Author Profile



W. Nam

The author presented on this page has recently published his 10th article since 2000 in Angewandte Chemie: "Reactive Intermediates in Oxygenation Reactions with Mononuclear Nonheme Iron Catalysts": J. Yoon, S. A. Wilson, Y. Kyeong Jang, M. S. Seo, K. Nehru, B. Hedman, K. O. Hodgson, E. Bill, E. I. Solomon, W. Nam, Angew. Chem. **2009**, 121, 1283-1286; Angew. Chem. Int. Ed. 2009, 48, 1257-1260.

Wonwoo Nam

Date of birth: 16 June, 1960 **Nationality:** Korean

Position: Ewha Distinguished Professor of Chemistry, Ewha Womans University (Korea)

Education: 1985 BS, California State University, Los Angeles

1990 PhD with Prof. J. S. Valentine in the field of bioinorganic chemistry, University of

California, Los Angeles (UCLA)

1991 Postdoc with Prof. J. S. Valentine, UCLA

Awards: 2000 Young Scientist Award (President Award); 2001 Excellent Research Award at Ewha

Womans University; 2003 Korean Chemical Society Award in the division of inorganic chemistry; 2005 the 1st Ewha Academic Award; 2006 the 5th DuPont Science and Technology Award; 2007 The 3rd Kyeong-Am Academic Award; 2008 named as a "role-model scientist",

Korea Science Foundation

Current research interests:

Biomimetic studies of dioxygen activation by heme and nonheme metalloenzymes; specifically, elucidation of the structures of reactive intermediates and their reactivities in oxygenation

reactions, as well as the mechanisms of dioxygen activation by synthetic biomimetic compounds

Hobbies: Singing in Korean Karaoke bars, traveling with my wife

The secret of being a successful scientist is...to devote oneself to one thing.

The biggest challenge facing scientists is...to recruit young talented students who are willing to enjoy ventures in science.

f I could have dinner with three famous scientists from history, they would be... Einstein, Lavoisier (who named dioxygen for the first time), and Marie Curie (because I am at a university for women).

The three things I would take to a desert island would be...a computer to write papers, an iPod to listen to music, and a cell phone to communicate with students in my laboratory. Of course, my family should also be on the island with me.

chose chemistry as a career because...God directed me this way.

f I wasn't a scientist, I would be...a congressman.

My most exciting discovery to date has been...the first non-heme iron catalyst in olefin epoxidation by hydrogen peroxide, and the first crystal structure of a nonheme iron(IV)-oxo intermediate.

The most exciting thing about my research is...to understand the differences between heme and non-heme iron-oxo intermediates.

When I wake up I...think what I have to do in chemistry.

n ten years time I will be...a congressman in Korea.

My ultimate goal is to...understand the exact mechanism(s) of dioxygen activation by metalloenzymes.

A good work day begins with...receiving acceptance letters for my submitted manuscripts.

The biggest challenge facing chemists is...to make the earth more "green".

My 5 top papers:

- "Water as an Oxygen Source in the Generation of Mononuclear Nonheme Iron(IV) Oxo Complexes": Y.-M. Lee, S. N. Dhuri, S. C. Sawant, J. Cho, M. Kubo, T. Ogura, S. Fukuzumi, W. Nam, *Angew. Chem.* 2009, 121, 1835–1838; *Angew. Chem. Int. Ed.* 2009, 48, 1803–1806.
- "Fundamental Electron-Transfer Properties of Nonheme Oxoiron(IV) Complexes": Y.-M. Lee, H. Kotani, T. Suenobu, W. Nam, S. Fukuzumi, *J. Am. Chem. Soc.* 2008, 130, 434–435.
- 3. "High-Valent Iron(IV)-Oxo Complexes of Heme and Nonheme Ligands in Oxygenation Reactions": W. Nam, Acc. Chem. Res. 2007, 40, 522-531.
- "Axial Ligand Tuning of a Nonheme Iron(IV)-Oxo Unit for Hydrogen Atom Abstraction": C. V. Sastri, J. Lee, K. Oh, Y. J. Lee, J. Lee, T. A. Jackson, H. Hirao, W. Shin, L. Que, S. Shaik, W. Nam, *Proc. Natl. Acad.* Sci. USA 2007, 104, 19181–19186.
- "Crystallographic and Spectroscopic Characterization of a Nonheme Fe(IV)=O complex": J.-U. Rohde, J.-H. In, M. H. Lim, W. W. Brennessel, M. R. Bukowski, A. Stubna, E. Munck, W. Nam, L. Que, Jr., Science 2003, 299, 1037-1039.

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