

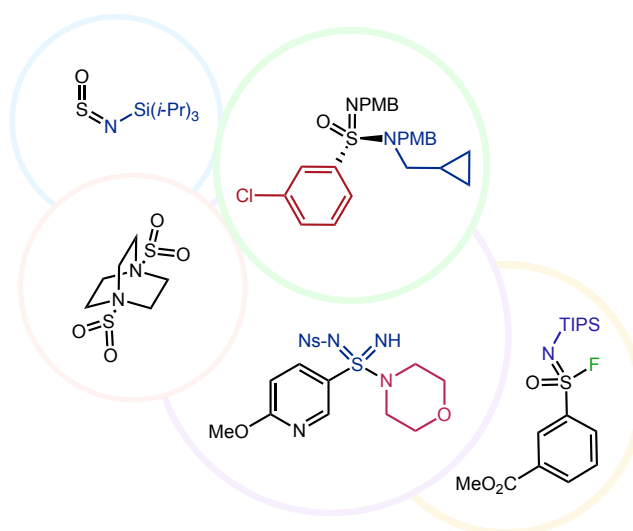
New functional groups for synthetic and discovery chemistry

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Sulfonamides feature in >100 FDA approved drugs, and while the first examples date back to the 1930s they still appear in contemporary medicines. Defining new sulfonamide 'chemical space' can be challenging,¹ however, a simple O to N switch creates a new class of molecules; sulfonimidamides. A second O to N switch leads to a further functional group, this time known as sulfondiimidamides,² which are essentially unknown molecules. Although there are no commercial sulfonimidamide or sulfondiimidamide drugs, their presence in the medicinal chemistry patent literature is growing rapidly. Further atom-switching around a central S(VI)-core provides additional unexplored functional groups. In this lecture we will discuss new, often catalytic, synthetic routes to these intriguing molecules,³ and discuss their potential applications in medicinal and synthetic chemistry.



References

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