

## Synthesis of functionalized terpenes by trapping the carbocation intermediate in confinement catalysis

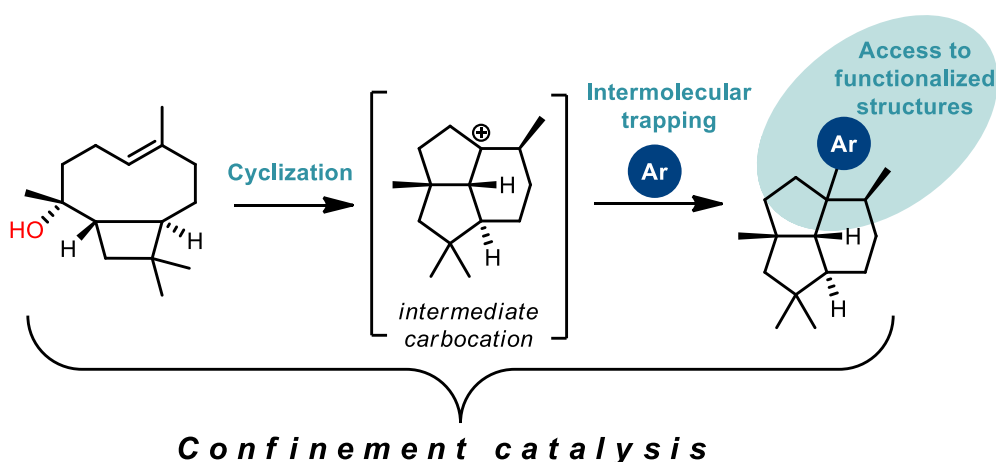
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Through cyclisation reactions, Nature produces an immense variety of carbon skeletons. Those structures, part of the terpene family can sometimes incorporate non-terpene moiety (such as phenols) and are then called meroterpenes. The latter have attracted interest in development of therapeutic, since they are more chemically diverse than simple terpenes. The synthesis of such functionalized terpenes is challenging. Using resorcin[4]arene as a catalyst, our group first reported the synthesis of the terpene presiphiperfolan-1 $\beta$ -ol<sup>1</sup> and later some derivatives by modification of the substrate and subsequent internal trapping of the carbocation intermediate.<sup>2</sup> In this work, we explore intermolecular trapping of the intermediate carbocation by an added aromatic nucleophile.



[1] L.-D. Syntrivanis, I. Némethová, D. Schmid, S. Levi, A. Prescimone, F. Bissegger, D. T. Major, K. Tiefenbacher, *J. Am. Chem. Soc.*, **2020**, *142*, 5894–5900.

[2] I. Némethová, D. Schmid, K. Tiefenbacher, *Angew. Chem. Int. Ed.*, **2023**, *62*, e202218625.