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Colleges and universities are not to be blamed completely. Considering that their raw material (students) come from a milieu which confuses "teacher training" and "driver education," and is populated by incompetent products of alleged colleges of education, one has to have sympathy for college and university instructors who frequently also have the requirement to help keep the body count up. Certain elements of academe are out of kilter with reality, and dialogue with the outside world, as well as corrective actions, is needed. "Baby P-chem" is best forgotten. Do it right or forget it.

John R. Wasson, *President*
SYNTHECO Inc., Gastonia, N.C.

ACS is a good buy

SIR: The information Bryant Rossiter provided on the amount of revenue ACS obtains from other countries (C&EN, April 15, page 27) is both surprising and satisfying. The strong dollar has forced many countries to nurse carefully their U.S. dollars and it is clear they believe ACS is a good buy.

The society has been a leader in the international chemical community and a responsible force for sharing scientific information free of political bias. We are all indebted to the effective leadership provided in the society and the Committee on International Activities, in particular, to improve life on this planet.

H. Fred Wilson, *Spring House, Pa.*

PCBs in Hudson River sediment

SIR: The findings by General Electric researchers that PCBs are being decomposed by anaerobic bacteria (C&EN, May 6, page 10) in contaminated Hudson River sediment are very interesting. The finding that "unexpectedly much more massive transformation was found for PCBs contained in deeper sediment layers," is not unusual for the following reasons: Transformation that takes place under oxygen-free conditions in organic solvent by the process of reductive dechlorination involves initial electron-transfer followed by stepwise replacement of chloride by hydrogen [*J. Electrochem. Soc.*, **130,** 1120 (1983)].

Therefore, the net effect would most likely be a more biodegradable PCB under such conditions. Furthermore, there may be a twist to the role of polycyclic aromatic hydrocarbons (PAHs) in the environment. Although PAHs are reported to be phototoxic to some organisms in the light, the organisms are not affected by them in the dark. The twist is that PAHs can actually be used to assist in catalytic dechlorination of PCB [*Chemosphere*, **13,** 415 (1984)].

Although it would be difficult to prove, I close with the question: "Are the anaerobic bacteria, deeply imbedded in the Hudson River sediment, in reality, using PAHs as electron-transfer mediators in anaerobic catalytic dechlorination reactions of PCBs in the dark?"

Thomas F. Connors
University of Connecticut, Storrs

Men/women scientists

SIR: As a graduate student, I was interested in your article (C&EN, April 19, page 48) about action taken to encourage women to seek graduate degrees in chemistry. I have many minor contentions with the information presented, but I cannot ignore the use of the phrase "a scientist instead of a woman." In this case, young women are being reassured that they will not feel out of place in graduate laboratories: "A woman soon finds herself thought of as a scientist instead of a woman."

I have heard similar statements elsewhere. A fellow graduate student complimented a faculty member by saying she was a chemist before she was a woman. I was told of a recommendation that began by claiming that the person recommended put her chemistry before her womanhood. I have thought about this notion for a long time and still am disturbed by it. Are men complimented by being told they are chemists before they are men? Do male chemists strive to be accepted as scientists *instead* of as men? I think not. Yet these young women can hope, at best, to reach a state of androgeny where they are scientists instead of women, a worry their male counterparts, apparently, need not face.

To me, this is sexism of the worst kind. This phraseology suggests, incorrectly, that there is something inherently contradictory in being a woman and a scientist. I exist as a woman; this fact does not come "before," "after," or "instead of" the fact that I have chosen to be a chemist. I am a scientiest *and* a woman. I wish to be accepted, thought of, and acknowledged as both in one.

Mary E. Roth, *Cambridge, Mass.*

International activities

SIR: I would like to applaud the sentiments expressed by Bryant W. Rossiter (C&EN, April 15, page 27).

Participation in many workshops on human and economic development in the so-called Third World over the last two decades has persuaded me that the development of a scientific infrastructure is a *necessary*, but a *sufficient* condition for making the kind of programs that we have come to take for granted in our affluent nation.

The role of founded-again professional societies—as well as individual scientists and engineers—is a crucial element in helping to develop this infrastructure, and I hope that your [readers will] take to heart the important message of Dr. Rossiter.

One hundred years from now the root causes of international unrest will likely be oriented on a North-South axis rather than on an East-West axis. Steps taken now will eliminate the kind of difficulties that will possibly arise during the next century.

Thomas F. Malone
International Committee, Sigma Xi
New Haven, Conn.

Asbestos in brake linings

SIR: In a recent letter (C&EN, April 15, page 4), B. N. Lord and H. A. Jongedyk of the U.S. Dept. of Transportation criticize an article (C&EN, March 4, page 28) identifying brake linings as a significant source of airborne asbestos. They cite a 1973 study inferring that brake usage physically alters asbestos fibers. However, in subsequent studies, A. Rohl et al. [*Environ. Res.*, **12,** 110 (1976)]; J. Alste et al. [*Atmos. Environ.*, **10,** 583 (1976)]; and in our laboratory, K. Seshan and G. R. Smith [*35th Ann. Proc. Electron Microscopy Soc. Amer.*, (1977)] found significant quantities of chrysotile asbestos in brake drum dust. In fact, W. V. Lorimer et al. [*Mt. Sinai J. of Med.*, **43,** 207 (1976)] advocated urgent control measures to protect vehicle maintenance workers.

Evidently, during braking, not all of the brake material that is removed from the surface reaches the approximately 800 °C required to convert chrysotile asbestos to forsterite or even the approximately 500 °C necessary to dehydroxylate the chrysotile. This is not surprising from a commonsense consideration of braking action. Moreover, the modifiers added to brake lining material are designed, among other things, to act as heat sinks.

To assume that all of the asbestos is converted to innocuous material during braking is to engage in wishful thinking contrary to documented evidence.

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Glenn Smith
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