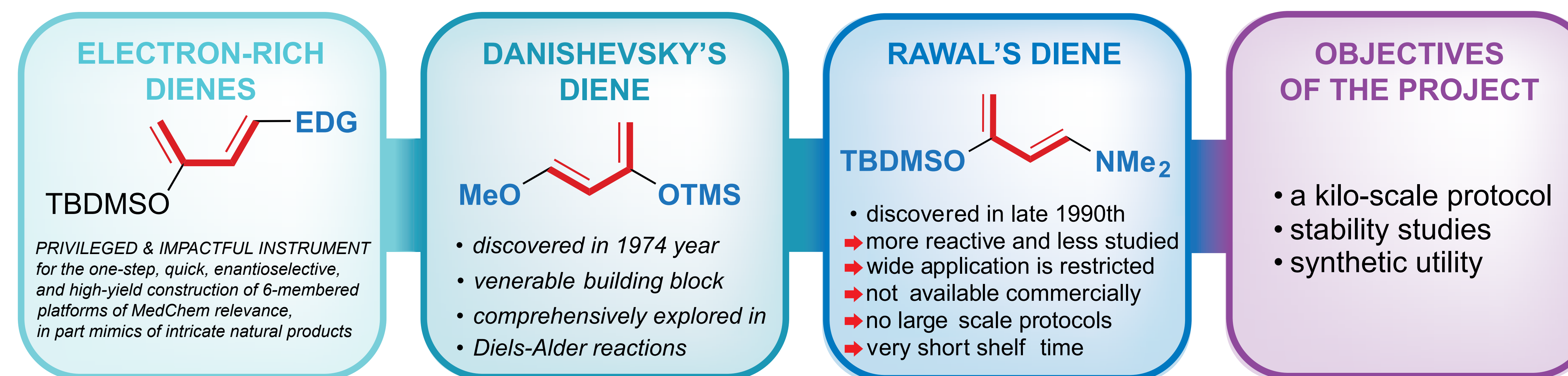


Rawal's diene-based multigram preparation of spirocyclic pyran building blocks

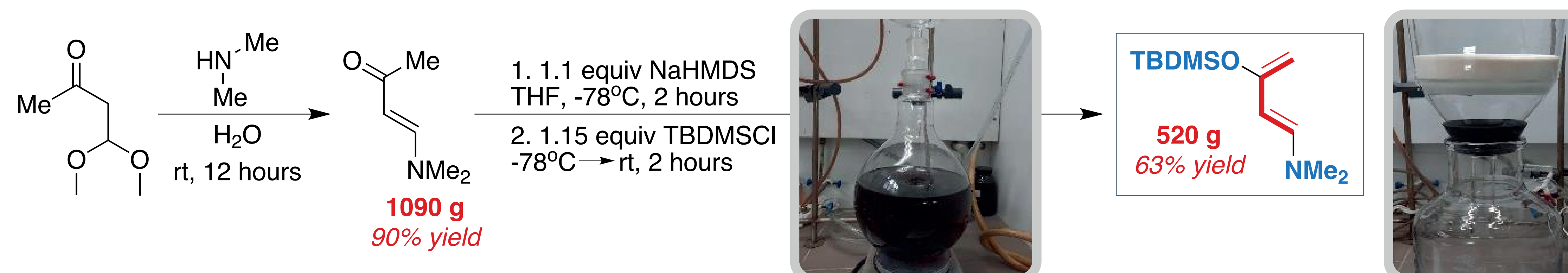


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Synopsis of the presented campaign



Elaboration of a detailed large-scale, protocol toward Rawal's diene



PRACTICAL ASPECTS OF RAWAL'S DIENE PREPARATION, ISOLATION AND STORAGE

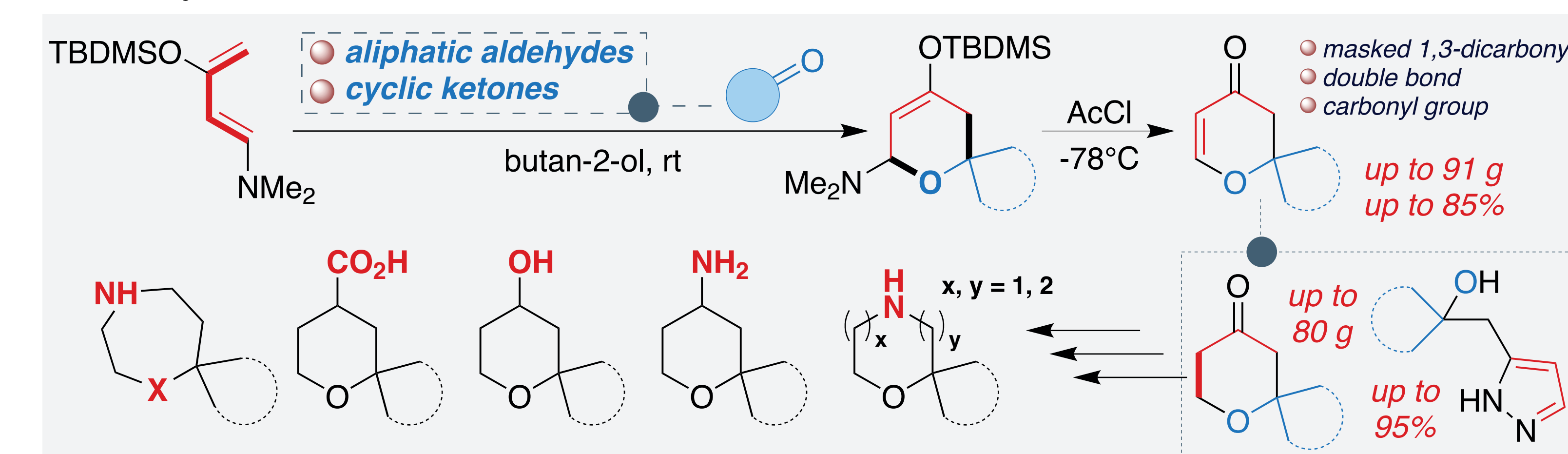
- IT IS EXTREMELY IMPORTANT** to qualitatively filter the finely dispersed precipitate of NaCl at the 2nd stage since it affects the quality and yield of the product; **high-quality** anhydrous sodium sulfate should be utilized
- the 2nd stage mixture should be concentrated at 30-35°C, high temperatures provoke the removal of TBDMS protection
- recording of the 1H NMR spectrum should be done as soon as possible** after the product dissolution in CDCl₃, as Rawal's diene decomposes over time upon standing in the solution and gives confusing peaks of impurities; **GCMS method is useless** in analyzing diene's purity
- the diene is stable at -10°C under argon atmosphere for months

Contact

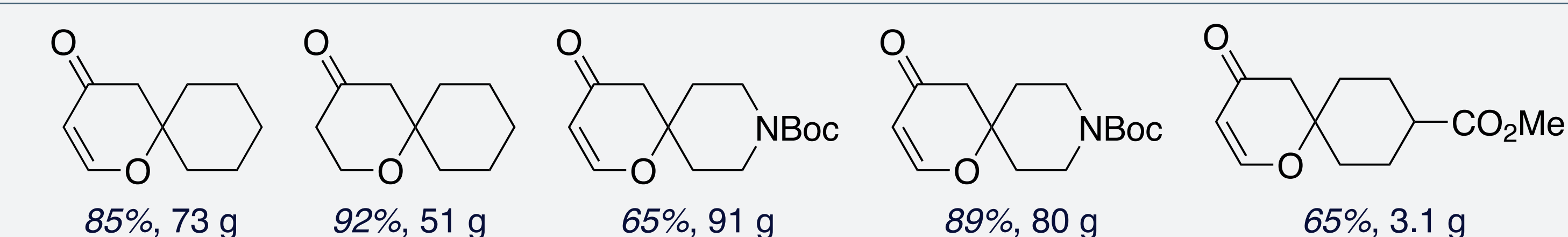
Sergey V. Ryabukhin, Prof. Dr. Sci.; s.v.ryabukhin@gmail.com,
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Synthetic utility of Rawal's diene

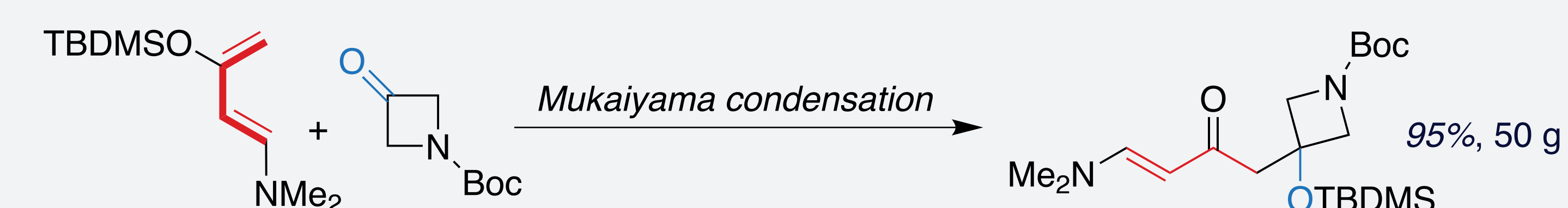
- adducts of Rawal's diene with cyclic ketones and simple aliphatic aldehydes unknown so far were successfully obtained
- the ways of further transformation of the adducts were elaborated



Showcasing building blocks



Limitation to be overcome



STABILITY STUDY RESULTS

