

Design and synthesis of new *bis*-pyrazolo[1,5-*a*]pyrimidine scaffolds

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ABSTRACT Some new *bis*-5-aminopyrazole compounds (**3a–d**) were synthesized through cyclocondensation reaction of aryloxy hydrazides with *N,N'*-(1,2-phenylene)*bis*(2-cyanoacetamide). The cyclization of the resulting *bis*-pyrazoles with ethyl acetoacetate yielded a new set of *bis*-pyrazolo[1,5-*a*]pyrimidine compounds (**5a–d**) in good yields. The current study offers an efficient and simple synthetic method for the preparation of structurally diverse *bis*-nitrogen heterocycles and extends the library of fused pyrazole-based heterocyclic scaffolds for potential applications in medicinal chemistry.

KEY WORDS Aryloxyhydrazides, *Bis*-pyrazoles, *Bis*-pyrazolo[1,5-*a*]pyrimidine, Cyclocondensation reactions.

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