

**Current positions**

Head of Division “Reactor Physics and Dynamics” at Institute of Neutron Physics and Reactor Technology (INR), KIT (since 2012)

Lectureship, KIT (since 2008)

Project leader “LWR Methods and Analysis” at INR, KIT

**Previous position**

Deputy Head of Group INR, KIT (2009-2011)

**Scientific degree**

Dr.-Ing. (PhD) in Reactor Engineering, TU Dresden (1987)

**Recent research topics**

Thermal hydraulics, reactor physics, reactor safety, deterministic methods for safety assessment, multi-physics and multi-scale methods for core and plant analysis

**Awards, honors, memberships**

Coordinator of EU projects e.g. HPMC (2010-2013), McSAFE (2017-2020), Member of the OECD WGAMA (since 2018), WP Leader of different EU projects e.g. NURESAFE (2013-2016), CESAM (2012-2016), MUSA (2020-2023)

**Publications (5 most important)**

- **Y. Alzaben, V.H. Sánchez-Espinoza, R. Stieglitz**, Analysis of a steam line break accident of a generic SMART-plant with a boron-free core using the coupled code TRACE/PARCS, *Nucl. Eng. Des.* 350, 33 (2019) [doi.org/10.1016/j.nucengdes.2019.05.002](https://doi.org/10.1016/j.nucengdes.2019.05.002)
- **V. Jauregui Chavez, U. Imke, V. Sánchez-Espinoza**, TWOPORFLOW: A two-phase flow porous media code, main features and validation with BWR-relevant bundle experiments, *Nucl. Eng. Des.*, 338, 181 (2018) [doi.org/10.1016/j.nucengdes.2018.08.009](https://doi.org/10.1016/j.nucengdes.2018.08.009)
- **D. Ferraro, M. Garcia, U. Imke, V. Valtavirta, [...], V.H. Sánchez-Espinoza**, Serpent/SCF pin-level multiphysics solutions for the VERA Fuel Assembly benchmark, *Ann. Nucl. Energy*, 128, 102 (2019), [doi.org/10.1016/j.anucene.2018.12.047](https://doi.org/10.1016/j.anucene.2018.12.047)
- **I. Gómez-García-Toraño, V.H. Sánchez-Espinoza, R. Stieglitz**, César Queral, María-José Rebollo, Assessment of primary and secondary bleed and feed procedures during a Station Blackout in a German Konvoi PWR using ASTECV2.0, *Ann. Nucl. Energy*, 113, 476 (2018) [doi.org/10.1016/j.anucene.2017.11.053](https://doi.org/10.1016/j.anucene.2017.11.053)
- J.A. Gonzalez-Vargas, **V.H. Sánchez-Espinoza, R. Stieglitz**, R. Macian-Juan, Development and validation of the new coupled code system TRADYN, *Ann. Nucl. Energy*, 12, 685 (2018) [doi.org/10.1016/j.anucene.2017.07.027](https://doi.org/10.1016/j.anucene.2017.07.027)