## **PREFACE**

On the centenary of the birth of Prof. Géza Pattantyús-Ábrahám, corresponding member of the Hungarian Academy of Sciences, Kossuth-Prize laureate, renowned professor of the Technical University of Budapest the University wishes to commemorate its late professor also with this publication.

The authors of this memorial volume were the co-workers and pupils of the great master; most of them are now professors-lecturers or industrial specialists holding a leading post in various fields. These papers prove the extensive mind of Prof. Pattantyús while the authors' sphere of activity displays the master's effect in creating various schools.

In the course of his life Prof. Pattantyús worked in an immensely wide scope of the development of technical sciences and of university education. He wrote his doctoral thesis in the domain of electrotechnics. He produced outstanding results and lectured in the fields of machine parts, hoisting and transporting machines, fluid machines, mechanical vibrations. He achieved reputation with his books the most excellent of which is his "A gépek üzemtana" ("Operation of machines") edited in a renewed form some time ago.

His wide scope of activity is represented by the papers of this publication:

- 1. theoretical progress of *fluid dynamics* and *fluid machines* are dealt with in the papers of Varga, Sebestyén—Szabó—Verba—Rizk, Fűzy, Szentmártony, I. Szabó, Rákóczy and Benedek;
- 2. Kertai's, Trenka's and Fáy's papers have hydro-power plants and watersupply as their topic;
- 3. material transport and its machines are the topic of the papers of SVÁB, VANKÓ and PÁPAI;
- 4. CSONKA's and TERPLÁN's main concern is mechanics and machine parts.

The authors of these papers intend to pay homage to his unforgettable personality and to commemorate the anniversary of their master's birth by developing his ideas.

Prof. László Pápai Department of Hydraulic Machines, Technical University Budapest