

A new paper in *Chemical Science* describing a simple setting for performing chemical reactions with hydrogen cyanide

The work published by Steffan K. Kristensen, Assoc. Prof. Anders Lindhardt and Prof. Troels Skrydstrup describes a simple setup whereby HCN is delivered in stoichiometric amounts by *ex situ* generation in a two-chamber reactor, thereby providing a safe setting for handling gaseous HCN in small-scale reactions, without the need for an HCN cylinder (DOI: 10.1039/C7SC03912C). They demonstrate the usefulness of this setup not only for the Pd-catalyzed cyanation of aryl bromides, but also for the Ni-mediated hydrocyanation of styrenes as a test reaction. With respect to the cyanation reactions, good functional group tolerance was obtained, and the method proved amenable to scale-up, but also to carbon-13 isotope labeling applying H^{13}CN . The methodology was tested on the synthesis of three pharmaceuticals containing a benzonitrile subunit, including dapivirine, citalopram and letrozole, providing isolated yields from 86–97%.

This chemistry is funded under the SPIR initiative by The Innovation Fund Denmark, and Haldor Topsøe A/S.

For direct access to the paper:

<http://pubs.rsc.org/en/content/articlelanding/2017/sc/c7sc03912c#!divAbstract>

