



## Influences of Hydrogen Effects and Corrosion Damages on Long-Term Service Safety of Energy Pipelines

Guest Editor:

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### Message from the Guest Editor

Stress corrosion and hydrogen embrittlement are important causes for underground pipeline failure during long-term service, often resulting in catastrophic accidents and property damage. With the rapid development of hydrogen energy, much attention is put on pure hydrogen transportation and hydrogen–natural gas blend transportation using pipelines. Due to corrosion and hydrogen effects, and in the case of hydrogen pipelines, the coupled effects of these two mechanisms, the long-term safety of high-pressure pipelines deserves a refreshed focus. In this issue, the microscopic mechanisms of related degradation processes, safety assessment of affected structures, and control methods of aging of pipelines are addressed by researchers from different parts of the world.

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