



1st United States Low Temperature Plasma Summer School

University of Minnesota, June 12-17, 2022

Organizers: Peter J. Bruggeman (University of Minnesota), Mark J. Kushner (University of Michigan)

Advisory board:

Jane Chang (University of California, Los Angeles)
 Daphne Pappas (Plasmatreat, USA Inc)
 Steven Shannon (North Carolina State University)

Uwe Czarnetzki (Ruhr University, Bochum)
 Edward Thomas (Auburn University)

The Summer School is inspired by the successful *Low Temperature Plasma School* in Bad Honnef, Germany. The Summer School is intended to provide an opportunity for graduate students to be immersed in the fundamentals and applications of low temperature plasmas for one week and to learn from leading researchers in their field. The US location will enable a new cohort of students to benefit from this experience. It is our hope that the School will also lead to strengthening our dynamic low temperature plasma community.

Registration process: Please send an expression of interest to Prof. Peter Bruggeman (pbruggem@umn.edu) with USLTPSS in the subject line. Please include your current position, affiliation, research topic, and one paragraph describing why you would like to participate in the summer school.

Registration deadline: May 1st, 2022, or until the maximum number of participants is reached

Registration fee: \$200 (including accommodation)

| Day | Lecture Topics | Confirmed Lecturers |
|----------|--|--|
| Mon | Introduction to plasmas Low pressure plasmas High pressure plasmas Magnetized plasmas and plasma wave interactions | Douglas Ernie (University of Minnesota) Uwe Czarnetzki (Ruhr University Bochum) Jose Lopez (Seton Hall University) Amitava Bhattacharjee (Princeton Plasma Physics Laboratory) |
| Tues | Plasma source design Plasma kinetics and reactions Plasma-surface interactions Dusty plasmas | Katharina Stapelmann (North Carolina State University) Uwe Kortshagen (University of Minnesota) Gottlieb Oehrlein (University of Maryland) Ed Thomas (Auburn University) |
| Wed | Modeling Diagnostics Hands on experience: Modeling (or) Hands on experience: Diagnostics | Mark Kushner (University of Michigan) Peter Bruggeman (University of Minnesota) Steven Shannon (North Carolina State University) Local organizers |
| Thu | Material processing: Low pressure Material processing: High pressure Environmental/agricultural applications Health applications Electric propulsion | Jane Chang (University of California, Los Angeles) Seth Kirk (3M) Selma Mededovic Thagard (Clarkson University) David Graves (Princeton Plasma Physics Laboratory) Mitchell Walker (Georgia Institute of Technology) |
| Fri (AM) | Combustion and flow control Energy applications | Igor Adamovich (Ohio State University) Elijah Thimsen (Washington University in St. Louis) |
| Fri (PM) | Special Topical Sessions: <ul style="list-style-type: none"> • Interactions of plasmas with complex interfaces • Plasma-biofilm interactions | |

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