

Preface

This Compendium of Polymer Terminology and Nomenclature is an expansion and revision of the Compendium of Macromolecular Nomenclature published in 1991 (the so-called Purple Book) under the auspices of the Commission on Macromolecular Nomenclature of the Macromolecular Division of the International Union of Pure and Applied Chemistry (IUPAC). The present compendium contains twenty-two chapters, compared with the nine chapters and introduction of the 1991 edition, and only four of the chapters of the 1991 edition are retained in their original form. One chapter included in the 1991 edition (Nomenclature for regular single-strand and quasi-single-strand inorganic and coordination polymers) has been excluded from this edition pending major revision in accord with the 2005 edition of the Nomenclature of Inorganic Chemistry (the Red Book).

This edition is published under the auspices of the Commission on Macromolecular Nomenclature of the Macromolecular Division of the IUPAC, the Sub-committee on Macromolecular Terminology and the Sub-committee on Polymer Terminology of the Polymer (previously Macromolecular) Division of the IUPAC. The changes of title of the bodies concerned reflect both the growth in the activities of the former Macromolecular Division and the reorganisation of the IUPAC to a project-based rather than a commission-based organisation. At the beginning of 2002, the Division of Chemical Nomenclature and Structure Representation of the IUPAC was formed with the task of overseeing all the chemical nomenclature projects of the IUPAC. At the same time, the Commission on Macromolecular Nomenclature was discontinued and the Sub-committee on Macromolecular Terminology formed with the same scientists actively involved. Finally, in 2004, the Macromolecular Division voted to change its name to Polymer Division and, in 2005, the sub-committee changed its name to the Sub-committee on Polymer Terminology. These changes followed the gradual expansion of the division's and sub-committee's activities that had occurred to cover the materials as well as the molecular aspects of the subject. The sub-committee has responsibility for projects on polymer terminology and works on macromolecular nomenclature in collaboration with the Division of Chemical Nomenclature and Structure Representation.

The synchronisation of the formation of the Sub-committee on Macromolecular Terminology with the formation of the Division of Chemical Nomenclature and Structure Representation was essential to ensuring the smooth continuation and expansion of the IUPAC's work on polymer terminology and nomenclature. Except for Chapter 14, which is an introduction to polymer nomenclature, and Chapter 23, dealing with abbreviations for names of polymeric substances, the chapters of the present compendium are reproductions, with some editorial corrections in line with current IUPAC practice, of official IUPAC recommendations published in *Pure and Applied Chemistry*. It can be seen from the range of dates of the original articles constituting the chapters that the restructuring of the IUPAC and the creation of a polymer terminology sub-committee from a macromolecular nomenclature commission did not cause a hiatus in publications.

The first, 1991 edition of the Purple Book contained two main sections, namely Definitions, having four chapters, and Nomenclature, having an introduction and five

PREFACE

chapters. In keeping with the expansion of the Commission's and Sub-committees' work into topics related to polymeric and polymer-based materials, the first section of the present edition is renamed Terminology and increased to thirteen chapters, and the second, Nomenclature section has ten chapters. In addition, the present edition retains a bibliography of biopolymer-related IUPAC-IUBMB nomenclature.

Following this preface are a copy of the preface to the first edition of the Purple Book, a history of the work of the IUPAC Polymer Division on polymer terminology and nomenclature by the past secretaries of the Commission and Sub-committees, and comprehensive lists of members of the several bodies involved in the work (Sub-commission (1952-1967), Commission (1968-2001) and Sub-committees (from 2002)).

This compendium is also available in electronic form via the Polymer Division's website, www.iupac.org/divisions/IV.

Finally, we would like to thank our co-editors, Val Metanomski, Ted Wilks, Jaroslav Kahovec and Tatsuki Kitayama, for their sterling efforts over the long period of time needed to prepare this book for publication, and also the help of colleagues Aubrey Jenkins and Pavel Kratochvíl, past Chairmen of the Commission on Macromolecular Nomenclature, for their invaluable contributions during the final stages of the editorial labours.

We hope that this, new edition of the 'Purple Book' continues the significant contribution to clear and precise communication in polymer science made by its predecessor.

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Chairman, IUPAC Commission on Macromolecular Nomenclature, 1992 – 1999

MICHAEL HESS

Chairman, IUPAC Commission on Macromolecular Nomenclature, 2000 – 2001

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