

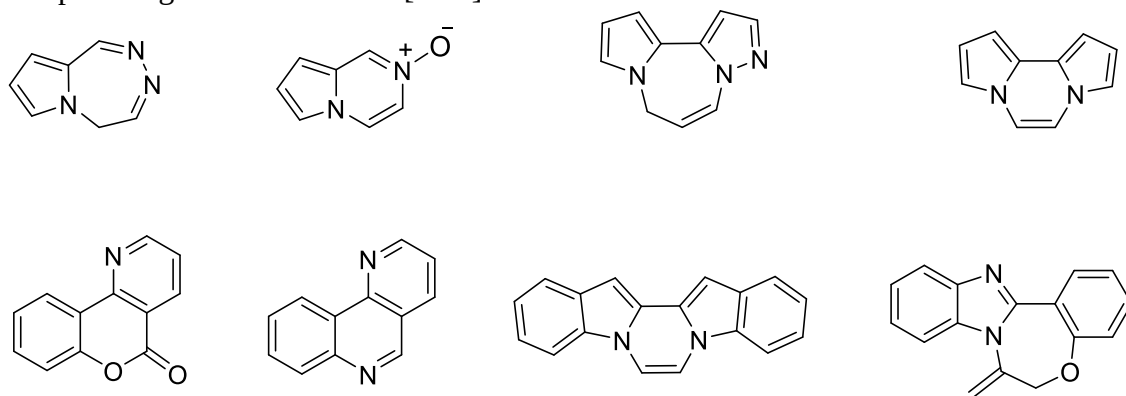
PLENARY PRESENTATIONS

DESIGN AND SYNTHESIS OF NEW HETEROCYCLIC COMPOUNDS

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Compounds classified as heterocyclic probably constitute the largest and most varied family of organic compounds and they are well presented among pharmaceuticals. As part of our ongoing research program on the design and synthesis of heterocycles with new skeletons we developed new methodologies. The key feature of this methodology was the synthesis of *N*-propargyl pyrrole, indole, and benzene derivatives. Gold-catalyzed or NaH-supported cyclization of these compounds resulted in the formation of compounds given in Scheme 1 [1-11].



Scheme 1. Structures of some synthesized compounds.

The gold-catalyzed reaction of pyrrole and indole oximes having *N*-propargyl group transferred the oxime functionality intramolecularly from one carbon atom to another carbon atom via 7-*endo-dig* cyclization process. This transformation is unprecedented in the literature and was named as oxime-oxime rearrangement [4].

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