

research, some of which he still carries on to this day. I always connect his name with polyphenol oxidases and with seed germination (he was co-author of one of the key textbooks on this topic), but as you can read in this book, he made significant contributions to several other fields. His work on the enzyme laccase, for example, won him an honorary degree from the University of Bordeaux. Alfred Mayer is also not afraid to describe his personal life. Most moving is the account of his close relationship with his late wife, Nitzà, and her sad death within a few years of their marriage.

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Altogether, this is a fascinating story of a modern plant scientist, who was lucky in his research to achieve a number of valuable breakthroughs. He generously acknowledges the influence of his students and co-workers and provides a rounded account of the pursuit of an academic career in plant sciences over the last fifty years.

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***Carotenoids. Volume 3. Biosynthesis and Metabolism*, edited by G. Britton, S. Lisaaen-Jensen and H. Pfander, Birkhauser Verlag, Basle, 1998. 414 pp. 198 Swiss Francs. ISBN 3-7643-5829-7.**

This is the third volume in a continuing series of monographs devoted to the carotenoid plant pigments. It deals with their biosynthesis and further metabolism, but also includes something on chemosystematics (within the algae), molecular biology, the absorption of carotenoids by animals and the place of carotenoids in various food chains. A final chapter by the senior editor provides valuable first hand guidance on the practical strategies and procedures for studying biosynthesis and applying biosynthetic inhibitors.

Nature makes carotenoids on a truly grand scale, particularly in seaweeds, and in great variety, especially in the yellow flowers of higher plants. The study of their biosynthesis presents many challenges.

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How is the basic C<sub>40</sub> skeleton assembled, how is unsaturation introduced and how are all the many and varied oxygenated pigments elaborated. Animals, of course, cannot biosynthesize carotenoids, although many fish, birds and crustaceans derive their colours from dietary carotenoids, which are then often subjected to structural modification. These are just a few of the major themes discussed in this volume. The biosynthetic story is completely up-to-date and includes discussion of the alternative isoprenoid pathway proceeding from glucose via 1-deoxyxylulose 5-phosphate. In all, this book reaches a very high standard of presentation and can be strongly recommended.

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