

Curriculum vitae

Name, Date of birth: Britt-Marie Steenari, born Nielsen, 1953-07-01
Department of Chemical and Biological Engineering; Industrial Materials Recycling;
Chalmers University of Technology

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Education and degrees

1977 Master of Science in Chemistry, Chalmers University of Technology, Göteborg
1988 Licentiate in Inorganic Chemistry. Thesis title: *Reactions in solids during fluidized bed combustion*
Licentiate thesis, Dept. of Inorganic Chemistry, Göteborg University and Chalmers University of Technology.
Supervisor: Prof. Oliver Lindqvist, Chalmers
1998 PhD in Environmental Science, thesis title *Chemical Properties of FBC Ashes*. Department of
Environmental Inorganic Chemistry, Chalmers University of Technology, Göteborg, Supervisor: Prof. Oliver
Lindqvist, Chalmers
2006 Associate professor in Environmental Inorganic Chemistry, Chalmers
2010 Professor (Swedish: biträdande professor) in Environmental Inorganic Chemistry, Chalmers
2013 Professor in Industrial Materials Recycling, Chalmers

Current and previous positions

Product developer and head of the food chemistry laboratory, NordBakels AB, Göteborg 1976-10-01 to
1980-09-30
1980 to 1994 Research assistant position, Department of Inorganic Chemistry, Chalmers University of
Technology, Göteborg /Göteborg University. During 1987-1994 part time work 25% due to part time
parental leave.
1994 to 1998 PhD candidate at Environmental Inorganic Chemistry, Chalmers
1998-2006 Researcher position at Environmental Inorganic Chemistry, Chalmers
2006-2010 Associate professor at Environmental Inorganic Chemistry, Chalmers
2010 Appointment as professor (Swedish: biträdande professor) in Environmental Inorganic Chemistry,
Chalmers
2013 Appointment as professor in Industrial Materials Recycling, Chalmers

Supervising experience

Kuanrong Qiu (Department of Environmental Inorganic Chemistry, Chalmers) PhD 2000
Zareen Abbas (Department of Inorganic Chemistry, Göteborg University) PhD 2002
Caterina Camerani (Department of Environmental Inorganic Chemistry, Chalmers) PhD 2003
Quang Tran (Department of Environmental Inorganic Chemistry, Chalmers) PhD 2004
Magda Wilewska (Department of Environmental Inorganic Chemistry, Chalmers) Licentiate 2004
Joakim Björnström (The graduate school Natural Materials in Environmental Science and Cultural
Conservation, Department of Chemistry Göteborg University) PhD 2006
Yulia Kalmykova (The graduate school Natural Materials in Environmental Science and Cultural Conservation,
Göteborg University and Department of Environmental Inorganic Chemistry). Licentiate 2006
Kristin Balksten (The graduate school Natural Materials in Environmental Science and Cultural Conservation,
Göteborg University; Department of Environmental Inorganic Chemistry) PhD 2007
Karin Karlfeldt (Environmental Inorganic Chemistry, Chalmers) Licentiate 2006, PhD June 2010.

Teaching experience

Examiner for candidate thesis student projects (Bachelor level) (2010 -)
Lecturer in the course General and Inorganic Chemistry for the first year undergraduate students of
Chemical Engineering 180hp program

Examiner and lecturer in the course Chemistry of Products given for third year Bachelor students
 Examiner and lecturer in the course Waste management at Master's level
 Diploma of Higher Education, Chalmers 21hp of pedagogical courses (Pedagogik för Chalmerslärare, Philosophies of learning, Supervision of Research)

National and international assignments of importance

Manuscript referee for: Environmental Science & Technology, Energy & Fuels, Energy, Fuel, Biomass and Bioenergy, Hazardous Materials, Environmental Technology, Bioresource Technology, Waste Management, Fuel Processing Technology and International Journal of Architectural Heritage.

Member of the evaluation committee at more than 20 dissertations, faculty opponent at 3 doctoral dissertations and opponent at 3 licentiate seminars.

Pre-reviewer of 2 PhD theses at Åbo Akademi Institutionen för kemiteknik during 2011 and 2012

Reviewer of an application to full professor in Inorganic Chemistry, especially technical inorganic chemistry at Umeå University 2012

Member of two evaluation panels for applications to VR 2009 and 2010.

Member of the Formas elector group 2009.

Acting as external expert in evaluation of FP7-ENV applications 2012-

Member of the advisory board of the Competence Centre Recycling at Chalmers

Member of the national competence centre for Gasification from 2011. Member of the steering group of the Chalmers node of this center.

Board member of the user association FASM at Maxlab, Lund

Member of an advisory group for XAS methods in the MaxIV project

Best paper award at the 18th Int. Conf. on FBC, 2005 Paper No: FBC2005-78017

Current external funding

Project	Granting Agency	Years	Funding per year	Total amount
Graduate school POWRES	Formas	2009-2013	1 500 kSEK	7 560 kSEK
Metal recovery from MSWI ash	Formas	2010-2014	1 900 kSEK	5 757 kSEK
Metal recovery from MSWI ash	Avfall Sverige	2010-2014		850 kSEK
Speciation of trace metals in ash	Swedish Energy Agency	2009-2013	Differing between the years	2 400 kSEK
Industrinära Tvärvetenskaplig Återvinningsforskning	Vinnova	2010-2014	Differing between the years	10 000 kSEK
Recycling of TiO ₂ from paint waste	Akzo Decorative Paints	2011-2014	400 kSEK	1 200 kSEK
Mistra Closing the loop - Phosrec	MISTRA	2013-2015	Differing between the years	2 520 kSEK

Innovation and outreach activities

2000-2009 coordinator of the graduate school Natural Materials in Environmental Science and Cultural Conservation, Göteborg University and Chalmers University of Technology.

2009-2013 coordinator of the graduate school Chemical Engineering Chalmers.

2008-ongoing coordinator of the graduate school Polytechnic Waste Research in Sweden – POWRES (financed by Formas)

From Jan 2012 coordinator for the Chalmers Centre for Recycling – CCR hosted by Industrial Materials Recycling

Co-operation with several departments at Chalmers within the Areas of Advance Energy, Materials and Production, the University of Borås, Lund University, Umeå University (prof.

Stellan Marklund) and with SLU (prof. Ingmar Persson), Katolieke Universitet Leuven Belgium (prof Koen Binnemans), Technische Universität Bergakademie Freiberg (prof Broder Merkel), V.N.Karazin Kharkiv National University, School of Ecology, Ukraina (associate professor Kateryna Utkina), NTNU Norway (Professors Gabriella Tranell and Ragnhild Aune), VTT (Dr Margareta Wahlström), Chalmers Industriteknik – CIT, Stena Metall AB, Eka Chemicals AB, Göteborg Energi AB, SP AB, Midsummer AB, Akzo Decorative Paints UK, Avfall Sverige, Elkretsen, Renova AB, Tekniska Verken Linköping AB and several other companies in the areas materials recycling, combustion and gasification.

Overview of publication records

No. of publications:	98 (<i>Publish or Perish</i>)
Total no: of citations:	1396 (<i>Publish or Perish</i>)
Hirsch index:	23 (<i>Publish or Perish</i>)

Ten most important publications

1. Steenari, B-M and Lindqvist, O. High Temperature Reactions of Straw Ash and the Antisintering Additives Kaolin and Dolomite. *Biomass and Bioenergy*, **14**, 67-76, 1998 (Google scholar 122 citations)
2. Steenari, B-M and Lindqvist, O. Stabilisation of wood ash for recycling to forest soil. *Biomass and Bioenergy*, **13**, 39-50, 1997 (Google scholar 95 citations)
3. K.O. Davidsson, L.-E. Åmand, B.-M. Steenari, A.-L. Elled, D. Eskilsson, B. Leckner "Countermeasures against alkali-related problems during combustion of biomass in a circulating fluidized bed boiler", *Chemical Engineering Science*, Volume 63, Issue 21, November 2008, Pages 5314-5329 (Google scholar 53 citations)
4. Henrik Leion, Erik Jerndal, Britt-Marie Steenari, Simon Hermansson, Mikael Israelsson, Erik Jansson, Martin Johnsson, Rebecka Thunberg, Albin Vadenbo, Tobias Mattisson and Anders Lyngfelt, "Solid fuels in chemical-looping combustion using oxide scale and unprocessed iron ore as oxygen carriers", *Fuel*, Volume 88, Issue 10, October 2009, Pages 1945-1954 (Google scholar 46 citations)
5. Anita Pettersson, Maria Zevenhoven, Britt-Marie Steenari, Lars-Erik Åmand, "Application of chemical fractionation methods for characterisation of biofuels, waste derived fuels and CFB co-combustion fly ashes", *Fuel* 87 (2008) 3183–3193 (Google scholar 38 citations)
6. Davidsson, K., Steenari, B-M. and Eskilsson, D., "Kaolin Addition during Biomass Combustion in a 35 MW Circulating Fluidised-Bed Boiler" *Energy & Fuels*, 2007, 21 pp. 1959-1966 (Google scholar 36 citations)
7. Camerani, M.C., Somogyi, A., Drakopoulos, M. and Steenari, B-M. "Synchrotron radiation induced μ -X-ray fluorescence spectroscopy on municipal solid waste fly ashes", *Spectrochimica Acta Part B* 56, 1355-1365, 2001 (Google scholar 24 citations)
8. Steenari, B-M, Lundberg, A., Pettersson, H., Wilewska-Bien, M. and Andersson, D., "Investigation of ash sintering during combustion of agricultural residues and the effect of additives" *Energy & Fuels* 2009, 23, 5655–5662 (Google scholar 22 citations)
9. Karin Karlfeldt, Christian Ekberg, Gunnar Skarnemark and Britt-Marie Steenari, "Removal of hazardous metals from MSW fly ash - an evaluation of ash leaching methods", *Journal of Hazardous Materials* 173 (2010) 310–317 (Google scholar 15 citations)
10. Karlfeldt Fedje, K., Ekberg, C., Skarnemark, G., Pires, E. and Steenari, B-M., "Initial studies of the recovery of Cu from MSWI fly ash leachates using solvent extraction, *Waste Management & Research* 30(10) 1072–1080, 2012

For full list of publications, see <http://bit.ly/X7pYN8>