

AMERICAN CHEMICAL SOCIETY HONOURS KEITH SOLOMON

Keith Solomon recently received an award from the ACS Agrochemicals Division for his work in environmental toxicology



The International Award for Research in Agrochemicals sponsored by BASF and awarded by the Division of Agrochemicals of the American Chemical Society was presented to Professor Keith R. Solomon on Monday, April 8, 2002 in Orlando, Florida. Dr. Solomon received a cheque from BASF and a plaque from the Division of Agrochemicals recognizing his research on the fate of agrochemicals in the aquatic environment and his work in probabilistic risk assessment (PRA).

Dr. Solomon's award address, entitled *Paracelsus to PRA – Risk Assessment for Agrochemicals*, addressed the question of what agrochemicals may do to people and the environment. He discussed the problems of off-target effects, such as those on applicators, in the food chain, and residential areas. He pointed out the various considerations that must be taken into account in relating toxicological properties to actual impacts. The address emphasized how risk assessment uses a tiered approach to move from conservative to more realistic estimates, using a transparent process and acknowledging uncertainties. Dr. Solomon traced the historical aspects of the risk assessment process and emphasized the importance of incorporating logic into decisions. In the symposium that followed, organized by J. Van Emon and J. Giesy, presentations focused on various aspects of risk related to agrochemicals, including reliability

of epidemiologic data, human exposure, environmental fate and effects, and analytical tools.

Born in Cape Town, South Africa in 1944, Keith Solomon holds B.Sc. and M.Sc. degrees from Rhodes University and M.S. and Ph.D. degrees from the University of Illinois. He has more than 30 years of experience in research and teaching pesticide science and environmental toxicology and directs an active program of research into the fate and effects of pesticides in the environment, as well as exposure of humans to pesticides. He is active in the Society of Environmental Toxicology and Chemistry (SETAC) and is at the University of Guelph, where he is a Professor in the Department of Environmental Biology and Director of the Centre for Toxicology.

Dr Solomon is a member of the United Nations Environment Programme (UNEP) Panel on Environmental Effects of Ozone Depletion, is an active member of the Society of Environmental Toxicology and Chemistry, the Entomological Society of America, and the Toxicology Forum. He is the recipient of the 1993 Society for Environmental Toxicology and Chemistry-ABC Laboratories award for Environmental Education and was elected as a Fellow of the Academy of Toxicological Sciences in December 1999.

Some of Dr Solomon's recent publications

- Marwood, C. A.; Bestari, K. T.; Gensemer, R. W.; Solomon, K. R.; Greenberg, B. M. (2001). Chlorophyll fluorescence as a bio-indicator of creosote toxicity to plant growth in aquatic microcosms. *Environmental Toxicology and Chemistry*, **20**, 890–898.
- Solomon, K. R.; Giddings, J. M.; Maund, S. J. (2001). Probabilistic Risk Assessment of Cotton Pyrethroids: I. Distributional Analyses of Laboratory Aquatic Toxicity Data. *Environmental Toxicology and Chemistry*, **20**, 652–659.
- Giddings, J. M.; Solomon, K. R.; Maund, S. J. (2001). Probabilistic Risk Assessment of Cotton Pyrethroids: II. Aquatic Mesocosm and Field Studies. *Environmental Toxicology and Chemistry*, **20**, 660–668.
- Maund, S. J.; Travis, K. Z.; Hendley, P.; Giddings, J. M.; Solomon, K. R. (2001). Probabilistic Risk Assessment of Cotton Pyrethroids: V. Combining Landscape-level Exposures and Ecotoxicological Effects Data to Characterize Risks. *Environmental Toxicology and Chemistry*, **20**, 687–692.
- Sibley, P. K.; Harris, M. L.; Bestari, K. T.; Steele, T. A.; Robinson, R. D.; Gensemer, R. W.; Day, K. E.; Solomon, K. R. (2001). Response of zooplankton communities to liquid creosote in freshwater microcosms. *Environmental Toxicology and Chemistry*, **21**, 394–405.