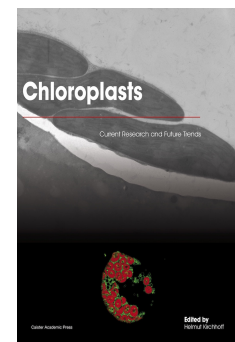


Chloroplasts

Current Research and Future Trends



Edited by: Helmut Kirchoff

Institute of Biological Chemistry, Washington State University, Pullman, USA

Published: August 2016. **Pages:** x + 290

ISBN: Book: 978-1-910190-47-0. Ebook: 978-1-910190-48-7 £159, \$319

Published by: Caister Academic Press www.caister.com

The chloroplast organelle in plants not only forms the platform for photosynthetic energy conversion that fuels life on earth but is also a highly dynamic anabolic factory generating a great variety of primary and secondary metabolites.

This authoritative book reflects the diversity of the research field on chloroplast biology ranging from the biophysical principles of energy conversion over metabolic regulation and ion transport to identification of unique plastid proteins by the systems-biology based green cut project. The chapters are written by renowned experts in their fields and provide state-of-the-art overviews of their current research. Each chapter ends with a section on future trends that projects where the research could be in the next five to ten years.

The book is recommended to readers seeking an overview on chloroplast biology as well as scientists looking for detailed up-to-date information.

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Chapter 2. Assembly and Degradation of Pigment-binding Proteins (*Tania Tibiletti, Miguel A. Hernández-Prieto, Trudi A. Semeniuk and Christiane Funk*)

Chapter 3. Structural and Functional Dynamics of the Thylakoid Membrane System (*Sujith Puthiyaveetil, Helmut Kirchoff and Ricarda Höhner*)

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