



Nanoparticle Deposition on Walls—Its Mechanism, Control, and Effect Evaluation

Guest Editor:

Prof. Dr. Manabu Shimada

Department of Chemical
Engineering, Hiroshima
University, Higashi-Hiroshima,
Hiroshima 739-8527, Japan

Deadline for manuscript
submissions:

closed (31 December 2017)

Message from the Guest Editor

Particle deposition denotes an arrival of solid or liquid particles suspended in a fluid onto a wall (a gas-solid or gas-liquid interface) followed by a stable attachment of the particles. Particles of the nanometer scale is becoming of greater interest lately. Even a very trace amount of deposited nanoparticles can cause serious problems in certain manufacturing and machining processes that require high precision at a molecular or nanometer scale level. Particle deposition is driven by the mechanisms in which fluid motion and various forces related to particle transport and attachment are integrated. For any of the desirable and undesirable nanoparticle depositions mentioned above, peculiar characteristics of the deposition mechanisms owing to the extremely small particle size need to be understood sufficiently. This Special Issue will cover recent advances in the investigation of the deposition mechanisms, control and prevention of particle deposition, and evaluation of the effects of deposition upon the walls and the human organs onto which deposition took place.

Prof. Dr. Manabu Shimada

Guest Editor





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of
Odontostomatologic and
Specialized Clinical Sciences,
Sez-Biochimica, Faculty of
Medicine, Università Politecnica
delle Marche, Via Ranieri 65,
60100 Ancona, Italy

Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

Contact Us

*International Journal of Molecular
Sciences* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/ijms
ijms@mdpi.com
X@IJMS_MDPI