

Fullerene and pillar[5]arene scaffolds for the preparation of bioactive multifunctional compounds.



Jean-François NIERENGARTEN
Laboratoire de Chimie des Matériaux Moléculaires,
Université de Strasbourg et CNRS (UMR 7509),
Strasbourg, France

One important aspect of modern chemistry is directed towards the synthesis of complex nanomolecules that exhibit specific properties for applications in materials science and biology. However, the preparation of complex nanostructures combining the required functional groups remains often difficult and requires a large number of synthetic steps thus limiting both their accessibility and applicability. Our research group has shown that the preparation of easily accessible nanoscaffolds allowing for the grafting of one or more molecular entities is an appealing strategy to generate sophisticated nanomolecules. Overall, one of our main concerns is to increase the complexity of the molecular structures without increasing the synthetic difficulties. Our latest advances in this particular field will be presented with special emphasis on the preparation of bioactive compounds.