The challenge of planning sustainable contemporary cities lies in considering the dynamics of urban systems, exchange of energy and matter, and the function and maintenance of ordered structures directly or indirectly supplied and maintained by natural systems. The task of researchers, aware of the complexity of the contemporary city, is to improve the capacity to manage human activities, pursuing welfare and prosperity in the urban environment. Any investigation or planning on a city ought to consider the relationships between the parts and their connections with the living world. The dynamics of its networks (flows of energy matter, people, goods, information and other resources) are fundamental for an understanding of the evolving nature of today’s cities.

Large cities are probably the most complex mechanisms to manage. They represent a fertile ground for architects, engineers, city planners, social and political scientists, and other professionals able to conceive new ideas and time them according to technological advances and human requirements.

The topics covered in this issue address the multidisciplinary components of urban planning, the challenges presented by the increasing size of the cities, the amount of resources required and the complexity of modern society.

The Editors are grateful to the reviewers, as well as to the authors for their contributions.

*The Editors*

*2017*