





an Open Access Journal by MDPI

Multiscale Analysis of Polymer Nanocomposites

Guest Editors:

Dr. Tien-Thinh Le

1. Laboratoire Modélisation et Simulation Multi Echelle, Université Paris-Est, MSME UMR 8208 CNRS, 5 bd Descartes, 77454 Marne-la-Vallée, France 2. Faculty of Mechanical Engineering and Mechatronics, Phenikaa University, Hanoi, Vietnam

Dr. Goshtasp Cheraghian

Civil Engineering and Environmental Science, Technische Universität Braunschweig, 38106 Braunschweig, Germany

Deadline for manuscript submissions:

closed (31 October 2021)

Message from the Guest Editors

Polymer nanocomposites are heterogeneous materials, exhibiting novel multi-physical phenomena that are linked to interactions at the smallest scales. These interactions cause significant alterations of the local physical properties – in particular, of the matrix phase (for instance, transition and/or modification of phase, specific conformation, modification of the degree of crystallinity for an organic polymer matrix, etc.). For such nano-reinforced materials, interactions at small scales (between nanofillers and the matrix, or between different nanofillers) are no longer negligible and must be interpreted and modeled in a multi-scale framework



