Special Issue

Structural Strength, Corrosion and Failure Analysis of Pressure Vessel and Pipeline System

Message from the Guest Editors

Pipelines, which are regarded as blood vessels in the industrial field, are widely used to transport oil and natural gas, ammonia, alcohol fuels, coal and ore, hydrogen, water, carbon dioxide, etc. By far, pipelines are the most efficient and economical way to transport fluid media. However, due to the complex and hazardous transport environment, fracture, distortion, leakage, corrosion, etc., can easily occur in pipelines. Corrosion is one of the main causes of pipeline failure and has always been a bottleneck problem affecting the structural strength and failure analysis of pipelines. As mentioned above, the failure of pipelines threatens people's lives and property. Therefore, research on the structural integrity and failure mechanism of pipelines, especially of corroded ones, is a vital task to meet the design requirements of safer ones.

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Deadline for manuscript submissions

closed (10 May 2023)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/102038

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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