

**Current positions**

Head of the Institute for Neutron Physics and Reactor Technology (INR), KIT (since 2009)

Chair Institute for Applied Thermo-Fluidics (IATF), Faculty Mechanical Engineering, KIT (since 2009)

Director Frederic Joliot-Otto Hahn School CEA/KIT (since 2009)

Previous positions (two selected)

Head of the Karlsruhe Liquid metal Laboratory (KALLA) at Institute for Nuclear and Energy Technologies, KIT (2002-209)

Scientific degree

Dr.-Ing. (PhD) in mechanical engineering Universität Karlsruhe (1994)

Recent research topics

Thermal-hydraulics in fluids (liquid metals, gases), fusion technology, nuclear safety analysis, instrumentation development (nuclear, non-nuclear), dynamics of systems & components, material qualification

Awards, honors, memberships

German Nuc. Reactor Safety Commission (up to 2015), NEA/OECD-WG on liquid metals (since 2005), German Soc. for nuclear engng. (since 2005), Fusion Innovation Industry Forum (FIIF) (since 2011), DEMO Stakeholder Group (since 2014), ITER Operations Network (since 2017)

Publications/Patents (5 most important)

- S. Ciattaglia, G. Federici, L. Barucca, **R. Stieglitz**, N. Taylor, EU DEMO safety and balance of plant design and operating requirements. Issues and possible solutions, *Fusion Eng. Des.* (2019), <https://doi.org/10.1016/j.fusengdes.2019.03.149>
- **K. Hesch, L. V. Boccaccini, R. Stieglitz**, Blankets – key element of a fusion reactor – functions, design and present state of development, *Kerntechnik* 83(3), (2018) 241-250, <https://doi.org/10.3139/124.110923>
- Ch. Linsmeier, **M. Rieth, J. Aktaa**, T. Chikada, **R. Stieglitz**, et al., Development of advanced high heat flux and plasma-facing materials, *Nuclear Fusion* 57(9), (2017), <https://doi.org/10.1088/1741-4326/aa6f71>
- A. Onea, **S. Perez-Martin**, W. Jäger, **W. Hering, R. Stieglitz**, Liquid metals as heat transfer fluids for science and technology, *Advances in New Heat Transfer Fluids: From Numerical to Experimental Techniques*, (2017), 305-376, <https://doi.org/10.1201/9781315368184>
- **S. Gordeev, F. Gröschel, R. Stieglitz**, Numerical analysis of high-speed Lithium jet flow under vacuum conditions, *Fus. Eng. Des.* 109-111B, (2016) 1669-1673, <https://doi.org/10.1016/j.fusengdes.2015.10.033>