Apr 21st, 11:00 AM - 12:00 PM

Keynote Speaker - Charles A. Pell, Associate in Research, Biology Department, Duke University: "A Periodic Table of Things that Swim and Fly"

KEYNOTE SPEAKER

"A PERIODIC TABLE OF THINGS THAT SWIM AND FLY"

Charles A. Pell, Associate in Research, Biology Department, Duke University

11:00 a.m. Anderson Auditorium (C101)

As Mendeleev organized chemical elements, so too artist-biologist Chuck Pell has arranged living and extinct things that swim and fly into groups. When he discovered that nature had omitted some logical possibilities, he built models to see whether those options worked and then he wondered what all these patterns meant about comparative anatomy.

A research associate in biology at Duke University, Chuck Pell is Vice President of science and technology for Nekton Research in Durham, North Carolina. He is co-principal investigator on the biomimetic Miniature Autonomous Underwater Vehicle (MAUV) effort sponsored by the Defense Advanced Research Projects Agency. This is aimed at producing swarms of mass-produced MAUV's for environmental monitoring and mapping. His other biologically inspired projects include the Nektor flexible maneuvering thruster and PilotFish agile underwater vehicle, sponsored by the Office of Naval Research, plus educational toys like the TwiddleFish.

Pell has served as art director of the Duke Bio-Design biomechanics modeling facility and as research coordinator for Dinamation in Los Angeles, which built full-sized robotic dinosaurs for the Smithsonian, the British Museum and others. His lifelong interest in art images and powered sculptures of microorganisms, swimming and flying fauna (extinct and extant) and locomotor machinery continues in his present research and development activities.