



S. Harder

The author presented on this page has recently published his **10th article** since 2000 in *Angewandte Chemie*:

“Hydrogen Storage in Magnesium Hydride: The Molecular Approach”: S. Harder, J. Spielmann, J. Intemann, H. Bandmann, *Angew. Chem.* **2011**, 123, 4242–4246; *Angew. Chem. Int. Ed.* **2011**, 50, 4156–4160.



The work of S. Harder has been featured on the cover of *Angewandte Chemie*:

“The Heaviest Alkali Metalloene: Structure of an Anionic Cesocene Triple-Decker”: S. Harder, M. H. Prosenc, *Angew. Chem.* **1996**, 108, 101–103; *Angew. Chem. Int. Ed. Engl.* **1996**, 35, 97–99.

## Sjoerd Harder

<b>Date of birth:</b>	March 17, 1963
<b>Position:</b>	Professor of Inorganic Chemistry, University of Groningen (The Netherlands)
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<b>Education:</b>	1981–1986 Undergraduate studies of Chemistry and Physics, University of Utrecht (The Netherlands) 1986–1990 PhD research with Lambert Brandsma, University of Utrecht 1991–1992 Postdoc with Paul von Ragué Schleyer, Universität Erlangen-Nürnberg (Germany) 1992–1993 Postdoc with Andrew Streitwieser, University of California at Berkeley (USA) 1993–1994 Postdoc with Hans-Herbert Brintzinger, Universität Konstanz (Germany) 1995–1998 Habilitation at the Universität Konstanz
<b>Awards:</b>	<b>1991</b> H. J. Backer Award in Organic Chemistry (KNCV); <b>1991</b> Alexander von Humboldt fellow; <b>1992</b> NATO fellow; <b>1994</b> Marie Curie fellow
<b>Current research interests:</b>	Development of heavier Group 2 metal chemistry (Ca, Sr, Ba) and Zn; use of early main group organometallics (especially calcium) in catalysis; advocating the many similarities of early main group and transition metal chemistry; synthesis and applications of early main group metal and zinc hydrides; use of molecular compounds in investigations towards hydrogen storage; development of benzylanthanide chemistry/applications in catalysis and luminescence; polymerization catalysis with Mg, Ca, Sr, Ba, Zn, Group 3 and 4 metal species; use and application of extraordinary large cyclopentadienyl ligands ( $\text{Cp}^{\text{BIG}}$ )
<b>Hobbies:</b>	Travelling to all kinds of remote places; cooking and eating all kinds of cuisines; brewing and drinking all kinds of beverages; roasting all kinds of green coffee; trying to find time for all kinds of water and mountain sports

**When I was eighteen I wanted to be ...** an astronaut—the ultimate travel experience.

**Young people should study chemistry because ...** it is the science that strives to achieve complete understanding and control over matter, that is, the world we live in.

**I am waiting for the day when someone will discover ...** transport by teleportation—a “Beam me up, Scotty!” device.

**If I could be described as an animal it would be ...** a mountain eagle—ever since an eye-to-eye paragliding experience beside one of those majestic birds I keep dreaming of such freedom and ability to fly.

**My favorite book is ...** “Surely, You’re Joking, Mr. Feynman! (Adventures of a Curious Character)” by Richard P. Feynman, a book that not only has historical value but shows that science can be fun when applied to everyday life.

**My motto is ...** keep it simple!

### My 5 top papers:

1. “The Simplest Metallocene Sandwich: the Lithocene Anion”: S. Harder, M. H. Prosenc, *Angew. Chem.* **1994**, 106, 1830–1832; *Angew. Chem. Int. Ed.* **1994**, 33, 1744–1746. (This paper is one of my favorites because it is so simple but shows that, although different in nature, main group metallocenes can be very similar to *d*-block metallocenes.)
2. “Novel Calcium Half-Sandwich Complexes for the Living and Stereoselective Polymerization of Styrene”: S. Harder, F. Feil, K. Knoll, *Angew. Chem.* **2001**, 113, 4391–4394; *Angew. Chem. Int. Ed.* **2001**, 40, 4261–4264. (This paper describes the first well-defined organocalcium catalysts and demonstrates the unique properties of these species.)
3. “Rational Design of a Well-Defined Soluble Calcium Hydride Complex”: S. Harder, J. Brettar, *Angew. Chem.* **2006**, 118, 3554–3558; *Angew. Chem. Int. Ed.* **2006**, 45, 3474–3478. (In the same issue an article appeared that questions “chemical design” let alone “rational design”. Although I strongly oppose this statement, it is true in this case.)
4. “Synthesis, Structure, and Reactivity of a Stabilized Calcium Carbene:  $\text{R}_2\text{CCa}$ ”: L. Orzechowski, G. Jansen, S. Harder, *J. Am. Chem. Soc.* **2006**, 128, 14676–14684. (I enjoy the controversy over defining  $\text{R}_2\text{C}=\text{Ca}$  as a carbene with a double metal–carbon bond.)
5. “Calcium Amidoborane Hydrogen Storage Materials: Crystal Structures of Decomposition Products”: J. Spielmann, G. Jansen, H. Bandmann, S. Harder, *Angew. Chem.* **2008**, 120, 6386–6391; *Angew. Chem. Int. Ed.* **2008**, 47, 6290–6295. (It was a joy to work together with theoreticians and NMR experts on this paper.)