

Applications are invited for the position of an

ALMA BACK-END INTEGRATION AND DATA COMMUNICATION ENGINEER

CAREER PATH: V

Purpose and scope of the position: Within the European ALMA team, the selected candidate will take up responsibilities in the monitoring of production contracts and in the integration, commissioning and acceptance of the Back-end sub-system and related data communication infrastructures (fibre optic based system) of the ALMA radio telescope. As such, the selected candidate will be part of the ALMA Back-end Integrated Product Team (BE IPT). The position will involve duties in ALMA partner regions, Europe, North America and Chile in the form of frequent and occasionally extended missions.

Duties and responsibilities: The position will include several of the following tasks:

- Elaboration of BE integration & test plans and support for the development of an operations and maintenance plan in close collaboration with the System Engineering & Integration IPT.
- Definition of applicable Quality Management processes, mainly in the areas of production, integration and validation in the ALMA project.
- Participation in and organisation of product reviews.
- Monitoring of the installation, commissioning and acceptance of the BE sub-systems and fibre optic distribution infrastructures on site.
- Support for developing and maintaining the BE sub-system specifications and interfaces and for assuring that the sub-system designs comply with defined specifications.
- Monitoring of detailed sub-system performance of the BE sub-system technical budgets.
- Contribution to the ALMA configuration and change-control processes.
- Direct reporting to the ESO ALMA Back-end manager. Support the IPT manager in monitoring schedules and the technical performance of all back-end subsystems.

Professional requirements/qualifications: University degree (or equivalent) in Electrical Engineering or Physical Sciences. Further qualifications and experience in a scientific domain would be advantageous, e.g. a post-graduate experience in radio-astronomy research and/or in high speed fiber optic networks and advanced electronics industrial environment. At least three years of working experience in an engineering position on multidisciplinary, high technology, advanced electronics and fibre-optic data communication project(s).

Experience and knowledge: The ideal candidates will have experience in:

- Design, development, production installation and commissioning of advanced electronic systems, high speed optical data communication systems, optical components and related infrastructures.
- Establishing Assembly, Integration and Verification Plans communication and electronic systems.
- Configuration and Quality management.
- Excellent communication skills, a good command of the English language and a strong sense of team spirit are essential.

Duty station: Garching near Munich, Germany.

Starting date: As soon as possible.

Remuneration and contract: We offer an attractive remuneration package including a competitive salary (tax free), comprehensive pension scheme and medical, educational and other social benefits as well as financial help in relocating your family. The initial contract is for a period of three years with the possibility of a fixed-term extension or permanence. The title or grade may be subject to change according to qualification and the number of years of experience.

Applications: If you are interested in working in a stimulating international research environment and in areas of frontline science and technology, please send us your CV (in English) and the ESO Application Form (<http://www.eso.org/gen-fac/adm/pers/forms/>) by

15 April 2005.

For further information please contact Mrs Nathalie Kastelyn, Personnel Department, Tel. +49-89-3200-6217. You are also strongly encouraged to consult the ESO Home Page (<http://www.eso.org/>) for additional information about ESO.

Although preference will be given to nationals of the Member States of ESO: Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Portugal, Sweden, Switzerland, and United Kingdom, no nationality is a priori excluded.

Applications are invited for the position of a

SENIOR ENGINEER – HEAD OF PARANAL ENGINEERING DEPARTMENT

CAREER PATH: V

Purpose and scope of the position: The role of the Paranal Engineering Department is to carry out the assembly, integration and troubleshooting of the VLT (Very Large Telescope), the instrumentation of the VLT and of the VLTI (VLT Interferometry), of the VST (VLT Survey Telescope), VISTA (Visible and Infrared Survey Telescope), of all the facilities required on the Observatory (Power Station, Air Compressors, Chillers, etc), and to provide general engineering support of maintenance, troubleshooting and fault repair to nightly operations.

The Engineering Department of the Paranal Observatory comprises 5 engineering groups (Mechanical, Electronic, Software, Optics, and Instrumentation), with a total workforce presently consisting of 45 engineers and 15 technicians.

The telescopes and instruments are large, complex systems that involve many advanced technologies and that require a high level of engineering support.

Duties and responsibilities: Reporting to the Head of Engineering of the La Silla-Paranal Observatory, the successful candidate shall have the responsibility of:

- The four telescopes with their instruments making them available for Science operations 365 nights per year;
- The integration activity of new instruments and telescopes ensuring they are properly performed on time;
- The engineering support to the commissioning of the interferometric complex;
- Additional technical responsibilities including that of the Power Station and of the auxiliary systems (compressed air, chillers, etc.);
- The definition of operational procedures and long-term planning;
- The personnel management (in particular training and performance evaluation) and supervision of the five engineering groups;
- The preparation of the annual budgets and the scheduling of support staff.

Professional requirements/qualifications:

- University Degree in mechanical, optomechanical or aeronautical engineering.
- At least ten years of relevant on field engineering experience in large multi-discipline scientific/of high technology projects;
- Technical experience in optomechanic systems will be a plus.

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Managerial Competence Criteria

- Ability to identify key strategic issues, opportunities and risks;
- Capability to communicate links between the Organization's strategy and the work unit's goals; establish/identify and communicate broad and compelling organizational directions;
- Strong managerial/leadership skills; with demonstrated experience to perform and/or oversee the analysis of complex human resources, financial, logistical or administrative management policy and program issues;
- Ability to effectively lead, supervise, mentor, develop and evaluate staff and design training/skills enhancement initiatives to ensure effective staff development;
- Excellent oral/written communication skills in English. Working knowledge of Spanish or the willingness to learn it;
- Proficiency with the Microsoft Office package.

Remuneration and contract: We offer an attractive remuneration package including a competitive salary (tax-free), comprehensive pension scheme and medical, educational and other social benefits as well as financial support in relocating your family. The initial contract is for a period of three years with the possibility of a fixed-term extension or permanence.

Staff Category: International Staff Member. The grade may be subject to change according to qualifications and the number of years of experience.

Duty Station/Working Schedule/Place of residence: The ESO Paranal Observatory, at Cerro Paranal (120 km south of Antofagasta), is located at an altitude of 2600 m. The working system is typically 5/2 (Monday to Friday) or 8/6 with accommodation provided on site. After a first period of 5/2 the final turno will be agreed upon with the supervisor according to the operational requirements. The place of residence will be Antofagasta or Santiago.

Starting date: As soon as possible.

Applications: If you are interested in working in a stimulating international research environment and in areas of frontline science and technology, please send us your CV in English and the ESO Application Form (to be obtained from the ESO Home Page at <http://www.eso.org/gen-fac/adm/pers/forms/>) by

30 April 2005.

For further information please contact Mr. Walter Demartis at wdemarti@eso.org.

You are also strongly encouraged to consult the ESO Home Page (<http://www.eso.org>) for additional information.

Although preference will be given to nationals of the Member States of ESO: Belgium, Denmark, Finland, France, Germany, Italy, The Netherlands, Portugal, Sweden, Switzerland, and United Kingdom, no nationality is à priori excluded. The post is equally open to suitably qualified male and female applicants.

Applications are invited for the position of an

ALMA PROJECT PLANNER/SCHEDULER

CAREER PATH: V

The Atacama Large Millimeter Array (ALMA) is an international astronomy facility. ALMA is an equal partnership between Europe and North America, in cooperation with the Republic of Chile, and is funded in North America by the U.S. National Science Foundation (NSF) in cooperation with the National Research Council of Canada (NRC), and in Europe by the European Southern Observatory (ESO) and Spain. ALMA construction and operations are led on behalf of North America by the National Radio Astronomy Observatory (NRAO), which is managed by Associated Universities, Inc. (AUI), and on behalf of Europe by ESO.

The ALMA construction project has adopted a management structure based on the Integrated Product Team (IPT) concept. The IPT concept provides a method of managing tasks carried out across multiple organizations and locations. Each Level One WBS element is managed by an IPT responsible for delivering the required sub-systems on time, within the specified cost and meeting the project requirements. The ALMA Project Control Management System (PMCS) is centralized under the leadership of the ALMA Project Controller located in the ALMA offices in Santiago, Chile with staff located in Chile, Europe and North America.

Purpose and scope of the position: The successful candidate is part of the ALMA PMCS team and reports to the European Project Controller. Responsibilities include: maintaining integrated project schedules for activities conducted in Europe; coordinating work activities with IPT's; progressing schedules and assisting in identifying and resolving schedule conflicts; providing Earned Value Management (EVM) reporting and variance analysis in conjunction with the Project Controller; developing and controlling associated project documentation; providing change and problem management.

The position involves duty travels to ALMA partner regions, Chile, Europe and North America.

Duties and responsibilities:

- Using Project Planning & Control (PP&C) tools, document and maintain master and sub-project plans including schedule, tasks, milestones, resource assignments and time/expense tracking for large, geographically dispersed, IPT activities and subcontracted work.
- Configure and customize PP&C software programs including determining user requirements; establishing and maintaining multiple remote user accounts; establishing data interfaces; and developing internal and executive reports.
- Assist the Project Controller with analyzing and reporting on the required master and sub-project plans to plan, track and display IPT efforts and performance.
- Assist with the integration of cost accounting and other plans into the master project schedule to facilitate EVM; collect periodic updates and reconcile differences; develop, analyze and report on EVM metrics as directed by the Management IPT.
- Assist with development and maintenance of additional project management tools and processes to assist the Project Controller in overseeing the IPT efforts and activities.

Professional requirements/qualifications:

- University degree in Engineering or technology related fields.
- Significant experience using medium to high-end Project Planning & Control tools (e.g. Open Plan, COBRA, Primavera, MS Project Server, MS Project Professional, etc.).
- Experience of working in large collaborative multi-cultural project environments.
- Ability to coach technical and financial personnel in Earned Value Management (EVM) and project scheduling methods (e.g., critical path method).
- Project Management Professional (PMP) certification is a plus.
- Proficiency in MS Office applications (Outlook, Word, PowerPoint, Excel and Access).
- Multi-tasking competencies to manage multiple efforts or projects.
- Excellent communication skills, a good command of the English language and a strong sense of team spirit are essential.

Duty station: Garching near Munich, Germany.

Starting date: As soon as possible.

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