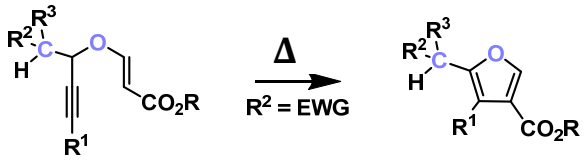
SYNTHESIS AND REACTIVITY OF ALKYNYL VYNIL HYDRAZINES

Raquel Diana Rivero, David Tejedor and Fernando García-Tellado

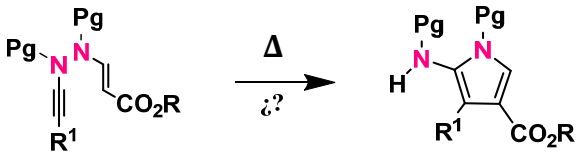
Instituto de Productos Naturales y Agrobiología, Consejo Superior de Investigaciones Científicas, Av. Astrofísico Francisco Sánchez 3, 38206 La Laguna, Tenerife, Spain

The propargyl-Claisen rearrangement of propargyl vinyl ethers (PVEs) has received increasing interest from our research group during the last years, since a rational selection of the substitution pattern and of the reaction conditions have allowed us to generate a broad array of biologically relevant compounds [1]. Within this line of research, tertiary PVEs having an electron-withdrawing group (EWG) at the propargylic position have been successfully transformed into trisubstituted furans [2].



Functionalized furans

As part of our ongoing research we have considered to study the replacement of the propargylic carbon and the oxygen of the starting PVE by two nitrogen atoms, which should lead us to nitrogenated compounds analogous to furans. Here we show the preliminary results of our proposal.



Functionalized 2-aminopyrrols

Acknowledgements: The authors thank the Spanish Ministry of Economy and Competitiveness (MINECO), the European Regional Development Funds (ERDF) (CTQ2015-63894-P), and the Canarian Agency for Research, Innovation and the Information Society (ACIISI) (ProID2017010019 ACIISI/FEDER, EU) for financial support.

———

[1]. a) Tejedor D, López-Tosco S, Méndez-Abt G, Cotos L, García-Tellado F (2016). Acc. Chem. Res 49: 703-713. b) Tejedor D, Delgado-Hernández S, Peyrac J, González-Platas J, García-Tellado F (2017). Chem. Eur. J 23: 10048-10052.

[2]. Tejedor D, Cotos L, García-Tellado F (2011). Org Lett 13: 4422-4425.