Revised Scope of Work – Richardson

Personnel

Tammi L. Richardson (PI)

Eric M. Lachenmyer (Technician)

Steven T. Litaker (Undergraduate Student)

We will be looking for populations of marine cryptophytes. Our work will involve: 1) collection of live phytoplankton samples, their preservation, and filtering for analysis of photosynthetic pigments. We will also characterize the quality of the underwater light environment using a spectral radiometer. We will us an Aquatic Laser Fluorescence Analyzer (ALFA) that connects to the ship’s flow-through seawater system to determine phytoplankton community composition.

We have (and will bring): the spectral radiometer with 200 m of cable, the ALFA instrument, all equipment required for filtration, a liquid nitrogen dewar (with liquid nitrogen) for flash freezing of pigment samples, and miscellaneous lab supplies for preservation/freezing/analysis.

Needed on the ship:

1. Niskin bottles for water collection at discrete depths.
2. CTD with fluorometer and PAR sensor for profiles.
3. Flow-through seawater supply for measuring spectral fluorescence properties by Aquatic Laser Fluorescence Analyzer (ALFA).
4. Winch for deploying the spectral radiometer.
5. -80°freezer

(We no longer need the radiation van).