

**SPECIFIC TECHNICAL COOPERATION AGREEMENT  
BETWEEN  
THE GEOLOGICAL, MINING AND METALLURGICAL INSTITUTE OF THE ENERGY  
AND MINES SECTOR OF THE REPUBLIC OF PERU  
AND  
THE CHINA GEOLOGICAL SURVEY (CGS) OF THE MINISTRY OF LAND AND  
RESOURCES, OF THE PEOPLE' S REPUBLIC OF CHINA  
ON GEOCHEMISTRY RESEARCH IN THE CENTRAL PERU**

This Specific Technical Cooperation Agreement, hereinafter "The Agreement" is entered into by and between the Instituto Geológico, Minero y Metalúrgico of the Energy and Mines Sector, of the Republic of Peru, with RUC N° 20112919377, domiciled in Av Canada 1470, San Borja, Lima, Peru, duly represented by Engineer **OSCAR HUBERT BERNUY VERAND**, identified by DNI N° 10491805, as President of the Board of Directors, appointed by Supreme Resolution N° 011-2016-EM, published on September 09, 2016, hereinafter referred to as "**INGEMMET**"; and the other party, the China Geological Survey of the Ministry of Land and Resources, of the People's Republic of China, domiciled in 45 Fuwai Street, Xicheng District, Beijing, People's Republic of China, duly represented by **Mr WANG YAN**, Vice President of China Geological Survey, hereinafter referred to as "**CGS**", under the following terms and conditions.

Hereinafter **INGEMMET** and **CGS** together will be referred to as "the Parties".

Both Parties' cooperation in the field of geology shall be mutual beneficial.

**ARTICLE 1: PARTIES OF THE AGREEMENT**

- 1.1 **INGEMMET** is a state scientific and technical entity of the Energy and Mines Sector, of the Republic of Peru. It is a legal person of the internal public law type, with technical, economic, and administrative autonomy, in charge of the basic geological research of the Peruvian territory and the awarding of mining rights to the private sector.
- 1.2 **CGS**, directly under the Ministry of Land and Resources of the People's Republic of China, is a government owned non-profit entity responsible for the centralized deployment and organizing implementation of nation's basic, public and strategic geological investigation and mineral exploration, providing basic geological information and data for national economy and social development and offering public-good service for the society.

**ARTICLE 2: LEGAL FRAMEWORK**

**CGS** and **INGEMMET** agree to sign this document pursuant to the following legal provisions:

- Political Constitution of Peru
- Civil Code of Peru
- Supreme Decree N° 304-2012-EF, TUO of the General Law of the National Budget System.
- Law N° 30281, Public Sector Budget Law for 2015 Fiscal Year

- Supreme Decree N°035-2007-EM, Regulation on the Organization and Functions of INGEMMET.
- Memorandum of Understanding between CGS and INGEMMET signed on April 20, 2009
- Addenda to the Memorandum of Understanding, signed on July 10, 2012.
- Addenda to the Memorandum of Understanding, signed on March 31, 2015.

### **ARTICLE 3: BACKGROUND**

On April 20, 2009, **CGS** and **INGEMMET** signed a Memorandum of Understanding for a three year's period which can be extended by mutual agreement. This was extended for three more years by signing the Addenda to the Memorandum of Understanding between **CGS** and **INGEMMET** on July 10, 2012 and March 31, 2015. The main purposes of this Memorandum of Understanding were the exchange of scientific and technical information, the exchange of study visits and scientific visits, joint research activities, projects of mutual benefit, as well as other cooperative possibilities that the Parties could find.

Likewise, dated November 4, 2013 **CGS** and **INGEMMET** signed a Specific Technical Cooperation Agreement with a term of December 31, 2014. The main objective was to strengthen and share the geological knowledge of regional geology and the geochemistry in Chaparra-Atico area, region of Arequipa. It's important to mention that are achieved the specified goals in the agreement.

On March 31, 2015, **CGS** and **INGEMMET** signed a Specific Technical Cooperation Agreement with a term of July 31, 2016. The main objective was to enhance and share the technical and scientific knowledge by means of cooperative study on digital geological mapping at scale of 1: 250 000, geochronology, and geochemistry in Piura, Lambayeque and Cajamarca. It's important to mention that are achieved the specified goals.

### **ARTICLE 4: OBJECTIVE**

The main objective of the specific agreement is to continue improving and transferring technical and scientific knowledge in the field of regional geochemistry between technical staff of **CGS** and **INGEMMET** by geochemistry multipurpose research.

### **ARTICLE 5: THE PURPOSE AND CONTENT OF COOPERATION**

#### 5.1 Project Area

The Mantaro basin of Central Peru.

#### 5.2 Content of Cooperation

These following matters are set forth in this Agreement:

##### 5.2.1 Technology exchange

To exchange the experience and training in Multi-purpose regional geochemical research, including the theory, sample collection method, laboratory test method, preparation of maps and database construction.

#### 5.2.2 Multi-purpose Regional Geochemical Research.

To carry out multi-purpose regional geochemical research in the Mantaro basin in central Peru. The work area is 1500 km<sup>2</sup>. Surface soil samples (0-20cm) will be collected at a density of 1 sample/1 km×1 km, and 1 composite analysis sample/4 km<sup>2</sup>. Deep soil samples (100-150cm) will be collected at a density of 1 sample/2 km×2 km, and 1 composite analysis sample/16 km<sup>2</sup>. Half of each samples will be remain and analyzed in Peru, the remaining half of the samples will be shipped to China and analyzed for 54 elements in Chinese Labs.

#### 5.2.3 Database building and map producing

Geochemical database will be built. Geochemical Atlas will be produced.

### 5.3 Work Plan

The General Work Plan is as follows:

2017:

Technology exchange in Lima, Peru;  
Collection of soil samples within the scope of 1000 square kilometers in Mantaro basin, Peru.

2018:

Technology exchange, Nanjing, China;  
Collection of soil samples within scope of 500 square kilometers, Mantaro basin, Peru;  
Analysis and test for soil samples in Nanjing, China.

2019:

Preparation of geological map and report writing  
Project summary, field acceptance check and submitting research achievements jointly.

### 5.4 Progress Reports

Progress reports shall be published quarterly on **INGEMMET** and **CGS** websites; printed versions will be determined at each party's sole discretion. The languages to be used are those that correspond to each institution, documents shall be translated into English, which is the common language used by the Parties.

## ARTICLE 6: PROJECT TIMELINE

### 6.1 **CGS** and **INGEMMET** designate properly organized teams for the project.

The first task of both teams will discuss and agree the "Specific Work Plan", including the sequence of work progress and a detailed timetable. This "Specific

Work Plan" will be considered as the tool of supervision and control with respect to the progress of the project, being timely and respectively to the highest authorities of both institutions statement.

- 6.2 The work schedule will indicate in detail all the steps necessary to provide the results on regional geochemical multipurpose research.

## **ARTICLE 7: COMMITMENTS OF BOTH PARTIES**

### **7.1 Commitments CGS:**

- 7.1.1 To organize and coordinate the **CGS** team will participate in the project.
- 7.1.2 To provide training specific to **INGEMMET** geologists participating into Multi-purpose regional geochemical research.
- 7.1.3 To develop geochemical analysis of samples transported to China for Regional Multi-Purpose (54 elements).
- 7.1.4 To provide office facilities, vehicles of transportation, and to cover safety features for the **INGEMMET** team during their work in China under the scope of the project.
- 7.1.5 To build a geological database for Multi-purpose Regional Geochemistry; and complete its review on maps, project reports and publication for the project's achievements.

### **7.2 Commitments INGEMMET:**

- 7.2.1 To provide geological information for **CGS**, including provision of the geological maps formulated in accordance with the scales of 1:100,000 and 1:50,000 for the designated zone, as well as to provide reference books and briefs deemed necessary for this project in accordance with the requirements of this project.
- 7.2.2 To organize and coordinate with the **CGS** team that will participate in this project.
- 7.2.3 To realize the sample collection in Peru for Multipurpose regional geochemical research and develop geochemical analysis of samples left in Peru.
- 7.2.4 To provide office facilities and for the procurement of transportation services, providing personal protection for **CGS** team during their stay in Peru under the project objectives.
- 7.2.5 To implement jointly with **CGS** for building the database of Multi-purpose Regional Geochemistry; mapping jointly with **CGS**, including data processing, preparation of reports and publications.

### **7.3 Mutual commitments of the Parties:**

- 7.3.1 Both Parties shall develop and submit specific work plan for cooperation project after an overall evaluation.

- 7.3.2 Both Parties undertake jointly to conduct field studies, general research and publish achievements. Similarly, to send specialists that apply and provide the information necessary to ensure that the project is developed according to the work plan.
- 7.3.3 Both Parties shall convene non periodic meetings for the project, as required for its development; analyze jointly the problems which arise during the project development and distribution of work to be done.
- 7.3.4 Both Parties hereby represent that the information and documents acquired in the duration of this Agreement shall be used by **INGEMMET** and **CGS** for publication. The achievements within the scope of this Agreement shall be deemed as public information.

#### **ARTICLE 8: FINANCIAL ARRANGEMENTS**

- 8.1 The cooperation in the field of science & technology between the two organizations achieves the conclusion of this Agreement, which will promote an improvement in the global technical domain, especially for the technical improvement in the Jurisdiction of Peru. The key point of this Agreement is that the finance expenses of either Party will be arranged by each Party respectively, namely each Party will bear its own expenses.
- 8.2 Each Party shall bear the expenses including accommodation, materials, and international travel expenses, intercity traffic cost, salary, allowance, insurance, subsidy for field work, etc. for its own team members during the implementation of the cooperative project.
- 8.3 Each Party bears the cost for samples analysis taken place in its own country, respectively.
- 8.4 The estimated budget (Appendix 1) allocated by **INGEMMET** for the activities listed in paragraph 5.3 they are scheduled in POI 2017 and provided in the Multi-Year Plan 2017-2019.
- 8.5 The Parties coordinate and decide the payment of other expenses. In the case of **INGEMMET** these are and will be budgeted in annual POI.

#### **ARTICLE 9: ACHIEVEMENTS**

The following achievements will be jointly made by both parties:

- 9.1 One (01) geodatabase on multi-purpose regional geochemical research.
- 9.2 Explanatory report and geochemical maps for multi-purpose regional geochemical research in the Mantaro basin of central Peru.

## ARTICLE 10: INTELLECTUAL PROPERTY

- 10.1 In furtherance of activities in connection with the implementation of this Agreement, the information provided by either Party shall belong to the information provider, and either Party shall respect the intellectual property of the other Party.
- 10.2 All data, information and achievements of this project, obtained under this agreement shall be jointly owned by both parties, pursuant to clause 7.3.4 of this agreement.

## ARTICLE 11: PROJECT COORDINATION

- 11.1 Both parties shall establish a work group, prepare a detailed work plan and an implementation plan, and shall discuss specific cooperation details.
- 11.2 Both parties shall respectively designate one person as project coordinator who shall be in charge of normal communication, communicate suggestions on behalf of his country, negotiate with the other party, exchange information and documents, and organize domestic experts to finish the tasks which are undertaken by each country according to the confirmed plan.

### 11.3 CGS Coordinator:

Name: Liu Dawen  
Senior Geochemist  
Director, Division of International Programme  
Sci. &Tech. and International Cooperation Department  
China Geological Survey  
Address: 45 Fuwai Street, Xicheng District, Beijing P.R. China  
Post code: 100037  
Tel: 86-10-58584660  
Fax: 86-10-58584661  
E-mail: ldawen@mail.cgs.gov.cn

### 11.4 INGEMMET Coordinator:

Name: Ing. Jorge Chira Fernández  
Director of Mineral Resources and Energy of INGEMMET  
Address: Av. Canadá N° 1470, San Borja,  
Post code: Lima 41, Perú  
Tel: (511) 618-9800  
E-mail: jchira@ingemmet.gob.pe

### 11.5 Functions of coordinators:

- 11.5.1 To establish the work plan of this Agreement, the same that shall be established at the beginning of the Agreement effective period.
- 11.5.2 To verify that all the mutual obligations of the parties are met.
- 11.5.3 To facilitate the implementation of this Agreement.

- 11.5.4 To offer favorable conditions and make the necessary arrangements to ensure an appropriate implementation of the Agreement.
- 11.5.5 To coordinate proper actions for the promotion, monitoring and evaluation of the Project and the activities which need to be carried out under this Specific Agreement.
- 11.5.6 To assess compliance, scope and impact of this Agreement in order to take proper actions when appropriate.
- 11.5.7 To identify and carry out actions to comply with the objective of this Agreement.
- 11.5.8 To follow up progress of this Agreement and inform their respective entities.
- 11.5.9 To coordinate quarterly publication and dissemination of the progress reports and achievements of the study.
- 11.5.10 To coordinate the publication and dissemination of the final report according to the work schedule.
- 11.5.11 Other functions as the parties may establish by mutual agreement through an addenda.

#### **ARTICLE 12: EXCHANGE OF INFORMATION AND PRIORITIES**

Methodology for information exchange and priorities shall be established in the respective Work Plan.

#### **ARTICLE 13: CONFIDENTIALITY**

By no means, the information exchanged at the beginning and to give viability to this agreement may be transferred by the receiving party to the third parties without the prior written consent of the other party.

#### **ARTICLE 14: NON EXCLUSIVITY**

This Agreement shall not prevent the parties from entering into or implementing agreements with similar purposes in different geographical areas, with other legal persons under public or private domestic or foreign organizations, as well as with international organizations aiming at the achieving the research objective of **INGEMMET** or **CGS**.

#### **ARTICLE 15: DURATION OF THE AGREEMENT**

This agreement shall enter into force upon its signing by both parties authorities and it will continue until December 31, 2019. It may be extended upon both parties agreement upon receiving a written communication no less than six (06) months in advance.

## **ARTICLE 16: MODIFICATION, SUSPENSION AND TERMINATION OF THIS AGREEMENT**

### **16.1 Modification**

Any modification on provisions of this Agreement shall be made in an appendix, which shall include the periodical appraisal result concluded in the duration of this Agreement and shall be executed through the same procedure and manner as those of this Agreement by both Parties in written form.

### **16.2 Suspension**

- 1) In the event that either Party can't perform its commitments in this Agreement temporarily as a result of an incidental or a force majeure event, the period of performance suspension for the obligations set forth in this Agreement shall solely depend on the duration of such incidental or force majeure event.
- 2) The Party which is unable to perform its obligations shall notify the other Party for suspension of this Agreement and state the reasons.
- 3) The longest duration of such suspension is three (3) months. In the event the causes of such suspension are not settled upon the expiration of such duration, this Agreement will be terminated.

### **16.3 Termination**

This Agreement will be terminated by any of the following reasons of:

- 1) Any breach of this Agreement without any reasonable cause; or
- 2) The failure to perform this Agreement or the failure to perform commitments, as a result of an incidental or a force majeure event and upon the mutual consents of both Parties.

In case of the breach of this Agreement without any reasonable cause, the suffering Party shall notify the other Party with a simple document, and if no response within fifteen (15) working days upon the delivery of such notice, or if such breach isn't remedied in such period, the suffering Party is entitled to deem this Agreement has been terminated.

Notwithstanding the foregoing, this Agreement may be terminated by an agreement between both Parties, and such termination shall be in writing and the conclusion procedure of this Agreement shall be abided by, or in the event that either Party proposes to terminate this Agreement without any explanation, such Party shall notify the other Party with a thirty (30) working days prior written notice.

Upon the termination of this Agreement, the unaccomplished commitments are deemed as unnecessarily to perform, excluding the case of an incidental or a force majeure event, and the on-going activities shall be accomplished. Both Parties shall take any necessary measure to prevent or reduce its losses or the losses incurred by any third party at its best efforts.



## **ARTICLE 17: SUPERVENING EVENTS**

If for reasons of force majeure, either party is unable to comply with the obligations under this Agreement, this shall be communicated by written notice to the other party within a period of ten (10) calendar days thereof, providing the details related to the event. The acts of God or force majeure shall release the parties from performance of obligations under this Agreement during the period of time that this situation persists. In case the event does not have a prompt solution, the parties are entitled to terminate this Agreement by mutual consent, as stipulated in Article 16.

## **ARTICLE 18: ADDRESSES AND NOTICES**

All communications in connection with this Specific Agreement to be exchanged between the parties shall be considered validly made if they are sent to the addresses set forth in the introductory paragraph of this Agreement.

Any modification to the above mentioned addresses shall be notified to the other party no less than seven (07) working days in advance of such modification, otherwise all the communications made to the above mentioned addresses in the introduction of this Agreement shall be considered validly made.

## **ARTICLE 19: SETTLEMENT OF DISPUTES**

Any dispute, controversy or issues not provided in this Specific Agreement or which might be generated in its interpretation or application shall be solved by looking for a direct understanding between the parties based on good faith and common intention. In such case, each party shall appoint its representative.

Such appointment shall be informed to the other party. In the event of controversy persists, it may be solved by arbitration, therefore, each party will appoint one arbitrator and a third arbitrator will be appointed by them.

In case of any controversy to be solved, both the Chinese, Spanish and English version of this Agreement shall be valid.

## **ARTICLE 20: NO TRANSFER**

Neither party may assign any of its rights under this agreement, nor shall it assign its position in this agreement to any other third party.

## **ARTICLE 21: OFFICIAL LANGUAGES**

This agreement and the documents to be signed during its implementation shall be written in official language Chinese, Spanish and English. The documents to be written in English shall be used for communication and additional interpretation purposes for a better performance of the parties.

**ARTICLE 22: NON-BINDING CLAUSE**

- 22.1 The parties concur into this Agreement by their own decision. Likewise, they can decide to end it, being necessary only to send a written notice to the other party pursuant to this non-binding clause. The Parties shall adopt the necessary measures to prevent or reduce any harm to themselves or to any third party.
- 22.2 Both parties agree that this Technical Cooperation Agreement can be modified by mutual consent as an addendum. In that case due procedure steps should be followed.

**ARTICLE 23: FINAL PROVISIONS**

- 23.1 The decisions adopted and the summaries jointly made during the working meetings or coordination meetings and collaboratively convened by both parties, should conform to this agreement.
- 23.2 This agreement becomes effective since the date on which the representatives of the cooperation parties sign and approve this agreement.

This agreement is signed on April 21<sup>st</sup> in city of Lima, Peru, in six (06) equally valid copies, two in English, two in Spanish and two in Chinese. Each party will keep one copy in each language respectively. If doubts or controversies arise, the English version will prevail.

For:

**Geological, Mining & Metallurgical  
Institute (INGEMMET)**

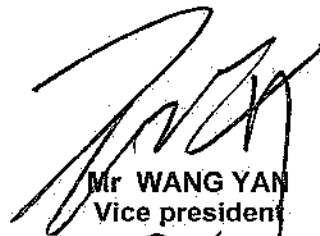


**Mr Oscar Hubert Bernuy Verand  
President**

City: LIMA - PERU  
Date: 21-04-2017

For:

**China Geological Survey (CGS)**



**Mr WANG YAN  
Vice president**

City: LIMA - PERU  
Date: 21-04-2017

**APPENDIX 1**

<b>BUDGET FOR THE YEAR 2017</b>				
<b>Request</b>	<b>Unity</b>	<b>Quantity</b>	<b>Unit price (\$ /)</b>	<b>Amount (\$ /)</b>
<b>Recruitment</b>				
Professionals	Months	4	5000	20,000
<b>Travel expenses and allowances</b>				
Professionals	Days	300	320	96,000
<b>Fuels and lubricants</b>				
Diesel Oil	Gallons	900	16	14,400
<b>Rent a car</b>				
4x4 van	Days	150	500	75,000
<b>Flights</b>				
Airlines	Units	2	7500	15,000
Terrestrial	Units	5	300	15,00
<b>Servicios diversos</b>				
Miscellaneous services	Days	260	50	13,000
Car rental	Days	50	35	1,750
Rent of parking space / garage	Days	150	7	1,050
Sample analysis (multi-elemental)	Sample	1078	60	64,680
Análisis de muestras (Especiación)	Sample	323	150	48,450
Real Estate Management	Vehicles	10	100	1,000
Toll	Units	100	7	700
Send samples	Shipping	16	500	8,000
<b>Telephone service</b>				
Mobile phones	Units	10	50	500
				<b>S/ 361,030</b>

<b>BUDGET FOR THE YEAR 2018</b>				
<b>Request</b>	<b>Unity</b>	<b>Quantify</b>	<b>Unit price (S /)</b>	<b>Amount (S /)</b>
<b>Recruitment</b>				
Professionals	Months	2	5000	10,000
<b>Travel expenses and allowances</b>				
Professionals	Days	150	320	48,000
<b>Fuels and lubricants</b>				
Diesel oil	Gallons	450	16	7,200
<b>Rent a car</b>				
4x4 van	Days	100	500	50,000
<b>Flights</b>				
Airlines	Units	2	7500	15,000
Terrestrial	Units	5	300	1,500
<b>Miscellaneous services</b>				
Recruitment of guides	Days	156	50	7,800
Car rental	Days	30	35	1,050
Rent of parking space / garage	Days	75	7	525
Sample analysis (multi-elemental)	Sample	539	60	32,340
Sample Analysis (Speciation)	Sample	162	150	24,300
Real Estate Management	Vehicles	5	120	600
Toll	Units	50	7	350
Send samples	Shipping	8	500	4,000
<b>Telephone service</b>				
Mobile phones	Units	5	50	250
				<b>S/ 202,915</b>

<b>BUDGET FOR THE YEAR 2019</b>				
<b>Request</b>	<b>Unity</b>	<b>Quantity</b>	<b>Unit price (S /)</b>	<b>Amount (S /)</b>
<b>Recruitment</b>				
Professionals	Months	4	5000	20,000

<b>Year</b>	<b>Associated project</b>	<b>Goals</b>	<b>Budget (S/ )</b>
2017	GE36-4	900 sediment samples for studies of regional multi-purpose geochemistry in the Mantaro basin.	361,030.00
		A regional multi-purpose geochemistry database in the Mantaro basin.	
2018	GE36-5	400 soil samples for studies of regional multi-purpose geochemistry in the Mantaro basin.	202,915.00
		A regional multi-purpose geochemistry database in the Mantaro basin.	
2019	GE36-6	An explanatory report of the study of regional multi-purpose geochemistry in the Mantaro basin.	20,000.00
		12 maps of regional multi-purpose geochemistry in the Mantaro basin.	
		A regional multi-purpose geochemistry database in the Mantaro basin.	

S/ 20,000