

中-澳压裂监测电磁法研究和矿产勘探中的各向异性研究合作

Research Agreement on scientific Research

Cooperation

1. Parties to the Agreement:

School of Earth Sciences, Adelaide University, Australia

College of Geophysics and Petroleum resources, Yangtze University

2. Purpose and content of cooperation

Scientific research on geophysical electromagnetic exploration methods will be undertaken. This will improve methodology and give greater coverage to the Yangtze University controlled source electromagnetic exploration method (YUTEM), and strengthen the international cooperation and exchange of electromagnetic methods, especially regarding fracturing monitoring and mineral exploration developed by Prof. Graham Heinson, School of Geosciences, Adelaide University, Australia.

At the invitation of Professor Heinson, Professor Yen Liangjun (Institute of Geophysics and Petroleum Resources, Yangtze University) will lead a team of 5 people with related scientific research equipment to travel to Adelaide University, Australia, in late April 2019 for a collaborative project on electromagnetic science research. This project fulfils the intentions of the 2017 visit to Adelaide University by staff from Yangtze University which established the basis for research cooperation agreement to achieve mutual benefits, such as sharing results, resources, and publication, and establish long-term scientific research and cooperative relations. The University of the Yangtze River will provide professional methods and equipment for long offset transient electromagnetism, and Adelaide University will also share its valuable experience in magnetotelluric (MT) exploration and provide logistical and data processing technical support. This is a non-commercial cooperation

Specific elements of the cooperation include:

1. The geological exploration test a copper ore deposit in the Burra (South Australia) area and investigation of anisotropy in the Kapunda (South Australia) area using a combination of YUTEM and MT.
2. the publication of academic and conference papers, exchange of academic staff.
3. Personnel & equipment:
In accordance with the Agreement between the parties, Yangtze

University intend to send the following personnel and equipment to jointly complete the relevant content of the provisions of the cooperation Agreement

People

Adelaide University		Yangtze University	
Name	Title	Name	Title
Graham Heinson	Professor	胡文宝	Professor
Goran Boran	Technician	严良俊	Professor
Chris Matthews	Project Manager	谢兴兵	A. Prof
		毛玉蓉	A. Prof
		Simon Carter	Lecturer

Equipment

No.	Unit	Item	Model	Number
1	Yangtze University	Medium Power Multi-purpose transmitter	TXU30	1
2		V8 Earth Electromagnetic Detector	V8	1
3		V8 V8 Earth Electromagnetic Detector	RXU-3	5
4		V8 V8 Earth Electromagnetic Detector	RXU-TXM	1
5		Electromagnetic Sensor coil	AMTC-30	6
6		Sensor coil cable		4
7	Adelaide University	3-phase generator	MG20	1
8		Non-polarized electrodes		25
9		Shielded electric wire		1000m
10		Transmitter wire		3000m
11		GPS		2
12		Vehicles		as required

Costs

Yangtze University will undertake all the costs of bringing their research team and scientific research equipment to Adelaide University, including air tickets, freight charges, customs clearance fees. Adelaide University undertakes all the daily expenses of the research team of Yangtze University while in Adelaide, specifically transportation, accommodation, food and research incidentals.

Responsibilities and obligations

1. The two sides jointly carry out data field collection, Adelaide University side is responsible for logistics and collection area security.
2. The data collected by the project and the results of the processing should be published after joint agreement, but restrictions due to commercial confidence is at the discretion of Prof. Heinson.
3. Yangtze University is responsible for the Yangtze University research equipment from China to Australia transport Customs Declaration and other matters. Adelaide University is responsible for the Yangtze University scientific research equipment from Australia entry and customs and all matters and instrument safety.



长江大学
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29/3/19

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30/3/19

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