



Christopher C. Cummins

Date of birth: February 28, 1966 **Nationality**: American

Position: Professor of Chemistry, Massachusetts Institute of Technology (MIT), since 1996

Career: 1984 Thomas Jefferson Senior High School, Bloomington, Minnesota

1989 Cornell University, Ithaca, New York

1993 PhD under the supervision of Richard R. Schrock, "Synthetic Investigations Featuring

Amidometallic Complexes", MIT

1993-1996 Assistant Professor of Chemistry, MIT

Current research

Unsaturated early transition-metal coordination complexes for exploratory studies of reactivity; activation of Group 15 elemental molecules; development of new inorganic functional groups; unsaturated reactive transient molecules; new ways to transform small molecules (CO_2 , O_2) that are pertinent to renewable energy; uncovering new systems containing uranium—element multiple bonds for comparison with transition-metal analogues; development of new reagents and strategies for inorganic synthesis; detailed studies of key reactions with in-depth elucidation of kinetic and thermodynamic parameters, as well as mechanistic nuances augmented with

computational chemistry predictions of structure and spectroscopic properties.

Hobbies: Ocean sailing near the coast of New England because "There is nothing-absolutely nothing-half

so much worth doing as simply messing about in boats": Kenneth Grahame, The Wind in the

Willows, Ch. 1.



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Me, myself, and I

f I could have dinner with three famous scientists from history, they would be...Hennig Brandt, Alfred Werner, and Sir Geoffrey Wilkinson.

The three things I would take to a desert island would be...a solar water still, a harpoon, and a global position indicating radio beacon (GPIRB).

f I wasn't a scientist, I would be...a freelance writer.

The most exciting thing about my research is...bringing into existence new molecules and knowledge.

A good work day begins with...no meetings!

The secret of being a successful scientist is...to always seek the truth, being ever mindful that the data are sacred and that there's no such thing as a failed experiment as long as a question was tightly formulated and answered convincingly.

The best advice I have ever been given is... "if you want to learn how to make molecules, go and work with Schrock"—Peter T. Wolczanski.

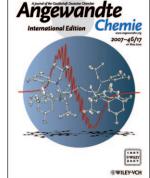
would have liked to have discovered...the first terminally-coordinated complexes of the diatomic AsS molecule; in this quest Manfred Scheer got there before me.

The part of my job which I enjoy the most is...working with enthusiastic students in the creative process of discovery and invention.

My favorite book is..."The Book of the Gloucester Fishermen" by James B. Connolly.

My five top papers:

- "Dinitrogen Cleavage by a Three-Coordinate Molybdenum(III) Complex": C. E. Laplaza, C. C. Cummins, *Science* 1995, 268, 861–863.
- "A Molybdenum-Phosphorus Triple Bond Synthesis, Structure, and Reactivity of the Terminal Phosphido (P³⁻) Complex [Mo(P)(NRAr)₃]": C. E. Laplaza, W. M. Davis, C. C. Cummins, Angew. Chem. 1995, 107, 2181–2183; Angew. Chem. Int. Ed. Engl. 1995, 34, 2042–2044.
- "The Niobaziridine-Hydride Functional Group: Synthesis and Divergent Reactivity": J. S. Figueroa, C. C. Cummins, J. Am. Chem. Soc. 2003, 125, 4020–4021.
- "Triple-Bond Reactivity of Diphosphorus Molecules": N. A. Piro, J. S. Figueroa, J. T. McKellar, C. C. Cummins, *Science* 2006, 313, 1276–1279.
- "A Niobium-Mediated Cycle Producing Phosphorus-Rich Organic Molecules from White Phosphorus (P₄) through Activation, Functionalization, and Transfer Reactions": B. M. Cossairt, C. C. Cummins, Angew. Chem. 2008, 120, 8995–8998; Angew. Chem. Int. Ed. 2008, 47, 8863–8866.



The author presented on this page publishes in this issue his 10th article since 2000 in Angewandte Chemie, see page 934... ... and has featured on the Inside Cover of Angewandte Chemie: P. Agarwal, N. A. Piro, K. Meyer, P. Müller, C. C. Cummins, Angew. Chem. 2007, 119, 3171–3174; Angew. Chem. Int. Ed. 2007, 46, 3111–3114 (see above).

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