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Book review

Shelley L. Armsworthy, Peter J. Cranford, Kenneth Lee (Eds.), Offshore Oil and Gas Environmental Effects Monitoring: Approaches and Technologies, Battelle Press, Columbus, OH, 2005, 644 pages, US$ 87.50, ISBN 1-57477-146-9

This book contains 27 peer-reviewed papers selected from the 62 papers presented at the Offshore Oil and Gas Environmental Effects Monitoring Workshop held in Dartmouth, Nova Scotia, Canada in 2003. The conference papers were presented by scientists from Canada, the United States, Norway, the United Kingdom, Italy, Mexico, and Brunei with Canadian scientists being more prevalent.

The book addresses issues related to past, present and future environmental effects monitoring (EEM) for operations related to offshore oil and gas operations, many of which take place in some of the world's most biologically productive oceanic waters.

The papers published are divided equally into three major topic areas:

- Environmental management
- Approaches and technologies
- Applications and regional experience

Some of the topics discussed in the book are the following:

- Cost-effectiveness and utility of modelling pollution effects before they occur
- Plans for the management of environmental accidents
- Improving environmental management methodologies by linking EEM with ecological risk assessment
- Techniques used for detecting contaminants and predicting their fates
- Methodologies used for estimating biological effects
- Concerns regarding seismic activity effects on living resources
- Approaches to oil and gas development in sensitive and deep-sea environments
- Effective experimental designs for offshore EEM
- Regional experiences from past and ongoing EEM programs
- Environmental management issues including risk assessment and decision-making processes
- Development of risk assessment models
- New approaches and technologies for monitoring potential alterations in benthic, pelagic, and tropospheric ecosystem components
- Design of offshore EEM programs

Given society's desire to discover and utilize new sources of oil and gas but with a mission to protect the environment, this book will be of major use to scientists and others who are involved in that process.

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