











Columbus Technical Society

Columbus Technical Society (CTS) is an affiliation of member organizations that hosts joint meetings for all member groups. Varied disciplines provide exposure to diverse topics and extended networking opportunities outside of one's own field.

When:

Monday, April 11, 2022

Where:

EWI 1250 Arthur E. Adams Dr. Columbus, OH 43221

Schedule:

Social: 6:00-6:30 pm Dinner: 6:30-7:00 pm Lecture: 7:00-8:00 pm

Cost:

\$20 for members of CTS Societies \$30 for nonmembers \$10 for students

For Reservations Contact:

Harvey Castner – hcastner@columbus.rr.com
Attendees must RSVP to this meeting by April 7, 2022.



AWS Columbus Section Presents

Directed Energy Deposition Additive Manufacturing

April 11, 2022

Dr. Thomas J. Lienert will provide an overview of Directed Energy Deposition-Laser (DED-L) Additive Manufacturing (AM) and compare it with multi-pass welding. After reviewing the seven AM processes (recognized by the ASTM F-42 Committee) he will discuss key aspects of DED-L and process control/monitoring sensors. His presentation will conclude with a short video showing complex parts that require multi axis control.

Dr. Thomas J. Lienert is Past-President of AWS (2019) and is internationally renowned as a welding researcher with over 40 years of documented accomplishments in the field of welding science and engineering. He is currently a consultant and recently retired from Los Alamos National Laboratory after more than 16 years. Tom has held previous positions on the Faculty of the Mechanical Engineering Department at the University of South Carolina, and as a Senior Engineer at the Edison Welding Institute. He earned a B.S. in Welding Engineering, as well as M.S. and Ph.D. in Materials Science and Engineering from The Ohio State University. Dr. Lienert has held leadership positions (chair or vice-chair) on several AWS Committees. He serves as Review Editor for the Welding Journal Research Supplement (WJRS) involving peer review for all research papers. He has published more than 35 journal articles related to welding, has received several awards for his publications and has given over 120 presentations at technical conferences. Tom has authored several book and handbook chapters, and has been elected a Society Fellow of both AWS and ASM International.