

CAREER OPPORTUNITY

The Council for Scientific and Industrial Research (CSIR) is a leading scientific and technology research organisation, implementing projects throughout Africa and making a difference in people's lives.

Chief Researcher/Engineer: Laser Metal Additive Manufacturing

About the job:

The CSIR has a vacancy for a **Chief Researcher/Engineer** in the Laser-Enabled Manufacturing research group within the National Laser Centre (NLC). The incumbent will be responsible for undertaking research and development in the area of Laser Metal Additive Manufacturing, and provide leadership for this area within the Centre. It will also be expected from the incumbent to provide leadership to the general field of Laser Enabled Manufacturing, writing proposals to attract funding, supervising students and producing high quality research outputs. This position is based in Pretoria.

Key responsibilities:

- Undertake research within the area of Laser-based Metal Additive Manufacturing, with a focus on powder-bed fusion;
- Produce high quality research outputs from this research;
- Provide research leadership for the Laser Enabled Manufacturing group;
- Write funding proposals to generate funding for the group;
- Supervise and support junior staff including Masters and Doctoral students within this subject area.

Qualifications, skills and experience:

- A Doctoral degree in materials science or physical metallurgy with at least ten years' post-doctoral research experience;
- Must have attracted some good level funding to cover own research costs and that of a large (greater than 10) group of scientists or engineers;
- Must have supervised masters and doctoral students;
- Ability to engage with various stakeholders at all levels;
- Proven track record / ten year experience in laser-based metal additive manufacturing R&D which specifically includes titanium and titanium alloys;
- Skills should include:
 - Physical metallurgy – specific expertise in the physical metallurgy of titanium will be a recommendation
 - Thermal and residual stress management
 - Laser/metal interaction
 - Process monitoring know-how
 - Development of kilowatt laser beam delivery systems
 - Project management

- Proven track record / five years' experience in managing multi-disciplinary R&D teams in the field of laser metal additive manufacturing including both process and system development;
- Preferably have a proven track record of industrialization and commercialization of Laser Metal Additive Manufacturing offerings – systems, processes, components;
- Mental resilience with exemplary anger management skills;
- A record of research outputs that demonstrates publications in the area;
- Strong leadership skills and experience of managing a group of researchers;
- Excellent English language proficiency including technical writing and presentation skills;
- Problem-solving, solution-seeking orientation;
- A goal-oriented approach;
- Ability to work independently, as well as in teams;
- Negotiation skills;
- Preferably two international patents in laser additive manufacturing or laser processing;
- Preferably (advantageous) have a proven track record of industrialization and commercialization of Laser Metal Additive Manufacturing offerings – systems, processes, components.

Should you meet the above requirements, please email your CV to jobapplications@csir.co.za with your name and surname, position title and reference number in the subject line, **(eg. John Smith: Chief Researcher/Engineer: Reference No: 308054)**

Closing date: 31 May 2017

PLEASE NOTE THAT FEEDBACK WILL BE GIVEN TO SHORTLISTED CANDIDATES ONLY.

For more info, please contact the CSIR Recruitment Centre on **012 841 4774** or email us at Recruitmentinfo@csir.co.za

*The CSIR is an equal opportunity employer. As such, it is committed to the Employment Equity Act of 1998. By applying for this position at the CSIR, the applicant understands, consents and agrees that the CSIR may solicit a credit and criminal report from a registered credit bureau and/or SAPS (in relation to positions that require trust and honesty and/or entail the handling of cash or finances) and may also verify the applicant's educational qualifications and employment history. **The CSIR reserves the right to remove the advertisement at any time before the stated closing date and it further reserves the right not to appoint if a suitable candidate is not identified.***