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Hiroshi Masuhara graduated from Tohoku University (1966) in Sendai and obtained Ph.D. degree from Faculty of Engineering Science of Osaka University (1971).

He is a physical chemist working in multidisciplinary areas in departments of chemistry (Tohoku University), synthetic chemistry (Osaka University), polymer science and engineering (Kyoto Institute of Technology), applied physics (Osaka University), frontier bioscience (Osaka University), life science (Hamano Foundation), and materials science (Nara Institute of Science and Technology).

In 2008 he joined Department of Applied Chemistry and Institute of Molecular Science of National Chiao Tung University in Taiwan as a Chair Professor.

He was awarded Asian Photochemistry Association Award (2010), National Medal with Purple Ribbon (2008), Porter Medal (2006), Chemical Society of Japan Award (2006), Osaka Science Prize (1994), Moet-Hennessy-Louis-Vuitton International Prize "Science for Art" Da Vinci of Excellence (1993), and received Doctor Honoris Causa de Ecole Normale Supérieure de Cachan (2006).

Now he is foreign fellow of Royal Flemish Academy of Belgium and the National Academy of Sciences India. He has published more than 500 papers and wrote/edited 19 books. In Taiwan he is extending seminal researches on (1) laser trapping crystallization of molecules and proteins and (2) molecular trapping phenomena by femtosecond laser pulses.

Publications:

- (1) Ken-ichi Yuyama, Chi-Shiun Wu, Teruki Sugiyama, Hiroshi Masuhara, Laser trapping-induced crystallization of L-phenylalanine through its high concentration domain formation, *Photochem. Photobiol. Sci.*, 13(2), 254-260 (2014).
- (2) Jing-Ru Tu, Atsushi Miura, Ken-ichi Yuyama, Hiroshi Masuhara, Teruki Sugiyama, Crystal Growth of Lysozyme Controlled by Laser Trapping, *Cryst. Growth. Des.*, 14, 15-22 (2014).
- (3) Wei-Yi Chiang, Anwar Usman, Hiroshi Masuhara, Femtosecond Pulse-Width Dependent Trapping and Directional Ejection Dynamics of Dielectric Nanoparticles, *J. Phys. Chem. C*, 117(37), 19182-19188 (2013).
- (4) Ken-ichi Yuyama, Teruki Sugiyama, Hiroshi Masuhara, Laser Trapping and Crystallization Dynamics of L-Phenylalanine at Solution Surface, *J. Phys. Chem. Lett.*, 4(15), 2436-2440 (2013).
- (5) Teruki Sugiyama, Ken-ichi Yuyama, and Hiroshi Masuhara, Laser Trapping Chemistry: From Polymer Assembly to Amino Acid Crystallization, *Acc. Chem. Res.*, 45, 1946-1954 (2012).
- (6) Anwar Usman, Wei-Yi Chiang, Hiroshi Masuhara, Optical trapping and polarization-controlled scattering of dielectric spherical nanoparticles by femtosecond laser pulses, *J. Photochem. Photobiol. A: Chemistry*, 234, 83-90 (2012).
- (7) Ken-ichi Yuyama, Teruki Sugiyama, and Hiroshi Masuhara, Millimeter-scale dense liquid droplet formation and crystallization in glycine solution induced by photon pressure, *J. Phys. Chem. Lett.*, 9, 1321-1325 (2010).
- (8) Tsuyoshi Asahi, Teruki Sugiyama, Hiroshi Masuhara, Laser fabrication and spectroscopy of organic nanoparticles, *Acc. Chem. Res.*, 41, 1790-1798 (2008).