# **Preface**

Powdered substances play an important role in a wide sphere of human activities; they are used in or they are produced within many industrial processes from the food industry through the production of medicines, binders, pigments up to the production of materials. Neither it is possible to quantify the set of products that we use either in powdered state or in compact form. In preparation and characterization of the powdered system, it is important to know the particularities of the powder properties represented by their aggregate and chemical instability. The first conference in the year 1996 was in a spirit of the adequacy assessment of current experimental methods used for the characterization of finely dispersed substances prepared by chemical and mechano-chemical methods under the guarantee of prof. Dr. Klára Tkáčová, DrSc. The following conferences have already seen qualitative and quantitative changes by expanding its theme, initially dedicated to the methods of preparation and characterization of particulates. In order to the mutual information and the presentation of scientific knowledge and practical experience in the field of particulates, the topics were extended to study relations between structure and reactivity of ultrafine systems in the laboratory and industrial scale, further the issue of solid dispersions occurring in the environment and for the occurrence in the air as pollutants and in terms of characterization of the properties of the solid waste in order to select the appropriate method of disposing and material recovery. With the introduction of green and cleaning technologies of gaseous air pollutants and wastewater we increasingly meet with the generation of large amounts of solid waste. They have become a key problem of conversion of liquid and gaseous waste.

Nowadays, the conference provides a platform for the exchange of knowledge and expertise on particulate solids, their characterization and application in various fields. The Conference aims to represent a multi-disciplinary forum for exchanging ideas, presenting the latest developments and trends, proposing new solutions and promoting international collaborations through meeting the experts from both academic and industrial areas.

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