The title is framed by stylized blue wavy lines that resemble ocean waves, with multiple layers of waves on both the top and bottom sides.

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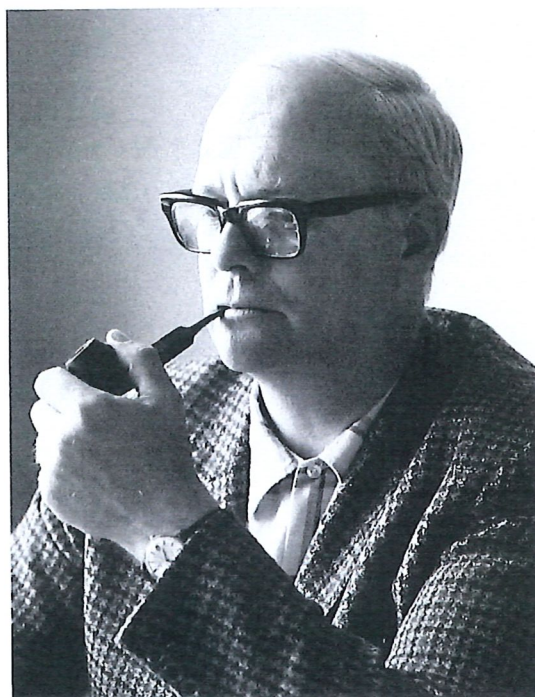
UNNSTEINN STEFÁNSSON

*Festschrift*

**HAFRANNSÓKNASTOFNUNIN**  
**MARINE RESEARCH INSTITUTE**

REYKJAVÍK 1999

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*Festschrift*

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## Preface

The original concept for this Festschrift Edition of *Rit Fiskideildar*, came about in November 1997, shortly after the 75th birthday of its regular Editor, Unnsteinn Stefánsson. Now, nearly two years later the contributors to this volume and the pirate editors still celebrate that occasion and can amplify it by celebrating with Unnsteinn another more recent event, the publication of the 2nd and much extended edition of his popular book *Hafið* (The Ocean).

Most present day oceanographers identify with or link to one of the basic scientific disciplines, *e.g.* physics, chemistry or biology. Unnsteinn Stefánsson defies any easy classification. His BS and MS (Wisconsin) degrees were in chemistry whilst his Dr. phil. (Copenhagen) work was in the field of physical and descriptive oceanography. His publications cover both physical and chemical oceanography and limnology. As for the last mentioned field, it may be a coincidence that the lakes Unnsteinn researched are generally known for good trout fishing. It is not the intention to describe here Unnsteinn's accomplishments in detail, but merely to mention a few milestones.

When Unnsteinn Stefánsson returned to Iceland in 1946 from his studies in the USA, with degrees in chemistry, his nation had become an independent republic, dependent on the ocean and its resources. Oceanographic research in Iceland, which in the decades before had primarily been conducted by Danish workers, had become a local responsibility directed by The University Research Institute - Department of Fisheries. Unnsteinn joined that institute in 1948, farsighted colleagues having convinced him to switch from laboratory chemistry to working on the oceanography of Icelandic waters.

Unnsteinn intensified oceanographic data collection, he installed recording thermographs in coastal freighters and, in order to conduct field work north of the island, he moved for two years

to the town of Siglufjörður, then a central port in the summer herring fishery. This was by no means coincidental because the waters north of Iceland were at that time the main feeding area of the Atlanto-Scandian herring, which in turn was the basis of the all important herring fishery. During Unnsteinn's stay in Siglufjörður, a coast-guard vessel was at regular intervals placed at his disposal for carrying out necessary field work in North Icelandic waters. Unnsteinn's oceanographic work in the Iceland Sea proved to be invaluable for the understanding of the water circulation and the general knowledge of the North Icelandic marine ecosystem. And his surveys in the late 1940s were indeed the beginning of annual time series for monitoring hydrographic conditions of Icelandic waters and have continued ever since.

In these early years Unnsteinn not only built up knowledge but also personal connections with workers on the oceanography of the Atlantic through stays at research institutions on both sides of the Atlantic; the Danish Institute for Fishery and Marine Research in Charlottenlund, Denmark, the Fisheries Laboratory in Lowestoft, England, the Geophysical Institute in Bergen, Norway and the Woods Hole Oceanographic Institute in USA. Two milestones were reached in 1961 and 1962. The first with the publication of *Hafið* (The Ocean), which was particularly well received by the public, and the second with the monograph and Dr. phil. thesis, *North Icelandic Waters*.

Unnsteinn's work on chemical oceanography had started with investigations of the distribution of dissolved oxygen early in the 1950s and was followed by establishing facilities for determinations of dissolved nutrients. In 1962-1963 Unnsteinn was a visiting scholar at the Department of Oceanography, University of Washington. His cooperation there with Francis A. Richards was fruitful and upon return to Iceland

the chemical oceanography activity was greatly enhanced and investigations started on oceanic water mass characteristics as well as seasonal nutrient dynamics in the shelf waters off Iceland. Nature provided him with an opportunity to combine physics with chemistry in an investigation of the effects of the submarine eruption which built the island of Surtsey late in 1963.

Unnsteinn Stefánsson has also contributed extensively to education in the marine sciences. He recognises that education, research and dissemination of knowledge are the basis for a sustainable utilisation of marine resources and for the protection of the marine environment. When he worked with the Intergovernmental Oceanographic Commission of UNESCO in 1970-1973, education and training were his main tasks. He advised for that organisation on the establishment of oceanographic research centers in Libya, Iraq and Nigeria. If these centers have faltered, it surely can not be for Unnsteinn's lack of enthusiasm. Before the UNESCO term, Unnsteinn taught and helped establish oceanography at Duke University, N-Carolina in 1965-1970.

His nation has, however, benefitted most from his work in education. In 1975 he became professor of oceanography within the Chemistry Department at the University of Iceland. Unnsteinn approached this undertaking with his usual gusto. At lectures Unnsteinn had no more use for a microphone than a diva performing on an opera stage and the story goes that at his first lecture, held in a local cinema hall, his immediate task was to disconnect all such gadgets. From the oceanography curriculum Unnsteinn has written in Icelandic textbooks in two volumes (*Almenn haffræði I and II*), on general oceanography, some 950 pages altogether.

As mentioned earlier, it is not our purpose to list all of Unnsteinn's feats in the fields of science and education, not to mention his many other interests. For that we would almost need another book. We will, however, use this opportunity to express our heartfelt thanks for having benefitted from his expertise as scientist and teacher through the years and, last but not least, for always having been counted among his many and good friends. May Unsteinn enjoy good health and happiness in future years.

*Hjálmar Vilhjálmsson   Jón Ólafsson   Olafur S. Astthorsson*