Preface

This special issue contains the proceedings of the Sixth International Workshop on Subsecond Thermophysics held in Leoben, Austria.¹ It was the sixth of a series of well established workshops (Gaithersburg, 1988; Torino 1990; Graz, 1992; Köln, 1995; Aix-en-Provence, 1998) on both experimental and theoretical aspects of the thermophysical behavior of matter in subsecond time regimes. It included papers and discussions on rapid resistive and inductive heating (volume), pulse laser heating (surface) and levitation techniques. The emphasis was on measurements of thermophysical properties at high temperatures. In this region, pulse-heating techniques are a unique approach in studying the behavior of matter under conditions close to or far from thermodynamic equilibrium.

This Sixth Workshop consisted of ten sessions with 42 presentations on the following topics: volume heating, laser heating, levitation, radiation, applications, numerical methods, and thermodynamic theory. A poster session was also included. An informal workshop atmosphere was chosen to facilitate an exchange of ideas and information among scientists and researchers from academia, research institutions, and industry with common scientific and technical interests.

The workshop hosted 52 participants coming from Belarus (1), P. R. China (2), France (7), Germany (11), Italy (1), Israel (2), Russia (6), Slovakia (2), Switzerland (1), United States of America (4), Uzbekistan (1), Yugoslavia (1), and Austria (13). This special issue of the *International Journal of Thermophysics* consists of 26 selected papers presented.

The workshop took place at the University of Leoben, which is located close to the center of town. Leoben is a relatively small town

¹ The sponsors of the Sixth International Workshop on Subsecond Thermophysics are gratefully acknowledged: Böhler Edelstahl GmbH & Co KG, Bundesministerium für Bildung, Wissenschaft und Kultur, Bundesministerium für Wirtschaft und Arbeit, Creditanstalt Leoben, Erku Präzisionsteile GmbH, MAGMA Gießereitechnologie GmbH, NETZSCH-Gerätebau GmbH, Österreichische Forschungsgemeinschaft, PCO COMPUTER OPTICS GmbH, Rauch Fertigungstechnik GmbH, Stadtgemeinde Leoben, Steiermärkische Landesregierung, VOEST-ALPINE STAHL LINZ GmbH.

(30,000 inhabitants) located in the alpine part of Austria. This region is a summer paradise for hikers and mountain climbers as well as a winter wonderland for skiers. Although several junctions of major European traffic routes are near Leoben, the natural environment is virtually untouched. Following the tradition of previous workshops, this workshop provided a congenial atmosphere for fruitful discussions among the participants who, as scientists and as tourists, seem to have enjoyed a pleasant stay in Leoben. We especially appreciated the participation of our colleagues from the United States of America and other distant countries who joined us despite the tragic events of September 11, which had occurred shortly before our meeting.

I would like to thank the members of the International Scientific Committee, Michel Boivineau, Iván Egry, Gernot Pottlacher, and Francesco Righini for their help in organizing the conference, as well as all the reviewers for editing the proceedings. A special thanks to W. M. Haynes, Editor-in-Chief of the *International Journal of Thermophysics*, for his large contribution in publishing this issue.

The Seventh International Workshop on Subsecond Thermophysics will be held in 2004 at Orléans, France. It will be organized by F. Millot from the Centre de Recherches sur les Matériaux à Hautes Températures (CRMHT), Centre National de la Recherche Scientifique. I look forward to attending this workshop and meeting with my colleagues of the subsecond thermophysics community once again.

> Erhard Kaschnitz Chairperson of the Sixth International Workshop on Subsecond Thermophysics