

## Principal Geoscientist, New Ventures - London

### Company

Sasol Petroleum International (SPI) is the E&P division of Sasol, one of the top 50 global energy companies. SPI has operations in Mozambique and Papua New Guinea and Exploration/Production interests in South Africa, West Africa, and Australia.

SPI's main strategic focus is exploration and monetisation of gas, leveraging Sasol's downstream technology differentiators in Gas-to-Liquids and Chemicals. Its current equity production is 40,000 boepd and it is in the middle of an expansion project to increase production to 55,000 boepd by 2011. The company strategy is to achieve 150,000 boepd equity production by 2025, mainly via exploration led organic growth.

### Department

The Technical Services function of SPI consists of Petroleum Engineering, Geoscience, Projects & Engineering, and Value Assurance and is made up of a team of 50 professionals, split between Johannesburg and London. The department is headed by General Manager of Technical Services, who sits on the Executive Committee of SPI and reports directly to the Managing Director.

The role of Technical Services is to ensure that SPI's strategic, exploration, tactical and operational decisions are well founded on sound technical study and analysis in line with good oilfield practice. This is achieved by maintaining a well-resourced function of skilled staff provided with the necessary technology and applying appropriate practices and processes.

### Position Summary

To provide high quality geoscience evaluation support to Exploration New Ventures/Business Development activities in line with SPI's growth aspirations. The principal position will be part of a full-time 3-person team, with responsibility for optimizing team member activity in geoscience evaluations in support of farm-in, bid round, and corporate acquisition related projects aimed at delivering new ventures. The team will be supported by specialist geoscience, petroleum engineering and facilities engineering skills from within Technical Services and/or external consultancies as required, for integrated opportunity identification and maturation.

To assist with training and supervision of junior members of the group and management of technical work carried out by specialist consultancies.

### Job Requirements

#### Qualifications and Capabilities

- Bachelor degree in a geological or earth science subject is required.
- MSc or PhD in Petroleum Geology or Petroleum Geophysics is desirable.
- Technical experience and understanding of the upstream exploration business, particularly in the evaluation of new ventures/business development opportunities is required.
- Fluency in written and spoken use of the English language is required. Knowledge of other languages would be an advantage.
- Current and up to date software capability using office and collaborative applications is required.
- Excellent written and spoken communication skills are required.
- Demonstrated ability to lead team work on multiple projects in close collaboration with other geoscientists, and interact effectively with multi-discipline exploration team members is required.
- Ability to perform analysis, interpretation and problem solving at all levels of complexity with varying volumes of data is required.

- Ability to work in a geographically dispersed virtual team is required. This will include the recognition of the need for regular inter-continental travel.
- Understanding of and willingness to work in a matrix organisation is required
- Understanding of the importance of Sasol Values and other Sasol Group working policies is required.

### **Specific Expertise and Experience**

- Extensive expertise in one of the following skill-sets is required, and more than one would be an advantage:
  - Structural interpretation and mapping of seismic data, sequence stratigraphic analysis, multi-layer depth conversion methods, seismic attribute methods, analysis, correlation and mapping, correlation of log response to seismic data (utilization of VSP, checkshot surveys), seismic data management, SEG-Y data loading, formatting and input of trace location data.
  - Geological evaluation of log, core and seismic data (2D and 3D) for the creation of 3D geocellular models, input for 3D structural models from gridded and mapped surface and fault data, statistical and deterministic description of depositional systems; facies distributions; lithology, porosity, permeability, and phase distributions, construction of digital static models for input to reservoir production simulator, deterministic and stochastic volumetric reserves estimation.
  - Well log interpretation, litho-stratigraphic interpretation and correlation of well logs, petrophysical estimation of rock parameters (porosity, permeability, fluid phase saturation), core and cuttings description, sampling, testing procedures, data management, handling and display of LAS files, and analysis, planning, selection, and specification of well logging procedures.
- Experience in working in sub-surface, predominantly exploration, evaluation teams is required.
- Current capability with geoscience interpretation and modelling software is required. Kingdom and Petrel expertise is desirable.
- Experience of the geological interpretation of well log and seismic data from a variety of depositional and tectonic systems from a number of different international regions desirable.
- Capability to grid and contour structural and attribute maps to presentation level is desirable
- Experience of volumetric estimation would be an advantage
- Knowledge of basin modelling, petrography, geochemistry, and / or biostratigraphy would be an advantage.
- Experience of participating in data room evaluations would be an advantage
- Experience of drilling operations, well site geology, and core description and analysis would be advantage.
- Knowledge of acquisition and processing of seismic, potential field, and remote sensing data would be advantage
- Experience in partnership/JV operations would be an advantage

### **Required Outputs: Functional (The core content and deliverables of the position)**

- Participate in detailed and integrated geoscience interpretation of operated and non-operated fields
- Provide structural, stratigraphic and geological facies input to accurately populate static reservoir models
- Provide geoscience input into SPI's Resource Statement and Prospect Inventory as necessary
- Carry out studies and provide geoscience input into acreage evaluation, prospect evaluation, well proposals, reservoir development studies and field development plans
- Provide sound geoscience input to lead, prospect and development planning to ensure an effective data acquisition and drilling programme.

### **Required Outputs: General (Overall objectives/Key Areas of Performance)**

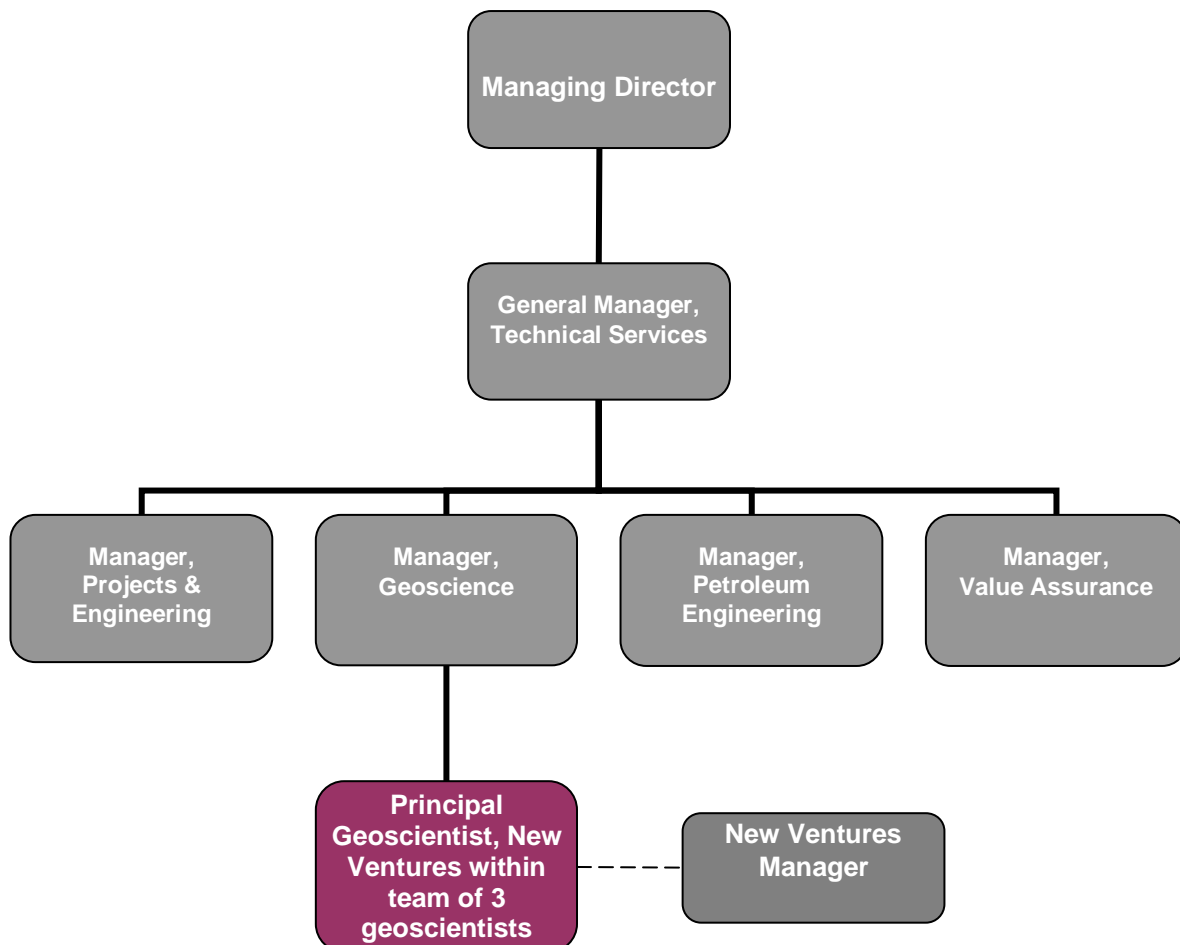
- Provide the highest standards of collaborative support to the Regional New Ventures Coordinators and the Manager, New Ventures
- Represent SPI interests in external dealing with contractors, consultants and industry forums

- Support SPI interests on joint projects – influence the operator in non-operated situations
- Report to Manager, Geoscience on functional geoscience matters

**Person Attributes: Competencies (Skills, Knowledge and Characteristics – Critical / Desirable)**

Competency	Must	Wish	Weight 1-10
Expert technical and analytical (geoscience) skills	X		10
High technical and personal work standards	X		10
Technical report writing and presentation skills	X		8
Team working (virtual), collaboration and interpersonal skills	X		9
Ability to work on own initiative	X		8
Setting goals and achieving them	X		8
Meeting deadlines and targets	X		8
Ability to work with varying volumes of data		X	7
Ability to work at all levels of complexity		X	7
Embracing new ideas/strategies/technologies		X	6
Flexibility to adapt to changes		X	6
Innovation and creativity		X	5
Communication and influencing skills		X	6
Management, Leadership & Development of others		X	6
Motivating others to achieve targets		X	5
Project Management Skills		X	4
Managing diverse groups		X	3
Willingness to travel		X	7

**Organisational Structure/Position**



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For further information and a confidential discussion please contact Liz Gardner at Simpson Crowden LLP on +44(0)207 016 9768 or +44 (0)7801 711372.

To apply please visit our website: [www.simpsoncrowden.com/sasol](http://www.simpsoncrowden.com/sasol) and follow the links, or email your CV and covering letter to [sasol@simpsoncrowden.com](mailto:sasol@simpsoncrowden.com) quoting reference **R192**.

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