

CAREER OPPORTUNITY

The Council for Scientific and Industrial Research (CSIR) is a leading scientific and technology research organisation that researches, develops, localises and diffuses technologies to accelerate socio-economic prosperity in South Africa. The organisation's work contributes to industrial development and supports a capable state.

Senior Researcher: Pavement Engineering and Materials

About the job:

The CSIR has a vacancy for a **Senior Researcher: Pavement Engineering and Materials** in the Transport Infrastructure Engineering Impact Area of Smart Mobility and specifically in Pavement Design and Construction (PDC) research group. This position is based in Pretoria.

About the group:

The group plays a leading role in road construction materials design, characterisation and assessment, pavement design, road rehabilitation design and analysis methods, forensic studies and monitoring long-term performance of roads, and transfer of processes and technologies for the design, construction, and maintenance of roads.

For more information about the cluster, kindly visit <https://www.csir.co.za/smart-mobility> for more information.

Key responsibilities:

- Provide scientific leadership to staff in the Pavement Design and Construction research group 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;
- Lead the research in the validation of innovative/alternative/new materials for use in road construction;
- To become recognised as an expert in the field of Pavement engineering and materials, and associated research;
- Networking ability both nationally and internationally, and proven networks within all aspects of transport infrastructure design, construction, maintenance, and rehabilitation;
- Proven contract and project management experience on medium to large-scale projects, preferably involving multi-disciplinary research and development, both in South Africa and international;
- Practical knowledge of, and experience in a range of research methods.

Qualifications, skills, and experience:

- A Master's degree in civil engineering or pavement engineering with at least five years in the following fields related to road engineering:
 - materials and modelling;
 - asphalt technology
 - performance assessment and modelling
 - construction and maintenance
 - risk and vulnerability assessment
 - forensic investigation

- procurement/contractual models
- infrastructure funding alternatives
- asset management
- sustainability science
- Excellent report-writing skills.
- Track record of research outputs published in peer-reviewed journals, books or conference proceedings.
- Effective communication skills (oral, written and presentation), including excellent communication in English.
- Skills in staff motivation and performance management.
- Analytical skills with a problem-solving, solution-seeking orientation.
- Ability to work independently and as part of a team.
- Computer literacy and experience in using standard software packages; programming skills will be an advantage.

Should you meet the above requirements, please email your CV to recruitment01@csir.co.za with your name and surname, position title and reference number in the subject line, **(eg. John Smith: Job title: Reference No: 311882)**

Closing date: 22 April 2022

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

For more info, please email us at Recruitmentinfo@csir.co.za

*The CSIR is an equal opportunity employer. As such, it is committed to the employment Equity Act and will through the filling of this vacancy, give preference to candidates from designated groups in terms of the Employment Equity Act. By applying for this position at the CSIR, the applicant understands, and agrees that the CSIR may solicit a credit and criminal report from registered credit bureau and/or South African Police Services (in relation to positions that requires trust and honesty and/or entail the handling of cash or finances), and may also verify the applicant's educational qualification 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.***