



News and Views

THIRD INTERNATIONAL WORKSHOP ON PLANT POLYSACCHARIDES

Le Croisic, Loire-Atlantique, France
19–21 September, 1990

The Third International Workshop on Plant Polysaccharides was held at Le Croisic, Loire-Atlantique from 19–21 September. The meeting was organized into five sessions and opened with *Structural Features and Recent Advances in Polysaccharide Investigation*. Dr Brady (Cornell) started this session with an overview of molecular dynamics simulations and showed how these can be used in determining carbohydrate structures. In the afternoon, Dr Kamerling (Utrecht) described the investigation of wheat-flour structures. Other talks in the session showed how different techniques (such as supercritical fluid chromatography, various two-dimensional NMR techniques and transmission electron microscopy) can be used in structure determination. Session II on *Cell Walls and Biologically Active Oligosaccharides* began with Dr Fry (Edinburgh) making some interesting speculations on the role of xyloglucan oligosaccharides in both the promotion and inhibition of plant growth. This theme was taken up by the next speaker, Dr Mutaftschiev (Institut Jacques Monod, Paris). Later talks looked at the use of monoclonal antibodies as probes and the way in which *Rhizobium meliloti* signals to its host.

The talks in Session III took a rather different point of view since this session was devoted to *Human Nutritional Aspects*. Topics discussed included fibre and obesity. Gels were the principal subject of the fourth session, *Network Formation and Characterization*. Dr Braudo (Laboratory of Organoelement Compounds, Moscow) discussed the formation of alginate and pectin gels incorporating Ca^{2+} and other metal ions. This was a subject picked up later by Dr Lips (Unilever) who described the measurement of the binding of calcium to pectic acid. The structure and

strength of pectin gels was discussed by Dr Berth (GDR Academy of Sciences, Bergholz-Rehbrücke). NMR once more made an appearance in the talks of Dr Gidley (Unilever) and Dr Taravel (Centre de Recherches sur les Macromolécules Végétales, Grenoble) who examined amylose and galactomannan gels respectively.

The conference closed with a session on *Polysaccharide Acting Enzymes* and Dr Teeri (Espoo, Finland) explained how amino acid sequencing has revealed that cellulases are constructed of two distinct domains joined by a flexible hinge. The spatial structure of the two parts has been revealed by X-ray diffraction and two-dimensional NMR. Enzymes which formed the subject of later talks included α -amylases, glycanases, transferases and a unique xylanohydrolyase.

One of the features which helped make the conference such a success was the poster session. Approximately 100 posters were produced and these remained on display throughout the entire proceedings. On the evening of the 20th, the conference delegates enjoyed a very fine conference dinner and were reminded by a prestidigitator that seeing should not always imply believing!

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