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[\[Home\]](#) [\[Services\]](#) [\[References\]](#) [\[Curriculum Vitae\]](#) [\[PDFs\]](#)

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Curriculum Vitae

Reinhard W. Serchinger, Ph.D., born in Germany on February 6, 1959, studied mechanical engineering at Technical University Hannover and physics and history of science at Ludwig-Maximilians-University Munich (LMU). He graduated from the latter as Diplom-Physiker (equivalent to the M.Sc. degree in physics). After working in university research in Stuttgart and Munich, he became one of the two chief curators at Heinz-Nixdorf-MuseumsForum (HNF) in Paderborn in 1993.

In 1999, he started his own business as a freelance consultant in applied physics, mainly for the railroad industry. Achievements include the complete thermodynamic engineering of both the diesel-hydrostatic track maintenance vehicle Tm 234 "The Ant" for ADtranz Switzerland and the diesel-electric railcar GTW DMU-2 for Stadler, the partial thermodynamic engineering and the thermodynamic approval tests of the Greek version of the diesel-electric railcar GTW DMU-1 for Stadler, the partial re-engineering of the diesel-electric railcar GTW DMU-1 prototypes for the German branch of Swiss Federal Railways, and solutions to teething troubles in railcars under contract to rolling stock manufacturers. His work in the field of heat generation from municipal solid waste (MSW) by pyrolysis resulted in a patent with original inventor John E. E. Sharpe and Jack R. Metz. Besides his commercial activities, he continued to do research work and earned his Ph.D. from LMU in 2008.

He has worked on the environmental effects of museum and tourist railway operation since 1990. Achievements in this field include the environmental report for the reopening of the Mt. Brocken line, the emission testing of Swiss Locomotive and Machine Works' (SLM) new rack tank steam locomotives, the adaptation of an environmentally friendly stationary oil-firing system for use on #52 8055, a standard gauge 2-10-0 steam locomotive re-engineered by SLM for use in tourist train service, and the development of a proprietary oil-firing system for diesel fuel, #2 heating oil, and fatty acid methyl ester (FAME, aka biodiesel), to which #5, an 0-6-2 760 mm gauge steam locomotive of the Zillertalbahn in Austria, was converted in 2010. After contributions to FEDECRAIL conferences since 1995, he was one of the founding members of FEDECRAIL's Environmental Working Group (EWG) in 2009.

Besides his native German, he speaks English, French, Spanish, Portuguese, and Turkish.