

## Stereoselective synthesis of heterocyclic compounds

Heterocycles are ubiquitous in several areas of chemical sciences spanning from materials to natural products and pharmaceuticals. It is not an overstatement to say that heterocyclic compounds affect our daily life. For these reasons, the chemistry of heterocycles is still a fertile land explored by synthetic chemists worldwide. Researchers from an important pharmaceutical company in a recent review (*Org. Biomol. Chem.* **2016**, *14*, 6611) listed the opportunities for new methodology development in heterocyclic chemistry. Among the challenges to be addressed in developing new methodologies, the authors mentioned the regio-, stereo-, and chemoselective synthesis of heterocycles, as well as their functionalization. Concerning the reaction conditions, it was stated that modern synthesis would be focused on the use of cheap and less hazardous reagents, wide tolerance to functional groups, and streamlined processes. Thus, the stereocontrol in the synthesis and functionalization of heterocycles remains a hot topic and a demanding task in modern heterocyclic chemistry. Some top seller drugs such as sofosbuvir, for treatment of hepatitis C, rivaroxaban, for treatment of venous thromboembolism, efavirenz and emtricitabine, for treatment of HIV infection, witness the relevance of the stereoselective preparation of heterocyclic compounds. With this premise, the thematic issue "Stereoselective synthesis of heterocyclic compounds", far from to be exhaustive, was intended to provide a snapshot of recent progress in the field of stereoselective preparation and characterization of heterocycles.



This thematic issue, consisting of two reviews articles, three microreviews ("Heterocycles in focus"), nine original articles, and two short communications, encompasses several aspects of the modern synthesis of heterocycles. I really hope the readers find inspiration for future work by looking at this issue of "Chemistry of Heterocyclic Compounds". As guest editor of this issue, I would like to thank all the authors for accepting the invitation to be on board in this endeavor. I am grateful to the Editorial Office and in particular to Dr. Andris Amoliņš for professional support and assistance during the preparation of the thematic issue.

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