

Prof. Dr. Kyoko Nozaki

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Topics

Organometallics, Catalysis, Synthetic Chemistry, Polymer Chemistry,
Sustainable Chemistry

3/1986 B.S.: Kyoto University (Prof. K. Utimoto)
3/1988 M.S.: Kyoto University (Prof. K. Utimoto)
3/1991 Ph.D.: Kyoto University (Prof. K. Utimoto)
9/1988-8/1989 Exchange student: University of California, Berkeley (Prof. C. H. Heathcok)
4/1991-3/2002 Assistant Professor, Associate Professor, Kyoto University (Prof. H. Takaya)
4/2002-3/2003 Associate Professor, The University of Tokyo
4/2003- Professor, The University of Tokyo

Awards

2003 OMCOS prize
2009 Mitsui Chemicals Catalysis Science Award
2020 The Chemical Society of Japan Award
2021 IUPAC 2021 Distinguished Women in Chemistry or Chemical Engineering
2021 L'Oréal-UNESCO for Women in Science Awards
2021 Toray Science and Technology Award
2022 The Medal with Purple Ribbon

Members

2021~ International Honorary Member of the American Academy of Arts & Sciences
2024~ Foreign Member of The Royal Society (UK)
2024~ International Member of National Academy of Sciences (USA)

Selected Recent Publications

1. Bimetallic synergy in supported Ni–Pd catalyst for selective hydrogenolysis of C–O bonds in epoxy resins. Y. Huang, Y. Yamazaki, K. Nomoto, H. Miura, T. Shishido, X. Jin, K. Nozaki, *Nat. Commun.* **2025**, *16*, 1188.
2. Chemoselective Hydrogenolysis of Urethanes to Formamides and Alcohols in the Presence of More Electrophilic Carbonyl Compounds. T. Iwasaki, Y. Yamada, N. Naito, K. Nozaki, *J. Am. Chem. Soc.* **2024**, *146*, 25562–5568.
3. Synthesis of Long-Chain Polyamides via Main-Chain Modification of Polyethyleneketones. Y. Lu, K. Takahashi, J. Zhou, R. Nontarin, S. Nakagawa, N. Yoshie, K. Nozaki, *Angew. Chem. Int. Ed.* **2024**, *63*, e202410849.
4. Mild Catalytic Degradation of Crystalline Polyethylene Units in Solid State Assisted by Carboxylic Acid Groups. B. Lu, K. Takahashi, J. Zhou, S. Nakagawa, Y. Yamamoto, T. Katashima, N. Yoshie, K. Nozaki, *J. Am. Chem. Soc.* **2024**, *146*, 19599–19608.
5. Synthesis of novel polymers with biodegradability by main-chain editing of chiral polyketones. H. Yuan, K. Takahashi, S. Hayashi, M. Suzuki, N. Fujikake, K. Kasuya, J. Zhou, S. Nakagawa, N. Yoshie, C. Li, K. Yamaguchi, K. Nozaki, *J. Am. Chem. Soc.* **2024**, *146*, 13658–13665.
6. Nickel-Catalyzed C(sp³)–O Hydrogenolysis via a Remote Concerted Oxidative Addition and its Application to Degradation of a Bisphenol A-Based Epoxy Resin. Y. Liao, K. Takahashi, K. Nozaki, *J. Am. Chem. Soc.* **2024**, *146*, 2419–2425.
7. Chemoselectivity Change in Catalytic Hydrogenolysis enabling Urea-reduction to Formamide/Amine over More Reactive Carbonyl Compounds. T. Iwasaki, K. Tsuge, N. Naito, K. Nozaki, *Nat. Commun.* **2023**, *14*, 3279.