



# Innovations in Biomedical Materials 2012

sign up by August 10th to save.

September 10-13, 2012 | Hilton North Raleigh-Midtown, NC, USA

## Confirmed Plenary Speakers

Delbert	Day	MO-SCI Corp	Radioactive Glass Microspheres for Medical Applications
Riad	Salem	Northwestern University	Radioembolization with Yttrium 90 Microspheres
Larry	Hench	Kings College / University of London	Bioactive Glasses: New Approaches for Tissue Repair, Regeneration and Prevention
Alan J.	Russell	Carnegie Mellon University	Bio Inspired Materials for Health and Defense
Hyun	Bae	Cedars-Sinai Hospital Spine Institute	Pedicle Screw Electrical Resistance: Hydroxyapatite Coated Versus Non-Coated

## Tutorial Session Presentations

Matt O'Donnell	O'Donnell	BSI, UK	CE Marking of Medical Devices
Keith	Strassner	Missouri S&T	Licensing Technology from a Public University, what in the world were you thinking?
Gary	Mushock	ASM International	Materials Data Impact on Device Design
Kristen	Reonigk	Granta Design	Medical Materials Data Management

## Invited Presentations

Charanpreet	Bagga	Prosidyan, Inc.	Selection of Biomaterials for Spinal Interbody Fusion Implants – Consideration of Design, Endplate Bonding, and Modulus vs. Engineered Modulus
Charanpreet	Bagga	Prosidyan, Inc.	Use of Bioactive Glass in Bone Graft Substitute Materials – The New Trend in Bone Repair
Ian	Baker	Dartmouth College	Overview of Projects at the Dartmouth Center for Cancer Nanotechnology Excellence
Shinn-Jyh	Ding	Chung Shan Medical University	Development and Applications of Sol-Gel Calcium Silicate-Based Bone Cements
Erik	Erbe	Nuvasive, Inc	Biomaterial Composites: Theory and Medical Applications
Jacqueline	Johnson	UTSI	X-ray imaging enhancement with glass ceramic plates
Xiaodong Li	Li	University of South Carolina	Nature-inspired Composite Design and Manufacturing
Thomas	McGee	Iowa State University	Wolff's Law, A Guide for Orthopaedic Implant Research
Devesh	Misra	Univ Louisiana Lafayette	Hybrid Silicone for Finger Joint Reconstruction
Prem	Pandey	Institute of Technology, Banaras Hindu University	Biomaterial derived from nanostructured Prussian blue gold and palladium and their application in L-cysteine sensing
Gregory	Pomrink	NovaBone Products LLC	Bioactive Glass Applications, Mechanism and Clinical Results
Markus	Reiterer	Medtronic, Inc.	Requirements for Bioactive Bone Implants from a Medical Device Company's Perspective
Johnny	Huard	Stem Cell Research Center	Exhaustion of Muscle Progenitor Cells during Aging & Disease: Implication for Stem Cell Therapy

## Confirmed Presentations

Lin	Chen	University of Illinois	Effect of bioactive borate glass fiber scaffolds on wound healing in diabetic mice
Clever	Chinaglia	Federal University of Sao Carlos	Enhancement of Titanium Surface Bioactivity by Treatment with a Highly Bioactive Glass
David	Cruickshank	Trans-Tech Inc.	Magnetic Oxide Material Optimized for 13.56 MHz Medical RFID Applications
Luisa	DiPietro	University of Illinois at Chicago	Wound healing research: Past, present, and future
Seyed Ali Seyyed	Ebrahimi	University of Tehran	Preparation and properties of magnetic ZnFe2O4-chitosan core-shell nanoparticles
Shaun	Eshraghi	Georgia Institute of Technology	Finite element modeling and mechanical property assessment of polycaprolactone-hydroxyapatite composite scaffolds fabricated by selective laser sintering
Shaun	Eshraghi	Georgia Institute of Technology	Large area maskless photopolymerization of hydrogels for cartilage tissue engineering
Kenan	Fears	U.S. Naval Research Lab	Circular-Dichroism Spectroscopy of Albumin Adsorbed on Calcium and Strontium Phosphate Microspheres
Matthias	Frank	University of Oslo	Hydride layer created by hot acid etching suppresses hydride formation by cathodic reduction on titanium based implant surfaces
Puneet	Gill	Florida International University	Biocompatibility, Corrosion and Mechanical Studies of Surface Treated Nitinol Alloys
Puneet	Gill	Florida International University	Influence of Anodization on Corrosion Resistance, Ion Leaching and Wettability of Biodegradable Magnesium Metal Matrix Composites
Ozkan	Gokcekaya	Istanbul Technical University	Yttrium doped Hydroxylapatite Coating and Antibiotic Duplex Coating on Titanium with Electrostatic Spray Deposition Method
David	Greenspan	Spinode Consulting	Effect of Surface Treatment of Titanium Alloy on Maturation of Osteoblasts In Vitro
Jing	Gu	Worcester Polytechnic Institute	Effects of Crosslink ratio on photocrosslinkable P(AM-AA) Gels for Drug Delivery
Amy	Harkins	Saint Louis University	Effects of Bioactive Glass Composites on Neuronal Cell Behavior for Tissue Engineering Applications
Yiyong	He	Mo-Sci Corporation	Preparation of Strontium Phosphate Microspheres For On-Site Delivery of Yttrium-90
Steven	Jung	Mo-Sci Corporation	Chronic Non-Healing Wounds Treated with Bioactive Borate Glass Nanofibers
Tadashi	Kokubo	Chubu University	Bioactive Ti metal and its alloys formed with positively charged TiO2 surface layer
Andrew	Larson	Northwestern University	MRI of SPIO-Labeled Radioembolization Microspheres
Gregory	McCarty	NCSU	Microfabricated Sensors for In Vivo Neurotransmitter Measurements
Bryan	McEntire	Amedica Corporation	An Overview of Silicon Nitride as a Novel Biomaterial
Jill	Meyer	University of Wisconsin - Milwaukee	Characterization of Elution of Cisplatin from Commercially Available Bone Cements
Jill	Meyer	University of Wisconsin - Milwaukee	Minimal Effect on Mechanical Strength with the Addition of Cisplatin to Commercially Available Bone Cements
Mohammad	Mujahid	University of Wisconsin - Milwaukee	Biodegradable Polymer-Hydroxyapatite Composite Scaffolds: Fabrication and Properties
Raheleh	Nikonammofrad	National University of Sciences and Technology	Mechanochemical synthesis of copper doped nanostructured fluorapatite
		Sharif University of Technology	
		Ludwik Rydygier Collegium Medicum in Bydgoszcz, Nicolaus Copernicus	
Maciej	Nowacki	University in Torun.	The potential use of innovative hemostatic dressings as a supportive cancer care factor in parenchymatous organs surgery – preliminary report
Prem	Pandey	Institute of Technology, Banaras Hindu University	Synthesis and applications of novel Nickel hexacyanoferrate-Gold Nanocomposite Biomaterial in electrochemical sensor designs

**Confirmed Presentations**

C.	Primus	Primus Consulting National Taiwan University of Science and Technology	Dental Cements- Traditional and Bioactive
Amaliya	Rasyida		PBAT Based Nanocomposites for Tissue Engineering and Industrial Applications
Alexandre Ramadoss Marina	Ribeiro Roop Kumar Souza	National Institute of Technology BITS Pilani, Dubai Campus Federal University of São Carlos	Characterization of dense and porous titanium with nanotextured surface induced by chemical oxidation Development of bioactive coatings of HA–G–Ti composites for in vivo studies New Bioactive Glass with Low Devitrifying Tendency
Bo Bo	Su Su	University of Bristol University of Bristol	Developing micro- and nano-patterning technique for osseointegrative titanium implants Novel microfabrication of 3D composite lattice scaffold for bone tissue engineering Biocompatible RF-magnetron sputter deposited CaP-based coatings on the surface of technically pure titanium
Roman Hanna Shabana Mariano	Surmenev Tiainen Urooj Velez	Tomsk Polytechnic University University of Oslo Gautam Buddha University Mo-Sci Corporation	Highly porous TiO <sub>2</sub> scaffolds for bone repair Examining Brain Edema Through Brain Impedance Analysis Evaluation of bioactive glass scaffolds made by selective laser sintering
Juan Martin	Vivanco Walter	The University of Wisconsin Madison University of Oslo	Bioactivity of Bioceramic Bone Scaffolds Fabricated at Two Sintering Temperatures Titanium hydroxilation – Hydroxide formation on titanium alloy surfaces by anodic oxidation Novel bioactive Ti metal and its alloy enriched with calcium ions on their surfaces by simple chemical and heat treatments
Seiji	Yamaguchi	Chubu University Indiana University - Purdue University Indianapolis	
Jing	Zhang	Indiana University - Purdue University Indianapolis	Residual Stress in Ceramic Coated Biocompatible AZ31 Magnesium Alloys
Jing	Zhang	Indianapolis	Novel Carbon Nanotube Reinforced Bioglass Composites for Orthopedic Applications