



## **Crises in Oil, Gas and Petrochemical Industries: Disasters and Environmental Challenges**

Edited by: *Mohammad Reza Rahimpour, Babak Omidvar, Nazanin Abrishami Shirazi, Mohammad Amin Makarem*

# **CRISES IN OIL, GAS AND PETROCHEMICAL INDUSTRIES**

## **Disasters and Environmental Challenges**

**Volume 1**

Edited by

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Elsevier

Radarweg 29, PO Box 211, 1000 AE Amsterdam, Netherlands  
The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, United Kingdom  
50 Hampshire Street, 5th Floor, Cambridge, MA 02139, United States

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ISBN: 978-0-323-95154-8

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*Publisher:* Candice Janco

*Acquisitions Editor:* Anita Koch

*Editorial Project Manager:* Kathrine Esten

*Production Project Manager:* Paul Prasad Chandramohan

*Cover Designer:* Vicky Pearson Esser

Typeset by TNQ Technologies



# Preface

## Vol. 1: Disasters and environmental challenges

Dealing with disasters becomes significantly more important in oil, gas, and petrochemical plants nowadays considering their growing number of units and plants. Working with high-pressure and temperature apparatus such as reactors, vessels, columns, heat exchangers, etc., and also pipelines utilized for transportation purposes increases incident potential in these industries. On the other hand, long-term side effects on humans and the environment are incredibly important. Problems regarding venting toxic materials in the form of wastes, dust, and gases may lead to health problems, and releasing greenhouse gases results in global warming. Therefore, a systematic procedure for figuring out, classifying, and managing crises in the oil, gas, and petrochemical industries is an essential need.

This book is a collection of chapters illustrating various disasters in the oil, gas, and petrochemical industries. This includes the effects of natural disasters such as floods, and hurricanes as well as manmade incidents including fire events, explosions, and the release of dust and toxic substances on various related units and plants. Besides, the long-term side effects on both humans and the environment resulted from these industries are presented. Problems such as releasing wastes and venting gases into the environment, pollution from oil, gas, and petrochemical industries, and challenges from overusing natural resources and producing noise pollutants are discussed in detail.

The editors feel obligated to express their profound gratitude to the chapter writers and reviewers for their involvement and invaluable support in this undertaking. The authors and editors would also like to thank the Elsevier team for their invaluable and irreplaceable step-by-step support in preparing this book.

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