Getting Smaller and Smaller

ROBERT F. SERVICE'S ARTICLE ON PROGRESS in developing miniature fuel cells for powering small electronic devices ("Shrinking fuel cells promise power in your pocket," News Focus, 17 May, p. 1222) is interesting and encouraging from the point of view of alternate energy strategies, but I wonder if the technology described is not already obsolete. Workable miniature fuel cells are coming on the market (*1*). The definition of a "fuel cell" should include not only cells using hydrogen and methanol, but also metal air cells. These are often called batteries, but they are not merely electricity-storing devices. Aluminum is especially interesting because the oxidation of aluminum produces enormous amounts of energy. To extract this energy in the usable form of electricity, aluminum is oxidized in an alkaline environment to aluminum hydroxide (*2*). Some of the more difficult problems of miniaturizing this technology have now been overcome (*3*). The Trimol Group is bringing out a unit 60 mm by 35 mm by 8 mm in size, which can power a wireless telephone for 25 hours of continuous talk (*1*). However depressing that prospect may be for the parents of teenagers, the problem of miniaturization of fuel cells has been solved.

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References and Notes

1. See www.trimolgroup.com/product_cellphone.htm.
2. See www.aluminum-power.com/technology.htm.
3. See fuelcellmagazine.com/articles/april01-2.htm.

CORRECTIONS AND CLARIFICATIONS

NEWS OF THE WEEK: "'Fantastic' fossil helps narrow data gap" by E. Stokstad (26 Apr., p. 637). Guillermo Rougier had the wrong affiliation attributed to him in the article. He is an Assistant Professor at the University of Louisville School of Medicine.

RANDOM SAMPLES: "E.T., where are you?" edited by C. Holden (19 Apr., p. 465). The name of the first author of a forthcoming paper on the Search for Extraterrestrial Intelligence was inadvertently omitted. He is Joseph Lazio from the Naval Research Laboratory.

NEWS OF THE WEEK: "One gene determines bee social status" by E. Pennisi (26 April, p. 636). The credit for the photograph accompanying the story was incorrect. It should have read, "Zachary Huang, Michigan State University (www.cyberbee.net)."

NEWS FOCUS: "Science invades the Magic Kingdom" by R. F. Service (19 April, p. 462). Grätzel cells use ruthenium-based light-harvesting complexes to absorb sunlight, not a rhodamine-based dye, as stated in the article.

Letters to the Editor

Letters (~300 words) discuss material published in *Science* in the previous 6 months or issues of general interest. They can be submitted by e-mail (science_letters@aaas.org), the Web (www.letter2science.org), or regular mail (1200 New York Ave., NW, Washington, DC 20005, USA). Letters are not acknowledged upon receipt, nor are authors generally consulted before publication. Whether published in full or in part, letters are subject to editing for clarity and space.