



## VACANCY

<b>VACANCY</b>	PROJECT PROCESS ENGINEER :SMELTER	<b>DIVISION</b>	SMELTER
<b>TYPE OF EMPLOYMENT</b>	FIXED TERM (12 MONTHS)	<b>CLOSING DATE</b>	
<b>GRADE</b>	C-UPPER	14 JUNE 2019	

### PURPOSE OF THE POSITION

- ✓ This purpose of the position is to focus on specific Smelter Business Unit projects to address projects and continuous improvements within the Smelter Arc Furnace with specific reference to charge/chemical recipes calculations to assist with achieve operational targets and deliverables.
- ✓ Develop process control data management systems as well as to be directly involved in business process and production improvements across the Smelter.

### MINIMUM QUALIFICATIONS

- ✓ Preference will be given to candidates a degree in Chemical Engineering (BEng or BScEng qualification will be advantageous)

### SKILLS AND ATTRIBUTES

- ✓ Advanced proficiency in computer literacy in MS Word, MS Excel, MS Power-point, MS Projects, and SAP.
- ✓ Focus on results through quality and safety awareness, managing work, planning and organising, decision making and customer focus.
- ✓ Express potential through adaptability, applied learning, initiating action, innovation, impact and work standards.
- ✓ Interact effectively through communication at all levels, building relationships, negotiation and gaining commitment.
- ✓ Achieve goals by aligning performance for success, developing others, facilitating change, monitoring information, inspiring others, meeting leadership and participation and follow up.
- ✓ Management skills: The proficient use of resources. The incumbent must have self-discipline, be honest, reliable and act independently, with minimal supervision.
- ✓ Trouble shooting skills: Able to diagnose and analyse process problems in plants. Be familiar with materials processing.
- ✓ Report writing skills: Able to produce reports that are timely, accurate, succinct and relevant.
- ✓ Team management: Be a team player and also have the ability to lead a diverse team.

### KNOWLEDGE AND EXPERIENCE

- ✓ Preference will be given to candidates with up to 5 years work experience with a pyro metallurgical and hydrometallurgical processes.

- ✓ Knowledge of thermochemistry and design charges.
- ✓ Knowledge of development of process design packages (Process description, PFD, P&ID, Energy and mass balancing, Datasheets, equipment sizing, and Control Philosophy Narrative etc.).
- ✓ Undertaking/Managing feasibility studies.
- ✓ Process plant knowledge- Good knowledge of metallurgical processes, thermochemistry, processing plants, equipment, sampling and analysis.
- ✓ Knowledge of different materials processing and understand chemistry of materials and ease of processing.
- ✓ SHERQ knowledge: Be conversant with all local and international statutory limits. Engage with SHERQ throughout the lifecycle of the project i.e. project initiation to execution.

### MAJOR RESPONSIBILITIES

#### RESOURCE PLANNING AND EXECUTION

- ✓ Understand and ensures compliance with process industry standards, ISO standards and Health and Safety standards.
- ✓ Deliver projects on-time and within budget meeting all quality standards.
- ✓ Provide timeous and accurate cost recovery reports.
- ✓ Participate in workshops as part of continuous improvement program focusing on the following: process improvements, training operation team and plant optimization strategies.

#### PROJECT MANAGEMENT

- ✓ Develop budgets, project schedules, WBS and project execution strategies.
- ✓ Develop project business cases indicating how the project will improve Smelter business unit.
- ✓ Develop front end engineering.
- ✓ Develop project management documentation (Charter, Scope, End User Requirements and Decision Register).
- ✓ Undertake project costing and NPV.
- ✓ Comply with project governance and procurement procedures.
- ✓ Maintain alignment of project teams with Smelter business unit objectives.
- ✓ Manage relationships with contractors, suppliers, internal and external stakeholders.



- ✓ Evaluate and manage project risks and contingency plans in addition to process safety related risk management.
- ✓ Report on the capital execution plan to Management.
- ✓ Manage multiple projects internally or manage EPCM companies.
- ✓ Review and generate documentation for Contracts.
- ✓ Project costing and NPV.
- ✓ Deliver projects on time and within budget, meeting customer satisfaction

#### ENGINEERING DEVELOPMENT

- ✓ Design and commissioning of capital projects to comply to the required legal requirements, and meeting end user requirements.
- ✓ Develop the process related engineering packages: Mass balance, PFD,P&ID's, PDC, process descriptions, control philosophy narrative, datasheets, equipment sizing, and scope of work. Process package to be developed in accordance to best engineering practices.
- ✓ Apply value engineering.
- ✓ Facilitate HAZOPs, design review and risk assessment(best engineering standards, legal requirements and ISO compliance).
- ✓ Liaise with C&I, Electrical and Piping/Mechanical disciplines.
- ✓ Undertake prefeasibility and feasibility studies or outsource and manager these studies by utilising SME (subject matter experts), consultants and specialist.
- ✓ Generate QCPs and undertake FAT.
- ✓ Generate Technical reports.

#### STAKEHOLDER ENGAGEMENT

- ✓ Develop, nurture and sustain strong partnerships with internal and external stakeholders. Maintain relationship with alliances and continuously test ideas with them.
- ✓ Develop project charter and organogram.
- ✓ Progress reports and stakeholder meetings.
- ✓ The incumbent will also liaise with Smelter process engineers and other operation staff to obtain process data, requirements and documentation.

#### REPORTS AND PRESENTATIONS

- ✓ Develop models for data collection, profitability models, complete business cases and trade off study documents for information sharing with the EXCO, Senior Management.

#### PROCESS OPTIMISATION

- ✓ Drive projects identified by the Smelter to reduce variable and fixed cost.
- ✓ Manage the improvement Projects.

#### RESEARCH AND DEVELOPMENT

- ✓ Perform process improvement studies at the beginning of a project.
- ✓ Investigate latest process technologies

#### PEOPLE MANAGEMENT

- ✓ Manage contractors during the project execution phase.
- ✓ Train operators during handover of new projects.

#### HEALTH AND SAFETY

- ✓ Ensures that GMP encompassing safety standards are adhered to.
- ✓ Complies with and ensures that all health and safety rules are met and acts proactively by

addressing any safety concerns which may be harmful to self or other employees

#### SALARY

- ✓ Salary and benefits will be negotiated in line with relevant experience and qualifications.

#### APPLICATION PROCESS

- ✓ Applications are to be submitted in writing on the approved internal vacancy application form, (CV's may be attached) and forwarded to: Nonkululeko Simelane, nonkululekos@gold.co.za , HR Department.
- ✓ Kindly provide proof of qualifications and experience.
- ✓ Consideration will be given to the Rand Refinery employment equity policy as part of the selection process. Please note that should your application be unsuccessful, you will be notified in writing.