

M.-H. Baik

Mu-Hyun (“Mookie”) Baik

Date of birth:	May 28, 1970
Position:	Professor of Chemistry, Korea Advanced Institute of Science and Technology (KAIST) and Associate Director, Institute for Basic Science (IBS)
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ORCID:	0000-0002-8832-8187
Education:	1995 Vordiplom, Heinrich-Heine-Universität Düsseldorf 2000 PhD with Prof. Cynthia K. Schauer, University of North Carolina, Chapel Hill 2000–2003 Postdoc with Prof. Richard A. Friesner, Columbia University, New York
Awards:	2018 Friedrich Wilhelm Bessel Award, 2007 Alfred P. Sloan Research Fellow, 2007 NSF-CAREER Award, 2006 Cottrell Scholar Award
Research:	Computational modeling of organometallic and organic reaction mechanisms, rational design of catalytic reactions
Hobbies:	Cooking, opera, woodworking

The author presented on this page has recently published his **10th article** in *Angewandte Chemie* in the last 10 years:

“Stereo-inversion of Unactivated Alcohols by Tethered Sulfonamides”: S. Cook, P. T. Marcyk, L. R. Jefferies, D. I. AbuSalim, M. Pink, M.-H. Baik, *Angew. Chem. Int. Ed.* **2019**, DOI: 10.1002/anie.201812894; *Angew. Chem.* **2019**, DOI: 10.1002/ange.201812894.

My favorite place on earth is the corner seat, upstairs, at Awful Arthur’s Oyster bar in the Outer banks, North Carolina, on a stormy day.

When I’m frustrated, I go to see an opera, get a massage, and open a good bottle of wine.

I chose chemistry as a career because I wanted to play around and have fun all day long. I’d do it for free, but they pay me. Unbelievable!

If I were not a scientist, I would be an unhappy lawyer or a miserable politician.

My worst nightmare is a scientific world dominated by Impact Factors. It seems we are heading there—scary!

My biggest motivation is seeing how quickly my students become better scientists.

The downside of my job is that I have to retire with 65, unless Korean law changes.

If I won the lottery, I would book a ridiculously expensive vacation in the Maldives and write a rebuttal letter on the beach.

The best advice I have ever been given is not to take myself too seriously and enjoy each day.

I can never resist a good bottle of wine and a good, intense dispute with friends (no politics and no religion, please).

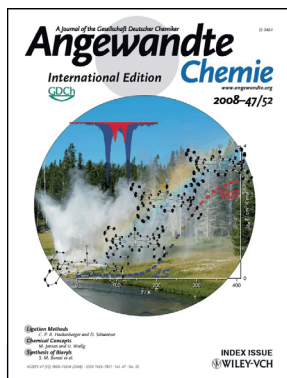
My favorite authors (fiction) are Robert Musil and Fyodor Dostoyevsky.

In retrospect, I would never again hesitate to accept the offer to move to Korea. The best decision of my life.

My 5 top papers:

1. “Computing Redox Potentials in Solution: Density Functional Theory as A Tool for Rational Design of Redox Agents”: M.-H. Baik, R. A. Friesner, *J. Phys. Chem. A* **2002**, *106*, 7407. (Thought “this should work” and found “yes, it does work”.)
2. “*cis,cis*-[(bpy)₂Ru^{VO}]₂O⁴⁺ Catalyzes Water Oxidation Formally via *in Situ* Generation of Radicaloid Ru^{IV}–O”: X. Yang, M.-H. Baik, *J. Am. Chem. Soc.* **2006**, *128*, 7476. (This was really hard work, but I was 100% satisfied with a paper for the first time.)
3. “Mechanistic Insight into the Diastereoselective Rhodium-Catalyzed Pauson–Khand Reaction: Role of Coordination Number in Stereocontrol”: H. Wang, J. R. Sawyer, P. A. Evans, M.-H. Baik, *Angew. Chem. Int. Ed.* **2008**, *47*, 342; *Angew. Chem.* **2008**, *120*, 348. (My first truly predictive work, where computations suggested a novel experiment that worked like a charm.)
4. “Understanding Intrinsically Irreversible, Non-Nernstian, Two-Electron Redox Processes: A Combined Experimental and Computational Study of the Electrochemical Activation of Platinum(IV) Antitumor Prodrugs”: M. C. McCormick, K. Keijzer, A. Polavarapu, F. A. Schultz, M.-H. Baik, *J. Am. Chem. Soc.* **2014**, *136*, 8992. (Can we do meaningful experimental work ourselves and publish it? Yes, we can.)
5. “Catalytic Borylation of Methane”: K. T. Smith, S. Berritt, M. González-Moreiras, S. Ahn, M. R. Smith III, M.-H. Baik, D. J. Mindiola, *Science* **2016**, *351*, 1424. (Everybody is so crazy about publishing in Magazines. Let’s do one and move on with our lives.)

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The work of M.-H. Baik has been featured on the cover of *Angewandte Chemie*:

“Cyanide: A Strong-Field Ligand for Ferrohemes and Hemoproteins?”: J. Li, R. L. Lord, B. C. Noll, M.-H. Baik, C. E. Schulz, W. R. Scheidt, *Angew. Chem. Int. Ed.* **2008**, *47*, 10144; *Angew. Chem.* **2008**, *120*, 10298.

Author Profile



“My favorite place on earth is the corner seat upstairs at Awful Arthur’s Oyster bar in the Outer banks, North Carolina, on a stormy day. When I’m frustrated, I go to see an opera, get a massage and open a good bottle of wine ...”

Find out more about Mu-Hyun Baik in his Author Profile.