

**Current positions**

Deputy Task Force Leader for Blanket activities, KIT (since 2017)
R&D Engineer for solid Breeding Blankets for the EU-DEMO, KIT (since 2015)

Previous positions (two selected)

EFDA Goal Oriented Trainee, Breeding Blanket Design, KIT (2009-2012)
Design Development Engineer for Car Body and Inner Trim at EDAG GmbH, Spain (2006-2009)

Scientific degrees

Dr.-Ing. (PhD) in Mechanical Engineering / KIT (2016)

Recent research topics

In-vessel components development; tokamak plant integration; solid breeding blanket development

Awards, honors, memberships

Lead Engineer and Coordinator of the Work Package WP1 (HCPB Breeding Blanket for the EU-DEMO) in EUROfusion

Publications (5 most important)

- **F.A. Hernández, P. Pereslvtsev, G. Zhou, B. Kiss, Q. Kang, et al.**, Advancements in the Helium-Cooled Pebble Bed Breeding Blanket for the EU DEMO: Holistic Design Approach and Lessons Learned, *Fusion Sci. Technol.* (2019) [doi:10.1080/15361055.2019.1607695](https://doi.org/10.1080/15361055.2019.1607695)
- **F.A. Hernández, P. Pereslvtsev, G. Zhou, H. Neuberger, J. Rey, et al.**, An enhanced, near-term HCPB design as driver blanket for the EU DEMO, *Fusion Eng. Des.* (2019), in press.
- **F.A. Hernández, F. Arbeiter, L.V. Boccaccini, E. Bubelis, V.P. Chakin, et al.**, Overview of the HCPB Research Activities in EUROfusion, *Trans. Plasma Sci.* 46(6) (2018) 2247-2261 [doi:10.1109/TPS.2018.2830813](https://doi.org/10.1109/TPS.2018.2830813)
- **F.A. Hernández, P. Pereslvtsev**, First principles review of options for tritium breeder and neutron multiplier materials for breeding blankets in fusion reactors, *Fusion Eng. Des.* 137 (2018) 243-256 [doi:10.1016/j.fusengdes.2018.09.014](https://doi.org/10.1016/j.fusengdes.2018.09.014)
- **F. Hernández, P. Pereslvtsev, Q. Kang, P. Norajitra, B. Kiss, et al.**, A new HCPB breeding blanket for the EU DEMO: Evolution, rationale and preliminary performances, *Fusion Eng. Des.* 124 (2017) 882-886 doi.org/10.1016/j.fusengdes.2017.02.008