





A. Baba

Date of birth: January 6, 1949

Position: Professor, Department of Applied Chemistry, Graduate School of Engineering, Osaka

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Education: 1971 Undergraduate degree, Osaka University

1976 PhD with Prof. Toshio Agawa, Osaka University

1976–1981 Mitsubishi Chemical Industry Research Center, Yokohama

Current research Lewis acids with high functional selectivity; one-pot domino transformations of basic organic

compounds; Lewis acid assisted generation of organometallic compounds

Hobbies: History, mountaineering, travelling

The author presented on this page has recently published his **10th article** in Angewandte Chemie in the last 10 years:

"Regio- and Stereoselective Carbobismuthination of Alkynes": Y. Nishimoto, M. Takeuchi, M. Yasuda, A. Baba, Angew. Chem. 2012, 124, 1075–1078; Angew. Chem. Int. Ed. 2012, 51, 1051–1054.

If I could be described as an animal it would be ... a white bull.

My motto is ... to accept my fate.

am waiting for the day when someone will discover ... a highly effective and practical solar cell.

Chemistry is fun because ... a new discovery can be expected every day.

My favorite drink is ... a green tea made with spring water.

The most significant historic event of the past 100 years was ... the earthquake disaster in the Tohoku area in 2011.

The most important future application of my research is ... the development of practical Lewis acids for the polymerization of functional olefins.

Young people should study chemistry because ... it is the most creative and exciting field.

n a spare hour, I ... read historical novels.

My favorite way to spend a holiday is ... visiting temples.

The secret of being a successful scientist is ... effort and enjoyment.

My favorite molecule is ... cyclopropenone, which I studied during my PhD.

My 5 top papers:

interests:

- "Direct Synthesis of Alkynylstannanes: ZnBr₂ Catalyst for the Reaction of Tributyltin Methoxide and Terminal Alkynes": K. Kiyokawa, N. Tachikake, M. Yasuda, A. Baba, Angew. Chem. 2011, 123, 10577-10580; Angew. Chem. Int. Ed. 2011, 50, 10393-10396. (Successive Migita Kosugi Stille reactions can take place in one pot as methanol is the only by-product.)
- "Regio- and Stereoselective Generation of Alkenylindium Compounds from Indium Tribromide, Alkynes, and Ketene Silyl Acetals": Y. Nishimoto, R. Moritoh, M. Yasuda, A. Baba, Angew. Chem. 2009, 121, 4647–4650; Angew. Chem. Int. Ed. 2009, 48, 4577–4580. (A convenient carbometalation that could be expanded to other metals such as gallium and bismuth.)
- 3. "Indium-Catalyzed Direct Chlorination of Alcohols Using Chlorodimethylsilane–Benzil as a Selective and

- Mild System": M. Yasuda, S. Yamasaki, Y. Onishi, A. Baba, *J. Am. Chem. Soc.* **2004**, *126*, 7186–7187. (An interesting mechanism that involves generation of hydrogen gas.)
- "Indium Chloride Sodium Borohydride System: A
 Convenient Radical Reagent for an Alternative to
 Tributyltin Hydride System": K. Inoue, A. Sawada, I.
 Shibata, A. Baba, J. Am. Chem. Soc. 2002, 124, 906 –
 907. (The first example of Cl₂InH generation and its
 practical application to radical reduction.)
- "Indium trichloride catalyzed reductive Friedel
 Crafts alkylation of aromatics using carbonyl compounds": T. Miyai, Y. Onishi, A. Baba, *Tetrahedron Lett.* 1998, 39, 6291–6294. (The start of my work on combined indium/silicon chemistry.)

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