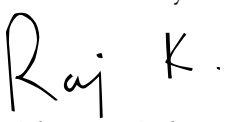
Green is Good

As I settle down to write this editorial column in early February, the big news out of Europe is the release of the fourth assessment report from the Intergovernmental Panel on Climate Change (IPCC), which unequivocally attributes with near certainty (more than 90% confidence level), the global warming trend to *human activity*. This is very significant in that IPCC's assessment hinges on sound, peer-reviewed data that are not "massaged" by any governmental agency to suit the ruling party's political agenda. The underpinning data in this report originated from reputable scientists working in countries and laboratories flung across the globe. The last IPCC report in 2001 put the confidence level at the 66-90% range for the causality of the observed temperature increase since 1950. The new 20-page summary report was released after an intense three-day meeting in Paris, France involving teams of scientists and officials from more than 100 countries. The IPCC was established in 1988 by the World Meteorological Organization and the United Nations Environment Program. Its charter is to assess on a comprehensive, objective, open, and transparent basis the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation. With the release of this new report, it is doubtful whether policymakers and corporate entities (especially some oil companies) can hide under the pretext that further research is needed to establish human activity as the culprit for the observed increases in greenhouse gas emissions and temperature increases.

The U.S. and other technologically advanced regions of the world continue to be major contributors to greenhouse gas emissions but China and India are two time bombs waiting to explode in an environmental pollution sense. Both countries will pay a steep ecological price for unfettered industrial and population growth in the near future unless drastic remediation measures are taken immediately. Air quality in cities like New Delhi, Mumbai, and Bangalore already is among the world's worst and I had first-hand experience of this during a recent family visit to India. Buses, trucks, and cars spew out exhaust fumes and smoke at an alarming rate. After being out in a city like Bangalore, one gets a splitting headache from the pollution and cacophony of blaring horns from impatient drivers stuck in snarled traffic. Enforcement of the quality of vehicular emissions in countries such as China and India is poor and the environmental laws are murky. The infrastructure has also not kept up with the growth in population and the economy; this goes beyond roads to water and electricity supply. Many power plants and factories in the so-called Third World continue to rely on coal combustion technology without investment in NO_x, SO_x, and particulate control. The need for mitigating action of the adverse environmental and ecological consequences of technological growth is urgent and crosses national and even continental boundaries.

This issue of the magazine does have an environmental relevance but in a rather convoluted sense in that the use of molten salts and ionic liquids (or "liquid salts" as Keith Johnson calls them) does not significantly contribute to the generation of volatile organic compounds (VOCs in environmental jargon) as in the case of the industrial organic solvents in use today. Thus it is not surprising that interest in these environmentally "green" solvents is exponentially increasing. The electrochemical and chemical processing possibilities are also immense as you will see in the feature article pages that follow. Stay tuned.



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Editor

The Electrochemical Society ***Interface*** (USPS 010-327) (ISSN 1064-8208) is published quarterly by The Electrochemical Society, Inc., at 65 South Main Street, Pennington, NJ 08534-2839 USA. Subscription to members as part of membership service; subscription to nonmembers $53.00 plus $10.00 for postage outside U.S. Single copies $6.00 to members; $13.00 to nonmembers. Periodicals postage at Pennington, New Jersey, and at additional mailing offices. POSTMASTER: Send address changes to The Electrochemical Society, Inc., 65 South Main Street, Pennington, NJ 08534-2839.

The Electrochemical Society is an educational, nonprofit 501(c)(3) organization with more than 7000 scientists and engineers in over 70 countries worldwide who hold individual membership. Founded in 1902, the Society has a long tradition in advancing the theory and practice of electrochemical and solid-state science by dissemination of information through its publications and international meetings.

The Electrochemical Society
INTERFACE

Published by:
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Pennington, NJ 08534-2839 USA
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Production Notes
Design Consultant:
O&Y Design,
Trenton, NJ

Printed by:
Cummings Printing Co.
Hooksett, NH