

**DOE LTP Centers and User Facilities
2021 Annual Meeting Schedule (Hybrid Mode)**

Thursday, September 23, 2021				
	Time (Eastern)	Speaker	Title	Mode
8:00 – 10:00 am Oral Session I: PICI (White Oak room)				In person
1	8:00 – 8:20	Mark Kushner	Introduction to the LTP Centers and Facilities Annual Meeting 2021	In person
2	8:20 – 8:40	Bryan Goldsmith	Atomistic Modeling of Plasma-Assisted Catalysis: Opportunities and Challenges	In person
3	8:40 – 9:00	Aditya Bhan	Interactions of Atmospheric Plasmas with Catalytic Surfaces	In person
4	9:00 – 9:20	Gottlieb Oehrlein	DRIFTS and Gas Phase FTIR Characterization of Plasma-enhanced Catalysis	In person
5	9:20 – 9:40	Selma Mededovic-Thagard	Treatment of Aqueous Pollutants in Gas-liquid Plasma Reactors: Identification of the Key Parameters Controlling the Removal	In person
6	9:40 – 10:00	Igor Adamovich	N ₂ Vibrational Excitation in Atmospheric Pressure Ns Pulse and RF Plasma Jets	In person
10:00 – 10:20 am Break				
10:20 am – 12:20 pm Oral Session II: PCRF (White Oak room)				Hybrid
1	10:20 – 10:40	Yevgeny Raitses	ExB Plasmas for Processing of Nanomaterials	Remote
2	10:40 – 11:00	Arthur Dogariu	Advanced Optical Diagnostics for Low Temperature Plasmas; Neutral Density Mapping and Dynamics in RF-Heated PFRC Plasma	In person
3	11:00 – 11:20	Sophia Gershman	Plasma Diagnostics of Mesoporous Silica Packed Bed Reactors for Ammonia Synthesis	Remote
4	11:20 – 11:40	Igor Kaganovich	PPPL Modeling Tools for Low Temperature Plasmas Available through the Princeton Collaborative Research Facility	Remote
5	11:40 – 12:00	Mikhail Shneider	Coherent Thomson Scattering	In person
6	12:00 – 12:20	Shurik Yatom	Characterization of Plasma in RF Jet Interacting with Water: Thomson Scattering versus Spectral Line Broadening	Remote
12:20 – 1:50 pm Lunch				
1:50 – 2:40 pm Poster Session I: PICI (Brookside room)				In person
2:40 – 3:30 pm Poster Session II: PICI/PACC/SPRF (Brookside)				In person
3:30 – 3:50 pm Break				

Thursday, September 23, 2021 (continued)				
	Time (Eastern)	Speaker	Title	Mode
3:50 – 5:30 pm <i>Oral Session III: SPRF (White Oak room)</i>				Remote
1	3:50 – 4:10	Shane Sickafoose	Sandia National Laboratories Plasma Research Facility	Remote
2	4:10 – 4:30	Jonathan Frank	Imaging of Methyl Radical in Plasmas by Photofragmentation Laser-Induced Fluorescence	Remote
3	4:30 – 4:50	Matthew Hopkins	Advanced Modeling Capabilities for Low-Temperature Plasma Simulation	Remote
4	4:50 – 5:10	Christopher Kliewer	Development of Hybrid Coherent Raman Imaging and E-FISH Approaches for Low Temperature Plasma Assisted Chemistry	Remote
5	5:10 – 5:30	Amanda Lietz	Simulations of Nonequilibrium Thermionic Cs Plasmas	Remote
5:30 – 7:00 pm <i>Dinner</i>				
7:00 – 8:00 pm <i>Poster Session III: PCRF/ SPRF/PACC</i>				Remote

Friday, September 24, 2021				
	Time (Eastern)	Speaker	Title	Mode
9:00 – 10:00 am <i>Oral Session IV: PACC (White Oak room)</i>				Hybrid
1	9:00 – 9:20	Igor Adamovich	Ns Pulse and Hybrid Plasmas for Plasma Assisted Ignition and Catalysis	In person
2	9:20 – 9:40	Yiguang Ju	Studies of Non-equilibrium Plasma Chemistry and Thermal-Chemical Instability	In person
3	9:40 – 10:00	Bruce Koel	Ammonia Synthesis and Decomposition in Plasma-assisted Catalysis	Remote
10:00 – 10:20 am <i>Break</i>				
10:20 – 11:40 am <i>Oral Session V: PICI (White Oak room)</i>				In Person
1	10:20 – 10:40	Ali Mesbah	Machine Learning and Artificial Intelligence for Low-temperature Plasmas: A Tutorial Overview	In person
2	10:40 – 11:00	Steven Shannon	Accurate Reproducible Power delivery across Multiple Plasma Sources	In person
3	11:00 – 11:20	Peter Bruggeman	Plasma-Surface Interactions: Boundary Layer Effects and Self-organization	In person
4	11:20 – 11:40	Mark Kushner	Plasma Interactions with non-Planar, Wet and Reactive Surfaces	In person
11:40 am – 12:40 pm <i>Discussion: All (White Oak room)</i>				Hybrid

Poster Session I. Thursday, September 23, 1:50 – 2:40 pm

	Presenter	Title	Mode
1	Joshua Morsell	Open Channel Microfluidic Substrate for Investigation of Multi-phase Surface Interactions with Atmospheric Pressure Plasmas	In person
2	Brian Bayer	Design and Operation of an Experimental Setup Used to Study Plasma Catalysis	In person
3	Francis Doherty	The Influence of Plasma-Induced Surface Charging on Single-Atom Catalysis for CO ₂ Reduction	In person
4	Michael Hinshelwood	DRIFTS and Gas Phase FTIR Characterization of Plasma-enhanced Catalysis for NO _x Production	In person
5	Osakpolo Faith Isowamwen	Efficient Defluorination of Perfluorobutane Sulfonate (PFBS) by Plasma with the Aid of a Surfactant	In person
6	Jingkai Jiang	Control of Reactive Species Fluxes to Substrate and Absolute Density Measurement of Ions and Vibrationally Excited N ₂ by Molecular Beam Mass Spectrometry	In person
7	Kseniia Konina	Surface Ionization Wave Interactions with Dielectric Porous Surfaces	In person
8	Yudong Li	Study of Plasma-catalytic Oxidation of Methane: Role of Atomic Oxygen and Surface Species	In person
9	Mackenzie Meyer	Sheath Dynamics around a Water Droplet in an Atmospheric Pressure Glow Discharge	In person
10	Victor Miller	Green Fertilizer: Can Cold Plasmas Enrich Biowaste and Reduce Nitrogen Loss?	In person
11	Keegan Orr	Laser Induced Fluorescence Measurements of Vibrationally Excited Oxygen Produced by Recombination of O Atoms	In person
12	Xin Yang	Measurements of Atoms and Metastable Species in N ₂ and H ₂ -N ₂ Ns Pulse Plasmas	In person
13	Caleb Richards	Time-resolved CO ₂ , CO, and N ₂ Vibrational Populations in Ns Pulse Discharge Plasmas	In person

Poster Session II. Thursday, September 23, 2:40 – 3:30 pm

	Presenter	Title	Mode
1	Caleb Richards	N ₂ Vibrational Excitation in Atmospheric Pressure Ns Pulse and RF Plasma Jets	In person
2	Ketong Shao	Active Learning-guided Experiment Design for Maximizing Energy Efficiency of NO _x Production Using a DC Pin-to-pin Glow Discharge	In person
3	Tanubhav Srivastava	Formation of Self-Organized Patterns at the Plasma-Liquid Interface for a Helium Glow Discharge with Solution Anode	In person
4	Mikhail Vasilev	The Effect of Liquid Residence Time on the Removal of Aqueous Contaminants	In person
5	Jianan Wang	Spatially Resolved Absolute OH-LIF Measurements in a Surface Discharge Generated by an Atmospheric Pressure Plasma Jet	In person
6	Sai Raskar	Spatially Enhanced Electric Field Induced Second Harmonic (SEEFISH) Generation	In person
7	Ning Liu	fs-UV-LAS for Measuring Temperature and OH Concentration in Low Temperature Plasmas	In person
8	David Mignogna	N ₂ (A ₃ Σ ⁺ ,v) Energy Transfer Kinetics in Reacting N ₂ -CO ₂ -CH ₄ Plasmas	In person
9	Xin Yang	Plasma-Enhanced Ammonia Synthesis over a Catalytic Surface	In person
10	Hongtao Zhong	Kinetic Studies of Excited Singlet Oxygen Atom O(¹ D) Reactions with Ethanol	In person
11	Justin Smith	VUV Spectroscopic Investigation of a Low Current Corona Source in Nitrogen	In person
12	Foluke (Jennifer) Ganzallo	Characterization and Treatment Performance of a Plasma Spinning Disc Reactor	In person

Poster Session III. Thursday, September 23, 7:00 – 8:00 pm

	Presenter	Title	Mode
1	Jian Chen	Validated Two-dimensional Modeling of Short Carbon Arcs: Anode and Cathode Spots	Remote
2	Nirbhav Chopra	Characterization of an Atmospheric Pressure Carbon Arc Plasma	Remote
3	Harry Fetsch	Surface Charging in Disinfection by Dielectric Barrier Discharge	Remote
4	Sophia Gershman	Plasma Disinfection by Dielectric Barrier Discharge Devices Suitable for Consumer Use	Remote
5	Haomin Sun	Analytical Model for Estimating Plasma Parameters in a Planar Diode	Remote
6	Lucas Beving	Simulations of Ion Heating in the Presheath Due to Ion-acoustic Instabilities	Remote
7	Timothy Chen	Time-resolved Electric Fields and Electron Properties Measured by Burst Laser pUlse EFISH (BLUEFISH) and Thomson Scattering in CH ₄ /Ar Nanosecond Pulsed Discharges	Remote
8	Surabhi Jaiswal	Observation of O(¹ S) Metastable Transition in Atmospheric Pressure Plasma	Remote