



首届致远学术节 学生科研成果展示

Topic:

Copper-Catalyzed Aerobic Oxidation of Aldehydes to Nitriles

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Research background:

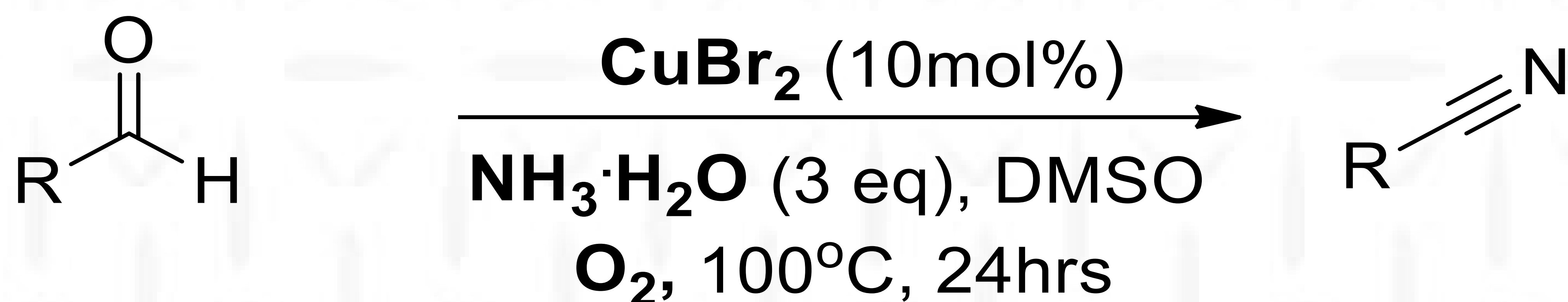
Many reactions have been set up from aldehydes (abundant in nature) to nitriles (valuable to many areas such as agriculture, medicine, polymers, etc) by stoichiometric oxidants and toxic noble metal catalysts. A **cheap, efficient** and **green** path to do the change is in great need indeed !

Research Purpose:

To establish a **green** and **efficient** way to carry out the reaction from aldehydes to nitriles

Research Method:

Ammonia is the nitrogen source, and **oxygen** is the oxidant. **Cheap copper salts** are the catalysts.



Achievement:

Selective Aerobic Oxidation of Aldehydes to Nitriles Catalyzed By CuBr_2 / N-methyl Imidazole. ----Submitted to *Synlett*.

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