

CHARACTERIZATION OF NEW HETEROCUMULENES RADICAL-CATIONS AND NEUTRALS IN A TANDEM MASS SPECTROMETER.

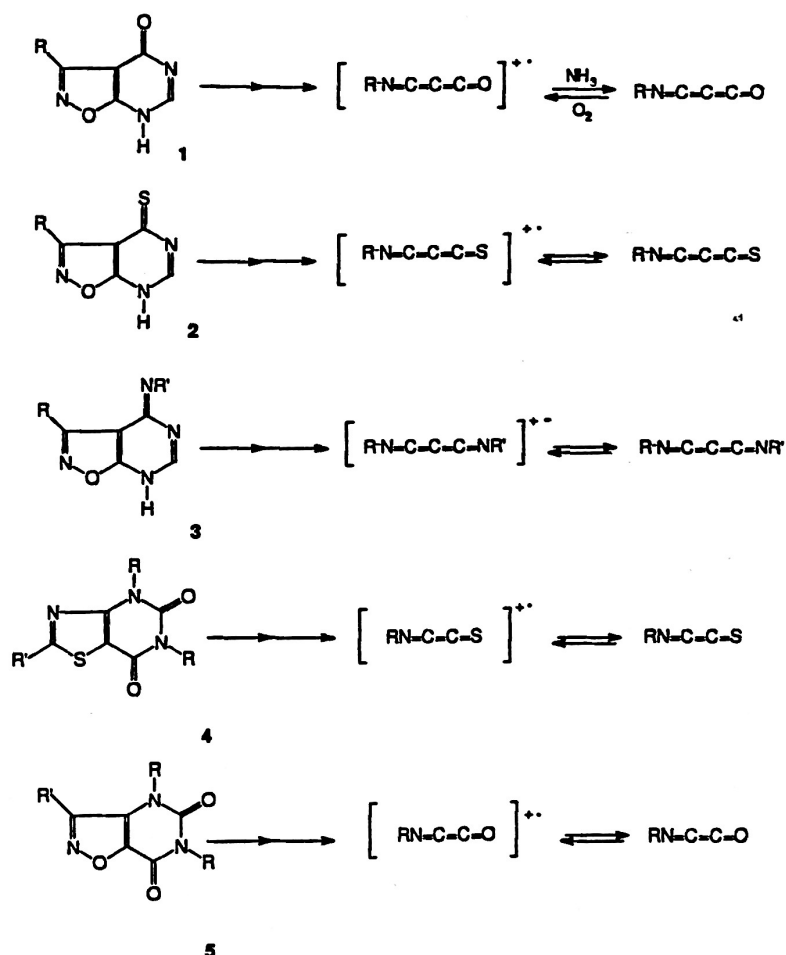
S.LAURENT, M.BARBIEUX-FLAMMANG, R.FLAMMANG and Y.VAN HAVERBEKE.

Université de Mons-Hainaut.

C. WENTRUP.

The University of Queensland, Australia.

Dissociative ionization of heterocyclic compounds constitutes a virtually inexhaustible source of new ionic systems. This is again exemplified in this report which describes the production of hitherto unerported new ionized cumulenes derived from dicarbon and tricarbon. The radical-cations were produced in high yields by dissociative ionization (electron impact) of the azolopyrimidines **1** - **5** and the connectivity of the atoms unambiguously established by collisional activation mass spectrometry.



Neutralization-reionization experiments demonstrate the stability of the corresponding neutral molecules in the rarefied gas phase of the mass spectrometer with the exception of iminoethenones, $RN=C=C=O$, which do not survive to the vertical electron transfer in the neutralization experiment.