

BioMaterials Advances: a new journal for the innovation and development of biomaterials science and technology

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Currently, organ failure and tissue loss have been well recognized as big health problems due to the widespread occurrence of injuries and aging. The field of biomaterials emerged to solve these problems by providing bioactive alternatives that can restore or improve the functions of those tissues and organs. This subject has offered the promise of inducing tissue regeneration by the materials themselves or the materials together with cultured cells, covalently bonded drugs or genes. Moreover, it has been shown how it is possible to make appropriate biomaterials into artificial organs with satisfactory functions by advanced techniques, such as three-dimensional printing, *etc.*

The biomaterials science has undergone a consistent growth with a steady introduction of new ideas and productive branches although its inception emerged just about 50 years ago. Up to now, many companies of other fields have invested large amounts of money in the development of new biomaterials products. Most importantly, more and more modern bio-

materials scientific achievements have been shown to benefit from the cross-cutting collaborations between different disciplines based on the fact that certain special sense, knowledge or technology in one discipline can help to resolve the problems, to which satisfactory solutions cannot be worked out by the traditional ways of their own discipline.

In other words, modern biomaterials science has developed into a multidisciplinary subject with global science and technology development during the recent decades. Three traditional disciplines, such as medical science, biology and materials science, have been still acting as the scaffold to support the main structure of biomaterials science. However, it has been shown that new scientific and technological developments in biomaterials urgently need the special sense, knowledge or technology of disciplines other than those mentioned above, such as mechanical science, mechanics, computer science, automatic science, nanotechnology, bio-MEMS, *etc.* This has been reforming the traditional development model of the biomaterials field.

Therefore, it has been shown how innovation and development in biomaterials research require a logical integration of the interdisciplinary science and technology, which not only concerns the scaffold disciplines of biomaterials science – say medical science, materials science and biology – but it also includes other disciplines which are actually promoting the research and development of next generation of biomaterials.

The innovation and development of biomaterials research that are promoted by the related interdisciplinary science and technology need a way to confront and express themselves

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publicly, which will be done by a new journal, *BioMaterials Advances*, and be read by all the people involved in biomaterials science and technology.

With PAGEPress as the Publisher, *BioMaterials Advances* will always go steadily in the direction of including very influential and innovative achievements in the field of biomaterials science and technology. The journal's contents will have unrestricted access through the Open Access model. English language will be the only language used in contributions as it is acknowledged as the global language. The peer-review system will be used to guarantee a high-quality scientific level of the accepted contributions in *BioMaterials Advances*.