

## Guest Editorial

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The 5th Congress of the Latin-American Society for Artificial Organs and Biomaterials (V COLAOB) took place in the historical city of Ouro Preto in Brazil, from June 22–25, 2008. COLAOB is a biannual meeting organized since 1998, when the Latin-American Society for Artificial Organs and Biomaterials (SLABO) was founded, as a result of the urgent need of a group of researchers to address issues in this field in a systematic and favorable way. It is the most important event in this area in Latin-America.

The 2008 meeting of COLAOB was very successful, as have been previous conferences, including invited lectures and peer-reviewed oral and poster presentations, covering the areas of biomaterials, biomechanics, biomimetic, characterization and functionalization of surfaces, degradation and failure of biomaterials, tissue engineering, in vitro and in vivo testing, drug delivery, artificial organs, modeling and other, fundamental studies in biomaterials.

The scientific committee consisted of leading scientists from Brazil and other Latin-American countries, with the task of reviewing the submitted abstracts and putting together an integrated program. There was an excellent response to the call for abstracts, 334 having been submitted. Following the review process, 297 abstracts were chosen for scientific presentation, among which 94 full manuscripts were accepted for publication in the proceedings of the congress. A total of 10 oral sessions covered the topics of Biopolymers, Bioceramics, Scaffolds, Drug Delivery, Tissue Engineering, Nanostructured biomaterials, Surface

analysis and functionalization, Cardiovascular applications, Artificial Organs and Biomechanics. In all there were 52 oral presentations and 245 posters. A total of 268 researchers and students registered for the congress, representing 10 countries.

Invited speakers from USA, France, Spain, England and Brazil presented six keynote lectures which aimed at presenting to the audience the state of the art in the main topics of the congress. In the area of Tissue Engineering an opening lecture was given by Professor Buddy Ratner on biocompatibility, healing and integration of medical devices and tissue engineered constructs. Another keynote lecture given by Dr. Julian Jones gave an overview of the use of micro computed tomography in biomaterials, cells and tissue analysis. In the area of Biopolymers and Bioceramics Science Professor Michel Vert presented a keynote lecture that focused on degradable and bioresorbable polymers in surgery and in pharmacology, and Professor Maria Vallet-Regi focused on the promising trends of bioceramics, specially silica based systems to the last advances in the synthesis of bioceramics for bone tissue regeneration. In the Bioelectronics and Bio-nanotechnology field, Professor Evgeny Katz presented a lecture on biocomputing systems based on biomolecular assemblies and their integration with signal-responsive materials. A special session on Cardiovascular Applications was opened by Dr. Aron Andrade with a presentation on the latest advances in Brazilian devices for ventricular assistance. Four of these invited lectures were presented as manuscripts and are included in this special issue.

As can be seen in the following special issue of the *Journal of Materials Science: Materials in Medicine*, another 11 manuscripts were selected for publication. The topics are as varied as the entities contributing to the current fields of biomaterials and regenerative medicine.

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The Guest Editors would like to express their sincere gratitude to all authors who made the effort to prepare a manuscript for consideration for this special issue, to all members of the Program Committee and to all reviewers. We would also like to thank Dr. Serena Best as Editor of the journal for her support as well as to the Editorial Office

of the Journal for their time and effort in this special issue. Finally, it is our wish that the scientific contributions here will represent the ongoing research in the field of biomaterials and tissue regeneration in Latin-America and lead to interactions required to advance this exciting field.