IASC is pleased to announce that the 2013 IASC Medal, which is awarded in recognition of exceptional and sustained contributions to the understanding of the Arctic, goes to

Leif G. Anderson

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The IASC Medal Committee reviewed the nominations received and unanimously decided to honor Leif G. Anderson
for his pioneering work on the functioning of the Arctic Ocean and his groundbreaking scientific contributions
to understanding the chemistry and carbon cycle of this very special ocean system.

Congratulations!

The 2013 award of the IASC Medal will be by the President of IASC during the Arctic Science Summit Week 2013 in Krakow (Poland). The award ceremony will be during the ASSW 2013 Science Symposium on 17-19 April and include a 30 minutes lecture by the awardee.

Biography of Leif G. Anderson

Leif G. Anderson is a Professor in hydrosphere sciences at the Department of Chemistry and Molecular Biology, University of Gothenburg, Sweden since 2000. He is an elected member of the Swedish Royal Academy of Sciences and the Royal Society of Arts and Sciences in Gothenburg. He represents Sweden internationally in the Marine Working Group of IASC and is a member of the scientific advisory board of the Alfred Wegener Institute for Polar and Marine Research.

Anderson´s research addresses the marine carbon cycle, how carbon is transformed and transported within the ocean and interact with the other compartments of the Earth System. To understand the marine carbon system it is essential to have a basic knowledge of oceanic water masses; how they mix and circulate. For this study there is a need to utilize state of the art observations. As an analytical chemist in background he has continuously worked on improving the analytical techniques for the determination of relevant chemical constituents in sea water. These and other techniques have been applied to the investigation of the Arctic Ocean, a geographic region where climate change has been manifested in recent years. Anderson has also made research of the carbon system is the coastal areas around Sweden; the Baltic Sea, the Kattegat and the Skagerrak.

The anthropogenic emission of carbon dioxide and its impact on future climate has attracted much attention during the last centuries. Within this theme his research has been the oceans´ role in sequestration of anthropogenic carbon dioxide and especially how climate change in the arctic region can feed back to the atmospheric carbon dioxide content. His studies also include the oceanic uptake of anthropogenic carbon dioxide and its impact ocean acidification, and how this pH perturbation is compared to the natural variability in, especially, coastal seas.

Anderson has participated in around 20 major research cruises, most to the Arctic Ocean but also to the Southern Ocean and tropical regions. He was chief scientist of the Oden 1991 cruise that was the first non-nuclear powered vessel to reach the North Pole. Anderson has also been active in teaching, mainly in marine chemistry, including the development of a course in the oceanic carbon system.