

Preface

The preparation of this Preface to the Proceedings of the 14th Gums and Stabilisers for the Food Industry Conference is this time a poignant undertaking. This Conference was special for me since I was awarded the Food Hydrocolloids Trust Medal after a session when many of my colleagues and my son Aled gave presentations. These were both personal and recalled work of by-gone days. So it is only fitting that I here thank all those who were involved in organising this session and for the Trustees in giving me this very special honour.

The high standard of the presentations is evident once again in this volume. There is no better way to learn about new developments in food hydrocolloids research than to browse in these volumes as they appear every two years. As I travel from country to country and lab to lab it is gratifying to see these volumes on the shelves, and to note the constant references to the papers published. This volume will again take the subject forward.

The first section deals with **Novel Hydrocolloid Functionality**, which is a target for most hydrocolloid users. With the number of new food hydrocolloids not likely to increase in the coming years because of the standstill in industrial research in this field, more must be squeezed out of the presently available materials. It is a fascinating and innovative section. These subject areas demonstrate the diversity of the presentations:

- polymers versus particles
- visualisation of hydration and swelling
- swelling of calcium pectin gel beads
- processing-structure-property relationships
- rennet-induced gelation of milk in the presence of pectin
- performance of resistant starch type 3
- bulk deformation behaviour of gellan gum on cross-linking with mixed cations.
- hydration study of soy protein in the 'dry state'
- adhesive of gelatinised starch granule
- extrusion processing of xanthan
- high intensity ultrasonication of pectin
- gel temperature of pectin and pectin-calcium-gels
- transitions in egg protein dispersions

The ingenuity demonstrated in many of the papers is truly admirable as is the global nature of the presentations.

The present conference called for papers on **Sensory-Texture Relationships**. The contributions were varied and dealt with the effect of texture on flavour release, effect of microstructure on flavour diffusion and release and the sensory and rheology of flaxseed gum-fortified dairy beverages.

Hydrocolloid Emulsifiers remain a very interesting and well studied subject. The Leeds group led by Eric Dickinson continues to unravel the complex processes in the formation and breakdown of emulsions. Gelatine, hydroxypropyl cellulose, mannans and xylans, are now making their mark in the food emulsification area. The potential of sugar

beet pectin continues to interest but despite the research efforts the practical commercial application is still minimal.

A major target of this Conference was **Hydrocolloids and Health**. The papers did not disappoint. We are constantly being urged to increase dietary fibre, remove fat, include antioxidants, reduce calories etc. The papers cover each of these areas and show that hydrocolloids can be in the front line in the battle against obesity.

The final three sections deal with:

- **Interactions in mixed hydrocolloid systems**
- **Innovative applications**
- **Developments in characterisation (of hydrocolloids)**

These papers form the backbone of the subject and all workers in the field will need to scrutinize these papers for new materials, new phenomena and new techniques. It is gratifying to note that hydrocolloids too can successfully enter the new nano structure era.

I am happy, therefore, once again to commend the volume to the growing body of researchers in food hydrocolloids. In China recently I found a remarkable growth in interest in this subject and the conference I attended attracted more than 600 participants who traveled from all parts of China. It is fitting, therefore, that the Food Hydrocolloids Trustees have approved that the 10th International Hydrocolloids Conference should be held in Shanghai under the Chairmanship of Professor Hongbin Zhang of Jia Tong University where the polysaccharide field is well and flourishing. Please note the date now - June 2010, following the 9th Conference in Singapore in 2008.

Finally, may I thank my expert Organising Committee for their constant efforts to identify subjects of current interest and point to the specialist lead speakers who can deliver these subjects effectively?

Glyn O. Phillips

Chairman, Gums and Stabilisers Conference Organising Committee