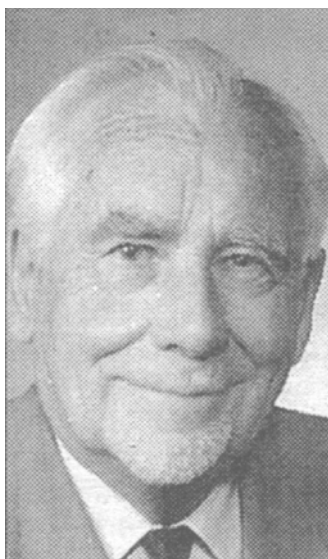


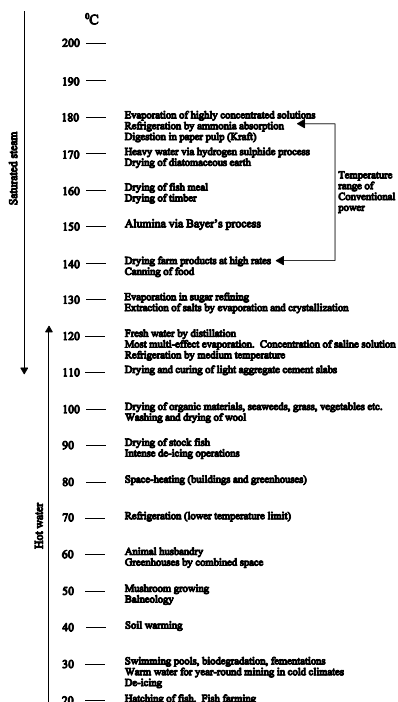
In Memory of Baldur Lindal (1918 - 1997)



Baldur Lindal, one of the world pioneers of direct utilization of geothermal energy, died in Reykjavik (Iceland) on 17th June 1997. He was born at a farm in northern Iceland on 17th August 1918. His father, Jakob Lindal, was a farmer and self-educated geologist. Baldur Lindal graduated as a chemical engineer from Massachusetts Institute of Technology. He worked as an engineer for the Icelandic State Electricity Authority (later Orkustofnun) from 1949 to 1961, and after that, he ran his own consulting engineering office. He soon started working in geothermal research in Iceland and for nearly five decades, he spent endless hours on developing processes for the direct application of geothermal energy for industrial purposes.

He was the prime mover in planning and designing the Kisilidjan diatomite factory at Myvatn in northern Iceland which has been in very successful operation for over three decades producing about 24,000 tonnes per year of diatomaceous earth filter-aids used for clarification of liquids in industry. This plant is the second largest user of geothermal steam for industrial purposes in the world. He was also the key person in developing the Reykjanes sea chemicals plant which produced up to 18,000 tonnes per year of salt receiving both the raw material and the power from a single geothermal well (295°C brine). In addition to numerous experiments in extracting chemicals from geothermal fluids, he was also active to the last day in developing various processes for the chemical industry. Only a few weeks before his death, almost 79 years old, he received a grant from the European Commission for a process development for extracting chemicals out of a certain wild plant.

Although living in Iceland most of his professional life, he participated in the chemical industry and geothermal projects in various parts of the world and was for many years involved in projects in Africa, Europe, USA, Central America, and the Middle East. He published a large number of papers on the direct application of geothermal energy and was for decades an active participant in international geothermal conferences including one on the OIT campus in 1974. His diagram indicating the temperature range of geothermal water and steam suitable for various applications has become a classic and is generally referred to in the literature as the "Lindal Diagram" (Gudmundsson, J.; Freeston, D. and P. Lienau, 1985. "The Lindal Diagram," *GRC Transactions*, Vol. 9, pp. 15-17). It was first published in 1973 in Lindal's article "Industrial and Other Uses of Geothermal Energy," in a book entitled *Geothermal Energy* published by UNESCO in Paris. He was a member of the International Geothermal Association (IGA) and the Geothermal Resources Council. On behalf of the International Geothermal Association, I would like to thank Baldur Lindal for his great contribution to geothermal development worldwide. Condolences are sent to his wife and family.



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