HR191	**POSITION DESCRIPTION**	UNIVERSITY OF CAPE TOWN IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

NOTES

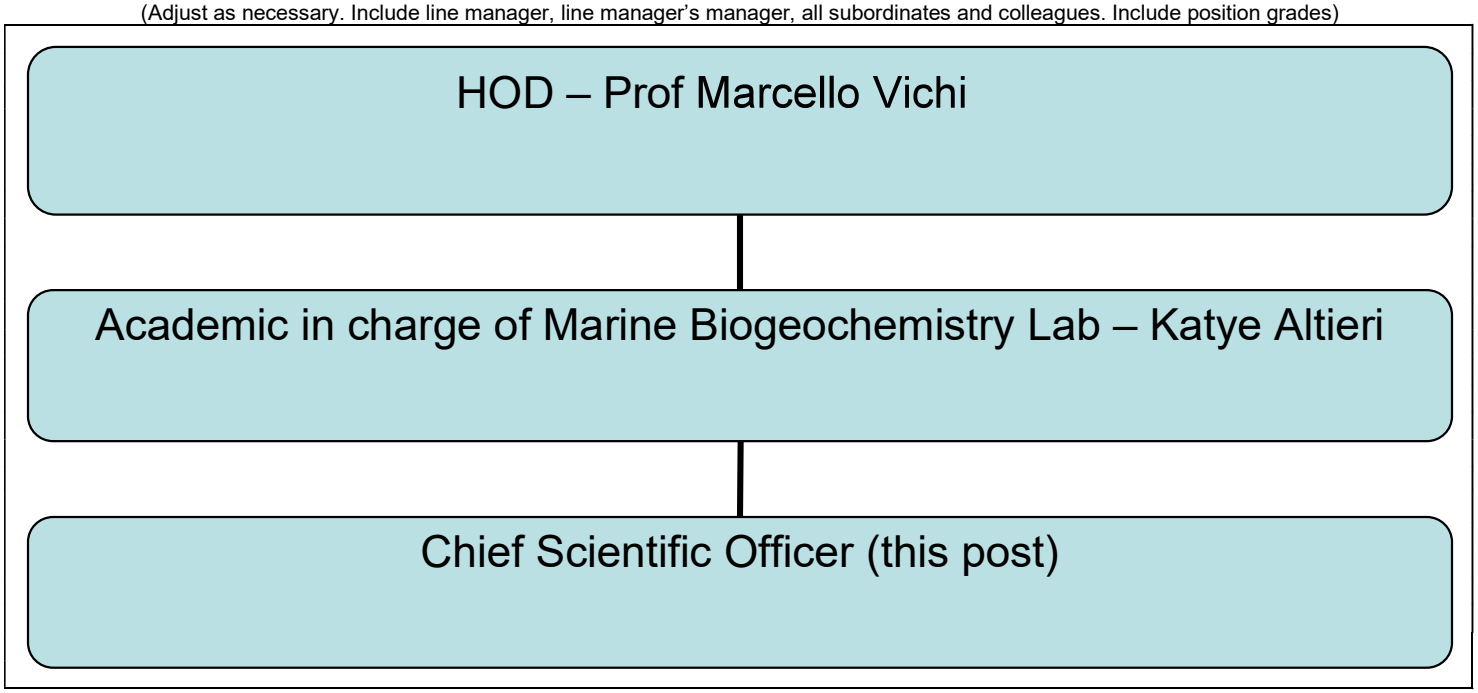
- Forms must be downloaded from the UCT website: http://forms.uct.ac.za/forms.htm
- This form serves as a template for the writing of position descriptions.
- A copy of this form is kept by the line manager and the position holder.

POSITION DETAILS

Position title	Chief Scientific Officer		
Job title (HR Practitioner to provide)	Chief Scientific Officer		
Position grade (if known)	PC 10	Date last graded (if known)	24 August 2021
Academic faculty / PASS department	Science		
Academic department / PASS unit	Oceanography		
Division / section			
Date of compilation	27 November 2024		

ORGANOGRAM

(Adjust as necessary. Include line manager, line manager's manager, all subordinates and colleagues. Include position grades)



PURPOSE

The main purpose of this position is to ensure the effective operation and maintenance of the denitrifier-IRMS facility in the Marine Biogeochemistry Laboratory. This involves maintenance and repair of the IRMS instrumentation, especially the custom bult gas-bench, and ensuring a well-maintained facility. It also involves liaising with users concerning their analytical requirements, advising and assisting with sample preparation and analysis, record keeping for analytical procedures used in the laboratory, overseeing inter-laboratory standardization to international quality, monitoring use of consumables and managing the purchase of replacements, billing users and controlling expenditure, training new users, and overseeing Health & Safety matters related to the laboratory.

CONTENT

Key performance areas		% of time spent	Inputs (Responsibilities / activities / processes/ methods used)	Outputs (Expected results)
E.g.	General and office administration	25%	Takes, types up and distributes minutes and agendas for monthly departmental meeting. Greets visitors, enquires as to the nature of their visit and directs them to the appropriate staff member.	All staff members receive an electronic copy of accurate minutes and agendas, in the departmental template/format, a week before the meeting. Visitors are directed to appropriate staff member in a professional and efficient manner.
1	Daily involvement in operation of IRMS and isotope analyses. Manage sample throughput.	40	• Ensure daily QC of IRMS system • Prepare samples for isotope analyses • Run isotope samples on IRMS • Monitor instrument performance • Supervise other analysts • Ensure data quality	• High throughput of isotope sample analyses • High level of consistency in IRMS performance • Well-maintained facility that is ready and operational at all times • Production of high-quality data
2	Responsible for IRMS laboratory, equipment, and affiliated denitrifier equipment. Purchase materials and consumables for all aspects of IRMS facility.	25	• Maintain all equipment associated with isotope sample preparation and throughput to a high standard • Conduct routine maintenance of IRMS • Diagnose gas bench and IRMS technical issues as needed • Organize purchasing of supplies and consumables • Ensure sufficient stock to keep IRMS facility operational	• Well organized and equipped facility ready to run as needed • IRMS remains well-maintained and in warranty • Technical issues quickly identified • Ensure isotope sample preparation is operational and available at all times
3	Responsible for data quality, inter-laboratory cooperation and standardization to international quality.	10	• Ensure the IRMS data output is of internationally acceptable quality • Participate in inter-laboratory standardization activities	• All data output meets accepted international standards. • The UCT MBL is a recognized participant in inter-laboratory standardization activities
4	Maintain records of internal and external users and maintain financial balance in charging users and control expenditures.	10	• Keep records of IRMS maintenance • Keep records of sample throughput • Quote external users for analysis costs and timelines • Charge external users for analyses done in the facility	• Maintain sound financial balance for the facility • Logbook of IRMS maintenance schedule • Logbook of all sample analyses and users
5	Supervise and train users and laboratory staff in best practice in the lab.	10	• Train and supervise all users in proper procedures • Conduct annual training session for all new postgraduate students	• All users are properly trained • All new students are introduced to the proper use of the facility

6	Oversee health and safety matters in the lab.	5	• Ensure that proper safety procedures are followed • Design additional safety procedures as needed	• A safe, accident-free laboratory • Written safety procedures available in laboratory

MINIMUM REQUIREMENTS

Minimum qualifications	A PhD in a related field and at least 2 years relevant experience.
Minimum experience (type and years)	Experience with gas-bench extraction systems, gas-source mass spectrometers, interfacing electronics and computers to scientific equipment.
Skills	A demonstrable aptitude for maintenance of laboratory and scientific equipment, particularly GC and IRMS.
Knowledge	General and practical technical competence, knowledge of the use of stable isotope data as a scientific research tool, knowledge consistent with minimum experience specified above.
Professional registration or license requirements	Not required.
Other requirements (If the position requires the handling of cash or finances, other requirements must include 'Honesty to handle cash or finances'.)	Honesty to handle cash or finances.

Competencies (Refer to UCT Competency Framework)

Competence	Level	Competence	Level
Analytical thinking / Problem solving	3	Planning and organizing/ work management	3
Client/student service and support	2	Professional knowledge and skill	3
Building interpersonal relationships	2	Teamwork / collaboration	1
Communication	2	Research support skills	2

SCOPE OF RESPONSIBILITY

Functions responsible for	The denitrifier-IRMS facility in the Marine Biogeochemistry Laboratory and all associated equipment.
Amount and kind of supervision received	Minimal supervision on technical aspects of job, report to directors of the MBL
Amount and kind of supervision exercised	Supervision of students and external users in the laboratory
Decisions which can be made	Routine decisions involving running the denitrifier-IRMS facility
Decisions which must be referred	Purchase of major equipment and major changes to the gas-bench IRMS system

CONTACTS AND RELATIONSHIPS

Internal to UCT	Multiple departments in the Faculty of Science
External to UCT	Users from southern African universities and research institutions and many international collaborators

AGREED BY

	PRINT NAME	SIGNATURE	CONTACT NO.	DATE
Position Holder				
Line Manager	Katye Altieri		X1222	27 November 2024