

# S09-4 Total Synthesis of Polycyclic Alkaloids Based on a Radical Cascade

○Tsuyoshi TANIGUCHI<sup>1</sup>, Hiroyuki ISHIBASHI<sup>1</sup>

<sup>1</sup>Division of Pharmaceutical Sciences, Graduate School of Natural Science and Technology, Kanazawa University

In recent years, radical reaction has been recognized as a very useful tool in organic synthesis including the total synthesis of natural products. We have developed the efficient radical cyclization onto olefinic bond of enamides with the intention of the concise synthesis of polycyclic nitrogen-containing heterocyclic compounds. In this symposium, we wish to present here the total synthesis of polycyclic alkaloids using a radical cascade reaction involving *7-endo-trig*/*5-endo-trig* cyclizations.

