



Current positions

Director at the DLR-Institute of Solar Research (since 2011) and
Professor of Solar Technology at RWTH Aachen University (since 2003)

Previous positions (two selected)

Deputy director of the DLR Institute of Engineering Thermodynamics (2010-2011)

Head of DLR Solar Research Division; Cologne (2003-2010)

Scientific degrees

PhD in Mechanical Engineering, University of Bochum (1993)

Degree in Physics (Dipl.-Phys) Ruhr University Bochum (1988)

Recent research topics

Concentrating Solar Thermal Technologies, thermochemical fuel production, solar radiation nowcasting

Awards, honors, memberships

Farrington Daniels Award of ISES (2017)

Chairman of IEA Technical Cooperation Program SolarPACES (since 2017)

Member of ESYS Project (German Academies of Science) (since 2017)

Publications/Patents (5 most important)

- **R. Pitz-Paal**, Still small but learning fast, *Nature Energy* 2, 17095 (2017). [doi:10.1038/nenergy.2017.95](https://doi.org/10.1038/nenergy.2017.95)
- **M. Lange, M. Roeb, C. Sattler, R. Pitz-Paal**, Entropy analysis of solar two-step thermochemical cycles for water and carbon dioxide splitting, *Entropy*, 18 (1), ; (2016); [doi:10.3390/e18010024](https://doi.org/10.3390/e18010024)
- **A. Hoffmann, T. Hirsch, R. Pitz-Paal**, Numerical investigation of severe slugging under conditions of a parabolic trough power plant with direct steam generation *Solar Energy*, 133, pp. 567-585. (2016) [doi:10.1016/j.solener.2016.04.012](https://doi.org/10.1016/j.solener.2016.04.012)
- **K. Noureldin, T. Hirsch, R. Pitz-Paal**, Virtual Solar Field - Validation of a detailed transient simulation tool for line focus STE fields with single phase heat transfer fluid, *Solar Energy*, 146, pp. 131-140. (2017) [doi:10.1016/j.solener.2017.02.028](https://doi.org/10.1016/j.solener.2017.02.028)
- **F. Wiesinger, F. Sutter, A. Fernández-García, J. Reinhold, R. Pitz-Paal**, Sand erosion on solar reflectors: Accelerated simulation and comparison with field data *Solar Energy Materials and Solar Cells*, 145, pp. 303-313. (2016) [doi:10.1016/j.solmat.2015.10.036](https://doi.org/10.1016/j.solmat.2015.10.036)