iFAST: The International Forum on Advanced Environmental Sciences and Technology

A series of distinguished seminars by eminent scientists 🥟

7 p.m. CST; <u>8 p.m. EST</u>; 1 a.m. GMT (Dec. 10); 9 a.m. Beijing (Dec. 10) Wednesday, Dec. 9, 2020



Jim Elser
University of Montana
https://flbs.umt.edu/newflbs/about-flbs/people/page-elements/flbs-people/people/jim-elser/

James Elser is Bierman Professor of Ecology at the University of Montana and has been director of UM's Flathead Lake Biological Station at Yellow Bay since 2016. He also holds a part-time research faculty position in the School Sustainability at Arizona State University. Trained as a limnologist, he is best known for his work in developing and testing the theory of ecological stoichiometry, the study of the balance of energy and multiple chemical elements in ecological systems. Currently, his research focuses most intensively on Flathead Lake as well as mountain lakes of western Montana and western China. In recognition of his research accomplishments, Elser has been elected to the National Academy of Sciences and named a Fellow of the American Association for the Advancement of Science and a foreign member of the Norwegian Academy of Arts and Sciences. He also has received the G.E. Hutchinson Award of the Association for the Sciences of Limnology and Oceanography, the world's largest scientific association dedicated to aquatic sciences. During 2014-2016 he served as ASLO's president.

Biological stoichiometry of nutrient limitation in ecology, evolution, and sustainability

Biological stoichiometry is the study of the balance of energy and multiple chemical elements in living systems. This talk will introduce some of the basic principles of stoichiometric theory and apply them to understanding the occurrence and impact of nutrient limitation in ecological and evolutionary settings using examples from both aquatic and terrestrial ecosystems. Finally, the talk will deal with how nutrient limitation might itself shape the long-term sustainability of human society, focusing on issues related to phosphorus and its role in agriculture and water quality.









Register for the Zoom conference at www.ou.edu/ieg/seminars

Organizing Committee Chair: Jizhong Zhou (University of Oklahoma, USA; https://www.ou.edu/ieg)
Xueduan Liu (Central South University, China)