

Curriculum Vitae
of
Doctor
Olof Erlandsson

Born: 1972
Address: Hjälnsavägen 61
SE-372 62 Bräkne-Hoby
SWEDEN
Phone: +46 (0)70 2361822
E-mail: olof.erlandsson@icer.se
Homepage: <http://www.icer.se>
Family: Maria and our son Axel



Current duties

Advanced Senior Engineer

September 20th, 2010 – present Titan X Engine Cooling AB Sölvesborg

- *Research and pre-development of heavy-duty vehicle engine cooling systems incl. waste heat recovery. Heat exchanger conceptual design, performance analysis and modelling.*

Experience

Consultant

April 28th, 2003 IC-Engine Research

- *Technical advisor and consultant within internal combustion (IC) engines, thermodynamics and product development. Experimental investigations, analysis and modelling of advanced and innovative IC engine concepts.*
- *Registered firm, VAT number: SE721014331401 (Sweden: Innehar F-skattebevis)*

Laboratory Manager/Acoustics specialist

Sept. 29th, 2008 – Sept. 10th, 2010 Atlas Copco AB RCE Karlskrona

Research and development engineer

Jan. 19th, 2004 – Sept. 26th, 2008 SCANIA CV AB Södertälje

- *Engine pre-development – Advanced Combustion. Combustion concepts and development of alternative fueled engine systems.*

Ph.D. student

Dec. 15th, 1997 – Mar. 28th, 2003 Lund University Lund

- *Ph.D. student at Lund Institute of Technology, department of Heat and Power Engineering, division of Combustion Engines, incl. some educational responsibility. Research within HCCI engine systems for stationary engines. Engine system modelling, simulation and experiments.*

Mechanical engineer

May 5th - Dec. 10th, 1997 Ingenjörprojekt AB Karlshamn

- *Consultant in mechanical engineering and product development, mostly within the automotive industry.*

Education

M.Sc. in Mechanical Engineering

- 1991 - 1998 Lund University Lund
- *Master of Science (180p) in Mechanical Engineering – Product Development. M.Sc. thesis in Combustion Engines (20p). M.Sc. degree September 11th, 1998*

Ph. D. in Mechanical Engineering

- 1998 - 2002 Lund University Lund
- Thesis: “Thermodynamic Simulation of HCCI Engine Systems”*
Licentiate degree (80p) October 5th, 2000
Doctoral degree (160p) December 6th, 2002
in Heat and Power Engineering – Internal Combustion Engines

Additional

Military Service

- Aug. 30th, 1993 – Nov. 4th, 1994 Swedish Marine Corps Karlskrona
- *Corporal in technical service*
 - *Practical education in mechanics, hydraulics and electronics.*

Workshop skills

- *Grew up in Blekinge (county in S.E. part of Sweden) where spent a tremendous amount of time in the workshop at the parents farm*
- *Special interest in old machinery, car and engine restoration, house restoration, ...*
- *Practical skills in mechanics, electronics, measurement techniques*

Software skills

- *Expert user of MS-Office, MATLAB, ...*
- *Experience of KULI, ANSYS (Spaceclaim/AIM/Discovery), Adobe FlashMX/ Actionscript, VBA, GT-Power, AVL Indicom/Concerto, AutoCAD, CATIA, Pro/E ...*

Publications

- Lund University Lund
- *“Demonstrating the Performance and Emission Characteristics of a Variable Compression Ratio”, Alvar-Cycle Engine, Olof Erlandsson, Gunnar Lundholm, Fredrik Söderberg, Bengt Johansson, SAE 982682*
 - *“Alvar Engine, An Engine with variable compression ratio, Experiments and tests”, Olof Erlandsson, M.S.c. thesis, ISRN LUTMDN/TMVK-5304--SE*
 - *“Hydrocarbon (HC) Reduction of Exhaust Gases from a Homogeneous Charge Compression Ignition (HCCI) Engine Using Different Catalytic Mesh Coatings”, Olof Erlandsson, Bengt Johansson, Fredrik Silversand, SAE 2000-01-1847*
 - *“Experiments and Simulation of a Six-Cylinder Homogenous Charge Compression Ignition (HCCI) Engine”, Jan-Ola Olsson, Olof Erlandsson, Bengt Johansson, SAE 2000-01-2867*
 - *“Development of an Engine System Simulation Software Package – ESIM”, Olof Erlandsson, Licentiate thesis, ISRN/LUTMDN/TMVK – 7043*
 - *“Tidiga Förbränningsmotorers Prestanda – Studie baserad på Statens Maskinprovningars meddelanden 1899-1995”, Olof Erlandsson, Teknisk rapport ISSN 0282 – 1990 ISRN/LUTMDN/TMVK – 3197 – SE (Swedish only)*
 - *“Early Swedish Hot-Bulb Engines – Efficiency and Performance Compared to Contemporary Gasoline and Diesel Engines”, Olof Erlandsson, SAE 2002-01-0115*
 - *“Analysis of a 6 Cylinder Turbocharged HCCI Engine Using A Detailed Kinetic Mechanism”, Guiseppe Cantore, Luca Montorsi, Fabian Mauss, Per Amnéus, Olof Erlandsson, Bengt Johansson, Thomas Morel, ASME Internal Combustion Engine Division, Spring Technical Conference, April 14 – 17, 2002 Rockford, Illinois, 2002-ICE-457*

- “Simulation of HCCI – Addressing Compression Ratio and Turbo Charging”, Olof Erlandsson, Patrik Einewall, Bengt Johansson, Per Amnéus, Fabian Mauss, SAE 2002-01-2862
- “Thermodynamic Simulation of HCCI Engine Systems”, Olof Erlandsson, Ph.D. thesis, ISBN 91-628-5427-5
- “Combustion in Homogeneous Charge Compression Ignition (HCCI) engines”, Olof Erlandsson, Bengt Johansson, Lund Institute of Technology (educational material, “Gröna Bilens utbildningsatsning” 2004)
- *The Effect of Unconventional Piston Movement on SI Engine Combustion and Emissions*, O. Stenlås, O. Erlandsson, R. Egnell, B. Johansson, E. Alm, M. Alaküla, F. Mauss, SAE 2005-01-1170
- “Water-Based Rankine-Cycle Waste Heat Recovery Systems For Engines: Challenges And Opportunities”, Gunnar Latz, Olof Erlandsson, Thomas Skåre, Arnaud Contet, Sven Andersson, Karin Munch. 3rd International Seminar on ORC Power Systems, 2015 (Best paper award!)
- “On Handling Waste Heat from Waste Heat Recovery Systems in Heavy-Duty Vehicles”, Olof Erlandsson, Thomas Skåre, Arnaud Contet, SAE 2015-01-2792
- “Performance Analysis of a Reciprocating Piston Expander and a Plate Type Exhaust Gas Recirculation Boiler in a Water-Based Rankine Cycle for Heat Recovery from a Heavy Duty Diesel Engine”, Gunnar Latz, Olof Erlandsson, Thomas Skåre, Arnaud Contet, Sven Andersson, Karin Munch, *Energies* 2016, 9, 495; doi:10.3390/en9070495
- “Design of a Thermoelectric Generator for Waste Heat Recovery Application on a Drivable Heavy Duty Vehicle”, Risseh, A., Nee, H., Erlandsson, O., Brinkfeldt, K., Contet, A., Frobenius, F., Gaiser G., Saramat A., Skåre, T., Nee, S., Dellrud, J., *SAE Int. J. Commer. Veh.* 10(1):2017, doi:10.4271/2017-01-9178
- “Exhaust waste heat recovery from a heavy-duty truck engine: Experiments and simulations”, J. Rijpkema, O. Erlandsson, S.B. Andersson, K. Munch, *Energy* 238 (2022) 121698, 202178
- “The Electrochemical Commercial Vehicle (ECCV) Platform.”, Johansson, M.; Contet, A.; Erlandsson, O.; Holmbom, R.; Höckerdal, E.; Jonsson, O.L.; Jung, D.; Eriksson, L., *Energies* 2024, 17, 1742.
- Inventor: WO2008111904, WO2009045154, WO2010143998, SE0701545, WO2014123474

2024-09-25