



## **UVN Product Development Engineer based at EUMETSAT, Darmstadt, Germany**

HAMTEC Consulting a provider of quality staff to the aerospace industry.

We are currently seeking a University educated engineer in a relevant discipline, with a minimum of 5 years experience in the field of remote sensing product data processing and analysis including at least 2 years of experience of UV/Visible/NIR calibration and validation. Further the consultant shall have a solid background in software engineering.

Location: Darmstadt, Germany

Start Date: 1<sup>st</sup> Quarter 2016

Closing date: 29 January 2016

### **TASKS:**

In-house support is sought for the ongoing processor development activities in preparation for the future UVN instrument to be flown on MTG-S. The key person will provide support within the Atmospheric Composition Team in the Remote Sensing and Products (RSP) Division of EUMETSAT, located in Darmstadt, Germany. He/she will be fully integrated in the Atmospheric Composition Team and will interface with in-house

experts of various disciplines (system, instruments, operations, science), and in particular members of the MTG Science and Instrument Teams.

It is expected that the tasks of the Key Person will typically include:

- Provision of support to the development of algorithms for calibration of UVN level 0 data;
- Provision of support to the development of an Instrument Data Simulator;
- Taking into account the constraints imposed by the final goal of implementation of the products within an operational processing system;
- Provision of support to the development of prototype software code for the purposes of testing and validation the algorithms developed;
- Provision of support to the development of an instrument performance model based on specifications to be provided by industry;

- Provision of support to the development of software for cross-calibration and validation activities;
- Generation of test data required for the verification of the algorithm and products;
- Provision of support to the generation of associated documentation including test data descriptions, Product Specification (PS), technical reports etc;
- Interfacing with experts across EUMETSAT as needed;
- Collaboration with expert groups and the wider scientific community outside EUMETSAT as appropriate;
- Assessment of results from scientific studies;
- Provision of support to operational level 2 processor development activities, for future level 2 product development for the UVN instrument.

The tasks will evolve as the MTG/UVN specifications mature and activities evolve in the coming years.

### **Qualifications and Experience**

- University degree in a relevant discipline
- a minimum of 5 years experience in the field of remote sensing product data processing and analysis including at least 2 years of experience of UV/Visible/NIR calibration and validation. Further the consultant shall have a solid background in software engineering.

### **Essential Skills**

- Very good skills in a higher programming language (e.g. Fortran, C++);
- Working with UNIX and/or Linux operating systems;
- Specification, design and coding of complex product processors;
- Testing and verification of complex data processing systems;
- Handling and processing of remote sensing data;
- Experience in atmospheric remote sensing in the optical spectrum (Ultraviolet to NearInfrared);
- Experience with instrument calibration and characterisation;
- Familiarity with Earth observation systems in operational meteorology, atmospheric composition and climate monitoring (both remote sensing and in situ systems);
- Writing concise and comprehensive scientific and technical reports

### **Desirable Skills**

- Quality control of satellite data and products;
- Operational product processing environments;
- Quality control of satellite data and products;
- Knowledge of scripting languages (e.g. python, Matlab, IDL, bash);

- Knowledge of SQL;
- Software build environments and tools (e.g. make, imake, eclipse, insure++);
- Source code control system, (e.g. GIT, Subversion, or CVS);
- Familiarity with radiative transfer.

Please send you CV in English to:

Simon Davidson via [recruit@hamtec.co.uk](mailto:recruit@hamtec.co.uk)

To register with HAMTEC Consulting and to view current opportunities go to our website:

<http://www.hamtec.co.uk>