



ESO

European Organisation
for Astronomical
Research in the
Southern Hemisphere



ESO is opening the following positions of

Engineer for Cryogenic Systems

in the Integration and Cryo/Vacuum Department of the Instrumentation Division at the ESO Headquarters in Garching near Munich, Germany. The successful candidate will work in the Integration and Cryo/Vacuum Department on the cryogenic and vacuum systems used to cool the instrument optics and/or detectors (typically CCDs or infrared arrays operating at temperatures down to ~ 5 K). Further specific tasks will include the design of vacuum vessels and cooling systems using liquid nitrogen or closed-cycle coolers, pulse tubes etc., the supervision of the manufacture of cryo/vacuum systems, the performance or supervision of system testing, the integration and commissioning of cryo/vacuum systems in instruments before and after shipping to the observatory, the support to R&D activities e.g testing new cooling concepts and devices as well as the monitoring and reviewing the development of cryo/vacuum systems for ESO by external consortia of scientific institutes.

Because the Department is relatively small she/he will be expected to take individual projects from the concept stage to commissioning at the telescope. Technical support will be provided by other INS staff, a small workshop plus engineers and technical staff from the Technology Division.

The position requires a University Degree in Engineering or equivalent. The successful candidate shall have a sound knowledge and understanding of the design and several years experience in the development of cryogenic and vacuum systems. Additional knowledge and experience of instrument design and thermal analysis would be a great asset. A good written and spoken command of the English language, good communication skills and a strong sense of team spirit are essential.

For details and to download an application form, please consult our homepage: <http://www.eso.org>. If you are interested in working in areas of frontline technology and in a stimulating international environment please send your application in English to:

System Engineer

The successful candidate will work in the Instrumentation Division (INS) which comprises about 40 astronomers, physicists, engineers and technicians responsible for the design, development, installation and commissioning of advanced optical and infrared instruments for ESO telescopes. The latter include the Very Large Telescope (an array of four 8-m-diameter plus several smaller telescopes) on Mount Paranal in Northern Chile plus the future 30–60-m-diameter European Extremely Large Telescope (E-ELT) now undergoing its Phase B design study. Specific tasks will include the definition and preliminary design of interfaces between the European Extremely Large Telescope and its suite of up to six optical and infrared instruments, the system engineering support to specific E-ELT instrument design studies, the system engineering support to one or more second-generation VLT instruments as well as the monitoring and reviewing of instrument designs performed for ESO by external consortia of scientific institutes. Furthermore, she/he will generally work in a team comprising staff from the Instrumentation, Telescope Systems, Technology and Software Development Divisions of ESO.

The position requires a University Degree in Engineering or equivalent. A sound knowledge and understanding of astronomical instruments or comparable systems and direct experience with their design and construction as well as mechanical design skills are necessary and at least a basic knowledge of optics design would be a valuable asset. A good written and spoken command of the English language, good communication skills and a strong sense of team spirit are essential.

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ESO is an equal opportunity employer. Qualified female candidates are invited to apply.

ESO. Astronomy made in Europe

