

Hilde Poelman

Senior scientist

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Personal details

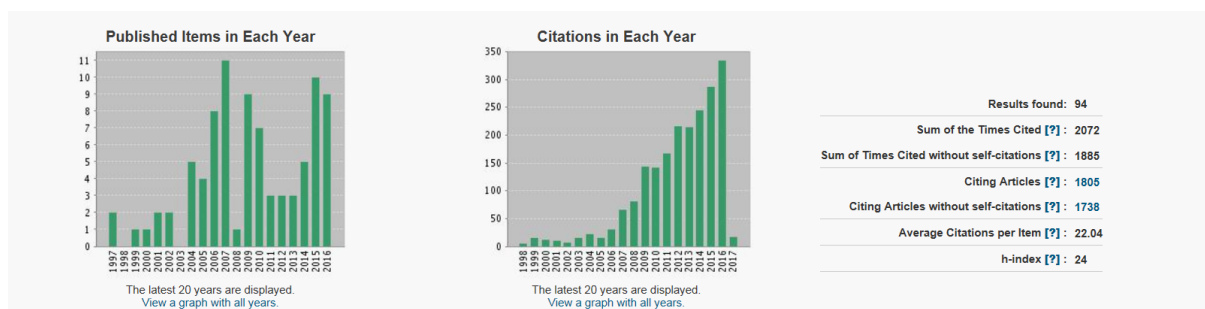
Name	Hilde Poelman
Nationality	Belgian
Date and place of birth	11 May 1963 at Sint-Amandsberg, Belgium
Civil state	Married to Dirk Poelman, two children Stijn and Nika
Address	Heerweg-Zuid 52, 9052 Zwijnaarde

Profile

- PhD in Science: Physics
- Aggregation for secondary education
- Broad experience in:
 - Analysis techniques for solid materials, surfaces and interfaces
 - physicochemical characterisation, in situ and operando research
 - catalysis and photocatalysis
 - synchrotron research
 - general solid state physics
 - thin film deposition techniques

Scientific output

- 102 peer-reviewed publications (94 in WoS, 2047 citations, Hirsch-index of 24 (10/1/2017))
- Co-author of 1 book chapter and co-editor of 1 proceedings;
- 4 times speaker upon invitation;
- Regular proposer and user of synchrotron radiation facilities (ESRF, SOLEIL, SLS) for XAS and XPS measurements (40 proposals, 26 granted);
- UGent biblio: <https://biblio.ugent.be/person/801000771108/bof>



Key publications

Super-dry reforming of methane intensifies CO₂ utilization via Le Chatelier's Principle, L.C. Buelens, V.V. Galvita, H. Poelman, C. Detavernier, G.B. Marin
Science, 354 (2016) 449. IF = 33.1 (2014).

Unraveling the formation process of novel bimetallic Pt-Ga/Mg(Ga)(Al)Ox catalysts by wavelet transformed analysis of in situ XAS.

M. Filez, H. Poelman, E.A. Redekop, V.V. Galvita, R.K. Ramachandran, J. Dendooven, C. Detavernier, G.B. Marin,
Chemistry of Materials 26 (2014) 5936; IF = 8.535 (2013), citations: 8.

Nature of active sites in total toluene oxidation over CuO-CeO₂/Al₂O₃

U. Menon, H. Poelman, V. Bliznuk, V. V. Galvita, D. Poelman, G.B. Marin
Journal of Catalysis 295 (2012) 91; IF = 5.787, citations: 35.

New supported vanadia catalysts for oxidation reactions prepared by sputter deposition

H. Poelman, B.F. Sels, M. Olea, K. Eufinger, D. Poelman, J.S. Paul, B. Moens, I. Sack, V. Balcaen, F. Bertinchamps, E. M. Gaigneaux, P.A. Jacobs, G.B. Marin, R. De Gryse,
Journal of Catalysis 245 (2007) 156; IF = 5.288 (2009), citations: 25

Determination of the V2p XPS binding energies for different vanadium oxidation states

G. Silversmit, D. Depla, H. Poelman, G. B. Marin, R. De Gryse.
J. Electron Spectroscopy and Related Phenomena 135 (2004) 167, IF: 1.172, citations: 367.

Key services

- Member of 10 doctoral jury's
- Member of the LCT department council
- Coach/promoter of 10 master thesis and 9 PhD students
- Member of the peer review committee PRC4, SOLEIL synchrotron
- Referee for scientific publications in 15 scientific journals
- Co-organizer of 2 conferences EL2002 (Ghent) and ICTF14&RSD2008 (Ghent)

Career in short

2016- ...	80% senior scientist 80% senior researcher at the Laboratory for Chemical Technology
2009-2016	50% senior scientist Half-time senior researcher at the Laboratory for Chemical Technology
1991-2009	50% post-doc researcher Half-time postdoc researcher at the department of Solid State Sciences
1991	PhD in Science, Physics (promoter J. Vennik) at Ghent University, with thesis: <i>Studie van de oppervlakeigenschappen van V₂O₅ en V₆O₁₃ met behulp van elektronenenergieverliesspectroscopie en aanverwante technieken.</i>
1985-1991	PhD researcher Full-time researcher at the department of Solid State Sciences.
1985	Graduate degree in Science, Physics , at Ghent University, with master thesis: <i>Studie van de invloed van de oppervlakbehandeling op p- en n-type InP Schottky-barrières.</i>