not actually collusive with the local plants). Even more painful, many of these activists, having already suffered illnesses and deaths of their children, were then attacked as "troublemakers" by neighbors who were workers at the polluting plants for threatening local livelihoods.

The offending chemical was trichlorethylene (TCE). There is grave doubt about whether epidemiological studies based on the small numbers studied are valid. Cancer clusters in small areas commonly occur by chance or for unknown reasons. Bruce N. Ames *et al.* say that the most polluted well water in Woburn had a human exposure dose/rodent potency dose (HERP) risk value of 0.0004%, compared to a HERP value of 0.001% of average U.S. tap water (*1*). According to this evidence, the residents of Woburn would have been more at risk of cancer from chloroform in ordinary tap water than from TCE in Woburn wells.

Other solvents, such as benzene, may cause cancer in workers who receive occupational exposures over long periods of time when the chemical is introduced through the lungs. But, is there evidence that TCE causes leukemia when it is not absorbed through the lungs (*2*)? Might it not, in view of considerations such as these, be fairer to say that residents were enraged because they wrongly believed that they were victimized?

The accusation of deliberate harm for profit is horrifying; it should not be made without substantial evidence. My reading of Schnaiberg's review suggests that he did not read the scientific literature and appraise the evidence. The point is not that I am necessarily right that the evidence is weak but rather that first-hand appraisal of the evidence is a scholarly obligation.

Aaron Wildavsky
Survey Research Center,
University of California,
Berkeley, CA 94720

REFERENCES

1. B. N. Ames, R. Magaw, L. S. Gold, *Science* **236**, 271 (1987).
2. *Cancer Rates and Risk* (Publ. 85-961, National Institutes of Health, Bethesda, MD, April 1985), pp. 40, 64, 93.

Response: It is peculiar to find one social scientist arguing that a fellow social scientist has a "scholarly obligation" to "appraise the evidence" of epidemiologists.

My review, "Oppositions" as its title indicates, was an attempt to understand community opposition to various environmental risks, which was the common theme of the books under review. As a social scientist, my charge in the review was to understand community social and political processes. Brown and Mikkelsen use *reports* from Woburn residents about their health experiences. They also use *reports* of residents' political experiences, while trying to get professional *epidemiological* assessments of their health risks. Both reports related to the operations of a local factory, which putatively affected the water supply in their community.

In the passage Wildavsky cites, I pointed to the empirical data collected by Brown and Mikkelsen. My task was not to assert whether the residents were actuarially "right" in their assertions of health *outcomes*. Rather, I sought to integrate their reported experiences into the broader empirical and theoretical task of comprehending how communities deal with such perceived risks.

Interestingly, Brown and Mikkelsen spend a good deal of their book carefully dealing with the options communities actually have in obtaining *scientific* information about health risks. (They also summarize the conclusions of Harvard School of Public Health epidemiologists and biostatisticians from *their* professional field studies of Woburn, which substantiated many of the claims of local activists.)

Allan Schnaiberg
Department of Sociology, and
Center for Urban Affairs–
Policy Research,
Northwestern University,
Evanston, IL 60208

Corrections and Clarifications

Figure 2 on page 523 of the Report "Magnetoferritin: In vitro synthesis of a novel magnetic protein" by F. C. Meldrum *et al.* (24 July, p. 522) was incorrect. The correct figure is printed below.

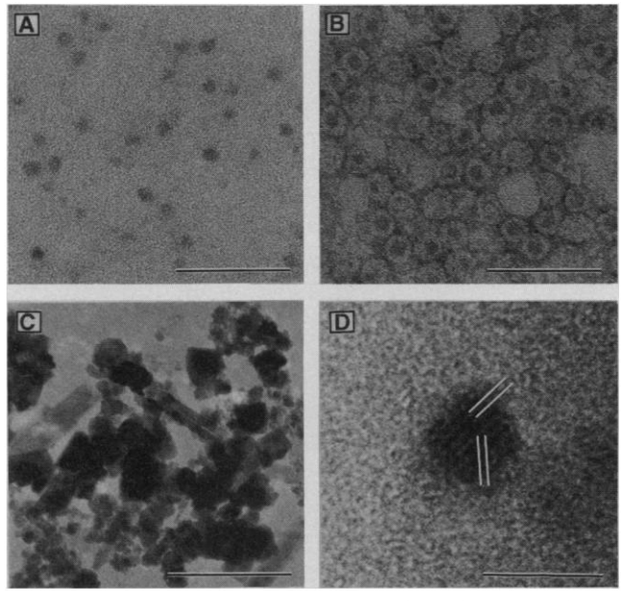

Fig. 2. Transmission electron micrographs of (**A**) an unstained sample of reconstituted ferritin showing discrete magnetite particles (scale bar = 50 nm); (**B**) a stained sample of (A) showing an intact protein shell surrounding the magnetite cores (scale bar = 50 nm); (**C**) magnetite crystals formed in the control reaction (scale bar = 100 nm); the needle-shaped crystals were identified as the mineral goethite (α-FeOOH); and (**D**) a high-resolution lattice image of an individual reconstituted ferritin core showing the single-crystal nature of the particle. Two sets of lattice fringes are observed corresponding to the {111} (interatomic spacing d = 0.485 nm) and {002} (d = 0.4198 nm) planes of magnetite. The angle between these planes is 54°, consistent with a cubic lattice symmetry (scale bar = 5 nm).