

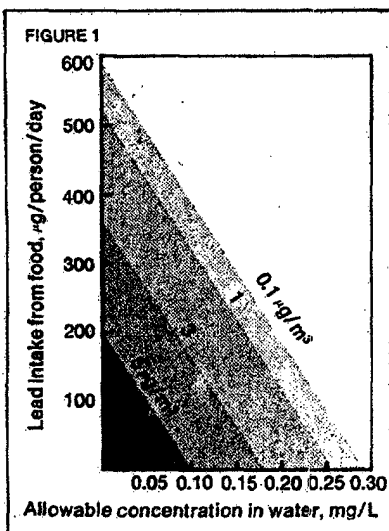
The cover runners.

Dear Sir: To my husband's and my surprise, we are the runners on the December 1978 cover of *ES&T*.
Amber & Anthony Reynoso
Ione, Calif. 95640

Man's lead burden

Dear Sir: I was pleased to read the aspects of integrated exposure assessment monitoring (*ES&T*, January 1979, p 34). In order to set standards for drinking water contaminants, the total exposure from air, food and water should be taken into consideration. A simplified approach for arriving at lead limits in drinking water is presented in Figure 1. Such limits are variable, as it should be, depending on lead intake from food and air. In making the computations (applicable to adults only), the following assumptions have been made:

Maximum no-observed-adverse-health-effect:	60 $\mu\text{g}/\text{d}$
Daily inspiration volume:	20 mg^3
Daily intake of water:	2 L
Lead absorption from food:	10%
Lead absorption from water:	10%
Lead absorption from air:	40%



It can be seen that in urban areas (for example air lead 1 $\mu\text{g}/\text{m}^3$), and with a daily lead intake from food of 430 μg (WHO's maximum tolerable daily intake), the allowable concentration of lead in drinking water should not exceed 0.05 mg/L . However, if for the same concentration of air lead, the daily lead intake from food is 300 μg only, then the allowable concentration of lead in drinking water could be increased to 0.11 mg/L . Such computation demonstrates that the WHO standard of 0.1 mg/L for lead in drinking water and the U.S. standard of 0.05 mg/L are in fact not conflicting, each one being appropriate under different exposure conditions.

Another example: in highly urbanized areas (3 $\mu\text{g}/\text{m}^3$), at an average intake of lead from food of 300 $\mu\text{g}/\text{day}$, the level of lead in drinking water should not exceed 0.03 mg/L . If the intake from food is 400 instead of 300 $\mu\text{g}/\text{day}$ then the "safe" limit of 60 $\mu\text{g}/\text{day}$ has already been exceeded and no lead should be allowed in the drinking water.

Such graphs could be constructed for a variety of contaminants provided certain metabolic and toxicological factors are known. They would serve to make "allocations" for the various routes of exposure as well as adopt standards that are appropriate to specific situations.

Hend Galal-Gorchev
1206 Geneva, Switzerland

Pesticides

Dear Sir: In the December 1978 issue of *ES&T* there is a letter on pesticides. The authors make a mathematically and grammatically meaningless statement... "the mirex (and other OC) levels in Lake Ontario Caspian Tern eggs are 4 to 6 times lower than in Herring Gull eggs...". Perhaps they mean "... are one fourth to one sixth of that in Herring Gull eggs...".

I notice an increasing trend in North American literature for confusion with this type of usage (as well as between, for example, "eight times higher than" and the synonymous "nine times"). I hope that *ES&T* will prevent such

future errors by careful editing and set an example for other publications.

Kenneth A. Hooton
Tempe, Ariz. 85283

January editorial

Dear Sir: I have been reading your January 1979 issue, and as usual (see letter, *ES&T*, May 1974, p 392) enjoyed it, as I do every issue. However, I would like to express in word, humble as my opinion is, that your Guest Editor, Dr. James P. Lodge, really touched on something that would and could, if accepted, turn the tide of history in this old world from its present deplorable state.

Authorities everywhere, searching for some solution to their many problems, are disregarding the "Whole Man."

In the eyes of the world science is esteemed, but on its own it has not proved wholly successful. Christianity, presenting only the spiritual side, is beyond man's natural understanding; but when the two are brought together—Science and Theology—as so wonderfully explained by Dr. Lodge, and the "Whole Man" in his entirety is considered, regardless of the sphere, a successful solution must be the result. We are body, we are intellect and we are spirit, and should be considered as such.

I appreciate your journal as a "Leader" and I am grateful for this article and trust that your publication, which reaches even Rhodesia still, will help us toward peace to humanity.

Rosaleen Kerr
Salisbury, Rhodesia

Corrections

- April 1979, p 416. The date of the Consent Decree is incorrectly reported. The correct date is June 7, 1976.

- April 1979, p 421. There is a misspelled word in the color type material. The correct wording is: An automated software program *completely* identified the presence or absence of the organic priority pollutants and quantifies them within minutes.