

Preface to the Special Issue for the 5th World Conference on the Safety of Oil & Gas Industry (WCOGI2014)

This special issue contains selected papers presented at the 5th World Conference on the Safety of Oil & Gas Industry (WCOGI2014) held in OKAYAMA CONVENTION CENTER Okayama Japan on June 8–11, 2014. WCOGI2014's theme is "Safety and Environment for the Future of Energy and Process Industries." WCOGI2014 was a success with more than 200 attendees and nearly 100 presented papers.

World Conference on the Safety of Oil & Gas Industry (WCOGI) was launched by the government departments and universities related to the oil and gas production safety from the United States, Korea and European countries in 2006.

WCOGI is a leading international conference for researchers and industry practitioners to share their new ideas, original research results and practical development experiences, aiming to strengthening the international academic exchanges and cooperation for oil and natural gas safety science and engineering, promoting the applications of modern safety science and technology in oil and gas industry, improving the establishment of a people-oriented oil and natural gas safety engineering technology system, reducing the oil industry accidents as well as production losses, and finally realizing the essence of security of oil and gas production.

In recent years, the accidents in the chemical plant are increasing. According to the Fire and Disaster Management Agency announcement, the number of accidents is almost twice than in 1994 in spite that the number of facilities is decreasing during this period. Establishing proper safety management is critical. Safety management is a balanced combination of well-designed framework, safety system and safety facilities including highly motivated and well-trained safety engineers. And safety system should follow the concepts of model based, evidence based, risk based approach, and PDCA cycle covering whole plant life cycle. Therefore, the papers in this special issue on WCOGI2014 can be classified under three general headings: process safety framework, model based process safety management, and process safety facilities and material management.

The submissions for this special issue underwent a new and thorough reviewing and revision process. The editors wish to thank the authors who have submitted papers to this special issue and the reviewers who have taken time to review the submissions.

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