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### SYNTHESIS AND REACTIONS OF THE FIRST 9,9,10,10-TETRAHALO-9,10-DIHYDRO-9,10-DISTANNAANTHRACENES

Masaichi Saito<sup>a</sup>; Natsumi Henzan<sup>a</sup>; Michikazu Yoshioka<sup>a</sup>

<sup>a</sup> Saitama University, Saitama, Japan

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## SYNTHESIS AND REACTIONS OF THE FIRST 9,9,10,10-TETRAHALO-9,10-DIHYDRO-9,10- DISTANNAANTHRACENES

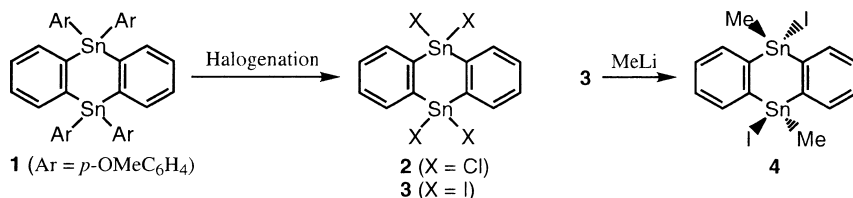
Masaichi Saito, Natsumi Henzan, and Michikazu Yoshioka  
 Saitama University, Saitama, Japan

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Since the first synthesis of 9,10-dihydro-9,10-disilaanthracene,<sup>1</sup> studies on the synthesis, structure, and reactions of dihydroanthracenes having group 14 metals (Si, Ge, Sn) in these central six-membered rings have been developed. One of the most interesting features of the dihydroanthracene derivatives is their synthetic utility as potential precursors for metal-containing reactive intermediates. In the course of our studies on 9,10-dihydro-9,10-distannaanthracene<sup>2</sup> as precursors for reactive species having a 9,10-distannaanthracene skeleton, we report herein the first synthesis of 9,9,10,10-tetrahalo-9,10-dihydro-9,10-distannaanthracenes from 9,9,10,10-tetra(*p*-methoxyphenyl)-9,10-dihydro-9,10-distannaanthracene (**1**).

Chlorination of **1** by acetyl chloride or tetrachlorogermane in the presence of a catalytic amount of aluminum chloride gave the first 9,9,10,10-tetrachloro derivative **2**. Iodination of **1** gave the first 9,9,10,10-tetraiodo derivative **3**. Reaction of **3** with methyl lithium gave the dimethyl derivative **4**. The stereochemistry of **4** is assigned to be *trans* by x-ray structural analysis.



Address correspondence to Masaichi Saito, Department of Chemistry, Faculty of Science, Saitama University, Shimo-okubo, Sakura-ku, Saitama-city, Saitama, 338-8570 Japan. E-mail: masaichi@chem.saitama-u.ac.jp

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