

Preface

Crystal engineering

The topic broadly defined as crystal engineering has been one of the most rapidly expanding areas of chemistry during the last 5 years and it has also evolved into a remarkably interdisciplinary field. Although the term itself, which was coined some 25 years ago by Gerhardt Schmidt, has its origin in the organic solid state, some of the most exciting recent developments in crystal engineering have taken place in the realm of coordination chemistry. In practice, crystal engineering can be many different things; synthesis, statistical analysis of structural data, *ab initio* calculations, etc., and this has allowed chemists from traditionally unconnected parts of the spectrum to exchange ideas, define new goals and to make contributions to further progress not only in crystal engineering, but also in other disciplines e.g. materials chemistry. For example, with precise control of intermolecular interactions it may be possible to 'fine-tune' a physical response to fit a desired range, speed or magnitude, simply by making controlled adjustments to the microscopic structure of a crystalline solid.

This issue brings together a selection of articles which, although they describe very different aspects of crystal engineering, are united by a common theme; the structural consequences of intermolecular forces, and the way in which such interactions are utilized for controlling the assembly of molecular building blocks into infinite architectures.

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