

## Special Issue

# Large Scale Cryogenic Systems and Transport of Cryogenes

### Message from the Guest Editors

There are currently many large-scale projects that require cryogenic temperatures in the planning or construction phase or are already in operation. These include research projects for fusion and various accelerators with superconducting components. However, there are also many large industrial cryogenic systems, such as air separators and liquefiers for various gases (e.g., LNG, LN<sub>2</sub>, LO<sub>2</sub>, LNe, LH<sub>2</sub>, and LHe). In addition to actual liquefiers, other cryogenic components are also required, such as cold compressors, supercritical He pumps, or secondary circuits. For the transport of liquefied cryogenic gases, very large cryogenic containers are sometimes required, and thermal insulation, boil-off gas management, and container pressure play very important roles here. The sloshing of liquids and measures (e.g., special fittings) to counteract this are also the subject of repeated investigations. Both original research articles and comprehensive review papers are welcome. Experience reports from large-scale plants in operation are also welcome in order to support those currently being planned.

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