PREFACE

JBBTE is one of the few journals in the biomaterials and tissue engineering realm that publishes both research papers and review papers, and this journal spans the diverse but closely interrelated fields of Biomimetics, Biomaterials, and Tissue Engineering. This volume (volume 13) comprises nine papers, all of which have a unique contribution to make to the interconnected fields of biomimetics, biomaterials, and tissue engineering:

1. Barnaby, Fath, Nakatsuka, Sarker and Banerjee (USA) present a **biomaterials and tissue engineering** research paper on the synthesis and human osteoblast cellular response to ellagic acid scaffolds, doped with calcium phosphate nanocrystals.

2. Britchi, Olteanu, Ene and Stanica (Romania) present a **biomaterials** research paper on coating 316L stainless steel, a biocompatible metal, with biocompatible glass as a protective diffusion barrier.

3. Xu, Li, and Wang (China) present a **biomimetic** analysis of plant leaf venation, and its biomimetic significance in our understanding of plates subjected to bending loads.

4. Smorygo, Krasilnikova, Vialiuha, Goranov, Kovalenko, and Tsedik (Belarus) present a **biomaterials and tissue engineering** research paper involving synthesis and in vivo testing of zirconia-alumina ceramic foam scaffolds for post enucleation (eyeball extraction) scaffolds.

5. Huang, Zheng and Xu (China) present a **biomimetic** study involving the biomechanical evaluation of Anterior cruciate ligament reconstruction, a widespread surgical procedure.

6. Rahman, Olabi and Hashmi (Ireland), present part two of their two-part **biomaterials** study on the curing of PMMA bone cement (for part 1 see Volume 12).

7. Adib, Hasni, Osman, and Maskon (Malaysia) present a **biomimetic** study involving the biomechanical evaluation of the relationship between the rigidity of mitral heart valve leaflets and backflow problems.

8. Shah and Siddiqui (India) present a **biomimetic** study involving the biomechanical evaluation of the effects of Blood-viscosity reducing drugs like Pentoxifylline on blood flow through a stenosed artery.

9. Ehsani, Ruys, and Sorrell (Iran) present a **biomaterials** study on microwave sintering of alumina fibre-reinforced hydroxyapatite.

Five of these papers document cutting edge research in the interrelated disciplines of biomaterials and tissue engineering, one of these papers is a fundamental biomimetic study (leaf venation), and three of these papers are biomimetic studies involving biomechanical evaluation of physiological systems within the human body, with surgical or clinical relevance. Thus Volume 13 of the Journal of Biomimetics, Biomaterials, and Tissue Engineering presents an excellent cross-section of research papers bridging the three inter-related disciplines of Biomimetics, Biomaterials, and Tissue Engineering

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March 2011