

# Engineer Thermal Analysis (m/f)

HPS GmbH is a leading midsized space company and central provider of subsystems as reflector antennas, large deployable reflector subsystems, deployable drag-sail subsystems, lightweight structures, thermal control hardware and multilayer insulations (MLI). Headquartered in Munich, it has a subsidiary in Bucharest (Romania), where MGSE, metal structures and metal thermal hardware components is developed. HPS is also well renowned as prime contractor in the field of space subsystems for European Space Agency ESA, the German Aerospace Center DLR, as well as for the "blue chips" of the European space industry. Up to now HPS is onboard 15 space missions, the most recent one (June 2018) is an IOD-flight of a deployable sail module onboard Electron, the NewSpace Launcher of RocketLab (USA). Space services of HPS also cover the complete range from design, analysis and development to assembly, manufacturing and testing of new technologies on demand. With outstanding engineering capacities, highest flexibility and customer orientation HPS is one of the fastest growing technology drivers in the European SME industry.

Currently HPS Group has a staff of 40 persons, 30 out of that in Munich at HPS GmbH. Due to our rapid growth we want to enlarge at HPS Germany our FEM-Analysis-Team and consequently we are searching for excellence, starting **August or latest October 2018**, with the following profile:

## Job profile:

The post-holder will substantially be involved in space flight hardware projects as well as in technology development projects in the area of thermal hardware. The main tasks of the post include the following:

- Development of thermal parts & assemblies of space subsystems
- Development of new technologies for thermal subsystems
- Elaboration of thermal designs
- Thermal FEM analyses
- Coordination of thermal test campaigns incl. correlation of test results with mathematical models
- Management and control of subcontractors & suppliers (material suppliers, MLI manufacturing, radiator elements, test house)
- Preparation of respective documentation (specifications, design documents, analyses, test plans, procedures, reports, etc.)
- Participation to customer meetings and presentation of results
- Participation to thermal test campaigns and integration activities
- Presentation of results in meetings intern & extern.

### Qualification:

Applicants should have as a minimum:

- Experience in use of thermal analysis software (TMG, ESATAN, Thermica or similar tool)
- Ability and motivation to report the analysis results in respective documentation
- Ability and motivation to present the analysis results in meetings with Customers
- Good knowledge in English (writing and speaking)
- MS office S/W tools (minimum: MS Word, MS Excel, Power Point)
- Master's degree in mechanical/aerospace engineering or physics
- Autonomous working approach, accurate working results
- Loyalty, team spirit and reliability.

#### Nice to have:

- 4 years (or more) of relevant experience
- Specific experience in MLI, radiators, thermal straps, heat pipes
- Experience in orbit analysis
- CAD design capabilities and knowledge in CAD-tools
- Experience in test engineering and definition of subsystem tests
- Knowledge in space flight hardware environmental requirements
- Hands on Hardware
- Knowledge about ESA ECSS standards.













### **Possibilities:**

HPS offers the chance to actively take part in the growth of an international operating high technology company but still keeping the friendly working environment of an SME (Small/Medium Enterprises). All HPS staff is continuously involved in company strategy items and can influence the path of HPS growth. Improvement suggestions are highly welcome.

The applicant has the chance to work very close on the one hand to highly experienced analysis staff and on the other hand to medium or young engineers. He/she will be involved in several projects which makes daily life very diversified.

A four-days-per-week contract might be possible. Self-responsible flexibility in working time per day is our company culture. Documented in our Quality Management System is not only the goal to deliver high end technology and to maintain financial health of the company, but also a very high degree of employee satisfaction.

Being part of HPS means to be involved in space missions, having hardware flying around the Earth or contributing to the European exploration of the Universe.



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