Preface

With this collection of short review papers we would like to present a broad overview of research on polyfluorenes and related heteroanalogues over the last two decades. The collection begins with papers on the synthesis of polyfluorenes and related polyheteroarenes, then reports photophysical properties of this class of conjugated polymers both at the ensemble and the single chain level, continues with a discussion of the rich solid state structures of polyfluorenes, and finally switches to device applications (e.g. in OLEDs). In addition, two chapters are devoted to defined oligofluorenes as low molecular weight model systems for polyfluorenes and also to degradation studies.

We feel that this up-to-date collection will be very helpful to all polymer chemists and physicists, and will also aid graduate students interested in this fascinating and still growing area of research, since such a compact overview is only now available. All articles are presented by leading scientists in their fields, insuring state-of-the-art coverage of all relevant aspects. Together with the body of references this volume is meant to assist researchers in the daily lab routine. Moreover, Advances in Polymer Science, as an established series of high quality review papers, represents a very appropriate platform for our project. We hope that this short collection will be of great value both for beginners and established research scientists in the field of polyfluorene research.

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