

INSTITUTE OF OCEAN SCIENCES

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May 7, 2003

Dr. Edward R. Urban, Jr.
Executive Director
Scientific Committee on Oceanic Research
Secretariat: Department of Earth and Planetary Sciences
The Johns Hopkins University
Baltimore, MD 21218, USA

Dear Dr. Urban:

The SCOR Working Group 75 has done pioneering work since its first meeting at the 1983 IUGG in Hamburg, in focussing the global strategy and technical problems of oceanic CQ2 measurements. It was the first formal international forum for the oceanic CO₂ measuring community. It produced the framework on the state-of-the-art of the methodology for oceanic CO2 and carbon measurements. The subsequent meetings at Arrowhead, California and Les Houches, France, reviewed the advances and technological gaps in CO2 methodology, under the leadership of David Keeling, provided a collective and focussed view of the CO₂ measurement community. It opened up an important area of research on the creation of oceanic reference standards for dissolved inorganic carbon (DIC) and total alkalinity (TA), which were the cornerstones for the WOCE/JGOFS global data set with compatibility between world oceanographic institutions participating in the one-time hydrographic survey and between long-line cruises and time-series stations. WG-75 had worked collaboratively with the JPOTS sub-Panel on CO₂ standards and narrowed down the "noise" of inter-laboratory measurement programs from being as large as the fossil-fuel CO2 signal to a stage suitable for detecting changes in annual to decadal time-scales. The WG-75 has led to the oceanic CO2 standards laboratory at the Scripps Institution of Oceanography and a network of similar national laboratories in Japan and Canada, by making available CO2 reference seawater and a recommended Department of Energy CO₂ Manual. The inter-calibration concept has been adopted by the oceanographic community, e.g. by the PICES (A North Pacific Marine Sciences Organization)-sponsored inter-comparison studies. Of course, the methodology, standards and inter-calibration developments are slow and painstaking, still leaving us with unfinished tasks since 1983 in areas of dissolved organic carbon (DOC) and ¹³C/¹²C ratios for seawater. These parameters are important for detecting signals of global change in the oceans. I hope SCOR will continue with generous supports for new initiatives such as the International Ocean Carbon Coordination Project.

Sincerely,

Best Regards.

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