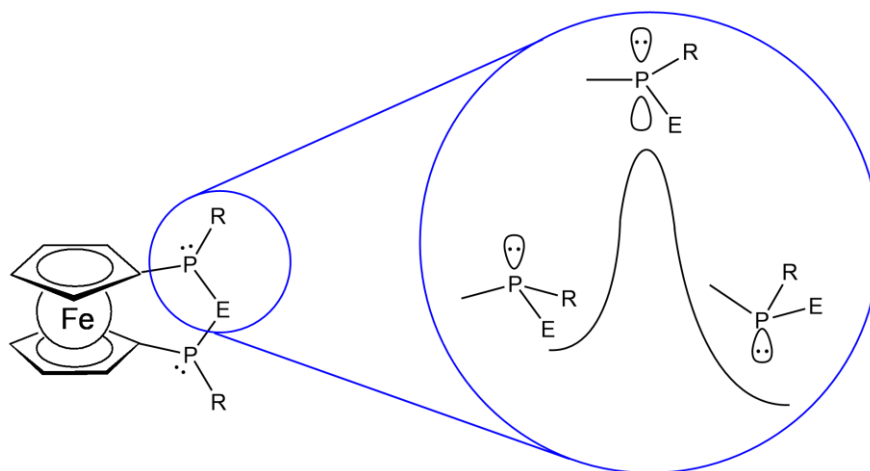


Switching vs. Preservation of P-Stereogenic Centers in Phosphanylidene Bridged Ferrocenophanes

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[*n*]Ferrocenophanes with an *n*-atomic bridge connecting the two rings of a ferrocene unit are an attractive molecular scaffold for accommodating catenated P-stereogenic centers. The alignment of these stereocenters offers a stereochemically confined setting to explore retention of configuration vs. epimerization during fundamental reaction types such as oxidation, insertion, and substitution. [3-6]



Scheme 1. Sketch of epimerization process in Phosphaferrocenophanes (E: divalent fragment with group 13, 14, 15 and 16 element).

References

- [1] D. Kargin, Z. Kelemen, K. Krekić, M. Maurer, C. Bruhn, L. Nyulászi and R. Pietschnig, *Dalton Trans.* **2016**, 45, 2180 - 2189.
- [2] A. Lik, D. Kargin, S. Isenberg, Z. Kelemen, R. Pietschnig and H. Helten, *Chem. Commun.* **2018**, 54, 2471-2474
- [3] D. Kargin, Z. Kelemen, K. Krekić, L. Nyulászi and R. Pietschnig, *Chem. - Eur. J.* **2018**, 24, 16774-16778.
- [4] S. Isenberg, L.-M. Frenzel, C. Bruhn and R. Pietschnig, *Inorganics* **2018**, 6, 67.
- [5] S. Isenberg, S. Weller, D. Kargin, S. Valić, B. Schwederski, Z. Kelemen, C. Bruhn, K. Krekić, M. Maurer, C. Feil, M. Nieger, D. Gudat, L. Nyulaszi and R. Pietschnig, *Chem. Open* **2019**, 8, 1235-1243.
- [6] R. Franz, S. Nasemann, C. Bruhn, Z. Kelemen and R. Pietschnig, *Chem.-Eur. J.* **2021**, 27, 641-648.
- [7] R. Franz, C. Bruhn and R. Pietschnig, *Molecules* **2021**, accepted.