세미나 초록

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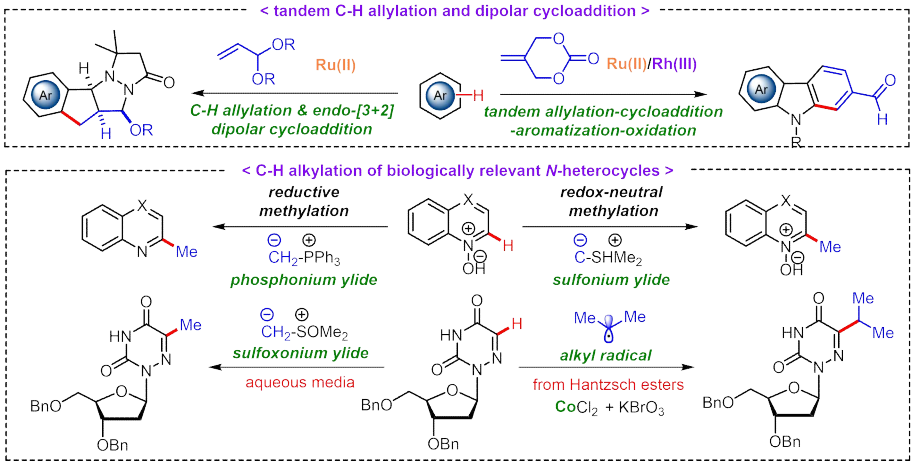
발표 주제	C-H Bond Functionalization
발표 내용	In the last 15 years, our research group has contributed on the development of new synthetic methods based on the catalytic C-H functionalization and the application of the developed methods into late-stage C-H modification, which can be a valuable step-stone in medicinal chemistry and drug discovery. In particular, the C-H functionalization has been recognized as an efficient strategy for the construction of bioactive heterocyclic molecules. In this context, our group disclosed the catalytic formation of indenopyrazolopyrazolones using allylic acetals as highly activated acrolein oxonium precursors.[1] With the importance of *N*-heterocycles in pharmaceuticals, agrochemicals, and functional materials, we also explored the unprecedented reductive and redox-neutral alkylations of various N-heterocycles using phosphonium and sulfoxonium ylides as novel alkylating surrogates.[2] The lecture will address the brief background and highlight on selected examples.  **Selected References** 1. (a) Lee, H.; Kang, D.; Han, S. H.; Chun, R.; Pandey, A. K.; Mishra, N. K.; Hong, S.; **Kim, I. S.*** *Angew. Chem., Int. Ed.* **2019**, *58*, 9470–9474. (c) Min, S.; Kim, T.; Jeong, T.; Yang, J.; Oh, Y.; Moon, K.; Rakshit, A.; **Kim, I. S.*** *Org. Lett.* **2023**, *25*, 4298–4302. 2. (a) Han, S.; Chakrasali, P; Park, J.; Oh, H.; Kim, S.; Kim, K.; Pandey, A. K.; Han, S. H.; Han, S. B.; **Kim, I. S.*** *Angew. Chem., Int. Ed.* **2018**, *57*, 12737–12740. (b) An, W.; Choi, S. B.; Kim, N.; Kwon, N. Y.; Ghosh, P.; Han, S. H.; Mishra, N. K.; Han, S.; Hong, S.; **Kim, I. S.*** *Org. Lett.* **2020**, *22*, 9004–9009. (d) Ghosh, P.; Kwon, N. Y.; Kim, S.; Han, S.; Lee, S. H.; An, W.; Mishra, N. K.; Han, S. B.; **Kim, I. S.*** *Angew. Chem., Int. Ed.* **2021**, *60*, 191–196. (e) Ghosh, P.; Kwon, N. Y.; Byun, Y.; Mishra, N. K.; Park, J. S.; **Kim, I. S.*** *ACS Catal.* **2022**, *12*, 15707–15714.