

# Laser Light Scattering in Biochemistry

Techniques Group Meeting held at Queen's College, Cambridge, 12–14 September, 1990. Organized by D. B. Sattelle (Cambridge), S. E. Harding (Nottingham) and V. A. Bloomfield (Minnesota, USA) and Edited by S. E. Harding

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## Introductory Remarks

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Historically, light scattering and the University of Cambridge are inextricably synonymous. Tyndall, who stated the two great enigmas of 19th-century Meteorology (why is the sky blue and why is sky-light plane polarized?), was a Rede Lecturer there. Maxwell, whose 'Electromagnetic Theory' provided the basis for solving Tyndall's enigmas, was the first Professor of the Cavendish Laboratory. Lord Rayleigh, who used Maxwell's theory to explain the scattering of light by small particles, was the second Cavendish Professor. Stokes, widely referred to by the 'Dynamic' or 'Quasi-elastic' light-scattering fraternity was Professor of Applied Mathematics and Theoretical Physics, and Bragg, whose scattering vectors are as central to light scattering as they are to X-ray crystallography was also a Cavendish Professor. So, Cambridge provided an appropriate venue for the first International meeting in the U.K. dedicated to light scattering in biochemistry for almost 10 years.

More than 130 participants attended the 29 invited lectures, Poster displays and a Trade Exhibition. The first session surveyed the state of the art of light-scattering technology, reviewing important advances in theory, instrumentation and data handling. Advances in methodology for handling difficult heterogeneous macromolecular systems received particular attention. The remaining sessions dealt with applications to proteins, polysaccharides and nucleic acids, with the final session dealing with large macromolecular assemblies including microbes, membranes and vesicles and drug delivery systems.

Without the support of the Trade Exhibitors

and other organizations who provided generous sponsorship, an International Meeting of this sort would not have been possible. The sponsoring bodies included Academic Press, British Sugar Ltd, Brookhaven Instrument Corporation (U.S.A.), Ciba-Geigy Ltd, Coherent Ltd, Coulter Electronics Ltd, Fisons Pharmaceuticals Ltd, Glaxo Ltd, LDC Analytical, ICI Ltd, Malvern Instruments Ltd, Nestle Ltd (Switzerland), Newport Ltd, Oriel Scientific, Oros Instruments Ltd, Polymer Laboratories, Polymer Standards Service (Germany), Photon Control Ltd, Schlumberger Ltd, Unilever Ltd, Yamanouchi Ltd, and Wyatt Technology Ltd. It is fair to say that Trade Exhibitors and Academics alike are part of one team – the success of each is intimately interwoven.

We would like to thank the session chairmen George Phillies, Walther Buchard, Sergio Paoletti, Phillip Wyatt, Ken Langley and Peter Bayley who opened the Meeting.

This, as far as we are aware, is the first collection of articles combining advances in theory with specific applications to Biochemistry since a volume based on the last comparable meeting held at Cambridge in 1981 [1] and a series of articles based on a Techniques Group Meeting held in 1983 [2]. From the evidence of this meeting, it most certainly will not be the last.

1. Sattelle, D. B., Ware, B. R. & Lee, W. I. (eds.) (1981) *Biomedical Applications of Laser Light Scattering*, Elsevier, Amsterdam
2. Tombs, M. P. (ed.) (1984) *Lasers in Biochemistry*, *Biochem. Soc. Trans.* 12, 623–627