

CAMBRIDGE

ENVIRONMENTAL CHEMISTRY

Aquatic Organic Matter Fluorescence

Edited by

Paula G. Coble, Jamie Lead, Andy Baker,

Darren M. Reynolds, and Robert G. M. Spencer



AQUATIC ORGANIC MATTER FLUORESCENCE

This is the first comprehensive text on the theory and practice of aquatic organic matter fluorescence analysis, written by the experts who pioneered the research area. This book covers the topic in the broadest possible terms, providing a common reference for making measurements that are comparable across disciplines, and allowing consistent interpretation of data and results. The book includes the fundamental physics and chemistry of organic matter fluorescence, as well as the effects of environmental factors. All aspects of sample handling, data processing, and the operation of both field and laboratory instrumentation are included, providing the practical advice required for successful fluorescence analyses. Advanced methods for data interpretation and modeling, including parallel factor analysis, are also discussed. The book will be of interest to those establishing field, laboratory, or industrial applications of fluorescence, including advanced students and researchers in environmental chemistry, marine science, environmental geosciences, environmental engineering, soil science, and physical geography.

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