

**Current position**

Head of the Department “Gas Turbines” at Institute of Combustion Technology, DLR (since 2017)

Previous positions (two selected)

Senior Scientist in the department of combustion diagnostics at the Institute of Combustion Technology, DLR, project coordinator for the fields of oxyfuel combustion and gasification (since 2004-2017);

Research Scientist in the department of spectroscopy and photochemical kinetics at the Max-Planck-Institute of Biophysical Chemistry (2000-2004)

Scientific degree

Dr. rer nat (PhD) in physical Chemistry, University Göttingen (2003)

Recent research topics

Development of gas turbine combustors and innovative gas turbine cycles, hybrid power plants, gas turbine based CHP systems, renewable fuels (biogas, syngas, and hydrogen)

Awards, honors, memberships

European Turbine Network “Member of the year 2019”, ETN Project board member (since 2018), Biomass panel member of ETIP Renewable Heating and Cooling (since 2018), Member of “TaskforceTechnology” of the EU ZEP platform (since 2010)

Publications/Patents (5 most important)

- S. Hasemann, H. Seliger, P. Kutne, M. Aigner, Experimental and numerical design study for a small scale jet-stabilized micro gas turbine combustor, *Proceedings of the ASME Turbo Expo* (2018) [doi:10.1115/GT2018-75050](https://doi.org/10.1115/GT2018-75050)
- T. Krummrein, M. Henke, P. Kutne, M. Aigner, Numerical analysis of operating range and SOFC-off-gas combustor requirements of a biogas powered SOFC-MGT hybrid power plant, *Appl. Energ.* 232, 598 (2018) [doi:10.1016/j.apenergy.2018.09.166](https://doi.org/10.1016/j.apenergy.2018.09.166)
- P. Kutne, J. Richter, J. D. Gounder, C. Naumann, W. Meier, Exhaust Gas Recirculation at Elevated Pressure Using a FLOX® Combustor, *Proceedings of the ASME Turbo Expo* (2017) [doi:10.1115/GT2017-64227](https://doi.org/10.1115/GT2017-64227)
- P. Nau, P. Kutne, G. Eckel, W. Meier, C. Hotz et al., Infrared absorption spectrometer for the determination of temperature and species profiles in an entrained flow gasifier, *Appl. Optics* 56, 2982 (2017) [doi:10.1364/AO.56.002982](https://doi.org/10.1364/AO.56.002982)
- J. D. Gounder, I. Boxx, P. Kutne, S. Wysocki, F. Biagioli, Phase Resolved Analysis of Flame Structure in Lean Premixed Swirl Flames of a Fuel Staged Gas Turbine Model Combustor, *Combust. Sci. Technol.* 186, 421 (2014) [doi:10.1080/00102202.2014.883204](https://doi.org/10.1080/00102202.2014.883204)