



ΠΡΟΣΚΛΗΣΗ ΔΙΑΛΕΞΗΣ

Την Παρασκευή **5 Ιουλίου** και ώρα **12:00** στην αίθουσα των Γενικών Συνελεύσεων (ισόγειο κτιρίου Δ) θα δοθεί διάλεξη από τον καθηγητή **Robert H. Davis** με θέμα:

Selected Problems in Low-Reynolds-Number Fluid Mechanics

Robert H. Davis, Dean Emeritus and Tisone Professor
University of Colorado Boulder

Abstract: For fluid flow at low Reynolds numbers, viscous forces dominate over inertia. These conditions occur when the flow is very slow, the fluid has a large kinematic viscosity, and/or the flow domain is very small. In this talk, I describe selected problems in low-Reynolds-number fluid mechanics studied by my research group over the past several years. Many of these problems are motivated by biological and energy applications and include examples such as novel bioreactors for production of biologicals, membrane separations for cell harvesting and protein separations, microfluidic flows for biological analyses and detection, emulsion flows in porous media, and particle flows and agglomeration. Interspersed with these technical subjects are a few comments on leadership and planning.

Biosketch: Robert H. Davis is Dean Emeritus of the College of Engineering and Applied Science and the Tisone Endowed Professor of Chemical and Biological Engineering at the University of Colorado Boulder. He received his B.S. from the University of California, Davis in 1978 and his M.S. and Ph.D. degrees from Stanford University in 1979 and 1982, respectively, all in chemical engineering. Following a NATO postdoctoral fellowship at the University of Cambridge, he joined the faculty at the University of Colorado in 1983, serving as Chair of Chemical Engineering from 1992-2002 and Director of the Colorado RNA Center and Co-Director of the Colorado Institute for Research in Biotechnology from 1987-2001. He was appointed as Dean in 2002, and served in this role until 2017. Since 2009, he has served as the Director of the Balsells Program, which supports students from Catalonia to study in the U.S.A. Professor Davis' research and teaching interests are in biotechnology, complex fluids, and membrane separations, with over 200 reviewed publications in these fields. Honors include an NSF Presidential Young Investigator Award, ASEE Outstanding Young Faculty Award, ASEE Dow Lectureship, a Guggenheim Fellowship, and an Erskine Fellowship.

