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Book review

The Maillard Reaction — Consequences for the Chemical and Life Sciences, Edited by R. Ikan, John Wiley & Sons, 1996. ISBN: 0-471-96300-3. 228 pp, £55.00 Hardback.

Maillard, in 1912, reported that chemical reactions can readily occur between reducing sugars and amino acids. As he rightly predicted, Maillard Reactions have subsequently been shown to have relevance in many scientific disciplines, especially those concerned with Food- and Bio-sciences.

The Maillard Reaction — Consequences for the Chemical and Life Sciences is ambitious in attempting to bring together in a single volume of nine chapters several of these important areas. These are concerned with geochemical, food, biological and mechanistic aspects and are written by leading researchers in their fields. Overviews are provided of Maillard Reactions in vivo — the role of oxidation and recent findings on glycation of DNA. Aroma

formation, nutrition, genotoxicity of reaction products and microwave chemistry relating to food are discussed, as are possible mechanisms involving free radicals and the scavenging of active oxygen species by melanoidins. One chapter is devoted to geological aspects.

The book is, on the whole, well presented and referenced and provides up-to-date information of the various fields covered. Some figures could have been better presented; 1.6 is difficult to read, 7.1 contains incomplete structures.

In spite of its common theme it is probable that only parts of this book will be of direct interest to most readers. This and the price (£55), may limit its appeal.

Dr. E. TarelliKing's College School of Medicine and Dentistry London SE5 9RWP