**OR03 – Intramolecular Pd-Catalyzed Dehydrogenative Allylations: Nucleopalladation vs Allylic C–H Activation**

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The oxidative intramolecular Pd(II)-catalyzed amination or oxylation of unsaturated N-sulfonyl carbamates, N-sulfonyl carboxamides and carboxylic acids takes place through the involvement of cyclic aminopalladated or oxypalladated intermediates.

These intermediates may subsequently evolve along different pathways such as distocyclic or proxycyclic β-H elimination, oxidative oxylation, or intramolecular carbopalladation, as a function of the nature of the substrate and/or the reaction conditions. However, when the above reactivities are inhibited, the palladated intermediates are only off-cycle intermediates in equilibrium with the initial substrate. This hurdle opens the way to alternative oxidative cataytic cycles, the most relevant one being the C-H activation of the allylic position. Our experimental studies in concerto with DFT calculations allow putting forward an unifying mechanistic scenario that rationalizes the ensemble of the observed results in this field.

![Chemical structure](image)

**References**