

## Preface

The idea for a Colloquium on *Femtosecond Reaction Dynamics* was inspired by the fast advancements that have been made in the field of 'femtosecond spectroscopy.' The recent discovery that an argon ion pumped Ti: sapphire laser can produce pulses of 10 fs or less and that such pulses can be amplified to terrawatt pulses of less than 50 fs, at kHz repetition rates, has made it clear that a new era in physics and spectroscopy has begun. For laser physicists this situation may present a problem as vividly expressed by Wayne Knox,<sup>1</sup> who concluded his paper on *The revolution in femtosecond near-infrared pulse generation* with: 'Ultimately, we suppose that femtosecond lasers will be as ubiquitous as 9 V batteries. Then what shall we do?' For physical chemists, on the contrary, this new situation presents a challenge to find novel use of femtosecond pulses in experiments that probe deeper into the question of molecular reactivity. In fact many people in our community have taken up this challenge already and this work is finding recognition by a broad audience in chemistry, as demonstrated by the fact that professor Zewail was awarded the Wolf Prize in Chemistry for 1993.

It is very satisfying that all speakers at the Colloquium have contributed a paper to the Proceedings of the Meeting. Because of the great diversity of topics addressed, these Proceedings of the Royal Netherlands Academy Colloquium on *Femtosecond Reaction Dynamics* contain a good overview of the state-of-the-art in the field of 'Femtoscience.'

The organization of the Royal Netherlands Academy Colloquium on Femtosecond Reaction Dynamics was only possible through the efforts of several people and financial support by many organizations. We gratefully acknowledge the indispensable help and advice of Ms. M. Kooy from the Royal Netherlands Academy of Arts and Sciences and Mrs. G. Lap-Koekkoek from the University of Groningen. For financial support we are foremost indebted to the Royal Netherlands Academy of Arts and Sciences. Without its generous financial support this meeting would never have been possible. Support from the other sponsors has also been vital to financing of the meeting and of the social activities.

<sup>1</sup> W.H. Knox, *Optics and Photonics News* 3, 10 (1992).

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### The Organizing Committee

Chairman: Prof. dr. D.A. Wiersma (University of Groningen)

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Prof. dr. A. Lagendijk (AMOLF and University of Amsterdam)  
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