

PUBLICLY FUNDED GRANTS IN 2021

Feel free to contact the CoMFRE affiliate directly if you have any questions on the projects below.

First Quarter:

- “Acoustically activated release of organic liquids in porous media: a multiscale experimental investigation using laser-based optical diagnostics”; Jaime Juárez and Michael Olsen; Funding Agency: NSF; New Funding Amount: \$307,056.
- “X-ray imaging of multiphase flows of interest to ONR”; T.J. Heindel (PI); Funding Agency: Office of Naval Research; New Funding Amount: \$50,000.
- “Detection of biothreats in near real time with a multiplexed aptasensor”; Marit Nilsen-Hamilton, Todd Kingston, Pranav Shrotriya, Monica Lamm, and Wendy Maury; Funding Agency: Department of Homeland Security; New Funding Amount: \$333,332.

Second Quarter

- “Coupled Modeling and Simulation Framework for Multiphase Blast;” Rodney Fox; Funding Agency: DOD – Air Force; New Funding Amount: \$175,000.
- “Acoustically activated release of organic liquids in porous media: a multiscale experimental investigation using laser-based optical diagnostics,” supplemental award; Jaime Juárez and Michael Olsen; Funding Agency: NSF; New Funding Amount: \$14,000.
- “Modeling and Simulation of Electrostatically Levitated Multiphase Liquid Drops,” supplemental award; Jonghyun Lee; Funding Agency: NASA; New Funding Amount: \$73,368.
- “Development of Novel Molecule-Based Measurement Techniques to Characterize Aero-ThermoElastic Interactions of Super-/Hyper-sonic Flows and Solid Surfaces;” Thomas Ward and Hui Hu; Funding Agency: DOD – Air Force Office of Scientific Research (AFOSR); New funding amount: \$600,000

Third Quarter:

- “LEAP-HI: AI-Optimized 3D Printing of Super-Soft Materials for Personalized Sensing;” **Baskar Ganapathysubramanian, Adarsh Krishnamurthy** and Soumik Sarkar; Funding Agency: NSF; New Funding Amount: \$2,000,000
- “Controlling Spray Formation and Dispersion,” **Ted Heindel**, Funding Agency: Cornell University (flow through from ONR); New Funding Amount: \$75,000.
- “Multiscale Mechanics of Composite Hydrogels Exposed to Shock Waves;” **Jaime Juarez** and Sarah Bentil; Funding Agency: NSF; New Funding Amount: \$548,815

Fourth Quarter:

- “Controlling Spray Formation and Dispersion – Year 6 extension,” **Ted Heindel**, Funding Agency: Cornell University (flow through from ONR); New Funding Amount: \$258,258.