

## PREFACE

This book includes papers collected for the 25th Symposium and Annual Meeting of the International Society for Ceramics in Medicine (BIOCERAMICS 25), held in Bucharest, Romania, from 07 to 10 November, 2013. The papers were selected by reviewing the full papers of authors whose abstracts submitted to the Symposium were accepted after a blind peer-reviewing process, and reflected the most recent progress made in the study of bioceramics and their applications in medicine.

The papers presented at BIOCERAMICS 25 have been categorized into different topics, even many of these papers present an interdisciplinary nature. The papers are focused not just on synthesis, processing and characterization of bioceramics, but also on surface modification, tissue engineering, nanomaterials and drug delivery. Which means that bioceramics are facing advanced towards the regeneration of the tissue by biomimetic design of structure and integration of biological function to optimize the tissue response. The strong contribution related to the application of bioceramics and composite materials in dentistry and orthopedics presented in this book confirm the importance of these materials for clinical practice in medical units.

We acknowledge all the members of the Executive Committee of the International Society for Ceramics in Medicine (ISCM), and of the International and Local Scientific Committee for their support and contribution. Also, we express our sincere thanks to the reviewing committee because they ensure the existence of this book.

A special homage should pay to the Professor Racquel LeGeros, who was one of the founders of ISCM and a pioneer in the field of calcium phosphates, biomimetic design, bioceramics and calcium phosphate cements. Also, special thanks should pay to Professor Larry L. Hench, Professor Paul Ducheyne, Professor Tadashi Kokubo and Professor Guy Daculsi, the pioneers in bioceramics with an invaluable experience who contribute to the progress of bioceramics and the development of the ISCM.

We express our gratitude to the keynote speakers who will provide for all participants the latest news in the field during Bioceramics 25 and support this world-wide event in bioceramics and their applications in medicine: Kunio Ishikawa (Japan), Xingdong Zhang (China), Besim Ben-Nissan (Australia), James C. Kirkpatrick (Germany), Luigi Ambrosio (Italy), Rui Reis (Portugal), Roger Narayan (USA), Julian R. Jones (U.K.), Marcelo Henrique Prado da Silva (Brazil) and Marc Bohner (Switzerland).

We hope that many scientists will be inspired by this book and will move forward the field of bioceramics and their applications in medicine.

We wish to emphasize that BIOCERAMICS 25 will provide not just a good opportunity to think about the future of bioceramics by reflecting upon their history but also an opportunity to network with clinicians and researchers, as well as universities, hospitals and companies.

**Iulian Antoniac**

**Simona Cavalu**

**Teodor Traistaru**

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1990	Samuel F. Hulbert, Ph.D.	Terre Haute, USA
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1993	Paul Ducheyne, Ph.D.	Philadelphia, USA
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1997	Laurent Sedel, M.D.	Paris, France
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2011	Eyüp Sabri Kayali, Ph.D.	Istanbul, Turkey
2012	Kunio Ishikawa, Ph.D.	Fukuoka, Japan
2013	Iulian Antoniac, Ph.D.	Bucharest, Romania

## **ACKNOWLEDGEMENTS**

### **Review Committee**

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