

## Design and optimization of SO<sub>x</sub> scrubber system"

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International Maritime Organization (IMO) is expected to tighten the regulation of sulfur oxide (SO<sub>x</sub>) emission from 2020 to reduce the environmental impact of exhaust gas from ship. The scrubber system installed in the ship enables to reduce the SO<sub>x</sub> level, thus rigorous process design for SO<sub>x</sub> scrubbing system needs to be developed. In this study, the novel scrubber systems using sea water was designed using commercial simulator and validated with operational data. Further, process optimization to reduce the capital and operating cost was performed.