This volume represents one of the two edited by inviting a selection of young researchers participating to the European Young Chemist Award 2010. The other volume concerns the area of Nanotechnology/Material Science and is titled: Molecules at Work.

This book contains the contributions of selected young chemists from the field of synthetic chemistry. The contributions are grouped under the three following umbrella topics:

- Synthetic Methods
- Catalysis
- Combinatorial and Chemical Biology

This volume is an indispensable read for all organic and inorganic chemists, biochemists, chemists working with/on organometallics, and Ph.D. students in chemistry interested in seeing what tomorrow's chemistry will look like.
Bruno Pignataro, born in Bologna in 1972, is Professor of Physical Chemistry at the University of Palermo. He received his degree in chemistry in 1995 from the University of Catania and his PhD in materials science five years later. He has helped establish a wide network of international collaborations and organized several scientific activities at national and international level, including coordinating the Young Chemists Group of the Italian Chemical Society and chairing the first three editions of the European Young Chemist Award. Professor Pignataro’s group research focus on the fields of nanoscience and nanotechnology, molecular electronics, and biotechnology.