

CV – Asbjørn Leth Vonsild

Born 17th of September 1974, Denmark.

Selected roles:

- Member of RTOC (Refrigerant Technical Options Committee), the advisory group on refrigerants for the Montreal Protocol under UNEP. Lead author on the chapter for refrigerant properties.
- Chair of SC61D, the steering committee for among others, IEC 60335-2-40, the safety standard for A/C, heat-pumps and dehumidifiers.
- Former convenor and project leader for the development of IEC 60335-2-40 Ed. 7.
- Convenor of ISO/TC86/SC8/TF1, the Task Force working on aligning ISO 817 and ASHRAE 34.
- Chair of the Danish mirror committee for standards within large refrigeration systems.
- Member of CEN/TC182/WG6, the group that works on the next version on EN378, the European safety standard for larger refrigeration, A/C and heat-pump systems.
- Member of ISO/TC86/SC1/WG1, the group that works on ISO5149, the international safety standard for larger refrigeration, A/C and heat-pump systems.
- Member of CEN/TC182/WG2, the group that works on components for refrigeration, project manager for the ISO 24664 pressure relieve device standard, which is to replace EN 13136, and previously project manager for the ISO 21922:2021 valve standard.
- Member of CEN/TC182/WG9, the group that works on updating the ISO 14903 tightness standard.
- Regularly examiner on Engineering and Master of Science studies at Danish Technical University and Aarhus University.
- Supplier of the data for creating and maintaining the UNEP System safety standards tool: <https://ozone.unep.org/system-safety-standards>

Jobs:

June 2015 -	Vonsild Consulting ApS: Independent consultant focusing on safety standards, refrigerants and related legislation. Participating in international standardization work in ISO, IEC and CEN. Helping customers with transitioning to environmentally friendly refrigerants.
2010-2015	Danfoss: Head of Refrigerants and standards. Coordinating refrigerant policies for Danfoss AC, following trends and participating in standardization within safety standards. A special focus has been on flammable refrigerants and relevant standards and legislation.
2009	Danfoss: Business development for central research department. One area identified as especially needing attention was components for flammable refrigerants. Standards were identified as crucial for the market.
2005-2008	Danfoss: Head of a technology department. Very broad area of technologies. One of the activities was starting the development of components for CO ₂ refrigerant. We started with bottle coolers, but changed focus to supermarket refrigeration. The use of CO ₂ as refrigerant has grown exponentially since.
2003-2004	Danfoss: Technology engineer, focusing on valves and sensors.
2000-2003	LEGO: Technology scout, display technologies, actuators, robotics, etc.

Education:

- M.Sc. in Computer Systems Engineering from University of Southern Denmark, 2000.
- AP Degree in Leadership & Management, 2007

Selected reports, papers, and articles:

- D. Colbourne; A. Vonsild; Detection of R290 leaks in RACHP equipment using ultrasonic sensors; International Journal of Refrigeration; <https://doi.org/10.1016/j.ijrefrig.2023.03.015>; 2023.
- UNEP; Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee 2022 Assessment Report; 2023, ISBN: 978-9914-733-93-8. (co-lead author Ch. 3 “Refrigerants”)
- Kuijpers, L.J.M.; Kochova N.; Vonsild A.; Current net-zero developments and complexities; Proceedings of the 10th IIR Conference on Ammonia and CO2 Refrigeration Technologies; <http://dx.doi.org/10.18462/iir.nh3-co2.2023.0010>; 2023.
- Kuijpers, L.J.M.; Kochova N.; Vonsild A.; Ways and means for the RACHP Sector to create efficient pathways to reaching net-zero; Proceedings of the 15th IIR-Gustav Lorentzen Conference on Natural Refrigerants; 2022.
- D. Colbourne; A. Vonsild; Refrigerant egression to connected spaces in relation to hydrocarbon charge limits; Proceedings of the 15th IIR-Gustav Lorentzen Conference on Natural Refrigerants; 2022.
- Devotta, S.; Chelani A.; Vonsild A.; Prediction of flammability classifications of refrigerants by artificial neural network and random forest model; International Journal of Refrigeration, Vol. 131; 2021.
- Devotta, S.; Chelani A.; Vonsild A.; Prediction of global warming potentials of refrigerants and related compounds from their molecular structure – An artificial neural network with group contribution method; International Journal of Refrigeration, Vol. 131; 2021
- D. Colbourne; K.O. Suen; T.-X. Li; I. Vince; A. Vonsild; General framework for revising class A3 refrigerant charge limits – a discussion; International Journal of Refrigeration, Vol 117, 2020.
- Kuijpers, L.J.M.; Kochova N.; Vonsild A.; Climate considerations for R/AC equipment operation: is the answer in energy efficiency?; 8th Conference on Ammonia and CO2 Refrigeration Technology. Proceedings: Ohrid, North Macedonia, April 11-13, 2019.
- UNEP; Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee 2018 Assessment Report; 2019, ISBN: 978-9966-076-58-8. (lead author Ch. 2 “Refrigerants”)
- Kuijpers, L.J.M.; Kochova N.; Vonsild A.; Low GWP Conversion; An Energy Efficiency Issue; Proceedings of the 13th IIR-Gustav Lorentzen Conference on Natural Working Fluid 2018.
- Colbourne, D.; Vonsild, A.; Global Warming Potential of Hydrocarbon Refrigerants; Proceedings of the 13th IIR-Gustav Lorentzen Conference on Natural Working Fluid 2018.
- Vonsild, A. Ventilated Enclosures for Flammable Refrigerants, Heat Pumping Technologies Magazine, IEA Heat Pump Centre, Vol. 35, No. 1/2017.
- UNEP; TEAP - Decision XXVIII/4 Task Force Report Safety Standards for Flammable Low Global-Warming-Potential (GWP) Refrigerants; 2017. (co-author)
- Vonsild, A. Charge Limits for Heat Pumps with Flammable Refrigerants, Heat Pumping Technologies Magazine, IEA Heat Pump Centre, Vol. 34, No. 2/2016.
- Vonsild, A. Flammable refrigerants, trends, legislation and standards for the Heat Pump Industry, Heat Pump Centre Newsletter, IEA Heat Pump Centre, Vol. 34, No. 1/2016.

- UNEP; TEAP - Decision XXVII/4 Task Force Report Further Information on Alternatives to Ozone-Depleting Substances; 2016. (co-author)
- UNEP; TEAP - Decision XXVI/9 Task Force Report Additional Information on Alternatives to Ozone-Depleting Substances; 2015. (co-author)
- UNEP; 2014 Report of the Refrigeration, Air Conditioning and Heat Pumps Technical Options Committee; 2015, ISBN: 978-9966-076-09-0. (lead author Ch. 2 “Refrigerants”)
- Funder-Kristensen, T.; Wilkins, R.; Vonsild, A.; New Components for Natural Refrigerants; Proceedings of the 10th IIR-Gustav Lorentzen Conference on Natural Working Fluid 2012.
- Colbourne, D.; Huhren, R.; Vonsild A.; Safety Concept for Hydrocarbon Refrigerants in Split Air Conditioner; Proceedings of the 10th IIR-Gustav Lorentzen Conference on Natural Working Fluid 2012.
- Vonsild, A.; Safety Standards for Hydrocarbon Refrigerants; Proceedings of the 10th IIR-Gustav Lorentzen Conference on Natural Working Fluid 2012.

Awards:

- 2023, IEC 1906 Award, International Electrotechnical Commission: Recognizes exceptional current achievements of experts. The 1906 Award is granted in recognition of exceptional recent individual achievements - a project or other specific contribution - which helped advance IEC activities in a significant way.

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