

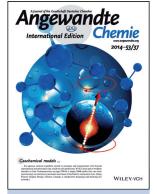




W. H. Casey

The author presented on this page has published more than 10 articles in Angewandte Chemie in the last 10 years. His most recent work is also featured on the inside back cover of this issue:

"2H and 139La NMR in Aqueous Solutions at Geochemical Pressures": G. Ochoa, C. D. Pilgrim, M. N. Martin, C. A. Colla, P. Klavins, M. P. Augustine, W. H. Casey, Angew. Chem. Int. Ed. 2015, 54, 15444; Angew. Chem. 2015, 127, 15664.



The work of W. H. Casey has been featured on the back cover of Angewandte Chemie:
"A High-Pressure NMR Probe for Aqueous Geochemistry": B. G. Pautler, C. A. Colla, R. L. Johnson, P. Klavins, S. J. Harley, C. A. Ohlin, D. A. Sverjensky, J. W. Walton, W. H. Casey, Angew. Chem. Int. Ed. 2014,

William H. Casey

Date of birth: April 25, 1955

Position: Distinguished Professor, Department of Chemistry, and Department of Earth and Planetary

Sciences, University of California, Davis

E-mail: whcasey@ucdavis.edu

Homepage: http://chemgroups.ucdavis.edu/~casey/ Education: 1976 BA, University of the Pacific, California

1985 PhD supervised by Prof. Antonio Lasaga, Pennsylvania State University

Awards: 2010 Inaugural Recipient of the Werner Stumm Medal, European Association of Geochemistry
Current research High-pressure solution NMR spectroscopy; isotope-exchange mechanisms; aqueous clusters;

interests: reaction dynamics; minerals

Hobbies: Reading fiction in the Irish language

In the future I see myself causing university administrators to weep in frustration.

The biggest challenge facing scientists is our smothering and reflexive elitism.

My favorite author (science) is Dr. James Rustad, who, two decades ago, wrote a molecular-dynamic code with fully dissociating and reacting water molecules in order to understand reaction mechanisms.

What I appreciate most about my friends is generosity and loyalty.

My favorite book is The Myth of Sisyphus by Albert Camus.

The natural talent I would like to be gifted with facility with languages.

The greatest scientific advance of the last decade was increased access to education by common people.

Science is fun because every day one hears "I didn't know that was possible ...".

n a spare hour, I go for a walk with Sara, my lovely wife of 33 years.

My favorite quote is "There is no fate that cannot be surmounted by scorn" (Albert Camus).

My biggest inspiration is a wall in my office that is pasted with newsprint photographs of common people who demonstrated uncommon courage.

advise my students to read biographies of great scientists—their successes are defined by the problems they picked, not the problems they solved.

The secret of being a successful scientist is constant and unwavering optimism.

My science "heroes" are Louis Pasteur and Gertrude B. "Trudy" Elion.

My 5 top publications:

- "2H and ¹³⁹La NMR in Aqueous Solutions at Geochemical Pressures": G. Ochoa, C. D. Pilgrim, M. N. Martin, C. A. Colla, P. Klavins, M. P. Augustine, W. H. Casey, *Angew. Chem. Int. Ed.* **2015**, *54*, 15444; *Angew. Chem.* **2015**, *127*, 15664. (We show colleagues how to make NMR measurements in aqueous solutions at pressures that correspond to those at the base of the Earth's continental crust. The method can be used by undergraduates.)
- "The Aqueous Chemistry of Oxides": B. C. Bunker, W. H. Casey, Oxford University Press, in press. (We wrote this new book for students in order to review all the important aspects of oxide chemistry in water and to generate enthusiasm for the subject.)
- 3. "Metastable structures and isotope exchange reactions in polyoxometalate ions provide a molecular view of oxide dissolution": J. R. Rustad, W. H. Casey, *Nature*

- Materials **2012**, *11*, 223. (We reconciled decades of bulk observations about rates of dissociation and oxygenisotope exchanges between sites in nanometer-sized oxide structures and solution.)
- "Kinetic Evidence for Five-Coordination in AlOH-(aq)²⁺ Ion": T. W. Swaddle, J. Rosenqvist, P. Yu, E. Bylaska, B. L. Phillips, W. H. Casey, *Science* 2005, 308, 1450. (Opened a new chapter on the understanding of aqueous aluminum chemistry.)
- 5. "On the relative dissolution rates of some oxide and orthosilicate minerals": W. H. Casey, J. Colloid Interface Sci. 1991, 146, 586. (One of my first scientific articles. The familiar reactivity trends for ligand exchange around octahedrally coordinated metal ions are also manifested in the dissolution of oxide materials.)

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53, 9788; Angew. Chem.

2014, *126*, 9946.