



## Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments

*By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit*

Download now

Read Online ➔

**Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments** By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit

Emphasis is on a broad description of the general methods and processes for the synthesis, modification and characterization of macromolecules. These more fundamental chapters will be supplemented by selected and detailed experiments. In addition to the preparative aspects, the book also gives the reader an impression on the relation of chemical constitution and morphology of Polymers to their properties, as well as on their application areas. Thus, an additional textbook will not be needed in order to understand the experiments.

The 5th edition contains numerous changes: In recent years, so-called functional polymers which have special electrical, electronic, optical and biological properties, have gained more and more in interest. This textbook was therefore supplemented by recipes which describe the synthesis of these materials in a new chapter "Functional polymers". Together with new experiments in chapter 3,4 and 5 the book now contains more than 120 recipes that describe a wide range of macromolecules.

From the reviews of recent editions:

"This is an excellent book for all polymer chemists engaged in synthesis research studies and education. It is educationally sound and has excellent laboratory synthetic examples. The fundamentals are well done for the teaching of students and references are reasonably up-to-date. As in previous issues, there are sections dealing with an introduction; structure and nomenclature; methods and techniques for synthesis, characterization, processing and modification of polymers.

....The authors have noted the following changes from previous editions- a new section on correlations of structure, morphology and properties; revision and enlargement of other property and characterization procedures; additional new experiments such as controlled radical polymerization; enzymatic

polymerizations; microemulsions; and electrical conducting polymers.

This is a high quality textbook at a reasonable price and should be considered as a suitable reference for all engaged in synthetic areas of polymer research." (Eli M. Pearce, Polytechnic University, Brooklyn, NY, USA)

 [Download Polymer Synthesis: Theory and Practice: Fundamenta ...pdf](#)

 [Read Online Polymer Synthesis: Theory and Practice: Fundamen ...pdf](#)

# Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments

*By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit*

**Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments** By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit

Emphasis is on a broad description of the general methods and processes for the synthesis, modification and characterization of macromolecules. These more fundamental chapters will be supplemented by selected and detailed experiments. In addition to the preparative aspects, the book also gives the reader an impression on the relation of chemical constitution and morphology of Polymers to their properties, as well as on their application areas. Thus, an additional textbook will not be needed in order to understand the experiments.

The 5th edition contains numerous changes: In recent years, so-called functional polymers which have special electrical, electronic, optical and biological properties, have gained more and more in interest. This textbook was therefore supplemented by recipes which describe the synthesis of these materials in a new chapter "Functional polymers". Together with new experiments in chapter 3,4 and 5 the book now contains more than 120 recipes that describe a wide range of macromolecules.

From the reviews of recent editions:

"This is an excellent book for all polymer chemists engaged in synthesis research studies and education. It is educationally sound and has excellent laboratory synthetic examples. The fundamentals are well done for the teaching of students and references are reasonably up-to-date. As in previous issues, there are sections dealing with an introduction; structure and nomenclature; methods and techniques for synthesis, characterization, processing and modification of polymers.

....The authors have noted the following changes from previous editions- a new section on correlations of structure, morphology and properties; revision and enlargement of other property and characterization procedures; additional new experiments such as controlled radical polymerization; enzymatic polymerizations; microemulsions; and electrical conducting polymers.

This is a high quality textbook at a reasonable price and should be considered as a suitable reference for all engaged in synthetic areas of polymer research." (Eli M. Pearce, Polytechnic University, Brooklyn, NY, USA)

**Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments** By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit **Bibliography**

- Sales Rank: #2254394 in Books
- Brand: Brand: Springer
- Published on: 2012-02-15
- Original language: English

- Number of items: 1
- Dimensions: 9.21" h x .94" w x 6.14" l, 1.60 pounds
- Binding: Hardcover
- 404 pages

 [Download Polymer Synthesis: Theory and Practice: Fundamenta ...pdf](#)

 [Read Online Polymer Synthesis: Theory and Practice: Fundamen ...pdf](#)

## **Editorial Review**

### Review

From the reviews of the fourth edition:

"The basic concept of the new edition ... remains unchanged: Emphasis is again ... on a broader description of the general methods and processes for the synthesis, modification and characterisation of macromolecules. ... In addition to the preparative aspects the book also gives the reader an impression on the relation of chemical constitution and morphology of polymers to their properties, as well as on their application areas." (KGK-Kautschuk Gummi Kunststoffe, Issue no. 5, 2005)

"The book, I found, covers a wide range of topics, all of value to a technologist seeking further knowledge of polymer structures, their creation and subsequent accreditation ... it is a goldmine of information on the various processes for generating known polymer structures – again, well presented ... If I have one criticism it is that perhaps the book attempts to cover too much - it is certainly not a text that can be reviewed in one sitting! To give it full justice, I needed to go back to it several times. Nevertheless, it is a book that I will certainly return to again, not only to gain a better understanding of the topic of polymers, but to dip into a fascinating presentation of what has been achieved with the chemistry of macropolymers." (Jan Czerski, Materials World, Vol. 14 (4), April, 2006)

"This improved and updated 4th edition of the 1971 original has been written by a group of qualified authors who have put together coherent and detailed material comprising a well-balanced mixture of theoretical descriptions with over 100 well-selected experiments. ... Overall, the book is an eclectic combination of polymer topics geared towards the industrial chemist. However, it is also a good student laboratory manual and it would certainly be a useful companion in a polymer synthesis class." (AD Asandei, Polymer International, Vol. 55 (1), 2005)

"The original edition had, as does the new fourth edition, detailed methods for many polymerisation reactions using all types of polymerisation conditions. ... Polymer Synthesis: Theory and Practice can be a useful and comprehensive book for finding starting-point experimental conditions for most polymerisations. It should be considered for library acquisition, where it will serve many users." (R.A. Shanks, Magazine of the Royal Australian Chemical Institute, June, 2005)

### From the Back Cover

Emphasis is on a broad description of the general methods and processes for the synthesis, modification and characterization of macromolecules. These more fundamental chapters will be supplemented by selected and detailed experiments. In addition to the preparative aspects the book also gives the reader an impression on the relation of chemical constitution and morphology of Polymers to their properties, as well as on their application areas. Thus, an additional textbook will not be needed in order to understand the experiments.

The 5th edition contains numerous changes: In recent years, so-called functional polymers which have special electrical, electronic, optical and biological properties, have gained more and more in interest. This

textbook was therefore supplemented by recipes which describe the synthesis of these materials in a new chapter "Functional polymers". Together with new experiments in chapter 3,4 and 5 the book now contains more than 120 recipes that describe a wide range of macromolecules.

#### About the Author

**Prof. Dr. Dietrich Braun** was the leader of the German Institute for Synthetic Materials in Darmstadt (Deutsches Kunststoff-Institut (DKI)) until his retirement in 2000. He is the author of numerous textbooks and research books.

**Prof. Dr. Harald Cherdron** was the director of the Department of Polymer Materials and Central Research in Höchst and Professor at the University Marburg until his retirement in 1994.

Since 1999 **Prof. Dr. Matthias Rehahn** holds a professorship at the Ernst-Berl-Institute for Technical and Macromolecular Chemistry at the Technical University Darmstadt, and he is the leader of the German Institute for Synthetic Materials in Darmstadt.

Since 2001 Prof. Dr. Dr. h. c. Helmut Ritter is head of the Institute of Organic Chemistry and Macromolecular Chemistry at the University Düsseldorf.

**Prof. Dr. Brigitte Voit** is Managing Director/Chief Scientific Officer (CSO) of the "Leibniz-Institut für Polymerforschung Dresden e.V." (IPF) and head of the IPF Institute Macromolecular Chemistry.

#### Users Review

##### From reader reviews:

##### William Riser:

With other case, little people like to read book Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments. You can choose the best book if you want reading a book. As long as we know about how is important any book Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments. You can add knowledge and of course you can around the world by just a book. Absolutely right, since from book you can understand everything! From your country until foreign or abroad you will find yourself known. About simple thing until wonderful thing you may know that. In this era, you can open a book or even searching by internet gadget. It is called e-book. You can utilize it when you feel fed up to go to the library. Let's examine.

##### Joanne Hall:

Reading a book can be one of a lot of activity that everyone in the world adores. Do you like reading book so. There are a lot of reasons why people enjoyed. First reading a e-book will give you a lot of new details. When you read a reserve you will get new information because book is one of many ways to share the information as well as their idea. Second, reading through a book will make you actually more imaginative. When you reading through a book especially tale fantasy book the author will bring someone to imagine the story how the characters do it anything. Third, it is possible to share your knowledge to other folks. When you read this Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments, it is possible to

tells your family, friends in addition to soon about yours reserve. Your knowledge can inspire different ones, make them reading a e-book.

**Stacey Pinkston:**

Beside this kind of Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments in your phone, it might give you a way to get nearer to the new knowledge or data. The information and the knowledge you will get here is fresh from the oven so don't always be worry if you feel like an previous people live in narrow community. It is good thing to have Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments because this book offers for you readable information. Do you often have book but you seldom get what it's all about. Oh come on, that would not happen if you have this within your hand. The Enjoyable agreement here cannot be questionable, including treasuring beautiful island. Techniques you still want to miss the item? Find this book and also read it from at this point!

**Beverly Thomas:**

That publication can make you to feel relax. This kind of book Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments was colorful and of course has pictures around. As we know that book Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments has many kinds or style. Start from kids until adolescents. For example Naruto or Investigator Conan you can read and think you are the character on there. So , not at all of book are make you bored, any it can make you feel happy, fun and chill out. Try to choose the best book in your case and try to like reading this.

**Download and Read Online Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit #3NPG28Q9TJL**

# **Read Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit for online ebook**

Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit books to read online.

## **Online Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit ebook PDF download**

**Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit Doc**

**Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit Mobipocket**

**Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit EPub**

**3NPG28Q9TJL: Polymer Synthesis: Theory and Practice: Fundamentals, Methods, Experiments By Dietrich Braun, Harald Cherdron, Matthias Rehahn, Helmut Ritter, Brigitte Voit**