

Preface

Measurement errors occur always whenever a measurement is performed. Their description may be either very simply if only a rough assessment is done or very complex if all influences are taken into account. Similarly, mathematical models of a *physico-chemical phenomenon* can be very simply or complex depending on the required accuracy. The model simpler is, its simplification errors larger are.

This property is also valid for the *multi-component potentiometric analysis*. The subject of the dissertation concerns first of all just this problem. Despite it is a part of the scientific research of chemistry, the point of view applied in the dissertation is from the metrological perspective. Furthermore, the products of the works (*i.e.* the ion-selective electrodes) find applications in medicine and environmental engineering. Therefore, it can be stated that it is an interdisciplinary research.

At the beginning of the dissertation the table of contents, list of tables and list of figures are placed. The nomenclature used in the text is presented next. After a brief introduction it is set forth the thesis in Chap. 1. In Chap. 2, a literature review and a theoretical framework are placed. Simulations and experiments made to support and confirm the validity of the thesis are described in Chap. 3. The chapter also contains discussions of results. Each section of the chapter ends with a brief summary. Chap. 4 includes conclusions of the dissertation. The bibliography is next. At the end, in appendixes, technical data sheets are attached.