

Journal of PHOTOCHEMISTRY AND PHOTOBIOLOGY A:CHEMISTRY

Journal of Photochemistry and Photobiology A: Chemistry 102 (1996) 1

Preface

XVIIth International Conference on Photochemistry, London, UK, 30 July–4 August 1995

This series of conferences has been going now since the early 1960s, and it is clear that our subject could be fairly described as mature. The danger of such maturity is that it can bring staleness and lack of vision to the core subject, and also spawn a number of offshoot subjects and applications which in their turn grow rapidly, generating their own conferences and followers to the detriment of the original subject. The International Conference on Photochemistry was conceived originally to be concerned principally with physical aspects of our subject, and it is clear that many areas of research such as ultrafast processes, atmospheric chemistry, jet spectroscopy, photochemical dynamics, supramolecular chemistry, in the physical arena, together with photobiology and photomedicine, have all grown as separate subjects with their own clientelle.

Attempting to run a conference which brings together all of these strands is therefore not without risk, but from the organiser's point of view the London Conference was a very great success, with over four hundered participants from all over the globe participating enthusiastically in all sessions. It seems from our experience that there is still a need for a general forum on the subject, and that this series will run for many years to come.

There were ten plenary lectures plus an opening address by Lord Porter of Luddenham (more familiarly known as George Porter). We asked the plenary speakers to give an overview of their field, and point the way to the future, and almost without exception, they achieved this in magisterial style. We were blessed by some magnificent lectures, particularly memorable to this reporter being those by Zewail on femtosecond photochemistry, Jean-Marie Lehn on supramolecular photochemistry, Hochstrasser who gave a very philosophical view of our understanding of the liquid state, and Ghiggino, who used the opportunity to show that rigour can be brought to the understanding of the complex world of photophysics in synthetic polymers. No doubt other participants would highlight other speakers; what can be said is that the standard achieved was exceptionally high, and set the tone of the whole conference.

The plenary speakers were backed up by 24 invited lectures, speaking in two parallel sessions around the ten themes of ultrafast spectroscopy, atmospheric chemistry, molecular assemblies, molecular beams, electron transfer, photosynthesis, photomedicine, polymer photochemistry, time-resolved vibrational spectroscopy, and general photochemistry. There were 70 short oral contributions to these themes, and 271 posters, discussed in four sessions.

The quality of the science was outstanding, the discussion fruitful, and the local organisers had done their best to provide high-quality ancillary facilities. The only difficulty, outside the control of the organisers, was the temperature. We inadvertently chose not merely the hottest week of the year for the Conference, but one of the hottest of the century!

In this issue of the Journal of Photochemistry and Photobiology A: Chemistry we have a collection of some of the plenary and invited lectures, which will give the reader a flavour of the Conference.

What of the future? We have demonstrated that there is a future for a forum of this sort, but what of the subject itself? I see dangers in the current preoccupation, driven by the funding situation in almost all countries, in excessive concentration upon applied photochemistry, important though that is. What excited those of us new to the field in the sixties was the development of understanding of non-radiative decay of molecules, which for the first time put the subject on a firm quantitative, or at least semi-quantitative basis, and took us away from the merely empirical. We have seen in recent times a great leap forward in the understanding of wave-packet dynamics in increasingly large molecules in the gas-phase. What is now needed is real progress in the understanding of the liquid state, and of solvation, the media in which most chemists work. I believe we may be on the brink of very significant advances here, and I look forward to enjoying future international conferences in photochemistry, at which these advances will be revealed.

I would like to thank the Local Organising Committee for their unstinting help, the International Scientific Committee for their wide advice, the sponsors for their support, but above all, the speakers and participants who made the XVIInd International Conference on Photochemistry such a notable success.