

**Cover Story**

## 18 Lithium Batteries Take to the Road

Can battery technology from a feisty start-up firm take hybrid-electric cars to the next level?

By John Voelcker

**Tech Expedition**

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Engineers build a smart underwater robot to explore a Mexican sinkhole, but their sights are on Jupiter's ocean-covered moon.

By Jean Kumagai

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By connecting tiny puddles of electrons in a chip, researchers hope to create a scalable quantum computer.

By Lieven Vandersypen

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Prediction markets bring "the wisdom of crowds" inside the corporation.

By Steven Cherry

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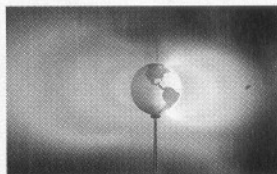
Now is the time to anticipate adverse effects.

By Barbara Karn & H. Scott Matthews

This month at

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## Killer Electrons From Space

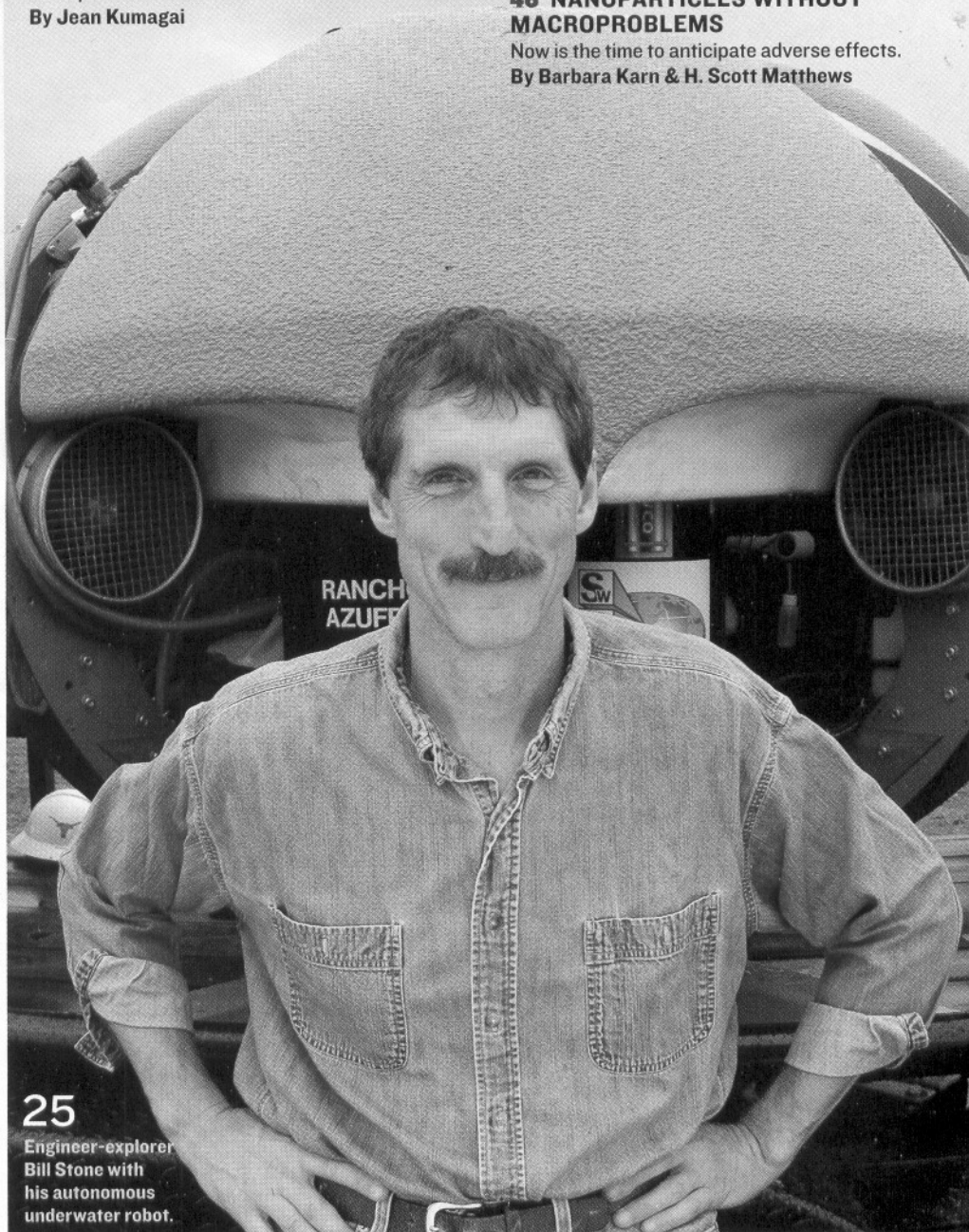
Scientists are figuring out what causes storms of satellite-crippling radiation in space. Their efforts could help engineers predict the storms and protect spacecraft from them.

## PORTRAIT OF A MATURE GRID MANAGER

With electricity deregulation, new authorities have been established in the United States and elsewhere to manage regional power systems. But not all are created equal. Join us on a virtual tour of New England's state-of-the-art Independent System Operator, in Holyoke, Mass.

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Engineer-explorer Bill Stone with his autonomous underwater robot.

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THIS PAGE, LEFT: Randi Silberman; RIGHT: NASA Glenn Research Center