At **The NOVA Optical Infrared instrumentation Group** at ASTRON in Dwingeloo, we develop world-leading optical and infrared instruments for some of the most prestigious international observatories. We work closely with astronomers from the NOVA universities of Amsterdam, Groningen, Leiden and Nijmegen, and our extensive network of industrial partners. Our primary goal is to develop instruments for the Extremely Large Telescope (ELT, see the website of the European Southern Observatory: elt.eso.org) and other observatories, building on our rich history with the Very Large Telescope and the James Webb Space Telescope.

The group is dynamic and agile consisting of some 30 highly skilled professionals, covering all phases of instrument development —from feasibility, through design, to manufacturing, testing and commissioning. We work across various disciplines, including optical, mechanical, thermal, electronics & software. The group is a world leader in the design and manufacturing of (cryogenic) opto-mechanical parts with extremely small tolerances. NOVA parts are highly specialized single pieces and small series of advanced milled parts of different sizes (specials) that are made mostly of aluminum.

For this unique and innovative group we are on the lookout for a passionate and detail-oriented:
Manufacturing Expert (Instrument Engineer)
0,8 – 1,0 FTE

In this expert role at NOVA you will contribute to the design and manufacturing of parts for astronomical instrumentation and to the machining infrastructure. You will be responsible for 1) the design for manufacturing of CNC milled parts, 2) the measurement and verification of CNC milled parts, and 3) the overall accuracy and optimization of the NOVA production facilities. NOVA CNC machines are commercial 5-axis milling machines customized to attain the required tight tolerances and complexity for single piece parts. You collaborate with our technicians, designers, PA/QA, and project managers, and you also play a key role in enhancing our design and production processes.

Your main tasks include:

- Supporting design by giving advice to mechanical designers on design feasibility and enhancement based on machining capabilities & part properties including material properties, heat treatment and surface treatment.
- Contributing to manufacturability assessments for milled parts and assemblies
- Devising manufacturing strategies together with the mechanical designer, manufacturing engineer, CAM and CNC operator(s), CMM operator(s)

- Design of fixation of parts in relation to machining and to part properties
- Supporting the CNC and the CMM processes (e.g. troubleshooting, solving data issues, fixtures)
- Optimization of part accuracy based on CMM feedback
- Development and maintenance of processes and tools to ensure the accuracy of the CNC & CMM machines
- Advising team members on performance aspects of the facility and advising NOVA on the introduction of new manufacturing technologies such as additive manufacturing
- **We’re looking for someone with:**
- A HBO degree in mechanical engineering or comparable experience
- 5+ years of relevant experience in mechanical design and/or CNC manufacturing
- Expertise on the use and accuracy of 5-axis CNC machines
- Experience with CAM programming is desirable
- Excellent communication skills, proficient both in Dutch and English

Competencies and skills we value:

- Team spirit with strong communication skills
- Accurate and results-driven mindset
- Innovative thinking and a hands-on approach

Here’s what we offer:

- An initial contract for two years (32-40 hours per week), with the potential to become indefinite depending on good performance and sufficient funding
- The position is classified in salary scale 9, 10, or 11 of the CAO-OI. Salary placement is based on education and relevant work experience.
- Opportunities and encouragement to grow and develop yourself and your career.
- A pleasant and stimulating work environment in a beautiful office in the heart of one of Drenthe’s National Parks.
- A comprehensive benefits package including a pension scheme, insurance discounts, travel allowances, and flexible work conditions

Your primary workplace will be in Dwingeloo within the NOVA OIR group. We embrace diversity and strongly encourage applications from women and underrepresented groups. Discover what it’s like to work at ASTRON by clicking: this link

Information:
For information about this vacancy, please contact Michiel Kregel (Group Lead, kregel@astron.nl). If you have any questions about the procedure, please contact HRM via hrm@astron.nl

Comments:
If you have come this far reading this vacancy and are interested in this exciting opportunity, we would like to invite you to apply for this vacancy, even if not all the requirements are met! Leave your CV & motivation letter on our website http://www.jobsatastron.nl.