

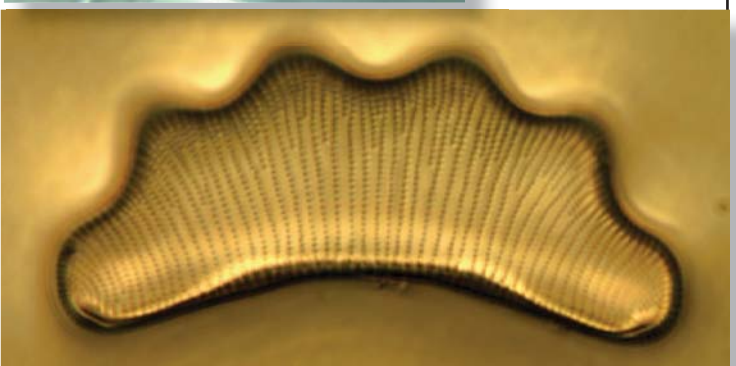
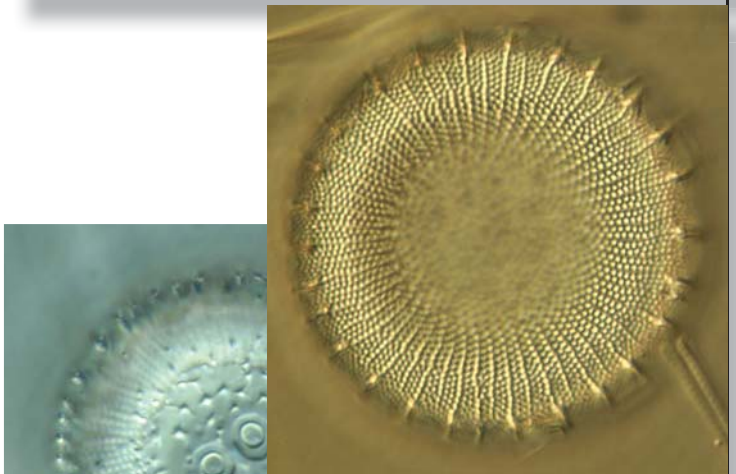
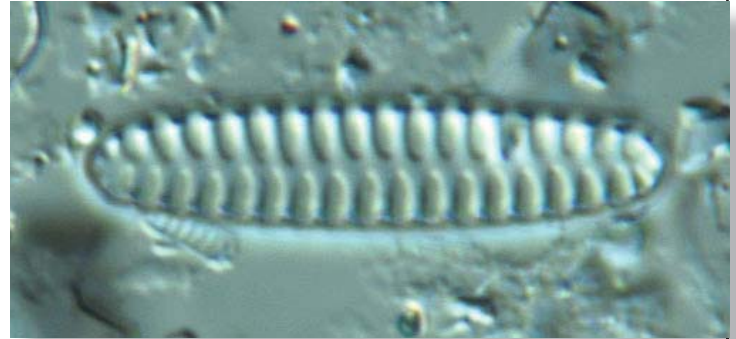


Freshwater Diatoms: Taxonomy and Biomonitoring with Jeffrey R. Johansen

July 25 - 31, 2010

This seminar will focus on building taxonomic competence to genus level for diatoms occurring in lakes and streams, as well as skills to determine species of ecologically informative taxa. It is offered for biologists and agency personnel interested in biomonitoring or including diatoms in ecological studies requiring species identification. Laboratory work will stress skills necessary to make reliable generic and species determinations freshwater diatoms. Participants will gain experience with a variety of taxonomic resources (i.e., North American and European diatom floras, internet resources, and primary literature). Laboratory work will also cover preparation of permanent diatom slides and calculation of water quality indices from diatom genera and species found in streams. Specimens used for study will be obtained from field trips during the seminar, but some supplemental specimens will be provided (particularly diatom slides from Acadia National Park). Participants are encouraged to bring samples from their own region for study or verification. Practical exams will be used to assess initial and final taxonomic competence of participants. Lectures will address an overview of morphology and taxonomy of most freshwater genera of diatoms, as well as the application of diatoms in assessment of water quality.

Dr. Jeffrey R. Johansen (johansen@jcu.edu) is professor of biology at John Carroll University. He is a specialist on the taxonomy and systematics of cyanobacteria and diatoms. His current research programs involve algal inventories of Acadia National Park, the Hawaiian Islands, and the Atacama Desert in Chile. He has served as an editor for *Diatom Research* and *Nova Hedwegia*.



Information is available on . . .

- other natural history science seminars
- graduate and undergraduate university credits
- continuing education units/recertification credits
- art workshops and courses

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