

In memoriam

HARRI KÄÄR

Harri Käär's death on April 20, 1997, was a great loss to Estonian power engineering. Harri Kaar was a professor of Tallinn Technical University, Dr., member of the Estonian Academy of Sciences, director of Energy Research Institute.

Harri Käär was born on July 1, 1944, in the family that descended from the island Hiiumaa. He began his long way of education in Tallinn Westholm Gymnasium. After school he entered the Thermal Engineering Department (TED) of Tallin Technical University (TTU). After his fourth term he continued his studies in Moscow Power Engineering Institute. His good results in the Institute allowed him to continue his education in the postgraduate studies here. He finished his studies in Moscow as a Master of Sciences in 1972 and started his very productive way of teaching and research in TTU. His extensive knowledge and connections with the leading thermophysicists of a number of countries enabled him to start several new investigations on thermophysics in TTU. The result of those investigations were published in Moscow as a monograph "Inside Deposits of Boilers with Supercritical Pressure" (co-authors: V. Glebov, N. Eskin, V. Trubachev, V. Taratuta, Energoatomizdat, Moscow, 1983, in Russian).

During his one-year scholarship (1978/79) in the Institute of Nuclear Sciences (Belgrade, Yugoslavia), he investigated effective thermal conductivity of porous material filled with media in critical stage. The test with critical state CO₂ showed a significant enhancement to effective thermal conductivity of porous media filled by critical CO₂.

After completing these studies, he investigated of gas-cooled high-temperature reactor's (HTGR) recovery boiler studying fouling of recovery boiler heating surfaces by graphite powder deposits. H. Käär with his colleagues estimated the fouling intensity and its impact on heat transfer in the boiler. An idea of cleaning of heating surfaces from the graphite deposits by acoustic waves generated in the boiler was given and patented by H. Käär.

The results of the investigation of inner tube deposits properties in supercritical boilers, and the fouling problems in HTGR boilers formed the basis of the doctor's thesis of H. Käär "Thermophysical Study for the Convective Heat Transfer Surfaces Fouling and Cleaning". The degree of Dr. was defended by him in the spring in 1991 in the Energy Institute of the Lithuanian Academy of Sciences. The next year H. Käär was elected the head of the Chair of Industrial Thermal Engineering in the TED TTU.

In the academic year 1992/93 H. Käär worked as a visiting professor in the University Toronto (Canada).

The English-Estonian-Russian Heat Engineering Dictionary by H. Käär with colleagues was published in 1997.

The high activity of H. Käär in teaching and scientific investigations led him to chair of the director of the Estonian Energy Research Institute (spring 1994), and he was elected a member of the Estonian Academy of Sciences (December 1994). He was one of the youngest members of the Academy. His activities as a member of the Academy gave him a number of new duties. These were: the Estonian-side leader of Estonian-Finnish Power Working Group, the leader of Estonian Council of Power, a member of Organising Committee of 1st and 2nd Baltic Heat Transfer Conferences, etc. He worked on the Baltic gas supply project (know as Baltic Gas Ring).

The productive activities of H. Käär are characterized by 115 scientific publications, education of a number of active power specialists, and the formation of Estonian School of Thermophysicists. The colleagues of H. Käär will remember him as a good friend with a friendly humor and always keeping his word.

Prof. Dr. Harri Käär, was from the first issue of the Journal *Thermal Science* the member of the International Advisory Board. His contribution to the scientific level of the Journal was recognized and helped much in establishing the international scientific standard of the papers.

We express our deep sentiments to the Estonian colleagues for loosing distinguish member of Estonian Scientific Community our dear colleague H. Käär.

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