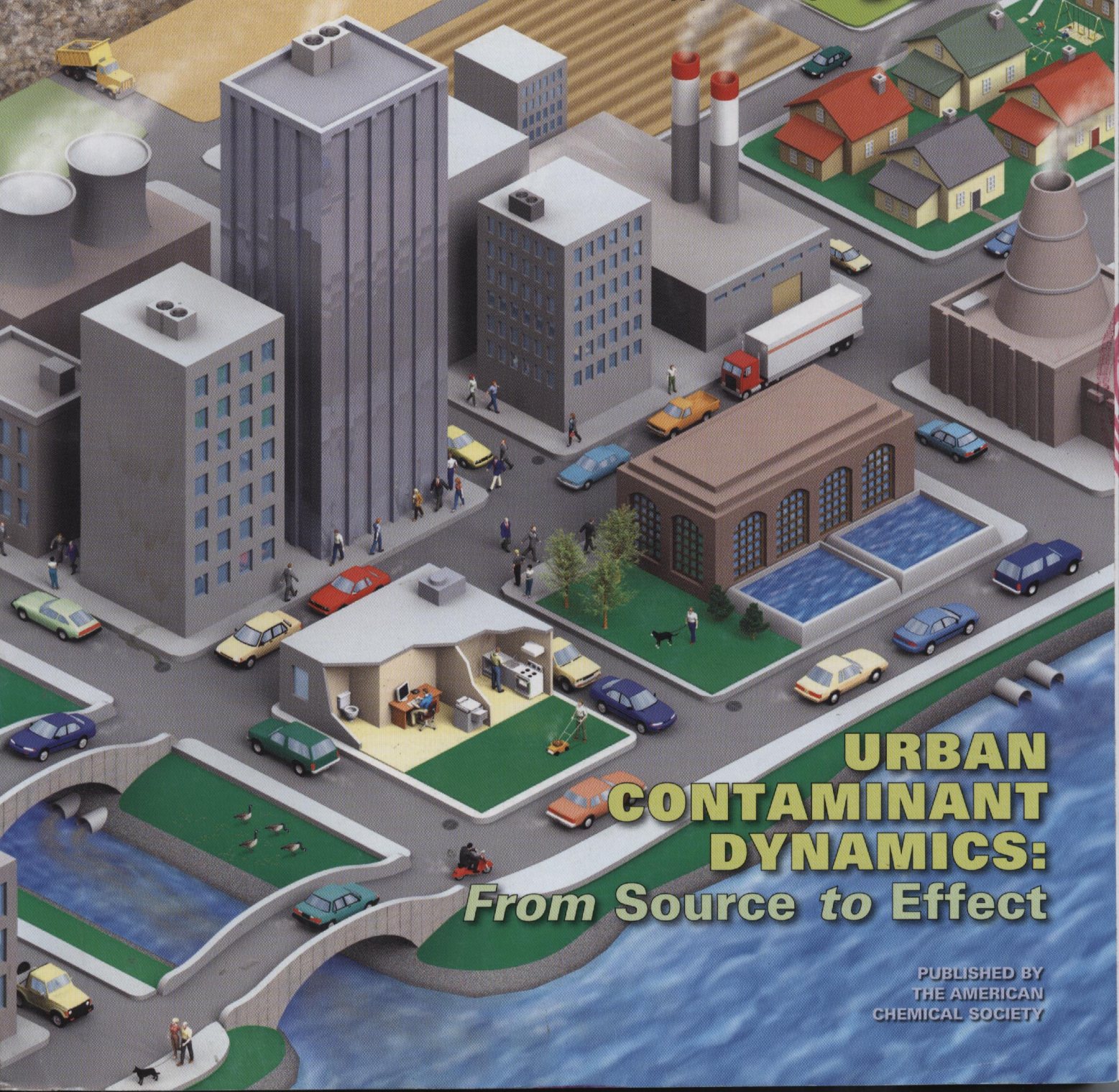


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**URBAN
CONTAMINANT
DYNAMICS:
*From Source to Effect***

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News and Features

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Top 10 stupid environmental policies of the Bush Administration

NEWS

3788 Clearing the air on ethanol

E85 vehicle emissions could cause just as many deaths as gasoline, or more.

3789 Thailand fuels up with cassava

Net-energy-value calculations favor ethanol production from cassava.

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Big picture on the small • Flushing pharmaceuticals • Rivers at risk • Virtual nano journal • EPA's benefits lie in its rules • A future for coal

3790 Seeing the forest for the methane

Plant-made methane has become a slush fund for balancing the global methane budget, but how big is the account?

3791 A nano Trojan horse

Nanoparticles can carry harmful metals into cells.

3792 Perchlorate from fireworks

Perchlorate levels in a lake in Oklahoma rose significantly after fireworks displays but eventually returned to normal.

3793 Perfume, perfume everywhere

Levels of synthetic musk compounds in breast milk from U.S. mothers are higher than those reported in previous European studies.

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Dredged sediments in cement

FEATURE

3796 Urban Contaminant Dynamics: From Source to Effect

Miriam L. Diamond and Erin Hodge



Urban areas are major concentrators, repositories, and emitters of numerous chemicals because of the wide range and intensity of human activities and the characteristics of the built environment. Diamond and Hodge review the array of contaminants produced, retained, and released in urban areas in industrialized countries and their fate in relation to the urban environment. They discuss the environmental degradation as well as the benefits of urbanization.

Research

CRITICAL REVIEW

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Evidence of Bias in Air–Water Henry's Law Constants for Semivolatile Organic Compounds Measured by Inert Gas Stripping

Chubashini Shunthirasingham, Ying Duan Lei, and Frank Wania

Many published air–water partitioning data for PAHs, PCBs, PBDEs, and organochlorine pesticides obtained by gas stripping are biased high because of an artifact caused by strong adsorption to the air–water interface.

CHARACTERIZATION OF NATURAL AND AFFECTED ENVIRONMENTS

■ 3815

Synthetic Musk Fragrances in Human Milk from the United States

Jessica L. Reiner, Chung M. Wong, Kathleen F. Arcaro, and Kurunthachalam Kannan

Concentrations of musk xylene, musk ketone, HHCB, AHTN, and HHCB-lactone are determined in human breast milk samples collected from the U.S.

3821

Semi Volatile Organic Compounds in Ambient PM_{2.5}. Seasonal Trends and Daily Resolved Source Contributions

Jürgen Schnelle-Kreis, Martin Sklorz, Jürgen Orasche, Matthias Stölzel, Annette Peters, and Ralf Zimmermann

The identified sources separated by PMF are lubricating oil, emissions of unburned diesel and heating oil consumption, wood consumption, brown coal consumption, biogenic emissions, and atmospheric transport.

■ 3829

Residues of Persistent Organochlorine Contaminants in Southern Elephant Seals (*Mirounga leonina*) from Elephant Island, Antarctica

Kleber C. Miranda-Filho, Tracy L. Metcalfe, Chris D. Metcalfe, Ricardo B. Robaldo, Mônica M. C. Muelbert, Elton P. Colares, Pablo E. Martinez, and Adalberto Bianchini

Southern elephant seals show age-dependent concentrations of persistent organochlorine contaminants in the blubber; these are derived from pesticides recently used in the southern hemisphere.

■ Supporting information is available free at <http://pubs.acs.org/est>.
▶ This issue contains a news story about this research.

Cover: The image showing movement of contaminants through an urban area was created by Neil Stewart of NSV Productions.

Online news: Read news first at <http://pubs.acs.org/estnews>.