





N. Kobayashi

Nagao Kobayashi

Date of birth: January 21, 1950

Professor, Tohoku University Position: E-mail: nagaok@m.tohoku.ac.jp Homepage: http://kinou.chem.tohoku.ac.jp

Education: 1973 Undergraduate degree, Shinshu University, Ueda

1978 Doctor of Science supervised by Masahiro Hatano, Tohoku University, Sendai

1985 Doctor of Pharmacy supervised by Tetsuo Osa, Tohoku University

Awards: 2006 Chemical Society of Japan Award for Creative Work in the Chemistry of Giant Aromatic

> Molecules; 2010 Commendation for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology: Prize for Science and Technology, Research Category

Porphyrins, phthalocyanines, (magnetic) circular dichroism, electronic structure, aromatic Current research

interests: macromolecules, electrochemistry

Hobbies: Traveling, listening to classical music, learning about old cultures

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

"Superazaporphyrins: Meso-Pentaazapentaphyrins and One of Their Low-Symmetry Derivatives": T. Furuyama, Y. Ogura, K. Yoza, N. Kobayashi, Angew. Chem. 2012, 124, 11272-11276; Angew. Chem. Int. Ed. 2012, 51, 11110-11114.

My favorite composer is ... Johann Sebastian Bach.

My favorite time of day is ... after dinner, because I can relax.

If I could be any age I would be ... around 40, since at that age, we are healthy and still have enough energy to pursue our purpose.

My favorite way to spend a holiday is ... to go walking in nature.

The secret of being a successful scientist is ... to think deeply and repeat experiments.

My favorite molecules are ... porphyrinoids, since they show various activities depending on the central metal and their structures.

f I had one year of paid leave I would ... like to visit several top-level laboratories.

The principal aspect of my personality is ... I am warm-hearted to other people.

My favorite painter is ... Johannes Vermeer.

The greatest scientific advance of the last decade was ... the production of induced pluripotent stem cells.

When I was eighteen I wanted to be ... a diplomat.

Chemistry is fun because ... we can design compounds with desired properties.

Looking back over my career, I ... was lucky, as I could get acquainted with many talented scientists.

My favorite drink is ... good wine.



The work of N. Kobayashi has been featured on the inside cover of Angewandte Chemie:

T. Kojima, T. Honda, K. Ohkubo, M. Shiro, T. Kusukawa, T. Fukuda, N. Kobayashi, S. Fukuzumi, Angew. Chem. 2008, 120, 6814-6818; Angew. Chem. Int. Ed. 2008, 47, 6712-6716.

My 5 top papers:

- 1. "Cation- or Solvent-Induced Supermolecular Phthalocyanine Formation: Crown Ether Substituted Phthalocyanines": N. Kobayashi, A. B. P. Lever, J. Am. Chem. Soc. 1987, 109, 7433-7441. (The first report of eclipsed cofacial dimers.)
- 2. "Synthesis, Spectroscopy, and Molecular Orbital Calculations of Subazaporphyrins, Subphthalocyanines, Subnaphthalocyanines, and Compounds Derived Therefrom by Ring Expansion": N. Kobayashi, T. Ishizaki, K. Ishii, H. Konami, J. Am. Chem. Soc. 1999, 121, 9096-9110. (The first comprehensive paper on subporphyrinoids.)
- 3. "Substituent-Induced Circular Dichroism in Phthalocyanines": N. Kobayashi, R. Higashi, B. C. Titeca, F. Lamote, A. Ceulemans, J. Am. Chem. Soc. 1999, 121, 12018-123028. (A semiquantitative description for the

- circular dichroism of phthalocyanines bearing binaphthyl units.)
- 4. "meso-Aryl Subporphyrins": N. Kobayashi, Y. Takeuchi, A. Matsuda, Angew. Chem. 2007, 119, 772-774; Angew. Chem. Int. Ed. 2007, 46, 758-760. (The first report on porphyrins that consist of three pyrrole units.)
- "Application of MCD Spectroscopy and TD-DFT to Nonplanar Core-Modified Tetrabenzoporphyrins: Effect of Reduced Symmetry on Nonplanar Porphyrinoids": J. Mack, M. Bunya, Y. Shimizu, H. Uoyama, N. Komobuchi, T. Okujima, H. Uno, S. Ito, M. J. Stillman, N. Ono, N. Kobayashi, Chem. Eur. J. 2008, 14, 5001 -5020. (The relationship between the symmetry and observed spectroscopic properties of porphyrinoids).

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