

Activation of small molecules on Al(I) and Ga(I) carbenoids: from bond cleavage to coupling reactions

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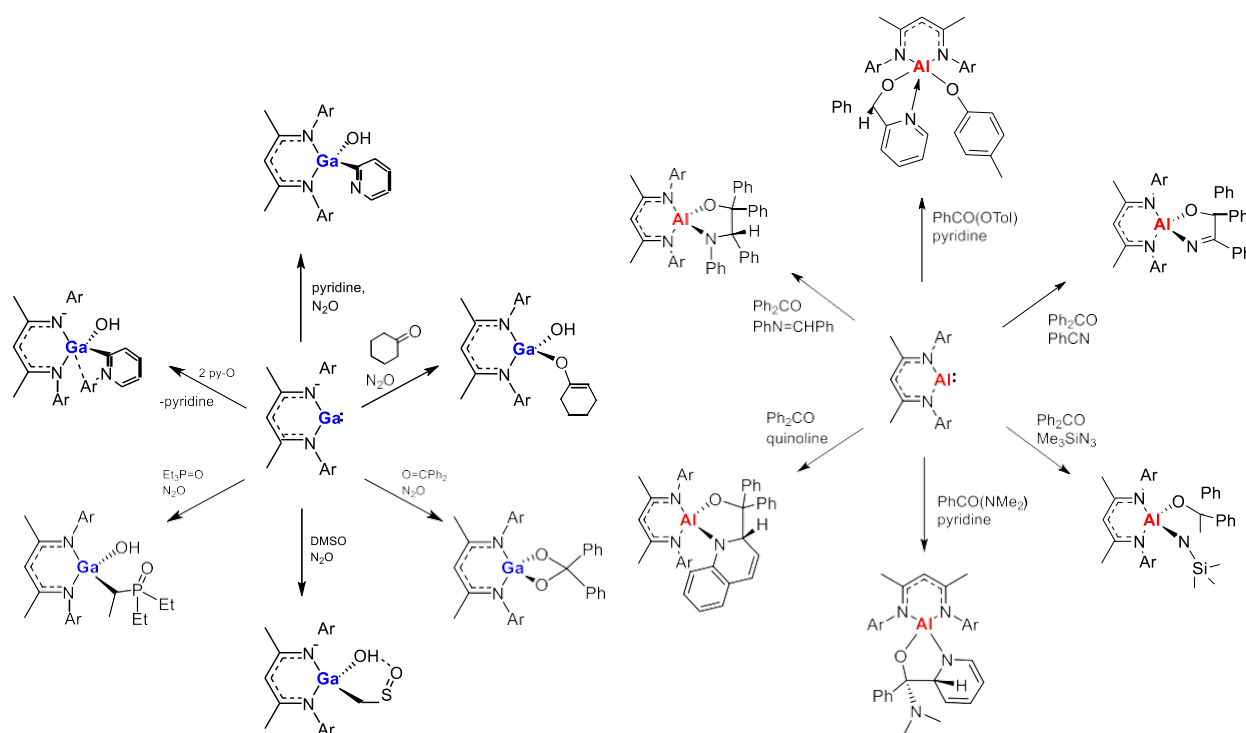
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Activation of small molecules on Al(I) and Ga(I) carbenoids: from bond cleavage to coupling reactions

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Activation of small molecules by low-valent main group compounds is a hot topic,¹ of which the bond cleavage by carbenoids, electronic analogues of carbene, is the most common.² The NacNac-supported Al(I) and Ga(I) compounds NacNacM have been in the focus of several groups, including ours. In this talk we shall review the results of the past decade of research³ and highlight the increasing complication of reactivity, progressing from bond activation to multicomponent reactions and coupling.⁴



References:

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2. Nikonov, G. I.; Chu, T. *Chem. Rev.* **2018**, *118*, 3608.
3. Nikonov, G. I. et al. *J. Am. Chem. Soc.* **2014**, *136*, 9195; *Angew. Chem. Int. Ed.* **2016**, *55*, 13306; *Inorg. Chem.* **2017**, *56*, 5993; *J. Am. Chem. Soc.* **2017**, *139*, 8804;
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1995-1996 Research associate with Dr. P. Mountford, Royal Society (London)
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Awards, Fellowships:

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3. 2019 Faculty of Math and Science Distinguished Researcher
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6. 2002 Eugene R. Corey Memorial Fund Fellowship
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