October 2025 CHMI Semiannual Meeting Summary

The Center for Composite and Hybrid Materials Interfacing (CHMI) hosted its Fall 2025 Semiannual Meeting on October 1–2 at the University of Tennessee, Knoxville. The event brought together faculty, students, and industry partners to share research progress, strengthen collaborations, and shape the center's strategic direction as it prepares for Phase II.

Attendance Breakdown:

In-person attendees: 44Virtual attendees: 8NSF Evaluator: 1

• IAB representatives: 11 in-person, 5 virtual

Faculty/Staff: 17 in-personGraduate students: 16 in-personUndergraduate students: 2 virtual

• Guest speakers: 1

Opening Remarks:

The meeting opened with remarks from CHMI leadership and the University of Tennessee Research Foundation (UTRF), emphasizing the center's mission to bridge academic research with industrial applications. Dr. Maha Krishnamurthy of UTRF highlighted the foundation's role in commercializing university innovations and fostering public-private partnerships that drive economic growth and workforce development.

CHMI Director Dr. Chris Muhlstein provided updates on the center's progress, including a strong financial outlook and a growing membership base. With 16 committed members and a revised annual membership fee of \$35,000, CHMI has successfully recovered from early funding shortfalls and is now well-positioned for long-term sustainability.

Day 1 Highlights:

Day 1 featured technical presentations from CHMI researchers, including six 30-minutes long technical presentations on various composite and hybrid materials interfacing topics. These presentations highlighted the center's commitment to industry-relevant research and student engagement, with graduate students actively participating in the presentations and discussions.

A major highlight of Day 1 was the student poster competition, held during the poster session and facility tour at the Fibers and Composites Manufacturing Facility (FCMF). The competition showcased innovative student research and fostered dynamic exchanges between students and industry representatives. The top three posters were recognized with awards sponsored by Endeavor Composites. Winners received custom-designed medallions (featuring bonded metal and carbon fiber parts) and cash gift cards. The awards added excitement to the event and underscored CHMI's commitment to student development.







Students receiving poster awards: First Place (left); Second Place (middle); Third Place (right)

Day 2 Highlights:

Day 2 focused on strategic planning through a roadmap revision session. Participants discussed consolidating CHMI's six research thrust areas into four, emphasizing the integration of artificial intelligence (AI) and other emerging technical tools into CHMI research, along with expanding education as a cross-cutting theme. The session also examined new research directions, including high-performance adhesives, coatings for extreme environments, non-destructive inspection (NDI), and sustainability through recyclability and upcycling.

The IAB/Student breakout sessions provided a platform for informal, career-focused conversations between students and industry representatives. Discussions covered the differences between academic and industrial research, the value of internships, leadership styles, and strategies for career development. Students were encouraged to build professional networks, seek mentorship, and explore diverse career paths in research and development.

The meeting concluded with closing remarks and expressions of appreciation for the collaborative spirit and hospitality of the University of Tennessee team. Plans for the next semiannual meeting, tentatively scheduled for April 2026, are underway.

CHMI continues to grow as a vibrant hub for innovation, education, and industry-academic collaboration. The October 2025 meeting reaffirmed the center's commitment to impactful research, student success, and strategic planning for a thriving future.

Acknowledgements:

The CHMI Center thanks the University of Tennessee for hosting, the IAB members for their guidance, and Endeavor Composites for sponsoring the student poster awards. Special thanks to all participants, students, and staff for making the October 2025 meeting a collaborative and inspiring success.