



## Preface

This is a special issue of *Thermochimica Acta* covering various aspects of reaction calorimetry. Due to the increasing use of this technology in a variety of applications, it would seem appropriate at this time to review the direction and potential of the field as well as to illustrate these claims with several current papers. This special issue attempts to achieve these objectives.

Prior to discussing the format and content of this issue, it is important that three groups of individuals are recognized for their efforts. Firstly, the authors of the 16 contributed papers should be acknowledged for their scientific and timely efforts. Obviously, this issue would not exist without these outstanding papers. Many of the authors are recognized experts in the field of reaction calorimetry and continue to demonstrate their creativeness with these latest scientific efforts. Secondly, recognition should be given to the editorial and managerial staff of *Thermochimica Acta* for recognizing the importance, of this critical methodology. Through their encouragement, I have enjoyed assembling this special issue. Lastly, without the support of the management here at Sandoz Pharmaceuticals Corporation, my involvement in this special issue would not have been possible. I extend my sincere thanks to all of you who have played a role in the success of this undertaking and feel that the quality of this issue reflects the support each of you has provided.

Regarding the arrangement of this special issue, it is composed of a review article summarizing the current state of the art which is then followed by 3 main sections. The first section deals with applications in process safety. Here, several papers outline the latest concepts in assessing runaway reaction potential and the role of reaction calorimetry in an integrated process safety program. The second section deals with the use of reaction calorimetry in the understanding of reactions and their optimization. The examples include contributions relating to process development, modeling simulation and elucidation of mechanism. The final section contains other topics including crystallization, evaluation of heat losses, heat transfer coefficients, and reactions under reflux conditions.

In closing, it is my hope that the contents of this special issue of *Thermochimica Acta* demonstrates the utility of reaction calorimetry as an effective tool for a variety of applications.

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