







an Open Access Journal by MDPI

Drug Delivery Systems Based on Mesoporous Silica

Guest Editors:

Dr. Miroslav Almasi

Department of Inorganic Chemistry, Faculty of Science, P. J. Safarik University, Moyzesova 11, SK-040 01 Kosice, Slovakia

Assoc. Prof. Virginie Hornebeca

Laboratoire MADIREL, Aix-Marseille University, CNRS, F-13397 Marseille, France

Deadline for manuscript submissions:

closed (10 March 2022)

Message from the Guest Editors

Controlled drug delivery systems are an ideal strategy for human healthcare in which the drug is released at a constant rate and its concentration in the organism remains steady. The research on drug delivery systems based on mesoporous silica has grown enormously over the last two decades.

This Special Issue of *Materials* is focused on recent developments in and the application of different types of mesoporous silica for drug delivery. Suggested topics include the influence of surface modification on drug adsorption/release properties, targeted drug delivery systems, and "smart" systems—drug release or transport of nanoparticles caused by the influence of internal or external stimuli, such as pH, a magnetic field, photoswitchable systems driven by IR, UV, or VIS radiation, redox potential, and enzymes. Studies of computational methods and drug adsorption/release kinetics analyzed using different models (zero/first-order/Higuchi/Korsmeyer–Peppas/Hixson–Crowell/the three-parameter model) are also desirable.

We welcome any kind of manuscript dealing with drug delivery systems based on mesoporous silica.













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and systems. nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials. materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us