

OS17: Supercritical Fluid

November 13, 2025

EX-2

- OS17-1
9:20-9:40 **Gas-Liquid Crossover and Density Fluctuation Effects in Supercritical Fluid Plasmas** (*Invited*)
Hitoshi Muneoka (Tohoku University, Japan)
- OS17-2
9:40-10:00 **Preliminary Measurements on Supercritical Region CO₂ Refractive Index and Boundary Film Thickness by Spectroscopic Ellipsometer**
Huan Liu (Chinese Academy of Sciences / University of Chinese Academy of Sciences, China), Atsuki Komiya (Tohoku University, Japan), Lin Chen (Chinese Academy of Sciences / University of Chinese Academy of Sciences, China)
- OS17-3
10:00-10:20 **Pore-Scale Insight into CO₂ Bubble Morphology and Dissolution Mass Transfer Coupling**
Yingxue Hu (Xi'an Jiaotong University, China), Yuki Kanda (Tohoku University, Japan)
- 10:30-10:45 BREAK
- OS17-4
10:45-11:05 **Experimental and Numerical Analysis of CO₂-CO₂ Jet and CO₂-N₂ Jet Mixing Flows Around the Supercritical Region**
Xiuben Li, Wangping Xi, Lin Chen (Chinese Academy of Sciences / University of Chinese Academy of Sciences, China)
- OS17-5
11:05-11:25 **Measurement of High-speed Supercritical CO₂ Convective Density Field with Local Heat Input from Bottom Side by Pixel-Arrayed Phase-Shifting Interferometer**
Zhaojia Liang, Shiyang Li (Chinese Academy of Sciences / University of Chinese Academy of Sciences, China), Gang Zeng (Chinese Academy of Sciences / Xiangtan University, China), Rui Zhang (Chinese Academy of Sciences / University of Chinese Academy of Sciences, China), Yuki Kanda, Atsuki Komiya (Tohoku University, Japan), Lin Chen (Chinese Academy of Sciences / University of Chinese Academy of Sciences, China)
- OS17-6
11:25-11:45 **Interferometric Measurement and Numerical Analysis of Converging-Diverging Channel Flow of Supercritical CO₂**
Zi Xu, Huimei Wang, Lin Chen (Chinese Academy of Sciences / University of Chinese Academy of Sciences, China)
- OS17-7
11:45-12:05 **Key Evaporation of Composite Fuel Droplets Under Sub-/Supercritical Environment**
Karim Ragui, Longfei Chen, Wu Huangsai, Wang Lida, Li Guangze (Beihang University, China), Atsuki Komiya (Tohoku University, Japan)