



北京大学工学院

湍流与复杂系统
国家重点实验室**Mechanics-enabled Innovations in Solid State
Electrolytes and Environmental Remediation****固态电解质和环境修复中的力学创新**

报告人: Christos Athanasiou 助理教授

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地点: 工学院力学楼434室

内容简介: All forms of life and inanimate matter share a common element for effective development and performance: tiny building blocks. Different configurations of either bio or engineered building blocks are used to make almost anything. Investigation and characterization of such configurations lead to pioneering inventions and scientific advances, including the development of high-performance materials and structures for emerging research areas and sectors, from environmental remediation to energy storage to space exploration. Moreover, such investigations become challenging for complex shapes, or under extreme environmental conditions.

Athanasiou's lab is aiming to address complex social and environmental problems by introducing characterization methods that can enable the invention of advanced, high-performance materials and structures. In this talk, pioneering methods for mechanics investigation at small length scales, complex geometries and extreme conditions will be presented. The potential and applications of these methods will be discussed, highlighting how high-throughput, accurate, and reproducible characterization under challenging conditions can be used to create next-generation energy storage devices, and remove of emerging pollutants from soil and water.

报告人简介: Dr. Christos E. Athanasiou is an Assistant Professor at the Daniel Guggenheim School of Aerospace Engineering at the Georgia Institute of Technology. He directs the Daedalus Lab whose mission is to advance science and technology in biological and man-made systems for tackling grand social and environmental challenges. A major focus of the Daedalus Lab is the development of materials and structures for energy storage, environmental remediation, and sustainable space exploration. Prior to joining Georgia Tech, Christos conducted postdoctoral research at Brown University while being a visiting scientist at MIT. He holds a Ph.D. in Photonics from Ecole Polytechnique Fédérale de Lausanne (EPFL).

