

**Current positions**

Head of the KIT Fusion Program (since 2010)

Head of Research Unit EURATOM – KIT Fusion (since 2010)

Previous positions (two selected)

Assistant to the Executive Board, Forschungszentrum Karlsruhe (2001-2003) and secondment to the Federal Ministry of Education and Research (2003-2004)

Head of Excimer Laser Laboratory, Institut für Mikrotechnik Mainz (1991-1998)

Scientific degree

Dr. rer. nat. (PhD) in Physical Chemistry, University of Heidelberg (1991)

Recent research topic

Fusion power plant development

Awards, honors, memberships

Board of Editors of Nuclear Fusion (since 2015), EUROfusion General Assembly (since 2014), Co-Chair of the EUROfusion DEMO Project Board (since 2018), Chair of the European Gyrotron Consortium Steering Committee (since 2012), EURATOM/EUROfusion/F4E DEMO Steering Board (since 2018)

Publications (5 most important)

- **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, [doi: 10.3139/124.110923](https://doi.org/10.3139/124.110923)
- **K. Hesch**, Highlights of Fusion Technology and Material Activities at KIT, *American Nuclear Society, Fusion Energy Division Newsletter* (2014) <http://fti.neep.wisc.edu/fednews/news0614.pdf>
- **J. Jelonnek, G. Gantenbein, K. Hesch, J. Jin, I. Pagonakis** et al., From Series Production of Gyrotrons for W7-X Toward EU-1 MW Gyrotrons for ITER, *IEEE Transactions on Plasma Science* (2014) [doi: 10.1109/TPS.2014.2301839](https://doi.org/10.1109/TPS.2014.2301839)
- **K. Hesch**, The German DEMO Working Group – Perspectives of a Fusion Power Plant, *atw – Int. Journal for Nuclear Power* 58 (2013), 486
- **K. Hesch, J. Aktaa, S. Antusch, L.V. Boccaccini, C. Day** et al., Technology developments at KIT towards a magnetic confinement fusion power plant, *Fusion Science and Technology* (2012) [doi: 10.13182/FST12-A13398](https://doi.org/10.13182/FST12-A13398)