

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 Civil Engineer

About the job:

The CSIR has a vacancy for a **Senior Civil Engineer** in the Water Centre Area, within the Smart Places cluster. The incumbent will be responsible for leading and conducting research and implementation projects in the field of civil engineering in Water & Wastewater Infrastructure. This position is based in Pretoria.

For more info about the impact area or cluster, please visit <https://www.csir.co.za/smart-places>

Key responsibilities:

- Conceptualise, guide and manage R&D projects within the water value-chain infrastructure. Provide strategic direction to R&D activities, understand and analyse real world problems and user requirements, select from a range of proposed conceptual solutions, formulate key research questions and appropriate R&D approaches.
- Development of operations and maintenance plans for water and wastewater infrastructure.
- Develop Asset Care management documentation.
- Development of strategic water infrastructure planning documentation.
- Design of water distribution network, water and wastewater infrastructure.
- Undertake research in the development and application of hydraulic models for water distribution networks.
- Utilise standard software for design, assessment, optimization, re-engineering of water and wastewater infrastructure.
- Manage project life cycle, technical resources, scheduling of activities to meet client expectations, balancing competing demands on scope, time, cost and quality.
- Develop proposals for different institutions in order to generate funding to pursue the strategic objectives of the CSIR.
- Engage with research programs and researchers to identify and grow opportunities to expand research endeavours and strengthen science at national and international level.
- Network with peers in the field expertise within and outside of the CSIR.
- Engage with clients and industry partners to develop long term relationships.

- Generate research papers, reports, reviews and summaries.
- Manage and ensure the development of self and interns through coaching, mentoring, work assignment, structured training and appropriate supervision in order to maximise human potential in line with the needs of the organisation and the national system of innovation.

Qualifications, skills and experience:

- A Master's degree or equivalent in civil engineering with at least ten years' experience in the field of water engineering;
- A Doctoral degree in civil engineering or water engineering will be an added advantage;
- Five to eight years' experience in design of water and wastewater infrastructure;
- Experience in working with public sector clients (e.g., municipalities, water boards, government departments);
- Experience in developing and/or updating operations and maintenance plans for water and wastewater infrastructure;
- Experience in water conservation and water demand management (non-revenue water programs) in the municipal space;
- Professional registration with ECSA;
- Practical knowledge and application of hydraulic modelling is essential;
- Proven track record in project management and research project leadership;
- Excellent English communication, presentation and writing skills, including the publication of technical outputs;
- Ability to work independently as well as in teams;
- Computer (MS software), programming and IT skills;
- Problem-solving, solution-seeking orientation;
- Ability to network and proactively establish and maintain links with internal and external stakeholders and clients as well as the research community;
- Must have a valid driver's licence.

Should you meet the above requirements, please email your CV to msebelebele@csir.co.za with your name and surname, position title and reference number in the subject line, **(eg. John Smith: Job title: Reference No: 313828)**

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 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.***