

## DOCUMENTATION

### Review of books

(In this section we publish reviews of the books from which we receive a copy in our library)

**Edible Oil Structuring. Concepts, Methods and Applications.– Ashok R. Patel.– The Royal Society of Chemistry, London, UK, 2018.– XVIII + 336 pages.– ISBN 978-1-78262-829-3.**

This book is the third volume of the series “Food Chemistry Function and Analysis” published by the Royal Society of Chemistry. It is dedicated to a field of rapid development in recent years because of the need of food industry to substitute *trans* and saturated fats by healthier fats in food design. To get that, a thorough investigation in oil oleogelation is being carried out. Oil oleogelation can be defined as the application of a series of innovative and promising technologies with the objective of obtaining healthy oils with physical properties close to that of saturated fats. Initiated with the publication in 2004 of the paper on edible oil structuring of fatty acids and fatty alcohols by Gandolfo et al., a large amount of research in this subject has been published since then. This book collects much of such information, specially those advances produced in the last five years. It is a book with a large number of references and numerous figures, tables, and schemes.

The book contains fourteen chapters that have been grouped into six sections. The first section, entitled “Introduction”, contains the chapter “Oil structuring: concepts, overview and future perspectives”, A. R. Patel (19 pages, 97 references). The second section, entitled “Structuring units”, contains two chapters: “Biobased molecular structuring agents”, S. S. Sagiri, M. Samateh and G. John (28 pages, 95 references); and “Biomimicry: an approach for oil structuring”, M. A. Rogers (15 pages, 46 references). “Structuring units: crystalline particles and self-assembled structures” is the third section. It includes three chapters: “New insights into wax crystal networks in oleogels”, K. D. Mattice and G. Marangoni (24 pages, 43 references); “Structuring edible oil phases with fatty acids and alcohols”, A. Bot and Flöter (11 pages, 28 references); and “Gelation properties of gelator molecules derived from 12-hydroxystearic acid”, J. F. Toro-Vazquez, M. A. Charó-Alonso and F. M. Alvarez-Mitre (26 pages, 57 references). Section IV is entitled “Structuring units: polymeric strands and network”. It contains four chapters: “Thermo-gelation of ethyl-cellulose oleogels”, M. Davidovich-Pinhas (15 pages, 58 references); “Proteins as building blocks for oil structuring”, E. Scholten and A. De Vries (25 pages, 30 references); “Oleogels from emulsion (HIPE) templates stabilized by protein-polysaccharide complexes”, W. Wijaya, P. Van Der Meer and A. R. Patel (23 pages, 68 references); and “Cereal protein-based emulsion gels for edible oil structuring”, X. Liu and X.-Q. Yang (17 pages, 47 references). Next section is dedicated to “Edible applications” and includes two chapters: “Edible applications of wax-based oleogels”, E. Yilmaz and S. Ok (33 pages, 54 references); and “Edible applications of ethylcellulose oleogels”, K. D. Mattice and A. G. Marangoni (25 pages, 66 references). Finally, section VI, entitled “Functional colloids from structured oils” contains the last two chapters: “Non-aqueous foams based on edible oils”, A.-L. Fameau (31 pages, 62 references); and “Innovative dispersion strategies for creating structures oil systems”, A. S. Patel (23 pages, 59 references).

In summary, a good book to know recent advances in the preparation of healthier fats. It is a book that can be very useful to researchers and to the industry, and that can also be employed in postgraduate courses.

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