

# **Gums and Stabilisers for the Food Industry 6**

**Editors: G.O.Phillips, P.A.Williams & D.J.Wedlock**

 **IRL PRESS**  
—at—  
OXFORD UNIVERSITY PRESS  
Oxford New York Tokyo

# **GUMS AND STABILISERS FOR THE FOOD INDUSTRY 6**

*Edited by*

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 **IRL PRESS**  
—at—  
OXFORD UNIVERSITY PRESS  
Oxford New York Tokyo

*Oxford University Press, Walton Street, Oxford OX2 6DP*

*Oxford New York Toronto  
Delhi Bombay Calcutta Madras Karachi  
Petaling Jaya Singapore Hong Kong Tokyo  
Nairobi Dar es Salaam Cape Town  
Melbourne Auckland  
and associated companies in  
Berlin Ibadan*

*Oxford is a trade mark of Oxford University Press*

*Published in the United States  
by Oxford University Press, New York*

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*A catalogue record for this book is available from the British Library*

*Library of Congress Cataloging in Publication Data*

*Gums and stabilisers for the food industry 6/edited by Glyn O. Phillips, P.A. Williams, and  
David J. Wedlock.*

*"Proceedings of the 6th International conference held at Wrexham, Clwyd, Wales, July 1991"—P.  
Includes index.*

*1. Colloids—Congresses. 2. Food additives—Congresses.*

*I. Phillips, Glyn O. II. Williams, Peter A. III. Wedlock, David J. TP453.C65G865 1992  
664'.06—dc20 92-3551*

ISBN 0-19-963284-7 (hbk)

**GUMS AND STABILISERS  
FOR THE FOOD INDUSTRY 6**

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Wrexham, Clwyd, Wales, July 1991**

## **PREFACE**

This sixth volume of books on Gums and Stabilisers again places major emphasis on the practical aspects of the subject. The sixth Wrexham Conference, on which this book is based, was designed to reflect the new trends and concerns which are currently associated with the industry. This volume deals with these changes. Legislation and applications changes, consequent upon the move to Europe 1992 are given emphasis. In the past it has been difficult to persuade the end-user to either discuss his practices or his needs. Here the end-user also contributes, with consideration given to the scientific principles which determine the usefulness of his products.

It is always the main objective of these volumes to integrate the knowledge of the academic researcher with the experience of producer. How to understand the phenomena and utilise the knowledge practically is essentially our mission. This will again be evident from the major themes:

- **STRUCTURE AND RHEOLOGY**
- **SYNERGISM**
- **PROCESSING**
- **EMULSION STABILISATION**
- **LOW CALORIE PRODUCTS**
- **NOVEL FUNCTIONALITY AND TECHNIQUES**

These are practical areas, but nevertheless we have encouraged academic researchers to contribute within these important product-led categories. Since these volumes have appeared, we have witnessed and been gratified by the greater degree of interaction and awareness between the academic—producer—user groups. Possibly this reaches its climax at the final Banquet at each Conference!

The regular and buoyant demand for these volumes demonstrates that we are now addressing a family audience. We would welcome any comments you might have about areas in the field which need further coverage. We particularly extend to you all an invitation to the next Conference which will be held in Wrexham, 12–16 July 1993. We trust you will find this volume as useful as the five which have preceded it. Together they provide the most comprehensive coverage of the subject currently available.

**PROFESSOR GLYN O. PHILLIPS**  
**CHAIRMAN**

## ACKNOWLEDGEMENTS

The Sixth Meeting owed its success to the invaluable assistance of the Organising Committee.

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The Editors would like to express their appreciation to Mr Haydn Hughes and Miss Linda Sneddon for assisting in manuscript preparation.

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## **Part 1**

### **END USE CONSIDERATIONS**





# Food Hydrocolloids: an end user's viewpoint

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## Abstract

In recent years, consumers have become particularly concerned about the use of "additives" in manufactured foods. As a result, manufacturers have become very resistant to the introduction of new ingredients and conservative about the use of established ones despite their obvious advantages in stabilising processing and product qualities. Despite this pressure, the use of hydrocolloids is at least stable, if not increasing. This appears to be due to the facts that hydrocolloids are 'natural', have no significant health risk associated with them, and can demonstrate obvious advantages in improving the quality of foods, either texturally and possibly nutritionally. The known physical and structural roles of various hydrocolloids are reviewed, together with comparisons with the current ingredients with which they compete. Some guidelines for the future uses of hydrocolloids in foods are discussed.

## INTRODUCTION

The purpose of this paper is to indicate in outline, the significance of hydrocolloids in the creation of modern manufactured foods.

Based on the provision of speciality ingredients of high quality, the food industry has developed an enormous range of available and convenient products over the last 20 years. During the same period, consumers attitude to and requirement from prepared foods has changed dramatically. Unfortunately, scientific understanding does not always keep pace with such rapid changes, so that the future issues of supply and demand cannot always be faced with confidence.

We will examine the context of consumer opinion and technical knowledge which will at least provide some of the questions which should be asked, even though answers are not yet available.

## THE USER'S VIEW

Food manufacturing in the developed world is a competitive industry. Only by the provision of products with increasing perceived value for money, and with a reasonable profit margin can any business survive.