

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.

Principal Researcher: Civil Engineer

About the job:

The CSIR has a vacancy for a **Principal Researcher: Civil Engineer** in the Transport Infrastructure Engineering (TIE) competence area within the Built Environment (BE) unit. The incumbent will support the development and growth of the research group and ensure the highest quality standards in the group's outputs. This position is based in Pretoria.

Key responsibilities:

- Provide scientific and engineering leadership to staff by means of an excellent grasp of the field and by ensuring quality scientific outputs and the professional development and transformation of the group's scientific capacity;
- Promote a culture of scientific excellence in terms of both quality and delivery;
- Contribute to the ongoing development and implementation of strategies to grow the research group;
- Assist the Research Group Leader (RGL) and Competence Area Manager (CAM) to construct and implement a business plan for the competence area (including strategy, goals, mission, HR, finances);
- Identify and manage research opportunities in order to secure external contracts.
- Establish, build, manage and maintain mutually beneficial and credible stakeholder relationships;
- Support the financial sustainability of the research group, through active networking, developing and managing client relationships, understanding the client needs and aligning them with internal needs and capability;
- Conceptualise, lead and deliver on multi-disciplinary and multi-agency projects and programmes in support of pavement design and construction, decision-making and policy development;
- Draft project proposals, identify tasks and activities to facilitate execution, and allocate appropriate resources;
- Prepare reports, guidelines or other documents aimed at disseminating the results and outcomes of projects;
- Support the management, motivate and develop staff in the research group and enable their career growth through creation of opportunities;
- Provide guidance to researchers and mentorship to interns and learners;
- Ensure that the research group is dynamic, and remains innovative, competitive and abreast of trends;
- Raise personal, team and institutional profiles through publishing original research and presenting at national and international conferences and workshops;

- Ensure the quality and delivery of projects and publications in the group by means of technical reviews and quality assurance;
- Ensure impact of the research group's work.

Qualifications, skills and experience:

- A Master's degree in civil engineering, road infrastructure engineering, rail infrastructure engineering or geotechnical engineering. A doctoral degree will be an added advantage;
- Ten years' experience in at least five of the following fields related to road pavements and/or rail engineering:
 - Materials evaluation and modelling,
 - Structural design,
 - Performance assessment and modelling,
 - Vehicle-Road Interaction (VRI),
 - Construction and maintenance,
 - Risk and vulnerability assessment,
 - Forensic investigation,
 - Procurement/contractual models,
 - Infrastructure funding alternatives,
 - Asset management,
 - Sustainability science.
- Ability to provide technical leadership in the field of infrastructure engineering;
- Ability to continuously disseminate research outputs in the form of technical papers;
- Ability to innovate and generate new knowledge;
- Problem-solving and solution-seeking orientation;
- Demonstrable research skills, proposal and report writing and project management skills;
- Must be registered with a professional body or in the process of doing so;
- Must have good communication, presentation and writing skills;
- Must have strong analytical skills and be self-motivated;
- Must have a valid driver's licence (code EC1 or code 10 would be advantageous);
- Must have the ability to work accurately, efficiently and independently as well as in a team;
- Must be computer literate as well as the ability to understand and use specialised software;
- Might be expected to travel from time to time;
- Networking abilities to proactively establish and maintain links with internal and external stakeholders and clients, as well as the research community.

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: Principal Researcher: Reference No: 307986)**

Closing date: 22 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.