

HANSER

Preface

Polymer Testing

Translated by Paul I. Anderson

Herausgegeben von Wolfgang Grellmann, Sabine Seidler

ISBN (Buch): 978-1-56990-548-7

ISBN (E-Book): 978-1-56990-549-4

For further information and order see

<http://www.hanser-fachbuch.de/978-1-56990-548-7>

or contact your bookseller.

Preface to the Second Edition

The textbook „*Polymer Testing*“ is mainly intended for the education of university students and students of universities of applied sciences. This textbook was deemed to be necessary because the testing of polymers has become established as a separate scientific discipline within polymer sciences in recent years. The textbook was first published in German in 2005. An improved English version was published in 2007, and a Russian edition appeared in 2010 with special consideration given to the specific GOST standards.

The positive reviews from our colleagues demonstrate that the concept „Method – Parameters – Examples“ meets students` needs and is also accepted in practice.

Although there have been no significant changes to basic testing methods since the first edition appeared, there have been considerable advances in the evaluation of structure-property correlations and standardisation. It has become increasingly necessary to provide material-scientific parameters to quantify the relationship between microstructure and macroscopic properties. Therefore, it seemed necessary to publish a second edition. The previous edition has been comprehensively revised, and the new edition covers all the latest developments in the field, including all amendments to the most important polymer test standards up to May 2013.

Using the same concept and methodical structure in the presentation of polymer test procedures, the parameters obtained by the latter and the selected examples, the new edition provides university students and students of universities of applied sciences with a good and fast source of information. This is why the textbook has been widely adopted by universities and universities of applied sciences for the teaching of „*Polymer Testing*“.

In order to provide support the lecturers, a PowerPoint presentation has been created for all pictures and tables. It can be downloaded from www.hanserpublications.com. In this regard, we would like to thank Prof. Dr.-Ing. Christian Bierögel, in particular, for his valuable advice in the preparation of this edition and especially for the new publication of the pictures, which are now in colour, and his extensive work on producing the PowerPoint presentation of all pictures.

A Wiki dictionary, „*Plastics Testing and Diagnostics*“, has been produced on the scientific basis of the book and of publications from the Merseburg scientific school, and it often provides more detail than the book. The dictionary is available at www.polymerservice-merseburg.de/wiki-lexikon-kunststoffpruefung and can be used for practical work. An extensive compilation of fracture mechanics test specimens and approximation equations to calculate parameters in fracture mechanics are just two examples of what the dictionary offers.

We would like to thank Carl Hanser Verlag, especially Ms. Dr. N. Warkotsch, Ms. Dr. C. Strohm, Ms. Dipl.-Ing. (FH) U. Wittmann and Mr. S. Jörg, for their much-appreciated and reliable assistance.

June 2013

The Editors