

## Molecular Gymnastics: bond formation with rearrangements

Nuno Maulide

*University of Vienna, Institute of Organic Chemistry, Vienna, Austria*

The turn of the century brought about a pressing need for new, efficient and clean strategies for the chemical synthesis of biorelevant compounds. Our group has studied the use of various molecular rearrangements and atom-economical transformations as particularly appealing means towards the streamlined synthesis of complex small molecule targets.<sup>1,2,3</sup>

In this lecture, we will present an overview of our research in these areas and how they provide efficient solutions for total synthesis as well as platforms for the discovery of unusual reactivity.

### References

[1] (a) Luparia, M.; Oliveira, M.T.; Audisio, D.; Frébault, F.; Maulide, N. *Angew. Chem. Int. Ed.* **2011**, *50*, 12631. (b) Audisio, D.; Luparia, M.; Oliveira, M.T.; Frébault, F.; Klütt, D.; Maulide, N. *Angew. Chem. Int. Ed.* **2012**, *51*, 7314. (c) Misale, A.; Niyomchon, S.; Luparia, M.; Maulide, N. *Angew. Chem. Int. Ed.* **2014**, *53*, 7068.

[2] Huang, X.; Maulide, N. *J. Am. Chem. Soc.* **2013**, *135*, 7312.

[3] Jurberg, I.D.; Peng, B.; Wöstefeld, E.; Wasserloos, M.; Maulide, N. *Angew. Chem. Int. Ed.* **2012**, *51*, 1950.