

Preface

This special issue of JTAC reports some communications selected from almost 400 papers presented on the 13th ICTAC Congress. This kind of editorial effort really provides a picture of the vast realm of applications of Thermal Analysis and Calorimetry, since the selected papers concern advanced studies by scientists and technologists active in various fields of chemistry, physics, life science and geoscience.

No matter the focus of your own scientific interests, once you use a TA approach, your message becomes clear to all TA users. A common 'experimental' language enhances the transfer of knowledge and new seeds can easily be sown in the fertile minds of the youngest of us. This is the beauty of thermal analyses.

New connections have been so far found between different scientific domains, like geo-science and solid state kinetics, food and polymer science, nano-technology and surface processes, thermodynamics and life-science. These links were reflected in TA studies and provided the driving force toward the use of combined experimental approaches and the design of new instruments that permit the simultaneous evaluation of more properties from the same sample. The Sample Controlled Thermal Analysis and the relevant instrumentation is another example of achievements that came from the evolution of kinetic studies performed with traditional instruments and the analysis of the 'thermal interaction' between sample and sample holder during a heating run. Similar progresses are on the way and will stimulate a further diffusion of TMDSC.

Examples of this kind were presented at the 13th ICTAC Congress and can be found throughout this JTAC issue. Our hope is that they can stimulate further progresses and sustain the dissemination of our techniques in other fields of sciences.

The high level of this issue is the result of the hard work of our colleagues who helped us to review the manuscripts carefully. We warmly thank all of them. A special mention has to be addressed to Judit Simon and Klara Kiss of the Lexica Ltd. for their personal dedication in the to preparation of this issue. We have now a further reason to trust these wonderful ladies.

Being responsible for the organization of the 13th ICTAC Congress, we feel deeply indebted with the colleagues who supported us, Prof. Italo Ferino, Prof. Silvia Porcedda, Dr. Alessandra Piras, and other younger and restless co-workers from the Università di Cagliari.

Last but not least, we thank the president of ICTAC, Prof. Jean Rouquerol, for his personal engagement in our team.



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