Scaling the heights—challenges in medical materials: an issue in honour of William Bonfield, Part II. Bone and tissue engineering
Organized by Mohan Edirisinghe and Eleanor Stride

Introduction
Scaling the heights—challenges in medical materials
M. Edirisinghe & E. Stride

Articles
Positively charged bioactive Ti metal prepared by simple chemical and heat treatments

Titanium oral implants: surface characteristics, Interface biology and clinical outcome
A. Palmquist, O. M. Omar, M. Eaposito, J. Lausmaa & P. Thomsen

Optimization of the sintering atmosphere for high-density hydroxyapatite–carbon nanotube composites
A. A. White, I. A. Kolech, A. H. Wilde & S. M. Best

Bioactive ceramic-reinforced composites for bone augmentation
K. E. Tanner

Applications of conducting polymers and their issues in biomedical engineering
R. Vashishth, S. Sundararajan, J. Reddy Venugopal, S. Mahamudra & S. Ramakrishna

Electrophoretic deposition of biomaterials
A. R. Buccacini, S. Kram, R. Ma, Y. Li & I. Zhiltovska

Customized Ca-P/PHBV nanocomposite scaffolds for bone tissue engineering: design, fabrication, surface modification and sustained release of growth factor
B. Duan & M. Wang

Biomimetic coatings for bone tissue engineering of critical-sized defects
Y. Liu, C. Wu & K. de Groot

An optical method to quantify the density of ligands for cell adhesion receptors in three-dimensional matrices
D. S. Tzeranis, A. Roy, P. T. C. So & I. V. Yannas

The degradation properties of co-continuous calcium phosphate polyester composites: insights with synchrotron micro-computer tomography
L. M. Ehrenfried, D. Fantar & R. E. Cameron

See further with the Royal Society in 2010 – celebrate 350 years