BIOINTERFACE RESEARCH IN APPLIED CHEMISTRY

www.BiointerfaceResearch.com

Special Issue

HEALING PROMOTERS AS THERAPEUTIC STRATEGIES FOR INJURIES AND MEDICAL SURGERIES

Ioannis Liakos¹*

AIM AND SCOPE

Due to the high number of personal accidents, medical surgeries, haemorrhagic and inflammation cases there is a high demand on treatment of the related traumas. The healing process of the wounds usually involves four interrelated processes such as haemostasis, inflammation, proliferation and tissue remodelling. These processes and their biological function must occur at the proper sequence for a specific time and taking into account many factors either internal or external to avoid improper tissue repair. Oxygenation, antimicrobial resistance, infections, diabetes, medication, nutrition, lifestyle habits and environmental parameters influence the support of the healing process and need to be studied further. Novel smart materials that will transmit such properties to promote the healing development are necessary to be constructed. Effective healing agents incorporated into natural or synthetic materials for their drug delivery to the open tissues should be impelled and delivered for superior curative results. Natural based materials, plant derived pharmacies, proteins, peptides, polysaccharides and synthetic medicines incorporated in films, dressings, capsules, beads, nanoparticles, fibers and nanofibers, or other form of materials for optimal drug delivery will be considered as potential healing therapeutic approaches.

Keywords: *Healing promoters, Wound treatment, Open Surgery, Natural and Synthetic Drugs, Biomaterials, Nanoparticles, Drug Delivery.*

SUBTOPICS

1	Wound healing	4	Novel healing promoters
2	Wound dressings	5	Healing in open surgeries
3	Biointerfaces of healing	6	Internal and external factors
	promoters in materials		influencing healing

SCHEDULE_

Manuscript submission deadline	15 th October 2014
Peer Review Due	31 st October 2014
Revision Due	15 th November 2014
Notification of acceptance by the Guest Editor	30 th November 2014
Final manuscripts due	15 st December 2014

¹ Nanophysics, Istituto Italiano di Tecnologia, Via Morego 30, 16163 Genova, Italy.

^{*}e-mail address: ioannis.liakos@iit.it and/or io.liakos@gmail.com