Hydrogen Storage in Nanotubes

In their recent letter (28 Jan., p. 593), Michael J. Heben and Anne C. Dillon point out that we, along with another group of authors, had misinterpreted their research with hydrogen storage in carbon single-wall nanotubes. In our report, "High H_2 uptake by alkali-doped carbon nanotubes under ambient pressure and moderate temperatures" (P. Chen, W. Wu, J. Lin, K. L. Tan, 2 July 1999, p. 91), we referred to the work of A. C. Dillon *et al.* (*1*) as being performed at a temperature of 133 kelvin and a pressure of 300 torr. Although they noted that the rate of hydrogen desorption peaked between 275 and 300 kelvin, we emphasized that the adsorption started at 133 kelvin and 300 torr, because from our experience with multiwalled carbon nanotubes, we had found that such nanotubes adsorb only a small amount of H_2 at ambient or high temperatures [our work is reported in (*2*)]. Recently, we performed low-temperature, low-pressure experiments on multiwalled carbon nanotubes and found that there was only very little H_2 staying in the sample at ambient or high temperatures in spite of the fact that adsorption was observed at subambient temperatures. This shows that some hydrogen was stabilized between 275 and 300 kelvin by Dillon *et al.*'s single-wall carbon nanotubes. We apologize for our misemphasizing the low-temperature and low-pressure conditions of Dillon *et al.*'s experiments, which may have led to a misunderstanding of their results as referred to in our report.

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References
1. A. C. Dillon *et al.*, *Nature* **386**, 377 (1997).
2. X. Wu, P. Chen, J. Lin, K. L Tan, *Int. J. Hydrogen Energy* **25**, 261 (2000).

Science Under the Nazis

Regarding Manfred D. Laubichler's Essay on Science and Society "Frankenstein in the land of *Dichter* and *Denker*" (*Science*'s Compass, 3 Dec., p. 1859), I must disagree with his analysis of history. That German sciences are now prospering is uncontestable. Where I disagree is the paragraph in which he speaks of past science and says the following: "The Nazi years changed all that. Large numbers of scientists and students were killed or forced to emigrate, retreated into 'pure science,' or were compromised by the odd mixture of reaction and modernism that characterized the Nazi attitude toward science. After World War II, the intellectual foundations of the New Federal Republic were laid by philosophers and social scientists, in particular by the so-called Frankfurt School, which stressed the critical evaluation of the past as a sine qua non for the intellectual life. In the context of this discourse, human genetics and any other forms of 'biologism' were considered particularly dangerous."

It is painfully important to understand that the scientific community in Nazi Germany both thrived under the Reich and morally failed. As described in Ute Deichmann's book *Biologists Under Hitler* (*1*), when the Nazis took power, they infused huge amounts of money into all types of science. Much of this science had a slant toward justifying the Nazi view of human development, and whether it was physics, chemistry or biology, psychology or behaviorism, the science had to demonstrate a strong Aryan streak. Grants were written by scientists seeking these funds, after a time of economic depression and scientific scarcity in Germany, and they were writen to accommodate Nazi dicta. Many will recall the debates involving Konrad Lorenz. It is this moral failure that led to the ostracism