



ENI AWARD 2010

Environment Protection Prize

Winner

François Morel

The biological role of cadmium and the efficiency of carbon dioxide fixation and export in the oceans

Biography

François Morel is the Albert G. Blanke, Jr. Professor of Geosciences at Princeton University. Before joining the Princeton faculty in 1994, he served for many years as professor in the Civil and Environmental Engineering department at the Massachusetts Institute of Technology.

Professor Morel received his Licence-ès-Sciences (BS) in Applied Mathematics at the University of Grenoble, where he also obtained the Diplôme d'Ingénieur in 1967. A few years later, in 1971, he earned a PhD in Engineering Sciences at the California Institute of Technology, Pasadena.

Author of more than 150 articles, several books and book chapters, his research interests lie in theoretical, laboratory and field investigations of: coordination chemistry, surface chemistry and photochemistry of trace elements in natural waters; interactions between the chemistry and microbiota in aquatic systems; Oceanic primary production and Biogeochemical cycles of carbon, nitrogen, phosphorus and bioactive trace elements.

His academic career is covered by several important recognitions: from 1998 to 2006 he was Director of the Princeton Environmental Institute, and from 1991 to 1994 Director of the R. M. Parsons Laboratory at MIT. He has been awarded the C.C. Patterson Medal of the Geochemical Society in 2001, the Maurice Ewing Medal of the American Geophysical Union in 2005, as well as the Urey Medal, from the European Association for Geochemistry in 2009, and was elected to the U.S National Academy of Sciences in 2009.

François Morel has been Visiting Professor in many Universities like the Ecole Normale Supérieure - Paris, the Université Pierre et Marie Curie - Paris VI, Université Louis Pasteur - Strasbourg and the Ecole Polytechnique Fédérale de Lausanne.

His research work has been highly appreciated both in the public and in the private sector: he has been Member of several Panels of the National Research Council, the National Advisory Committee for Oceans and Atmosphere and the Conseil Scientifique of the Institut National de l'Environnement Industriel et des Risques among others. Finally he is a Member of several professional societies, including the American Geophysical Union, the American Society for Microbiology, the American Chemical Society and the Geochemical Society.