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Preface

The Polysaccharide Biotechnology Royal Society of Chemistry Meeting, 1997

Between September 3rd and September 5th 1997 the Biotechnology Group (Industrial Affairs Division) of the United Kingdom Royal Society of Chemistry held a meeting at the Sutton Bonington Campus of the University of Nottingham. The meeting marked the opening of the new Food Sciences Building, its new 230-seater lecture theatre and the 10th anniversary of the UK National Centre for Macromolecular Hydrodynamics (NCMH) who hosted the meeting.

This meeting provided a snapshot of some of the many significant advances in the industrial and biomedical usefulness of polysaccharides that have occurred over the past two decades and included a series of research papers and review articles. The collection we have included in this special edition of Carbohydrate Polymers is from the research papers that were presented at this meeting and covers a wide range of topics starting with glycodendrimers followed by a series of articles on starch technologies [pullulan production from starch waste, depolymerisation technologies; starch as a substrate for bacterial citric acid production; and biotechniques for the study of starch fermentation in the gastrointestinal (GI) tract]. Another storage polysaccharide which is becoming of increasing biotechnological importance (inulin) is then considered, and then the focus on GI tract is continued with the use of the β-D-glucan based chitosans as mucoadhesives for drug delivery. The biotechnology of other β-D-glucans are then considered with papers on quaternary ammonium based adsorbates on microcrystalline cellulose and on the immunomodulatory activity of microbial $\beta(1 \rightarrow 3)$-D-glucans. Two 'rheological' based papers follow: the first on the development of a new penetration method for assessing polysacharide gels. The important area of the effect of heat processing on polysaccharides, is then included with a paper on high temperature processing of locust bean gum. Film technologies are covered with a consideration of dextrans. This special edition finishes with sugar beet pulp technology and with a paper on an intriguing use of labelling saccharides with flavours for use in wine technology.

This special edition should supplement well a recent introductory text that has just appeared (Tombs and Harding 1998), and volume 16 of Biotechnology and Genetic Engineering Reviews which contains the review articles presented at the meeting. The meeting was widely regarded as very timely and a great success with over 120 participants from several continents and a wide range of backgrounds: thanks goes to Professors M.P. Tombs and F. Franks and Ms Lynne Moseley, Ms Elizabeth Rodgers and especially Ms Kathleen Brasnett without whose help and endurance the meeting and this special volume would not have been possible.

References

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