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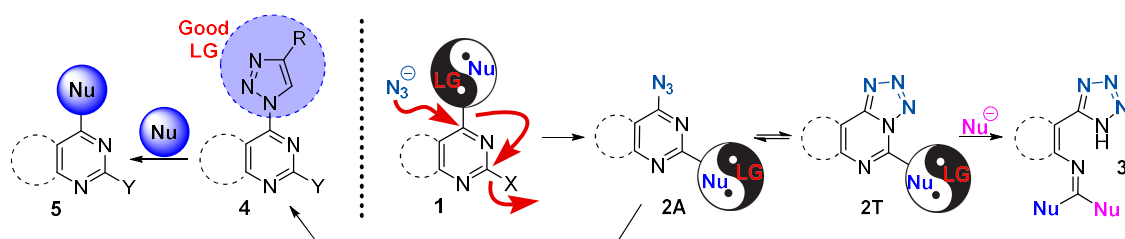
BOOK OF ABSTRACTS

SUBSTITUTION AND RING OPENING OF FUSED PYRIMIDINES USING THEIR ACTIVATION BY AZIDO AND TRIAZOLYL GROUPS

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We have developed synthesis of 2,6-bis-triazolyl-purine derivatives **4** (Y = 1,2,3-triazole) and demonstrated their application in S_NAr reactions by substituting C(6) position of purine with a broad range of *N*-, *S*-, *Se*-, *C*-, *O*-, and *P*-nucleophiles (Scheme 1).^[1] 2,6-Bis-triazolyl-purine derivatives **4** and their S_NAr products **5** are fluorescent and this has led to development of ion sensing, cell imaging systems and applications in materials science.^[2] On the other hand, azido-substituted fused pyrimidines of type **2** exhibit azide-tetrazole tautomerism, which was instrumental to develop novel substitution methodologies (nucleophile-nucleofuge dance) around the cycle^[3] and also pyrimidine ring opening reactions leading to compounds of type **3**.^[4]



Scheme 1.

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