INDUSTRY RELATIONS TEAM
WE OPEN DOORS AND CREATE CONNECTIONS

The Industry Relations Team of the Jülich Supercomputing Centre

- manages industry-related research projects
- channels commissioned work to experts in the HPC centre
- provides the contact for the provision of computing time to industry

It serves as the head office for industry outreach by advertising the expertise of the JSC provided through its Simulation and Data Laboratories and Cross-Sectional Teams to industrial companies in various fields, e.g., in Engineering, Biology, Medicine, and Physics. Thereby, the team aims at establishing new industrial collaborations based on both commercial and third-party funded relations.

Services

- Provision of taylor-made computing solutions for the industry
- Knowledge transfer and consulting in high-performance computing and associated research fields (Engineering, Biology, Medicine, and Physics), see Simulation Labs[1]
- Analysis of simulation code performance and optimization, see ATML Performance Analysis[2]
- Consulting in hardware suitability - which hardware fits to your simulation problem?
- Porting of simulation codes to different architectures (Graphics Processing Unit, accelerators, etc.)
- Computing time on high-performance computing resources at JSC
- Big data analytics[3]
- Training and education (e.g. Python, MPI, …), see courses[4]

Competences

- Shared and distributed memory parallelization of complex simulation codes
- Simulation code performance analysis
- Single-core and multi-core performance optimization of simulation codes
- High-performance parallel I/O
- GPU and accelerator programming
- Specific field-related expertises as provided by the Simulation Laboratories
- Decades of experience in running supercomputers and supporting users with highly complex simulation problems

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[1] Simulation Labs

[2] ATML Performance Analysis

[3] Big data analytics

[4] Courses

Reference customers

Successful industry projects have been established with the following companies: