

PREFACE

The continuous evolution of Quantitative Infrared Thermography (QIRT) techniques, systems, and fields of application is impressive. Nonetheless, making infrared thermography more and more quantitative is a permanent challenge for researchers, engineers, and physicians. To support them the Quantitative Infrared Conference was created in 1992 in the frame of the Eurotherm Seminars¹. Since then, an International Working Group on QIRT (QIRT WG²) has been highly active. Its main actions consist in: choosing the group in charge of the next conference, selecting the papers, helping the local committees to organise the conference, selecting and reviewing the papers to be published in the proceedings. QIRT Conference was successively and successfully organised by the following institutions:

- The Thermophysics Division of the National French Aerospace Research Agency (Onera), which founded the conference by organising QIRT'92 at Châtenay-Malabry (France);
- The Department of Energetics, Thermo-fluid-dynamics and Environmental Control (DETEC) of the University "Federico II" of Naples, in charge of QIRT'94 held in Sorrento (Italy);
- The Institute for Polymer Testing and Polymer Science (IKP) of the University of Stuttgart (Germany), organiser of QIRT'96;
- The Institute of Electronics of the Technical University of Łódź (Poland), in charge of QIRT'98.

This list illustrates the international dissemination of quantitative infrared thermography in Europe. The Proceedings of the Conferences bear witness of the wide variety of the application fields. The regularity of the event - one conference every two years, in summer - proves the vitality of the field capable of generating a continuous flow of interesting and stimulating communications.

QIRT'98 was particularly important because two initiatives were undertaken:

- for the first time the conference moved from Western Europe to Central Europe,
- a noticeable importance was given to biomedical applications.

The first initiative was a justified recognition of the strong thermographic activity of the Polish scientific and industrial community. The QIRT WG wishes to thank Piotr Pręgowski, member of the WG until 1998, who proposed Poland as the nation in charge of organising QIRT'98 and Łódź as the conference site, and Bogusław Więcek, new Polish member of the WG, who took the charge of successfully organising the conference.

The second novelty was the importance given to biomedical sessions. Taking into account the number of papers presented in this field (fourteen oral communications) and their specificity, the editors and the organiser of the conference decided to publish them in a special companion volume to the present proceedings: Medical InfraRed Thermography (MIRT'98). Consequently, the volumes MIRT'98 and QIRT'98 constitute the full proceedings of the Łódź conference.

The editors are grateful to the QIRT WG members, to the colleagues who presented the invited lectures, the oral presentations and posters, to those who chaired the sessions, and

¹ The objective of the EURO THERM Seminars is to create within the European Community a forum for high-level scientific and technical interchange of ideas and developments in the thermal sciences and heat transfer, and their applications. This field is relevant to the challenges Europe faces: technological developments, energy resources and the solution of environmental problems. The primary aim of the seminars is to stimulate discussion and liaison between specialist groups.

² The present composition of the QIRT WG is the following : Darryl Almond (United Kingdom), Daniel Balageas (France) - chairman, Jean-Marie Buchlin (Belgium), Gerd Busse (Germany), Giovanni Maria Carlomagno (Italy), Xavier Maldague (Canada), Jukka Rantala (Finland), Srećko Svaic (Croatia), Vladimir Vavilov (Russia), Bogusław Więcek (Poland).

especially to the local group from the Institute of Electronics for the perfect organisation and the generous hospitality.

Finally, the Conference organisers acknowledge gratefully support by the following sponsors:

- the Polish State Committee for Scientific Research,
- the President of the City of Łódź,
- the Rector of the Technical University of Łódź,
- the Dean of the Electrotechnics and Electronics Faculty,
- Inframetrics Inc.

and to the companies which displayed their recent products in the exhibition, whose support made possible the attendance of many Central and East European participants.

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