# 第89回有機元素化学セミナー

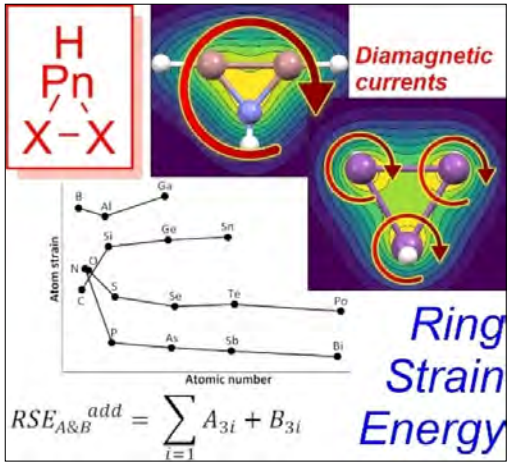
## The 89th Organoelement Seminar Series

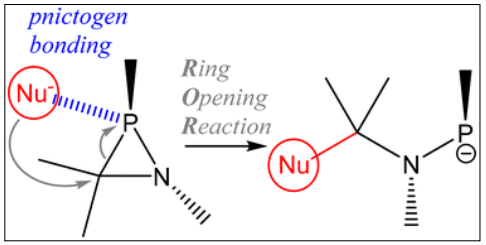
## Prof. Arturo Espinosa Ferao

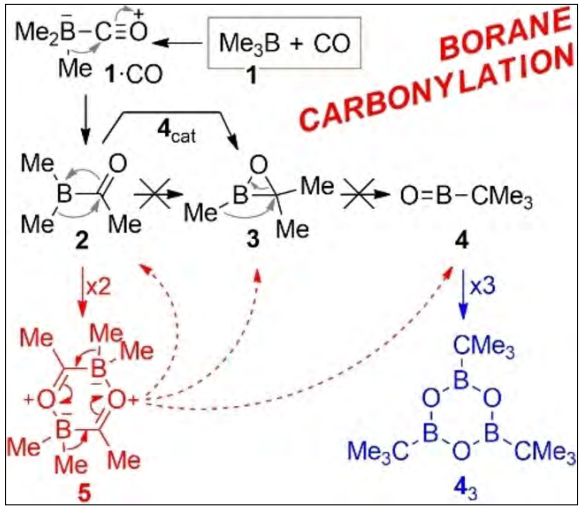
## (University of Murcia, Spain)

website URL: https://www.um.es/funcmolecmat/artuesp/

## “Three-Membered Rings with p-Block Elements: Scope, Ring Strain and Aromaticity”



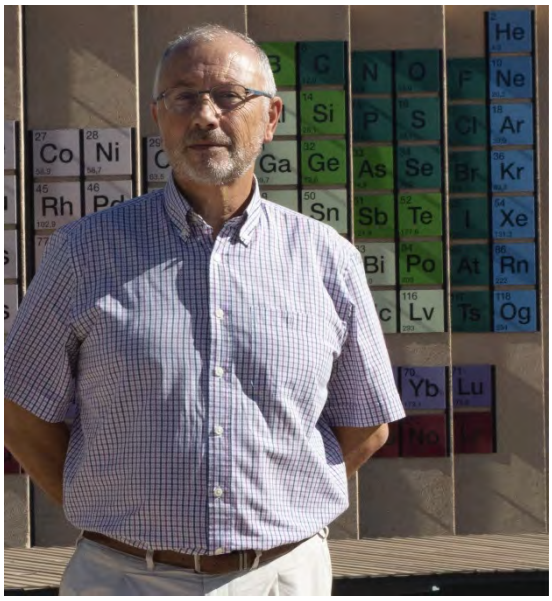

The talk will focus on the variety of three-membered rings (3MRs) containing p-block elements (groups 13 to 16) that have been studied computationally so far. Some three-atom combinations lead only to acyclic structures, while others do not form proper rings (pseudorings). Accurate ring strain energy (RSE) values for all other proper 3MRs are presented, and the main geometric and electronic factors affecting the RSE are discussed. Among the latter, the fate of 2π-electron Hückel aromaticity is explored for rings with two triels and one atom bearing a lone pair (pnictogen or chalcogen). An additive method based on atomic or bond strain contributions will be proposed for rapid estimation of the RSE.

**16:30-18:00, June 13 (Fri), 2025@Room M-124 (1st floor, main building, Institute of Science Tokyo)**
**Host: Makoto Yamashita (Sch. of Sci.) (yamashita.m.6dbb@m.isct.ac.jp)**

# “Three-Membered Rings with p-Block Elements: Scope, Ring Strain and Aromaticity”

Prof. Dr. Arturo Espinosa Ferao

University of Murcia (Spain)

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