

One- and Two-Dimensional Inorganic Nanomaterials



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Nanoscience and technology have emerged to become important areas of research in the last few years. Synthesis and characterization of nanomaterials is an essential part of this subject and also determines progress in this area. In

**Inorganic chemistry
crucial for
nanotechnology**

this context, chemistry plays a crucial role in nanoscience and technology. Most of the nanomaterials happen to be inorganic. Thus, the whole variety of nanoparticles or quantum dots is inorganic. Nanotubes and graphenes are generally inorganic. As a result, inorganic chemistry has a justifiable claim over nanomaterials. It is, therefore, most appropriate that the European Journal of Inorganic Chemistry has chosen to devote a special issue to inorganic nanomaterials, especially on one-dimensional and two-dimensional nanomaterials. This focus is significant, because there has already been much written about zero-dimensional nanoparticles and quantum dots. One-dimensional and two-dimensional materials are

**Attention focused
on less well
researched materials**

equally important and have not received as much attention. There is much to be done in the area of inorganic nanowires and nanotubes, and they are yet to be exploited for various applications. The recent advent of graphene into the scene has made two-dimensional inorganic materials more attractive.

This special issue of the European Journal of Inorganic Chemistry covers various aspects of one- and two-dimensional inorganic nanomaterials in the form of reviews, original research articles and short communications. There are several articles dealing with nanowires, nanotubes and nanofilms. We have several interesting articles on core-shell type structures and as well as nanotubes and nanowires of important materials such as carbon, VO_2 and ZnO . Nanocomposites and chemical modification of nanostructures form the subject matter of some of the articles. There are articles on graphene-like materials and nanofilms as well. Overall, I believe that this issue gives a fair picture of the present trend in one- and two-dimensional inorganic nanomaterials.

**Applications
still to be
developed**

**Representative
of trends
in the field**

I thank all the authors for their contributions and am pleased for the opportunity to present this special issue in an Inorganic Chemistry journal.