# Preface

During the last two decades, it is not hard to observe unusual direct progress of civilization in many fields concerning conditionality coming up from technical theories or more generally technical sciences. We experience extraordinary dynamics of the development of technological processes including different fields of daily life which concerns particularly ways of communicating. We are aspiring for disseminating of the view that the success in the concrete action is a consequence of the wisdom won over, collected and appropriately processed. They are talking straight about the coming into existence of the information society.

In such a context the meeting of the specialists dealing with the widely understood innovations in biomedical engineering would give a new dimension associated with promoting something like the new quality. Because having the innovative approach as a pointer in today's world of changing attitudes and socioeconomic conditions can be perceived as one of the most important advantages. It results from the universal globalization letting one to observe surrounding world. Thanks to the development of new biotechnologies rising from the rapid progress in biomedical sciences, by comprehending the contemporary needs of surrounding world it may be said almost without any risk that life without biomedical sciences would stopped existing.

At present, as it seems, implementing the universal standardization of the transfer and the processing of information is the most important issue which in a significant way influences for expanding the circle of biomedical applications. It is a kind of challenge to put the proper weight into particular branches covered by biomedical engineering and therefore we decided to edit the book as a four-part elaboration covering biomaterials, biomechanics, biomedical informatics and last but not least biomedical signals processing. One should aspire to its permanent integration rather than the disintegration to progress in the context of the technological development. Hence, the constant observation and the appropriate problem analysis of biomedical sciences as well as checking the technologies development and their applications is picking up great importance.

The monograph returned to hands of readers being a result of meeting specialists dealing with the above-mentioned issues should contribute in a significant way to the success in implementing consequences of human imagination into the social life. We believe being aware of a human weakness and an imperfection that the monograph presenting a joint effort of the increasing crowd of professionals and enthusiasts will influence the technology development further regarding generally understood biomedicine with constantly expanding spectrum of its applications.

The last part of this preface will be devoted to express our great thanks and appreciation to all the contributors of this book, which were listed in the special section

as “Contributor’s List” and to persons who gave us unusual help in final editing process. Special thanks to Dr. Barbara Mika and Dr. Paweł Kostka for incredible engagement and help in creating the final version of this book.

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