Proceedings of the
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Preface

Since 2009, the positron research group at the Institute of Physics of UMCS University in Lublin (Poland) organizes the traditional Polish Seminar on Positron Annihilation (PSPA), belonging to the most popular meetings of positronners from all continents.

This volume contains the proceedings of 41th PSPA meeting (PSPA-13) which was held on September 9–13, 2013 in Czartoryski Palace in Lublin, now the seat of Lublin Scientific Society. The workshop brought together people from 10 countries. They presented the results and discussed their opinions in an cosy atmosphere of the place.

80 years ago the positron was discovered. In spite of so many years which passed the properties of this particle and possibilities of its application in material research are of interest. In particular, its bound state, the positronium, has been studied very extensively and recognized as a useful experimental probe of free volumes in the structure of solids, very often determining their properties important in practical applications. The positron and positronium techniques are well applicable to the wide range of materials from metals through polymers to composite systems which play the role in technology development now. However, some aspects of positron behavior in the matter, are still debatable.

This volume is a collection of results presented during the Seminar covering many areas of recent studies on this field of research. We hope that the atmosphere of presentation the current results which characterized our meeting is noticeable also in these Proceedings and will stimulate the Reader to cross the borders toward new ideas concerning positron science.

Lublin, March 2014

Marek Pietrow, Editor