizations (*Jessica Mangler*)

- 6.2 – District Energy
- 6.5 – Radiant Heating & Cooling

- 6.6 – Service Water Heating
- 6.7 – Solar and Other Renewable Energies
- 6.8 – Geothermal Heat Pump & Energy Recovery Applications
- 6.10 – Fuels and Combustion
- Residential Building Committee
- Hydronics Industry Alliance
- Others?

13. Old Business

- Task Force for Building Decarbonization (Jason Atkisson)
- Open discussion as time allows.

14. New Business (*Jessica Mangler*)

- Feedback?
- Open discussion as time allows.

15. Adjourn (*Jessica Mangler*)**ATTACHMENTS:**

- Draft Meeting Minutes from 2024 Winter Conference in Chicago
- TC 6.1 Membership Roster