

Curriculum Vitae

Personal details

Name: Louis Sileghem
Date of Birth: 1988/06/27
Address: Bellegemstraat 80
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Education

2009-2011: **Master of Electromechanical Engineering: Mechanical Energy Engineering (Ghent University)**
Graduated summa cum laude
Master thesis: Alcohol as fuel for spark ignition engines: Experimental Study.

2006-2009: **Bachelor of Electromechanical Engineering (Ghent University)**
Graduated magna cum laude

2000-2006: Latin-Mathematics (Sint-Niklaasinstituut Zwevegem - Pleinschool Kortrijk)
Secondary School Laureate

Working Experience

Oct 2011- present: **PhD fellowship of the Research Foundation – Flanders, FWO (Ghent University)**
Study of the combustion of blends of gasoline, alcohols and water, in advanced internal combustion engines

Foreign research stays during PhD:

- Argonne National Laboratory (Chicago, IL, USA) 4 months, 2014
FWO grant for a long stay abroad
- Lund University (Lund, Sweden) 4 months, 2012-2013
FWO grant for a long stay abroad

Skills

Languages: Dutch: mother tongue
English: good
French: intermediate level

Computer skills: MS Office, Matlab, GT-power, Solidworks, AutoCAD, Maple, Java, Fluent

Extra-curricular activities

Youth club: 12 year member, 5 year leader of Scouts Zwevegem
Organized several events, camps, evenings

Music: Guitar, drums

Sport: Cycling, snowboarding

Lead author

- L. Sileghem, J. Vancoillie, J. Demuynck, J. Galle, S. Verhelst, Alternative Fuels for Spark-Ignition Engines: Mixing Rules for the Laminar Burning Velocity of Gasoline–Alcohol Blends, *Energy & Fuels*, 26 (2012) 4721-4727.
- L. Sileghem, V.A. Alekseev, J. Vancoillie, K.M. Van Geem, E.J.K. Nilsson, S. Verhelst, A.A. Konnov, Laminar burning velocity of gasoline and the gasoline surrogate components iso-octane, n-heptane and toluene, *Fuel*, 112 (2013) 355-365.
- L. Sileghem, V.A. Alekseev, J. Vancoillie, E.J.K. Nilsson, S. Verhelst, A.A. Konnov, Laminar burning velocities of primary reference fuels and simple alcohols, *Fuel*, 115 (2014) 32-40.
- L. Sileghem, A. Coppens, B. Casier, J. Vancoillie, S. Verhelst, Performance and emissions of iso-stoichiometric ternary GEM blends on a production SI engine, *Fuel*, 117 (2014) 286-293.
- L. Sileghem, D. Bosteels, J. May, C. Favre, S. Verhelst, Analysis of vehicle emission measurements on the new WLTC, the NEDC and the CADC, *Transportation Research Part D: Transport and Environment*, 32 (2014) 70-85.
- L. Sileghem, T. Wallner, and S. Verhelst, S. (2015). A quasi-dimensional model for SI engines fueled with gasoline-alcohol blends: Knock modeling. *Fuel*, 140 217-226.

Co-author

- J. Vancoillie, J. Demuynck, L. Sileghem, M. Van De Ginste, S. Verhelst, Comparison of the renewable transportation fuels, hydrogen and methanol formed from hydrogen, with gasoline – Engine efficiency study, *International Journal of Hydrogen Energy*, 37 (2012) 9914-9924.
- J. Vancoillie, J. Demuynck, L. Sileghem, M. Van De Ginste, S. Verhelst, L. Brabant, L. Van Hoorebeke, The potential of methanol as a fuel for flex-fuel and dedicated spark-ignition engines, *Applied Energy*, 102 (2013) 140-149.
- J. Vancoillie, L. Sileghem, S. Verhelst, Development and validation of a quasi-dimensional model for methanol and ethanol fueled SI engines, *Applied Energy*, 132 (2014) 412-425.
- J.D. Naucler, L. Sileghem, E.J.K. Nilsson, S. Verhelst and A.A. Konnov, (2015). Performance of methanol kinetic mechanisms at oxy-fuel conditions. *Combustion and Flame*.