Call for Papers

Bioinspiration & Biomimetics

Special Issue on

"Biomimetics of Movement"

Taking inspiration from nature for new materials and devices for systems that move

Systems that move are ubiquitous in our world. They surround us in a huge variety of products that integrate actuators for different kinds of purposes. Basically any kind of mechatronic system, such as those used for consumer products, machines, vehicles, industrial systems, and robots, is based on one or more devices that move, according to different implementations and motion ranges. Despite this, technical solutions to develop systems that move do not evolve very fast, as they traditionally rely on well consolidated actuation technologies, which are implemented according to known architectures and with established materials. This fact limits our capability of overcoming challenges related to the needs continuously raised by new fields of application, either at small or at large scales. Biomimetics based approaches might innovate the field, taking inspiration from nature for smart and effective solutions. In an effort to disseminate current advances in this field, a Special Issue on "Biomimetics of Movement" will be published by Bioinspiration & Biomimetics. Papers are solicited on all aspects, including studies on natural systems, and works on new materials, devices, models, controls, processes, and applications.

Manuscript preparation:

Papers must contain original contributions and be prepared in accordance with standards of Bioinspiration & Biomimetics. Instructions for authors are available on the journal website. Maximum paper length should be approx 8000 words including figures (equivalent to 2-300 words each).

Manuscript submission:

Manuscripts should be submitted through the online submission service of Bioinspiration & Biomimetics. General submission guidelines can be found at:

http://authors.iop.org/atom/usermgmt.nsf/AuthorServices?OpenForm&ISSN=1748-3190

The submission form will be set up so that authors could select this special issue when submitting. Authors should select "Special issue article" in the "Article type" drop-down menu. A new drop-down menu will then appear from which to select the correct special issue. All manuscripts will be subjected to the peer review process.

Important dates:

As soon as Interested contributors are invited to send an <u>expression of interest</u> by e-mail to ALL the Guest possible: Editors. The expression of interest will not be binding and will be used for organizational

purposes only.

30 April 2011: Paper submission

Guest Editors:

Federico Carpi,

University of Pisa (f.carpi@centropiaggio.unipi.it)

Rainer Erb,

BIOKON international (erb@biokon-international.com)

George Jeronimidis,

University of Reading (G.Jeronimidis@rdg.ac.uk)