Foreword

The 8th International Workshop on Photoacoustics and Photothermics took place at Tourist-Sport Center “Zagro” in Szczyrk as a part of 32nd Winter School on Molecular and Quantum Acoustics. These Workshops have been organized every year since 1996, by the Upper-Silesian Division of Polish Acoustical Society in co-operation with Institute of Physics, Silesian Technical University of Gliwice. Traditionally, the workshops take place in small towns in Beskidy Mountains in the last week of February. They always start on Thursday afternoon and end on Friday evening.

The workshop is a place where scientists and students working either in the field of photoacoustics and photothermics or simply applying photoacoustic and photothermal effects in another investigations may present their own, original results, discuss problems and ideas, listen to review lectures presented by representatives of research group and laboratories from different countries. In addition, what is also very important, participants may establish new acquaintances essential for future cooperation.

The meeting brings together members of all Polish research groups working in photoacoustics and photothermics and invited guests from abroad. Scientists who join the meeting for the first time present review lectures, characterizing activity of their research groups. Contributed papers are devoted to the newest results. It is also possible to show results of ongoing projects in the form of posters.

The Proceedings contain full texts of 15 papers presented during the 8th Workshop on Photoacoustics and Photothermics. Physical and technical topics concerning use of thermal waves in measurements were the main subject of interest. Papers comprise problems of theoretical description of photothermal phenomenon, models of different detection schemes, proposals of new measuring methods. A few papers present results of material studies. There are also very interesting contributions showing potential applications of photoacoustic measurements in medicine and biology. Two papers concern advantages and disadvantages of photoacoustic spectroscopy in chemistry, surface sciences and catalytical research.

The Organizers gratefully acknowledge the financial support of the Polish State Committee of Scientific Research received via the Polish Acoustical Society.

I would also like to thank the authors, chairmen of the sessions, and debaters for their contributions, the whole group of colleagues and co-workers for their assistance in organizing the meeting and helping to provide a good scientific and social atmosphere during the Workshop.

I would dedicate this Proceedings to the Memory of Prof. Zygmun Kleszczewski, Director of the Institute of Physics, Silesian University of Technology, who died suddenly in May 2003. Since the idea of these Workshops arose in 1995, he has always supported it and helped me in this undertaking. He will be greatly missed for his friendly personality.

Jerzy Bodzenta
Silesian University of Technology,
Gliwice, 12th May 2003