

Excretion of Different Forms of Zinc by the
prawn *Palaemon serratus* (Pennant)

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Freshly collected specimens of Palaemon serratus from the upper Adriatic Sea were used to determine excretion rates of zinc in "zinc-free" water by anodic stripping polarographic techniques. Weight-specific excretion of total zinc varied reciprocally with body weight, apparently in a log-log relationship. Weight-specific excretion of ionic-particulate zinc appeared greatest in short term (1-3 hr) experiments, while weight-specific excretion of complexed zinc appeared greatest in longer term (4-5 hr) experiments; however, we cannot exclude the possibility that ionic-particulate zinc and dissolved organic compounds were excreted separately and subsequently combined in the water to yield zinc complex.

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Intercalibration of Methods for Radionuclide
Measurements on a Marine Sediment Sample

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The results reported in the intercalibration of methods for radionuclide measurements on a marine sediment sample are surveyed. The preparation of the marine sediment sample, its homogeneity and the procedures for intercalibration are also described. Forty-four laboratories from 20 countries participated in this intercalibration exercise during 1972-73. The survey of the reported results shows that, although the scatter of the data for the sediment measurements is still considerably large, especially for ruthenium-106, the comparability of the results obtained by different laboratories has been improved, as a whole, when compared with that for the seaweed sample. Nevertheless, a comparison of the results obtained by Ge(Li) γ -spectrometry with other methods indicates that there are still problems of calibration of Ge(Li) γ -spectrometers in some laboratories due, perhaps, to the radionuclide standards used and/or the procedures of instrument calibration. The probable concentrations estimated by various statistical treatments of the reported data are presented for major radionuclides reported, such as strontium-90, ruthenium-106, caesium-134, caesium-137 and cerium-144.

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