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Oxidative aminoaziridination: past, present and future

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Abstract. Oxidative aminoaziridination is a general, functional group tolerant, stereospecific and in many cases stereoselective synthetic method for the preparation of diverse *N*-aminoaziridine derivatives. This focused review begins with a short historical sketch of the field, continues with its recent accomplishments and presents an outlook for the areas where this methodology can successfully be applied.

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Introduction: Past

Present state of oxidative aminoaziridination

N-Aminocompounds

Oxidants

Substrates

Stereoselectivity of aminoaziridination

Application of products

Outlook: Future.

Acknowledgements

References and notes

Introduction: Past

For years aziridines have been attracting much attention for at least two reasons.^{1,2} First, this three-membered nitrogen heterocycle features exclusively broad range of biological activities and can be found in a number of synthetic drugs and some natural compounds. Second, the release of the strain energy upon cleavage of the aziridine ring is a driving force for a vast number of transformations, thus making aziridines particularly useful as synthetic precursors to functionalized nitrogen heterocycles and acyclic compounds.^{1,2} Therefore development of novel efficient methods for the synthesis of aziridines still remains a relevant research endeavor.

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