

Editorial

The publication of the first issue of *Journal of Materials Science: Materials in Medicine* in association with the *Journal of Materials Science* reflects a distinctive development in the coverage of research in the field of biomedical materials. *Journal of Materials Science: Materials in Medicine* will publish papers on the science and technology of biomedical materials and their applications as medical or dental implants, prostheses and devices, and of biological materials.

It has become apparent that progress in this field, particularly in the development of second generation implants and prostheses with an enhanced lifetime in the body, depends on a multi-disciplinary approach, in which the materials contribution is set in the context of the relevant science, engineering and medicine. *Journal of Materials Science: Materials in Medicine* will publish a range of topics from the basic underpinning science to clinical applications, around a central theme of materials in medicine and dentistry.

The core element of the journal is the structure, properties and applications of natural materials, as well as the metals, ceramics, polymers and composites used in orthopaedic, maxillofacial, cardiovascular, neurological, ophthalmic and dental applications. Special biomedical topics include cell biomaterial interactions, biocompatibility, tissue biomechanics, deformation, fracture, creep, fatigue, fracture mechanics, *in vivo* implantation, degradation, X-ray and electron microscope characterization, surface analysis, metalurgical processing, powder processing, polymer and composite fabrication, prosthesis biomechanics and clinical trials. Consequently *Journal of Materials Science: Materials in Medicine* will provide a wider coverage of the role of materials in the context of biomedical applications than is possible in the *Journal of Materials Science*.

The high standard of refereeing associated with papers in the *Journal of Materials Science* will be continued in this adjunct journal. The superior quality of reproduction traditionally associated with the *Journal of Materials Science* will also be maintained and the submission of papers with significant micrographs will be particularly appropriate; papers concerned with advanced microscopic techniques will also be encouraged.

We are particularly pleased that the European Society for Biomaterials has already adopted *Journal of Materials Science: Materials in Medicine* as its official journal, which both ensures a wide readership and facilitates an input into the development of the journal in its formative years.

We hope that the launch of *Journal of Materials Science: Materials in Medicine* will prove beneficial to the international biomedical materials community in providing a distinctive outlet for research papers and a wide readership forum. With your help, we have no doubt that this new publication will rapidly establish itself as a leading journal in the important subject of biomedical materials.

**Professor William Bonfield
Professor David Williams
Editors**