



UNIVERSITA' DEGLI STUDI DI ROMA
"LA SAPIENZA"

DIPARTIMENTO DI CHIMICA

Mercoledì 22 Aprile 2015 ore 12.00 - Sala Parravano

Iodine Reagents in Synthesis and Flow Chemistry

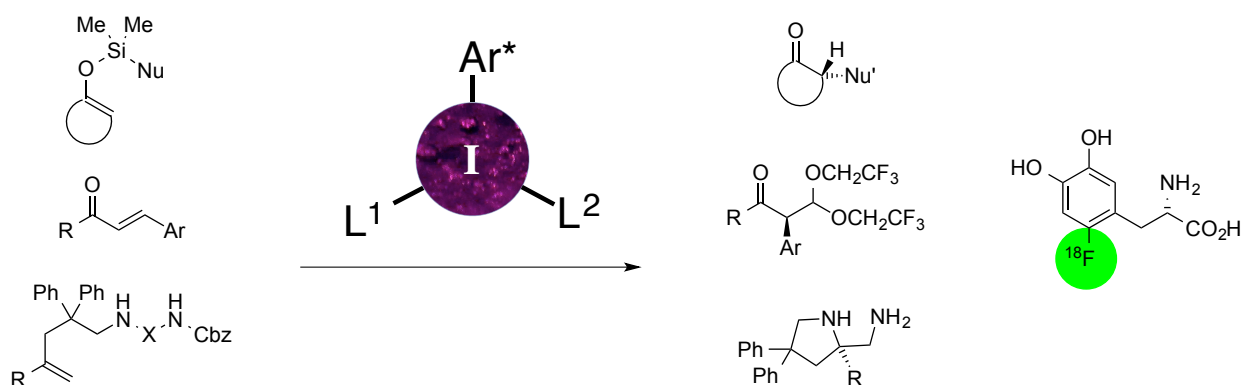


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Hypervalent iodine reagents have received particular attention in synthetic chemistry and have found wide applications in synthesis due to their environmentally friendly nature, low toxicity and easy accessibility. We present novel oxidative rearrangements and addition reactions to double bond-containing compounds including application towards stereoselective synthesis.

The potential of handling small volumes in microreactors in a controlled and defined way is used for reactions with hazardous chemicals and also in the development of advanced protocols for the synthesis of radiopharmaceuticals. [18]-Fluoride radiolabelled compounds such as F-DOPA were synthesized by different routes from novel diaryl iodonium derivatives.



References:

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2. P. Mizar, T. Wirth, *Angew. Chem.* **2014**, *126*, 6103 – 6107; *Angew. Chem. Int. Ed.* **2014**, *53*, 5993–5997.
3. P. Mizar, A. Laverny, M. El-Sherbini, U. Farid, M. Brown, F. Malmedy, T. Wirth, *Chem. Eur. J.* **2014**, *20*, 9910–9913.
4. R. Edwards, A. D. Westwell, S. Daniels, T. Wirth, *Eur. J. Org. Chem.* **2015**, 625–630.