FEATURES ON THE THEME

34  Dating the Moon.
Teaching lunar stratigraphy and the nature of science.
*Edward Murphy and Randy Bell.*

40  On the Shoulders of Sir Issac Newton and Arthur Storer.
Today we can engage in the same types of scientific thinking, discussions, and observations of the heavens that Newton and his friend did over 300 years ago.
*Helen E. Martin and Bonita Evans-Gondo.*

45  Deep Space Detectives.
Searching for planets suitable for life.
*Amy Pallant, Daniel Damelin and Sarah Pryputniewicz.*

52  Reading the Ice.
Using remote sensing to analyze radar data.
*Brandon Gillette, Kelsey Leinmiller-Renick, and Steve Foga.*

60  Stromatolites.
Teaching Earth and space science with field trips, geologic timelines, and other activities involving these ancient records of life.
*Renee Clary and James Wandersee.*

ALSO IN THIS ISSUE

The important features of life science standards for elementary, middle, and high school levels.
*Rodger W. Bybee.*

DEPARTMENTS

6  Editor’s Corner
Earth and Space.

8  Science 2.0
A Flipped Classroom in Action.

10  The Green Room.
Exploring Fuel Efficiency.
Earth and space science are often the forgotten discipline in high school. This is a shame. The study of our home planet and its place in the universe has provided inspiration for countless scientists and amateur naturalists. Closer to home, deep knowledge of the Earth is essential to meeting the environmental challenges of the 21st century. Students must comprehend the dynamic Earth system if they are to responsibly address such critical issues as global climate change. Emerging technologies — many of them spin-offs of the space program — offer powerful new tools for students to analyze a wide range of planetary data and create their own inquiry-based investigations. The articles in this issue offer a taste of the vast range of study that awaits.

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