

3,3-Disubstituted Oxetanes for Medicinal Chemistry Needs: The Technical Guide

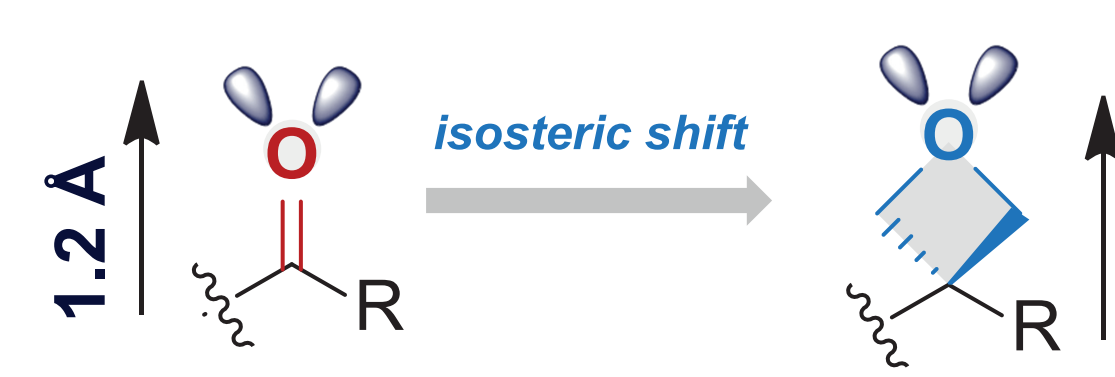
Serhiy Ryabukhin, Eduard Litskan, Dmytro Volochnyuk

Status quo of oxetane core in MedChem research

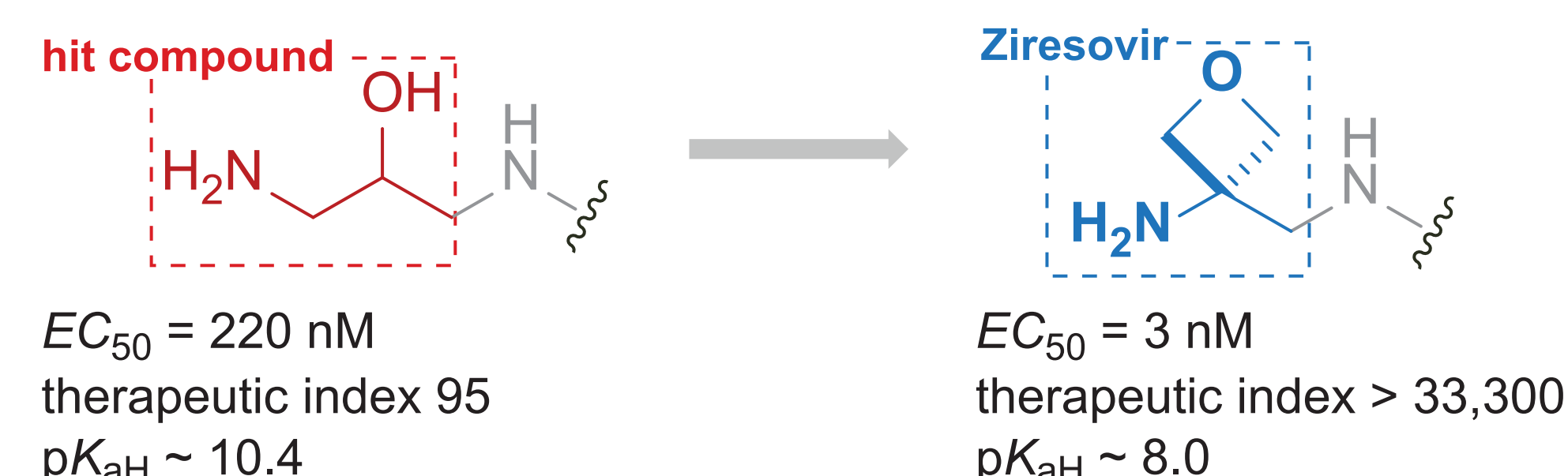
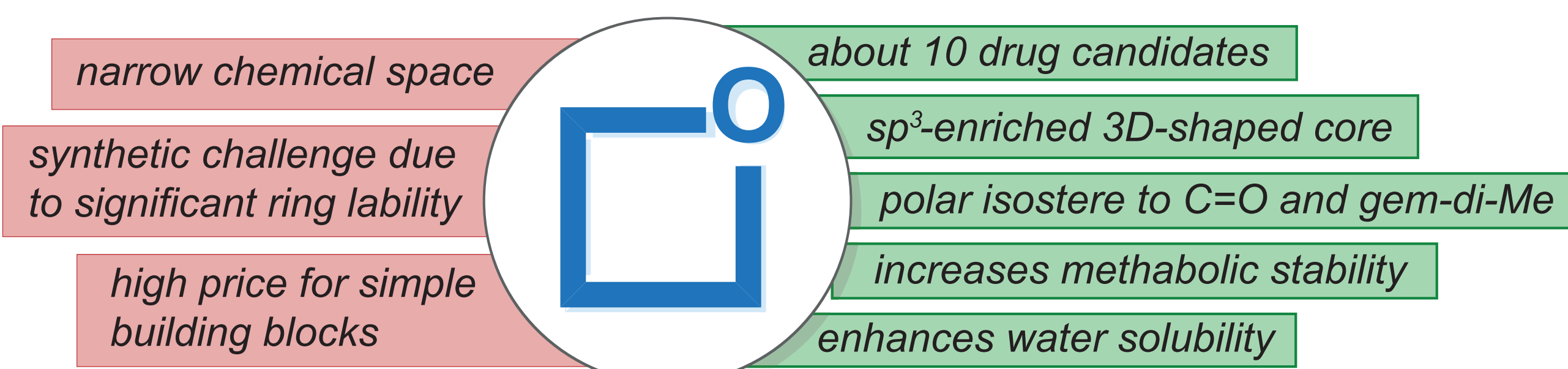
OXETAN'S MEDICINAL CHEMISTRY PROSPECTS



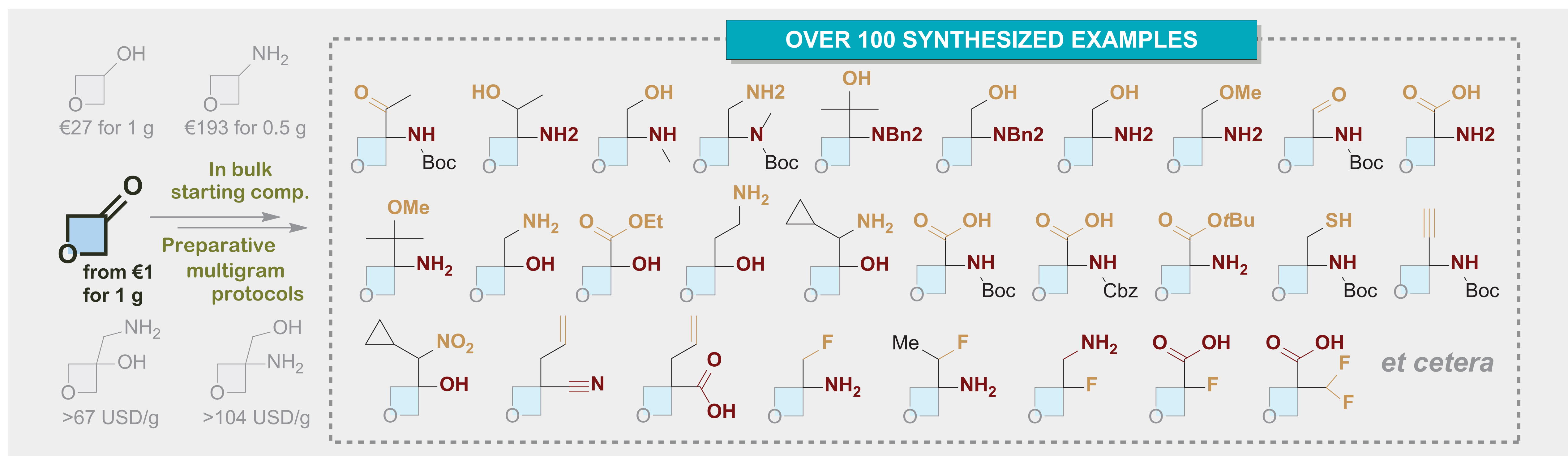
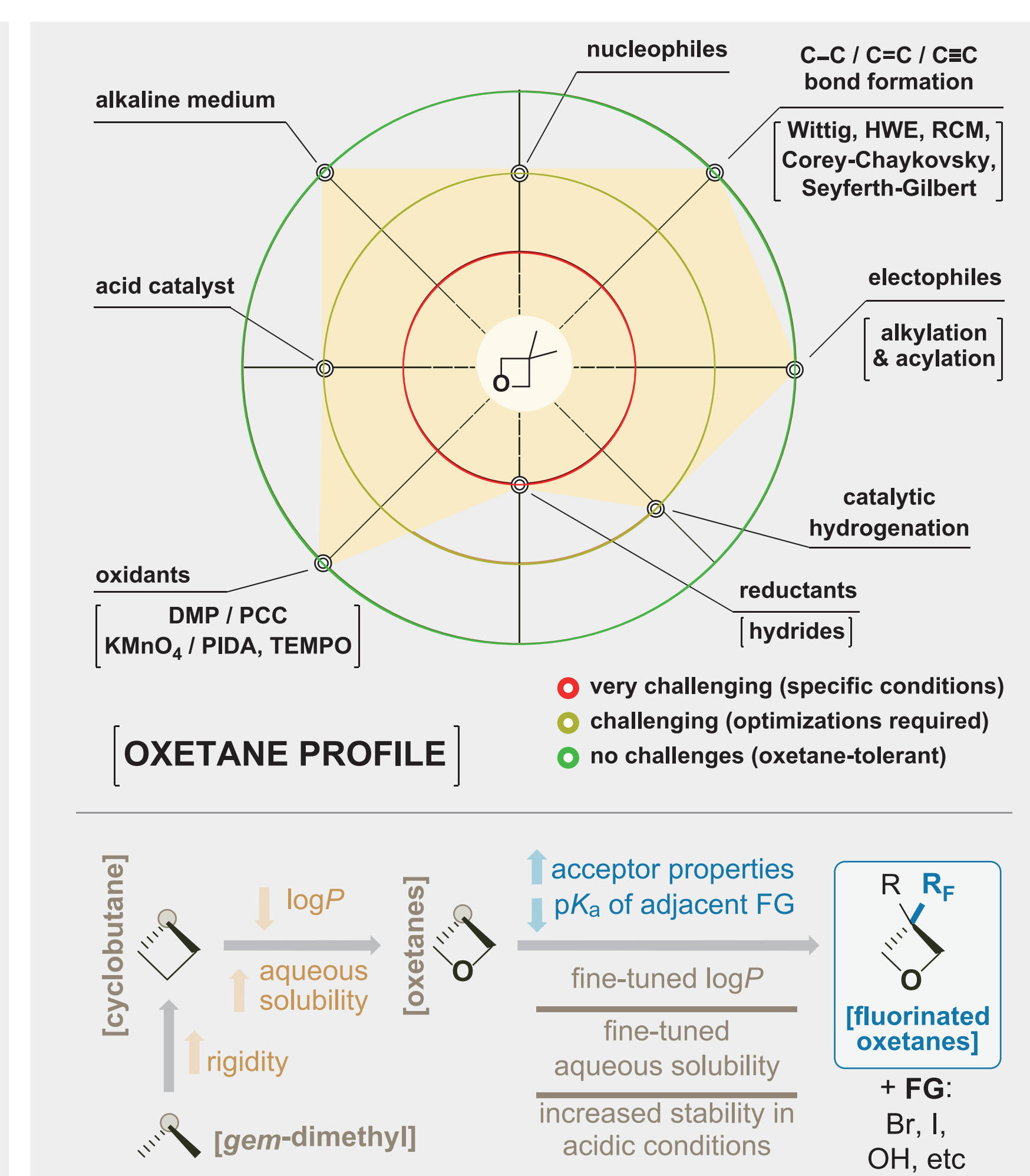
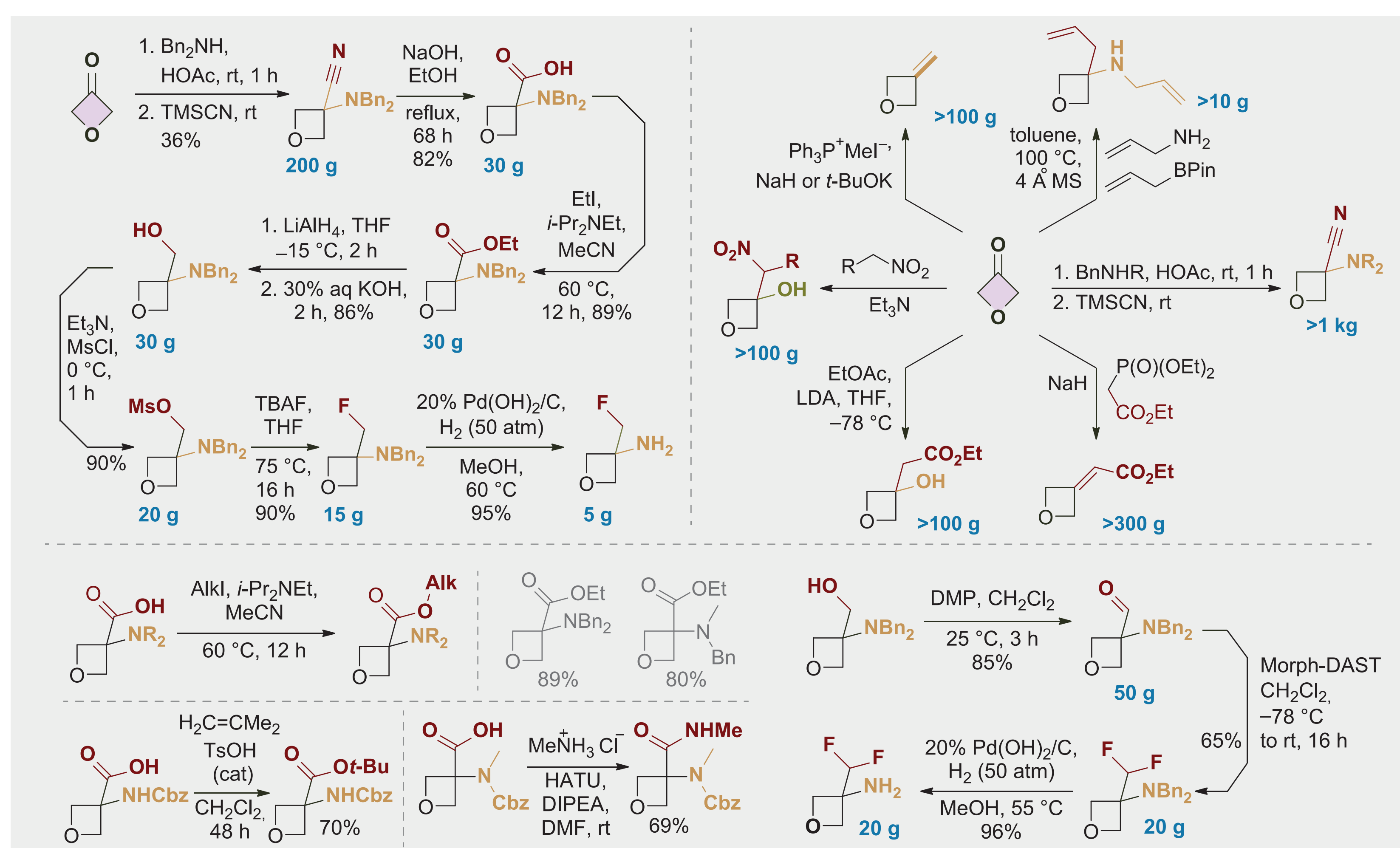
- increases metabolic stability
- adds to three-dimensionality
- lowers logD



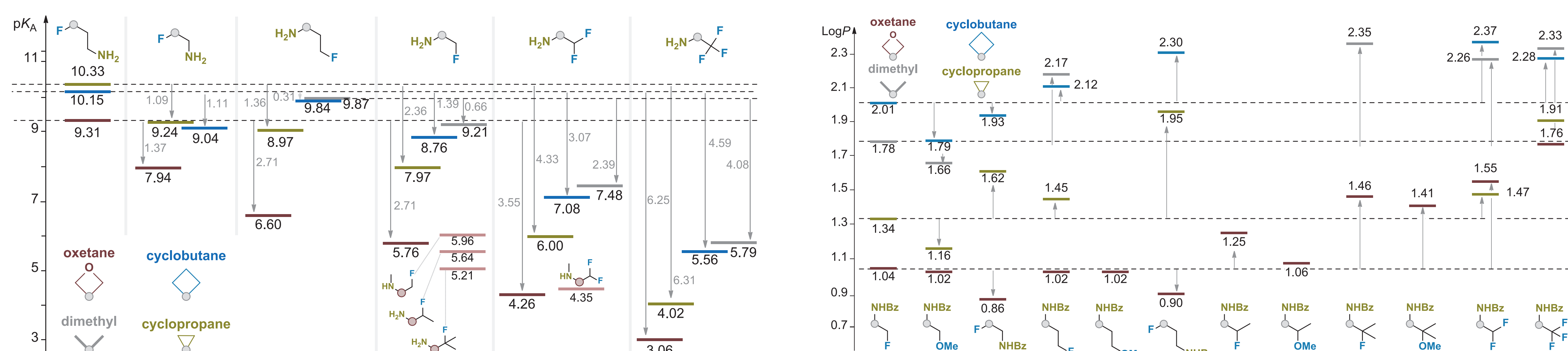
- improves chemical and metabolic stability
- adds to three-dimensionality
- increases water solubility
- isostere for ketones, carboxylic acids and their derivatives (depending on R)



Synthetic results



Physicochemical properties – the impact of fluorine



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References

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- 2.Chem. Eur. J., **2025**, e00940. 10.1002/chem.202500940