# Assessment of carbon content in fluorescently labeled microgels

M. K. JENNINGS[1]*, M. ORELLANA[2] AND D. HANSELL[1]

[1]Rosenstiel School of Marine and Atmospheric Science, Univ. of Miami, Miami, FL 33149, USA (*correspondence: meredith.jennings@rsmas.miami.edu)

[2]Institute for Systems Biology, Seattle, WA, USA

Self-assembling microgels, transitional in size between dissolved and particulate matter, have been suggested to play a key intermediary role in organic matter bioreactivity. Microgel formation is the first step in creating a particulate sink for dissolved organic matter, with up to 10% of dissolved organic carbon in the ocean (70 PgC) predicted to exist in the gel phase. Independent tests of these important roles for microgels have not been conducted. In this work, we evaluate the fluorometric method developed previously for assaying the carbon content of gels, employing samples collected from the Gulf of Alaska.