





an Open Access Journal by MDPI

Advanced Hybrid Materials for Catalytic Applications

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Deadline for manuscript submissions: **closed (31 July 2020)**

Message from the Guest Editors

Current environmental requests encourage the production of molecules through sustainable and environmentally friendly processes requiring the design of new catalytic systems. The synthesis of "hybrid catalysts" is a part of these new concepts based on combined biological and chemical structuration. Hybrid materials are composites of organic and inorganic constituents from the nanometer to the molecular level. Hybrid materials provide extended properties due to the synergetic effects of the organic and inorganic components regarding the initial single original phases. New efficient and eco-responsible hybrid materials are increasingly generated for catalytic applications, as they could be the key to success for more selective biomass valorization. In this context, mixing the "best" of each catalysis (chemical and enzymatic) opens up new horizons.



