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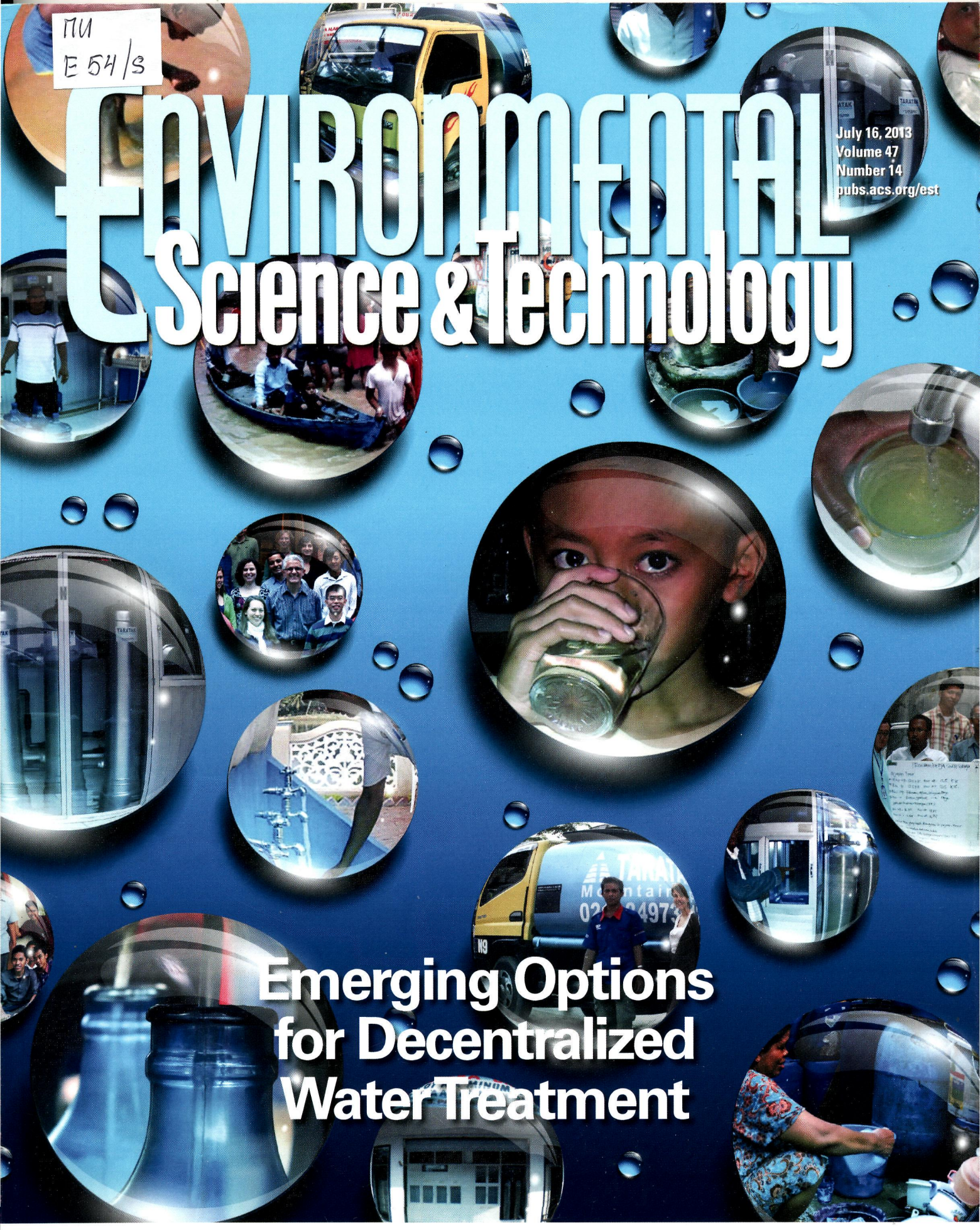

Emerging Options for Decentralized Water Treatment

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ON THE COVER: Decentralized membrane-based water treatment and refill stations are a growing business in developing countries. These drops are a compilation of images from refill stations in Indonesia, including Jakarta, a village in Sumatra, peri-urban Surabaya, and a fishing town in Flores. Pictures were taken by Laura Sima and Budi Darmawana.

Comment

Features

Decentralized membrane-based water treatment and refill stations represent a viable and growing business model in Southeast Asia, which rely upon the purchase of water from refill stations by consumers. This feature article discusses these water treatment and refill stations, including the appropriateness of the technology, the suitability of the business models employed, and the long-term environmental and operational sustainability of these systems. We also provide an outlook for the sector, highlighting key technical challenges that need to be addressed in order to improve the capacity of these systems, such that they can become an effective and financially viable solution.Decentralized membrane-based water treatment and refill stations represent a viable and growing business model in Southeast Asia, which rely upon the purchase of water from refill stations by consumers. This feature article discusses these water treatment and refill stations, including the appropriateness of the technology, the suitability of the business models employed, and the long-term environmental and operational sustainability of these systems. We also provide an outlook for the sector, highlighting key technical challenges that need to be addressed in order to improve the capacity of these systems, such that they can become an effective and financially viable solution.

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(S) Supporting Information available via online article