

Dr. Toshiyuki Yokoi C. V.

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Name in Full: Toshiyuki Yokoi Nationality: Japanese Gender: Male
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Education:

April 1996 to March 2000

Yokohama National University, Faculty of Engineering, Division of Materials Science & Chemical Engineering, received Bachelor of Engineering degree March 2000.

April 2000 to March 2002

Yokohama National University, Graduate School of Engineering, Division of Materials Science & Chemical Engineering, received Master of Engineering degree March 2002.

April 2002 to September 2004

Yokohama National University, Graduate School of Engineering, Division of Materials Science & Chemical Engineering (Doctor course), Obtained Ph.D. of Engineering from Yokohama National University, September 2004.

PhD Title: Studies on the syntheses and applications of organic-functionalized mesoporous silica

Employment:

October 2004 to November 2004: Post Doctoral Fellow

Yokohama National University, Prof. Tatsumi group,

December 2004 to March 2006: Assistant Professor

The University of Tokyo, Department of Chemical System Engineering, Prof. Okubo group,

April 2006 to March 2016: Assistant Professor

Tokyo Institute of Technology, Chemical Resources Laboratory, Division of Catalytic Chemistry

April 2016 to March 2017: Assistant Professor

Tokyo Institute of Technology, Institute of Innovative Research, Laboratory for Chemistry and Life Science

April 2017 to March 2018: Assistant Professor / Unit Leader

Tokyo Institute of Technology, Institute of Innovative Research, Nanospace Catalysis Unit

from April 2018: Associate Professor / Unit Leader

Tokyo Institute of Technology, Institute of Innovative Research, Nanospace Catalysis Unit

2016-2019 JST-PRESTO Researcher

Short Bio:

I received a Ph.D. in 2004 from Yokohama National University, under the supervision of Prof. Tatsumi. Soon afterwards, I became a postdoctoral fellow in his group. Thereafter, I moved to The university of Tokyo and worked as an Assistant Professor of Professor Tatsuya Okubo from 2004 to 2006. I returned to the Tatsumi's group in Catalytic Chemistry Division, Chemical Resources Laboratory, Tokyo Institute of Technology as an Assistant Professor in 2006. I was promoted to associate Professor in 2018.

By the end of 2017, I will publish over 150 refereed papers. I first succeeded in synthesizing mesoporous silica by using anionic surfactant (*Nature Mater.*, 2004). I also succeeded in preparing the colloidal crystal of silica nanospheres 10 nm in size by using basic amino acids (*J. Am. Chem. Soc.*, 2006, 128, 13664-13665). I developed the preparation of the RTH-type zeolite without using organic-structure-directing agents (*Angew. Chem. Int. Ed.*, 2009, 48, 9884-9887). Recently, I successfully developed a new catalyst for the MTO reaction with a high performance based on the CON-type zeolite (*ACS Catalysis*, 2015, 5, 4268-4275). Now, I am tackling the synthesis of zeolite with the T sites in the framework occupied by active elements, e.g., Al atoms, controlled (*J. Phys. Chem. C*, 2015, 119, 15303-15315). These achievements were nationally recognized and I was given the Japan Petroleum Institute Award for Encouragement of Research and Development in 2011 and the Catalysis Society of Japan Young Researcher's Award in 2012.

Since 2018, I have been an associate Professor, and a research unit leader of "Nanospace Catalysis Unit", Institute of Innovative Research, Tokyo Institute of Technology. This unit focuses on nanospace materials such as zeolite and mesoporous materials, and aims to create nanospace catalyst that can make efficient use of diverse resources on the planet and that can contribute to the development of green production of chemical feedstocks and value-added chemicals.