

Fully-funded Ph.D. Openings

About the Positions

Two fully-funded Ph.D. positions are available immediately at the department of mechanical engineering of the University of Louisville (UofL). The Ph.D. students will be working with Prof. Yanyu Chen at the *Materials and Structures in Extreme Environments (MSE²)* Laboratory. The broad areas of interest include 1) lightweight mechanical metamaterials, 2) 3D printed multifunctional composites, 3) wave dynamics of phononic metamaterials, and 4) high-performance lithium-ion batteries.

The prospective Ph.D. students should be highly motivated to participate in computational and/or experimental research related to the mechanics and physics of architected materials. We are particularly interested in candidates with experience in solid mechanics, multiscale/multiphysics modeling, topology optimization, physics, and material science. Applicants should submit a full curriculum vitae, a one-page cover letter, and the contact information of three references to Prof. Yanyu Chen at Yanyu.Chen@nrel.gov (CC to Yanyu.Chen@alumni.stonybrook.edu).

About the University of Louisville

The University of Louisville is a public university in Louisville, Kentucky, a member of the Kentucky state university system. When founded in 1798, it was the first city-owned public university in the United States. The 287-acre Belknap Campus is three miles from downtown Louisville and houses seven of the university's 12 colleges and schools. The J.B. Speed School of Engineering (SSE) encompasses seven academic departments. The SSE also houses three large research centers: the Rapid Prototyping Center, the Micro/Nano Technology Center, and the Conn Center for Renewable Energy. Mechanical Engineering is the largest, with approximately 500 undergraduates, 120 graduate students, and 18 faculty members.

About the Principal Investigator

Before joining the University of Louisville, Prof. Yanyu Chen worked as a postdoc researcher at National Renewable Energy Laboratory (NREL), which is a national laboratory of the U.S. Department of Energy. He earned his Ph.D. degree in Mechanical Engineering from Stony Brook University and M.S. and B.S. degrees in Structural and Civil Engineering from Beijing University of Aeronautics and Astronautics and Wuhan University, respectively. Throughout his career, Prof. Chen has published over 20 peer-reviewed papers and has given over 15 presentations. He is a member of American Society of Mechanical Engineers (ASME) and American Physical Society (APS).



Downtown Louisville



University of Louisville