
Editorial

Dear Readers,



In this Special Topic Issue twenty-two publications from internationally recognized research groups describe the development and the different facets of organic materials science. Hopefully, this issue will enhance the interest and fascination materials exert into the wider organic community. Organic materials can only survive successfully by the constant input of synthetic chemists that show new and, or improved ways “of how to make” materials of interest. In addition, the organic materials chemist has to constantly straddle the borders between, sophisticated synthetic and physical chemistry, device design and sensory techniques or other applications. However, synthetic chemistry is the material base of smart polymers and small molecules that are useful for all of these applications, and the manuscripts presented reinforce this point. The contributions in this issue can be grouped into different categories.

Four authors have written review articles, exciting accounts of the respective research in their chosen fields. Meier describes the use of benzo-fused large-ring arenes as fascinating liquid crystalline materials, Schanze contributed an extremely timely review about conjugated water soluble polymers, Müllen and Grimsdale report the progress in the field of polyphenylene dendrimers, Bazan gives an exciting account of the functionalization of paracyclophanes, while Sandman reviews the use of sugar-based reagents in the synthesis of materials.

The second topic is the synthesis of polymers, and these contributions range from novel conjugated organometallic polymers with ferrocene units (Curtis), novel polythiophenes (Hellberg), PPEs (Yi), polyfluorenylenevinylene derivatives (Scherf), unusual supramolecular side chain materials for metal assisted self assembly (Weck), and to last but not least functional hole injecting polymers for OLEDs (Marder).

The other ten contributions cover materials that are “small molecules” and the properties of these materials. A surprising number of manuscripts, (Shimizu, Wudl, Haley, Stoddart, Marsella) deals with the synthesis and evaluates the properties of organic materials based on dehydroannulenes, with a heavy dose of exciting alkyne chemistry involved. The remaining six manuscripts (Hartmann, hole transporting materials; McGrath, photodegradable dendrimers; Müller, tetraarylmethanes; Weder, PPV oligomers Würthner, multifunctional dye conjugates as photorefractive materials) deal with various aspects of materials that show fascinating optical, electronic, and photorefractive properties.

Overall this special issue of synthesis offers a broad but by no means exhaustive look into the vibrant field of organic material science, and I hope that the readers will enjoy these contributions.

Columbia, South Carolina, June 2002

Uwe H. F. Bunz

A handwritten signature in black ink, appearing to read 'Uwe H. F. Bunz', written over a light-colored background.