



News and Views

SYMPOSIUM ON CONFORMATIONAL STUDIES OF OLIGOSACCHARIDES, POLYSACCHARIDES AND GLYCOCONJUGATES

Le Croisic, Loire-Atlantique, France, 29 June–2 July 1992

Le Croisic — besides being a beautiful small fishing port on the south Brittany coast — is now rapidly becoming a centre for conferences on saccharides. Following hard on the heels of the 'Workshop on Cereal Polysaccharides' held a few weeks earlier, came this meeting focussing on conformational studies.

For many years regarded as the Cinderella molecules of biochemistry, the importance of 'saccharides' is now widely recognised — the significance of these molecules in, for example, molecular recognition phenomena speaks for itself. It was therefore very timely for a meeting of this type, in which computer modelling and NMR were particularly well represented.

The format consisted of 5 sessions, each with an invited speaker giving talks of 45 minutes duration,

followed by between 2 and 5 'oral communications' (30 min) and poster sessions.

On the first day, session 1 covered Spectroscopic methods with talks given by S. Homans (disaccharide modelling), F. Boue (neutron scattering), M. Hricovini (internal motions by proton NMR), L. Kroon Batenburg (molecular dynamics/NMR), E. Stevens (optical rotation) & B. Meyer (conformation and dynamics of complex carbohydrates). Session 2, covering protein–oligosaccharide interactions, centred on lectures given by F. Quiocho (atomic interactions), M. Mestdaghs (receptor–mannan interactions), A. Imberty (oligosaccharide–lectin interactions) and N. Vyas (structure of Fab with and without a bacterial CHO epitope). The second day with session 3 (titled 'Force Field Development')



considered a modelling/crystallographic approach to sulphated polysaccharides (D. Lamba) sandwiched inbetween two talks on new force field modelling approaches, given by C. Haasnoot and K. Rasmussen respectively.

On the last day of the final two sessions focussed on applications to specific saccharides (apart from a talk by D. Cumming on probabilistic random walks) with presentations by B. Pinto (epitopes of Streptococcus group A antigens), R. Klein (on a Streptococcus pentasaccharide repeat unit), M. Bednarski (on a sialyl-Lewis X tetrasaccharide), T. Kozar (on two disaccharides), P. Nyholm (on glycolipids), S. Kitamura (on β -glucans), B. Stokke (cyclization of associating polysaccharides), A. Cesaro (carrabiose) and finally D. Brant (xanthan).

Despite the uncharacteristically chequered weather conditions outside, there was enough to excite the mind inside, particularly the presentations by Roger Klein and Francois Boue.

On the whole we thought it was a very worthwhile meeting, and although, as 'low resolution' ultracentrifuge and light scattering people, despite being almost overawed by the power of NMR and molecular modelling for looking at very small saccharides, as demonstrated in many of the talks (in many cases however, for 'oligosaccharide' read 'disaccharide!'), we were pleased to see that, despite the elegance of these methods, they still have a long way to go in addressing the conformational properties of large, intact, active polysaccharides and glycoconjugates.

In conclusion the organisers, S. Perez, A. Imberty, M. Axelos, S. Cros, M. Dowd, J.-Y. le Questel, C. Meyer and R. Vietor are to be congratulated by the saccharide community for putting on this useful meeting.

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