

CALL FOR PAPERS

Environmental remediation, food, and bioengineering are three areas in which the application of nanomaterials triggered the development of new products and enhanced research around them. Fabrics composed of nanofibers or nanodrops of a selected polymer containing inside or on its surface different active principles can be achieved using the techniques of electrospinning and electrospray. The materials developed through these techniques show several scopes for different applications. For example, in the food industry, they are used in foods to encapsulate antioxidants, vitamins, and bactericides and to control their release, but also in the development of functional packaging and nanofilters for beverages. In the area of environmental remediation, the research focuses on the development of active membranes of polymeric nanofibers containing different nanoparticles or other active agents, capable of extracting dyes, arsenic, heavy metals, hydrocarbons, and so on. Similar ideas are applied in bioengineering for the development of active patches. However, the most successful electrospinning techniques in this area are associated with tissue engineering where both natural and synthetic biopolymers are used.

The main aim of this special issue is to generate bridges between the most innovative scientific developments and their potential industrial applications in the field of electrospinning / electrospray technologies applied to food, environmental remediation, and bioengineering. Emerging and future research directions are welcome.

We are pleased to invite you to submit original research articles, and review articles. We look forward to receiving your contribution for this special issue.

Potential topics include but are not limited to the following:

- ▶ New structures and nanocomposites of electrospun mats or nanofibres
- ▶ Electrospinning/electrospraying for food applications
- ▶ Active or smart nonwoven fabric food packaging
- ▶ Micro- and nanoencapsulation of food bioactive compounds
- ▶ Nanocomposite electrospun nanofibers for environmental remediation
- ▶ Filters and membranes of functionalized polymer nanofibers for water treatment
- ▶ Biofilters, biosystems that combine microorganisms with nanofibers or nonwoven fabric
- ▶ Electrospun nanofiber membranes: applications in water, wastewater treatment, and oil/water separation
- ▶ Fabrication of active and smart electrospun nanofiber membranes
- ▶ Novel nanocomposites of nonwoven fabrics for biomedical applications
- ▶ Biopolymer nanofibers scaffolds for bone tissue engineering

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/jnm/eses/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

Lead Guest Editor

Silvia Goyanes, Buenos Aires University,
Buenos Aires, Argentina
goyanes@df.uba.ar

Guest Editors

Juan M. Rodriguez, Universidad
Nacional de Universidad Nacional de
Ingeniería, Lima, Peru
jrodriguez@uni.edu.pe

Laura Peponi, Institute of Polymer
Science and Technology (ICTP-CSIC),
Madrid, Spain
lpeponi@ictp.csic.es

Laura Tamayo, Universidad de Chile,
Santiago, Chile
lauratamayo26@gmail.com

Alex López Córdoba, Universidad
Pedagógica y Tecnológica de Colombia,
Boyacá, Colombia
alexlcordoba@gmail.com

Submission Deadline

Friday, 31 August 2018

Publication Date

January 2019