



K. Kataoka

The author presented on this page has recently published his **10th article** since 2000 in *Angewandte Chemie*: “Efficient Delivery of Bioactive Antibodies into the Cytoplasm of Living Cells by Charge-Conversional Polyion Complex Micelles”: Y. Lee, T. Ishii, H. J. Kim, N. Nishiyama, Y. Hayakawa, K. Itaka, K. Kataoka, *Angew. Chem.* **2010**, 122, 2606–2609; *Angew. Chem. Int. Ed.* **2010**, 49, 2552–2555.



K. Kataoka has also been featured on the Inside Cover of *Angewandte Chemie*: “Charge-Conversional Polyionic Complex Micelles - Efficient Nanocarriers for Protein Delivery into Cytoplasm”: Y. Lee, T. Ishii, H. Cabral, H. J. Kim, J.-H. Seo, N. Nishiyama, H. Oshima, K. Osada, K. Kataoka, *Angew. Chem.* **2009**, 121, 5413–5416; *Angew. Chem. Int. Ed.* **2009**, 48, 5309–5312.

Kazunori Kataoka

Date of birth:	November 27, 1950
Position:	Professor of Biomaterials and Clinical Biotechnology, The University of Tokyo (Japan)
Education:	1974 BEng (organic chemistry), The University of Tokyo 1976 MEng (polymer chemistry), The University of Tokyo 1979 PhD (polymer chemistry) with Professor Teiji Tsuruta, The University of Tokyo
Professional associations:	Fellow of the American Institute for Medical and Biological Engineering (AIMBE); Vice President of the Society of Polymer Science (Japan); Associate Editor of <i>Biomacromolecules</i> ; Associate Editor of <i>Biomaterials</i> ; Editor of the <i>Journal of Biomaterials Science, Polymer Edition</i> ; Editorial Board Member of 11 International Journals
Awards:	1993 Society Award, Japanese Society for Biomaterials; 2000 Society Award, Society of Polymer Science (Japan); 2005 Clemson Award in Basic Research, Society for Biomaterials (USA); 2008 Founder's Award, Controlled Release Society; 2009 NIMS Award, National Institute of Materials Science (Japan); 2010 The Prize for Science and Technology, The Commendation for Science and Technology by the Minister of Education, Culture, Sports, and Technology (Japan)
Current research interests:	The development of novel supramolecular structures of block copolymers in aqueous media for the delivery of bioactive compounds including chemotherapeutic reagents, proteins, genes, and nucleotides. Starting from self-assembly concepts in polymer chemistry, several block-copolymer micelles for anticancer drug delivery, which are currently in clinical trials in several countries including Japan, the USA, France, and the UK have been developed
Hobbies:	Skiing, wine, and art

In my opinion, the word “scientist” means ... an artist for the future.

If I won the lottery I would ... buy a winery.

My favorite subject at school was ... history.

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

I am waiting for the day when someone will discover ... a way to prevent the progress of Alzheimer's disease.

If I could be anyone for a day, I would be ... an astronaut.

My science “heroes” are ... Louis Pasteur and my PhD mentor Professor Teiji Tsuruta.

If I could have dinner with three famous scientists from history, they would be ... Hippocrates, Louis Pasteur, and Shibasaburo Kitazato.

I chose chemistry as a career because ... it's fun.

My most exciting discovery to date has been ... polyion complex micelles.

The most exciting thing about my research is ... exploring biological issues by using chemistry.

My biggest motivation is ... curiosity.

A good work day begins with ... fresh coffee.

My favorite composer is ... Mozart.

My 5 top papers:

1. “Block Copolymer Micelles as Vehicles for Drug Delivery”: K. Kataoka, G. S. Kwon, M. Yokoyama, T. Okano, Y. Sakurai, *Journal of Controlled Release* **1993**, 24, 119–132.
2. “Formation of Polyion Complex Micelles in an Aqueous Milieu from a Pair of Oppositely-Charged Block Copolymers with Poly(ethylene glycol) Segments”: A. Harada, K. Kataoka, *Macromolecules* **1995**, 28, 5294–5299.
3. “Chain Length Recognition: Core-Shell Supramolecular Assembly from Oppositely Charged Block Copolymers”: A. Harada, K. Kataoka, *Science* **1999**, 283, 65–67.
4. “Design of Environment-Sensitive Supramolecular Assemblies for Intracellular Drug Delivery: Polymeric Micelles that are Responsive to Intracellular pH Change”: Y. Bae, S. Fukushima, A. Harada, K. Kataoka, *Angew. Chem.* **2003**, 115, 4788–4791; *Angew. Chem. Int. Ed.* **2003**, 42, 4640–4643.
5. “Polyplexes from Poly(aspartamide) Bearing 1,2-Diaminoethane Side Chains Induce pH-Selective, Endosomal Membrane Destabilization with Amplified Transfection and Negligible Cytotoxicity”: K. Miyata, M. Oba, M. Nakanishi, S. Fukushima, Y. Yamasaki, H. Koyama, N. Nishiyama, K. Kataoka *J. Am. Chem. Soc.* **2008**, 130, 16287–16294.

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