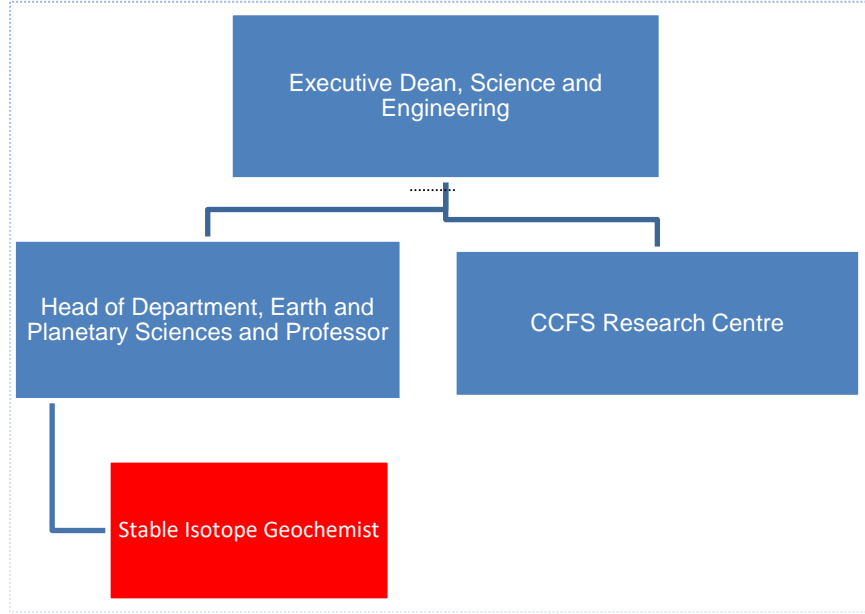


Position Description

Title: Stable Isotope Geochemist	HEW Level: Level 7
Faculty/Office: Science and Engineering	Position Number: 10303
Department/Team: EPS	Date: October 2017
<p>Position Purpose: To manage the MAT 253+ and isotope clumping laboratory including research and development, overseeing the training and supervision of users and providing high level specialist technical support.</p>	
<p style="text-align: center;">ORGANISATIONAL CONTEXT</p> <p>The Faculty of Science and Engineering offers both undergraduate and postgraduate Degree programs across a diverse range of disciplines. The Faculty is research intensive environment delivering world class outcomes.</p> <p>The Department of Earth and Planetary Sciences is one of the ten departments within the Faculty of Science and Engineering, offers a range of undergraduate and postgraduate courses, which also can be integrated with many other disciplines. EPS is a research intensive department.</p> <p>EPS hosts some of the most advanced isotope analysis laboratories in the world and has recently refurbished the laboratory facilities supporting sedimentary geochemistry area of research.</p>	<p style="text-align: center;">ORGANISATION CHART</p>  <pre> graph TD A[Executive Dean, Science and Engineering] --- B[Head of Department, Earth and Planetary Sciences and Professor] A --- C[CCFS Research Centre] B --- D[Stable Isotope Geochemist] </pre>

KEY ACCOUNTABILITIES	POSITION CONTEXT		
<ul style="list-style-type: none"> • Manage the day-to-day operation of the specified facility and provide expert technical support of the MAT 253+ and isotope clumping lab to internal and external (collaborative universities and industry)users. • Research, develop and implement new analytical procedures and maintain existing procedures; • Research and prepare standards and samples for analysis by the MAT 253+ and isotope clumping lab for quantitative analysis • Publish independent research where appropriate • Undertake troubleshooting and maintenance of the MAT 253+ and isotope clumping lab instruments and manage maintenance schedules; • Train and supervise staff, students, visitors and external users in operation of MAT 253+ and isotope clumping lab instruments including sample preparation techniques; • Maintain currency and provide expert advice to staff, students, visitors and external users on appropriate analytical techniques; • Data quality control, data reduction and compilation of results, and maintaining high standards of analyses produced by the MAT 253+ and isotope clumping lab; • Implement and oversee analytical result archives according to the guidelines and requirements of ARC and Macquarie University; • Monitor and maintain consumables and instrument spare parts in MAT 253+ and isotope clumping laboratories, including preparation of purchase requisitions for supplies; • Assist in the operation of other relevant instruments (e.g. SEM or ICP management). • Build and maintain relationships with key stakeholders; • Manage safety through the implementation and monitoring of policies and procedures to maintain compliance with regulatory and laboratory standards and legislation; • Comply with relevant EEO and WHS regulations; • Perform any other duties as required and appropriate for this classification 	Reports to:	Professor Geology	
	Positions Reporting to:	N/A	
	Key Direct Clients:	<ul style="list-style-type: none"> • Academic staff • Higher degree research students • Staff and students from other Departments across the University • Visitors and other external stakeholders (other institutes, public or private) 	
	Other Key Relationships:	<ul style="list-style-type: none"> • External stakeholders (Partner Universities and Industry, suppliers and service providers) • CCFS • Property • METS • Administrators • IT 	
	Budget Accountability:	N/A	
	Role-specific Conditions:	N/A	
	Scope and autonomy	Develops and modifies processes, procedures, systems and/or techniques for the work area and/or contributes to the development of University-wide systems, processes and procedures.	
	Problem solving	Draws on own knowledge, experience and expertise to identify, develop and implement new initiatives, processes and programs.	

CAPABILITY FRAMEWORK

Capability Frameworks describe the behaviours, skills, attributes and experience required to successfully perform a position or group of similar positions.

COMPETENCIES Clusters of behaviours required for successful performance.

Planning and Execution: Managing time and resources to complete tasks and achieve objectives.

Quality Focus: Ensuring accuracy and quality when completing tasks.

Analysis and Judgement: Evaluating information and data to solve problems and make decisions.

Communication: Effectively grasping and conveying ideas and concepts to others.

Relationship Management: Establishing effective working relationships with others.

Improvement Focus: Finding better ways of completing tasks or solving problems.

ATTRIBUTES Personal qualities related to successful performance.

Flexibility: Responding effectively to unexpected or changing circumstances.

Resilience: Dealing effectively with and recovering quickly from setbacks or pressure.

Interpersonal Impact: Making a positive impression on others in a range of interpersonal contexts.

Integrity: Maintaining confidentiality, discretion and professionalism.

Accountability: Assuming responsibility for making decisions and delivering agreed outcomes.

REQUIRED KNOWLEDGE Qualifications, technical and/or professional skills and information needed from day one for successful performance.	KEY EXPERIENCES Practical experiences and exposure to specific environment or activities related to successful performance.
<p>PhD or advanced degree in Geology with a Geochemistry/ Petrology emphasis and/or equivalent experience.</p> <p>Experience in stable isotopic measurements with a preference for clumped isotope analysis.</p> <p>A track record of research</p> <p>Thorough understanding and knowledge of analytical methods and data quality control in inorganic geochemistry.</p> <p>Understanding of rock and mineral chemistry.</p> <p>Knowledge of analytical methods and principles of IRMS analysis, data handling, and expertise in data reduction methods for quantitative trace-element analysis</p> <p>Knowledge of analytical methods and principles of MAT 253+ and isotope clumping, data handling, and expertise in data reduction methods for quantitative analysis.</p> <p>Knowledge of workplace health and safety legislation and principles including hazardous chemicals and non-ionising radiation.</p>	<p>Experience in a research environment and conducting independent research.</p> <p>Managing a geochemical analysis laboratory</p> <p>Working in operation, maintenance and troubleshooting of the MAT 253+ and isotope clumping laboratories instruments.</p> <p>Working in operation of other equipment or laboratory procedures (e.g. SEM or ICP management).</p> <p>Maintaining geochemical equipment (monitoring, service records, compliance with contracts)</p> <p>Designing, developing and delivering training on analytical techniques, methodologies and equipment</p> <p>Training and supervising staff and students in the laboratory</p> <p>Researching, developing and updating experimental techniques.</p> <p>Preparing geochemical standards and samples.</p> <p>Capturing and analysing data using geochemical equipment.</p> <p>Ensuring safe work practices within a laboratory.</p> <p>Building and managing relationships with key stakeholders.</p>
ACQUIRED KNOWLEDGE Organisational and/or professional skills and information to be developed within the first 3 to 6 months for successful performance.	
<p>Knowledge of the Faculty of Science and Engineering's functions and structure.</p> <p>Knowledge of the Science and Engineering's policies, systems, processes and procedures.</p> <p>Knowledge of what other areas of the University do and how they interact with the Faculty of Science and Engineering.</p>	