# Photobiogeochemistry of organic matter [ principles and practices in water environments /

Mostofa, Khan M. G.

Springer,
c2013

Llibres electrònics

Monografía

Photoinduced processes, caused by natural sunlight, are key functions for sustaining all living organisms through production and transformation of organic matter (OM) in the biosphere. Production of hydrogen peroxide (H2O2) from OM is a primary step of photoinduced processes, because H2O2 acts as strong reductant and oxidant. It is potentially important in many aquatic reactions, also in association with photosynthesis. Allochthonous and autochthonous dissolved organic matter (DOM) can be involved into several photoinduced or biological processes. DOM subsequently undergoes several physical, chemical, photoinduced and biological processes, which can be affected by global warming. This book is uniquely structured to overview some vital issues, such as: DOM; H2O2 and ROOH; HO{8226}; Degradation of DOM; CDOM, FDOM; Photosynthesis; Chlorophyll; Metal complexation, and Global warming, as well as their mutual interrelationships, based on updated scientific results."



**Título:** Photobiogeochemistry of organic matter Recurs electrònic] :] principles and practices in water environments Khan M.G. Mostofa ... [et al.], editors

**Editorial:** Berlin New York Springer c2013

**Descripción física:** 1 recurs electrònic

**Tipo Audiovisual:** Water Organic compound content Water chemistry Photobiochemistry Hydrogen peroxide SCIENCE / Life Sciences / Biochemistry bisacsh Hydrogen peroxide. fast Photobiochemistry. fast Water chemistry. fast Water Organic compound content. fast Sciences de la terre. eclas Environnement. eclas

**Mención de serie:** Environmental science and engineering. Environmental science

**Bibliografía:** Includes bibliographical references

**Contenido:** Dissolved Organic Matter in Natural Waters -- Photoinduced and Microbial Generation of Hydrogen Peroxide and Organic Peroxides in Natural Waters -- Photoinduced Generation of Hydroxyl Radical in Natural

Waters -- Photoinduced and Microbial Degradation of Dissolved Organic Matter in Natural Waters -- Colored and Chromophoric Dissolved Organic Matter in Natural Waters -- Fluorescent Dissolved Organic Matter in Natural Waters -- Photosynthesis in Nature: A New Look -- Chlorophylls and their Degradation in Nature -- Complexation of Dissolved Organic Matter with Trace Metal Ions in Natural Waters -- Impacts of Global Warming on Biogeochemical Cycles in Natural Waters

**ISBN:** 9783642322235 electronic bk.) 3642322239 electronic bk.) 9783642322228 3642322220 1283945843 9781283945844

**Autores:** Mostofa, Khan M. G.

**Punto acceso adicional serie-Título:** Environmental science and engineering (Springer (Firm)). Environmental science SpringerLink eBooks

---