# CV Leif Hammarström - Uppsala University, Sweden

Updated Feb. 2015

Name: Leif Åke Hammarström Born:Uppsala, July 27, 1964

Address: Professor Leif Hammarström; Chemical Physics

Department of Chemistry – Ångström Laboratory

Uppsala University; Box 523; SE-751 20 Uppsala, Sweden Telephone: +46-18-471 3648; +46-704 25 08 32 (cell phone);

Fax: +46-18-471 6844

e-mail: Leif.Hammarstrom@kemi.uu.se



#### **ACADEMIC DEGREES**

<u>Doctoral (PhD) degree</u>: 1995, Physical Chemistry at UU (Prof. M. Almgren) <u>Post-doctoral research:</u> 1996 (12 months) Bologna Univ. (Prof. V. Balzani)

<u>Docent</u>: 1999, Physical Chemistry, UU

### **ACADEMIC POSITIONS**

Present position (since 2004): Professor (Chair) of Chemical Physics, permanent.

Uppsala University

Previous positions:

2002-10-01 – 2007-09-30 Research Fellow of the Royal Swedish Academy of Sciences.

2001-02-01 – 2004-06-30 Associate Professor in Physical Chemistry, UU. 1998-01-01 – 2001-01-31 Assistant professor, UU (Research council position).

1997-01-01 – 1997-12-31 Researcher in Physical Chemistry, UU.

### **SUPERVISION**

### Graduate student examinations as main supervisor

Mikael Andersson (2000), STINT postdoc Northwestern Univ. (M. Wasielewski). Now analyst at AstraZeneca (Södertälje).

Helena Berglund Baudin (2001), Project leader at GammaData Instruments (Uppsala).

Malin Abrahamsson (2001), STINT post-doc CalTech (H. B. Gray) 2002-2004, now Project Leader at Fresenius KABI (Uppsala).

Martin Sjödin (2004), VR post-doc CEA Saclay (W. Rutherford) 2005-2007, now Assistant Professor at Dept of Engeneering Sciences, Uppsala Univ.

Magnus Borgström (2005), JSTS post-doc Osaka Univ. (Prof. Miyasaki), now Researcher at KimAB Research Inst, Stockholm.

Staffan Wallin (2005) post-doc Univ of Durham (Jaqueline Cole).

Maria Abrahamsson (2006) VR post-doc at Johns Hopkins University (G Meyer) 2007-2009. Now Assistant Professor at CTH

Tania Irebo (2010). Sales technician, AZPECT Photonics.

Susanne Karlsson (2010) post-doc at EPFL Lausanne (M. Chergui), now position at the Swedish Energy Agency

Erik Göransson (2012) – postdoc pending.

Daniel Streich (2013) post-doc PSI (Switzerland)

Jonas Petersson (Dec 2014) postdoc pending

I have advised 20 post-docs, of which 4 are presently active in my group

<u>**Publications:**</u> Over 150 publications in peer-reviewed international journals. More than 6000 citations; h-index: 46.

## **Commissions of trust/organization (selection):**

- Head of the department 2006-2014. Director of department board 2006-2014.
- Co-coordinator of the Swedish Consortium for Artificial Photosynthesis 1997-present. Co-coordinator of an EU RTN 1996-2000. Work-package leader in the EU project "SOLAR-H2" 2008-2011, involving 20 PIs.
- Chairman of the Solar Energy Platform Sweden.
- Member of the international advisory board for the ANSER Centre for Basic Solar Energy Research at Northwestern University/Argonne Natl. Lab.
- Member of the International Advisory Board of *Inorganic Chemistry* (2010 2012) and *Journal of Physical Chemistry* (2012 2014)
- Elected chairman for two Gordon Research Conferences: "Electron Donor-Acceptor interactions" (2008, Newport) and "Renewable Energy: Solar Fuels" (2011, Ventura).
- Co-chair for the International Conf. on the Photochemical Conversion and Storage of Solar Energy (460 participants) in Uppsala, 2006.
- Reviewer for both rounds of review for DOE Energy Innovation Hub on "Solar Fuels" (one award of 122 MUSD) in 2010, with reverse panel review Washington DC June 23-25, 2010.
- On review panel for the Swedish Research Council several times. Reviewed proposals for e.g. the Swedish Foundation for Strategic Research, the Swedish Energy Agency, the European Science Foundation, the Department of Energy (US), the Swiss Research Council and Science Foundation Ireland.
- Review panelist for on site evaluation of the CEA Saclay (Paris) unit on Structural biology, bioenergetics and biological mechanisms, March 2010. Appointed by AERES (government).
- Reviewer/evaluator for professor recruitments and promotions at e.g. UC Berkely, FU Berlin, Yale Univ., Johns Hopkins Univ., Michigan State Univ., EPFL Lausanne, Ben Gurion Univ. and Chalmers Univ.
- Faculty opponent/external examiner for PhD thesis defence at Chalmers University (Gothenburg) 2001 and 2010, Dublin City Univ. 2001, Univ of Nantes 2007, Univ. of Newcastle 2008, Univ. of Jyväskylä 2013. Served on PhD thesis committees several times.
- Guest Editor of *Acc. Chem. Res.* issue 12, 2009; Guest Editor of *Energy & Environmental Science*, issue 7, 2011; Guest Editor for Honorary Issue of *J. Phys. Chem. B*, issue 46 2010 (published Nov 18), Guest Editor *AMBIO* Special Report "Capturing the Sun" (April 2012).

#### Awards, major grants, scientific honors etc.

- May 2013: Elected Member of the Royal Society of Sciences.
- May 2004: Nominated as No 1 and offered two open Chair Professorships: Chemical Physics (Uppsala Univ) and Molecular Electronics (Royal Inst. Techn., Stockholm).
- 2003: The Thuréus prize by the Royal Society of Sciences (Uppsala).
- 2002: Five-year Research Fellow position at the Royal Swedish Academy of Sciences.
- 2001, Awarded an Individual Grant for the Advancement of Research Leaders, including 10 MSEK from The Swedish Foundation for Strategic Research (SSF).
- Voted best chemistry teacher of the year by the Uppsala chemistry student association ("IUPAK").

- Current Major grants:
  - "Molecular Solar Energy Sciences" 1.1MEuro/year 2012-2016, K&A Wallenberg foundation, 7 PI:s; role: co-PI.
  - Artificial Photosynthesis, 1 MEuro/year 2013-2016, Swedish Energy Agency, 7 PIs; role: co-PI
  - Swedish Research Council 130 kEuro/year 2013-2016, individual grant.
  - Swedish Research Council 450 kEuro/year 2015-2018, 4 PIs, role: PI

## **Invited talks at international conferences**

I have been *invited speaker* at more than 60 international conferences (2005-present) (in addition to several oral presentations).

In addition, I have been invited as *Plenary/Keynote speaker* at the following conferences:

- Gordon conference, Electron Donor-Acceptor Interactions, Newport (US) Aug. 8-13, 2004.
- 2nd International Symposium on Hydrogen in Matter, Uppsala (SE) June 13-17, 2005
- EUCHEM meeting: Organic Free Radicals Bergen (NO) July 9-13, 2006.
- US DOE meeting on Solar photochemical energy conversion, Washington, June 4-7 2006.
- Gordon conference, Renewable energy: solar fuels, Ventura (CA) Jan 21-26, 2007
- 13th Int. Conf. on Unconventional Photoactive Systems, Chicago, Aug 5-9, 2007.
- XXIInd IUPAC Symposium on Photochemistry, Göteborg (SE) July 28-31, 2008.
- Gordon conference, *Photochemistry*, Bryant College (US), Jul 5-10, 2009.
- Gordon conference, Electron Donor-Acceptor Interactions, Newport (US) Aug. 8-13, 2010.
- 15<sup>th</sup> International Photosynthesis Congress, Beijing, Aug 23-28, 2010 (Symposium chair and overview lecture)
- Gordon Conference, Inorganic Reaction Mechanisms, Galvestone (US), March 6-11, 2011
- First EuCheMS/RSC Inorganic Chemistry Conference, Manchester (UK), April 11-14, 2011.
- RSC/MIT Energy Club, 4<sup>th</sup> Int. Conf. on Advancing the Chemical Sciences: "Challenges in Renewable Energy", MIT, Boston, July 5-8, 2011.
- 2<sup>nd</sup> European Energy Conference, Maastricht (NL), April 16-20, 2012
- Int. Conf. on Photochemical Conversion and Storage of Solar Energy (IPS-19), CalTech July 2012
- Dalton Discussion 13: Inorganic Photophysics and Chemistry Sheffield, Sept 10-12, 2012.
- 16th Int. Congress on Photosynthesis, S:t Louis (USA) Aug 11-16, 2013.
- Gordon Research Seminar on *Renewable Energy Solar Fuels* Ventura, Jan. 19-24, 2014.
- Gordon Research Conference on Renewable Energy Solar Fuels Ventura, Jan. 18-19, 2014.
- 20<sup>th</sup> International Conference on the Photochemical Conversion and Storage of Solar Energy, Berlin, July 27-Aug 1, 2014.

#### Presentations to non-academic audiences:

Eight interviews in main Swedish TV and main Scandinavian newspapers 2000 ff, most recently Vetenskapsradion (2012 +2013), Dagens Nyheter (2011), and Aftonbladet (2011). Several interviews in specialized magazines. Several talks for high-school students, teachers, local government officials, societies, trade union groups etc.