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1. A letter from the IAGOD President

IAGOD was founded in 1963 (50 years ago) and is both from membership, personnel and topics in a process of continuous renewal. The election process of new Council and officers that was launched around the IGC in Brisbane 2012 has resulted in a significant renewal of IAGOD Executive Council. A new generation of research leaders now volunteers to lead the association and engage in serving the membership and contribute to international research cooperation, training of a young generation of mineral deposit researchers, and organising events to keep IAGOD a lively society that justifies its existence. The association has shown in the past year that it can combine forces and establish fruitful cooperation across the globe, especially with our sister societies SEG and SGA but also with IUGS-UNESCO’s IGCP programmes and national research organisations. A highlight to reflect this rejuvenation and partnership will be the Quadrennial IAGOD Symposium in Kunming, 2014, that comprises an ambitious program of sessions, courses/workshops and field trips. Many of the historic Working Groups and Commissions have delivered a great contribution and some are now being replaced by new emerging ones. Examples are the new International Uranium Group and the Working Group on Critical Metals (born out of a merger with the Working Group on Tin and Tungsten Deposits). Council is currently endorsing a proposal of Prof. Vladykin (Irkutsk, Russia) to re-establish a group on “Mineralisation Related to Carbonatites and Alkaline Rocks”, and we welcome the proposal to revive the DIWA group that addresses mineralisation processes not related to plate tectonics. Other working groups and commissions on Fluid Inclusions (previously COFFI), on skarns and a proposal to establish a group focusing on IOCG are in the pipeline. We also welcome a consolidation of the previously declining individual membership that was due to aging of IAGOD’s founders’ generation, now buffered by again growing
membership, especially from China, India and Iran. In 2013 IAGOD engaged in co-sponsoring events in the Urals (Russia), in Mongolia and in Vietnam (leading to a new National IAGOD Group for Vietnam). For 2014 IAGOD will engage beside its Quadrennial Symposium with supporting conferences in Iran, in the UK (Eurogranites 2014 in Cornwall, North Atlantic Craton Conference, and so on), and the International Platinum Symposium in Ekaterinburg, just to mention a few out of many activities.

IAGOD is also interested to continue its close cooperation with the International Geoscience Programme (IGCP) and to contribute to IUGS’ proposed major new initiative “Resourcing Future Generations” (RFG). We encourage especially early career researchers and young scientists to take initiative in establishing and leading new activities to fill IAGOD with live (simply contact the Secretary General or other Council members with an expression of interest). The proposals must come from the membership to fill their association with life whereas Council sees its task in steering and guiding these efforts. We continuously look to strengthen our Council with inviting research leaders to take responsibility by serving a 4-year term as officers. We also invite proposals on hosting the next Interim Conference in 2016 and the next Quadrennial in 2018. We invite the international communities to join our coordinated efforts and to cooperate to mutual benefits.

Prof. Mao Jingwen, President of IAGOD
2. General Report of the International Association on the Genesis of Ore Deposits (IAGOD) for 2014

2.1 Overall objectives

The objective of the International Association on the Genesis of Ore Deposits (I.A.G.O.D.) is to promote international co-operation in the study of the genesis of ore deposits and to further the growth of knowledge in this field. These tasks are achieved in several ways. International symposia are organized by IAGOD, and a variety of meetings and symposia are held in conjunction with other organizations interested in the genesis of mineral deposits. The association continues to expand its international activities and membership, having members in about 50 countries world-wide, both individual members and members in 13 National IAGOD Groups.

2.2 Structure and organizations

IAGOD activities are run through topical Commissions and Working Groups (see www.iagod.org ) in the fields of tectonic control of ore deposits, global tectonics and metallogeny, tectono-magmatic activization, remote sensing methods for tectonics & ore prospecting, research in paragenesis and ore forming fluid inclusions, industrial minerals and rocks, placer deposits, tin-tungsten deposits, skarn deposits, thermodynamics of ore-forming fluids, research linking ores and metamorphism.

The three most active groups are: Commission on Ore Deposits in Mafic & Ultramafic Rocks (CODMUR – reconnected under IAGOD umbrella in 2013); Working Group on Critical Metals (WGCM – established in 2013); and International Uranium Group (IUG).
The International Association on the Genesis of Ore Deposits (IAGOD) consists of 13 national groups and 15 commissions and working groups:

**13 National Groups:**

Chinese IAGOD National Group  
Czech Republic IAGOD National Group  
Georgian IAGOD National Group  
Armenia IAGOD National Group  
Azerbaijan IAGOD National Group  
Kazakhstan IAGOD National Group  
Kyrgyzstan IAGOD National Group  
Mongolian IAGOD National Group  
Russian IAGOD National Group (incl. Russian Far East IAGOD group)  
Slovak IAGOD National Group  
Spain IAGOD National Group  
Tajik IAGOD National Group  
Ukraine IAGOD National Group  
Uzbekistan IAGOD National Group  
Vietnam IAGOD National Group  
Iran IAGOD National Group

**15 Commissions and Working Groups**

Commission on Tectonics of Ore Deposits (CTOD)

Working Groups of CTOD are -

CTOD WG1: Global Tectonics & Metallogeny
2.3 Major accomplishments in 2014

2.3.1 Meetings and conferences

1. 14th Quadrennial IAGOD Symposium

On 19–22 August, the 14th Quadrennial International Association on the Genesis of Ore Deposits Symposium has been held in Kunming, the capital of Yunnan Province, Southwest China, jointly organized by the
International Association on the Genesis of Ore Deposits and China Geological Survey. More than 700 scientists, geologists and students from 18 countries around the world have attended this geological event.

Under the theme “Mineral Resources: Discovery and Utilization”, there were 19 scientific sessions, discussions covered all aspects of currently hot topics in economic geology which lead to an enhanced understanding of the genesis of mineral deposits in continental settings, as well as to improved techniques for exploration, discovery, and utilization. In addition to the four days of the general assembly discussion, the exchange of exhibitions, scientific poster presentations, 6 post-conference fieldtrips and two days pre-conference workshop and short course have been held. And 822 abstracts have been published in the conference proceedings.

At present, the search for mineral resources is becoming increasingly dependent on metallogenic theory and progress in prospecting technology. Mao Jingwen, the president of IAGOD, said:

"This conference becomes deposit experts’ knowledge exchange and collision of thinking 'Carnival', it will greatly promote the understanding of global mineralization, metallogenic regularity, will strongly promote the ore prospecting in the idea of progress, achieving significant prospecting breakthrough, improve resource exploration mining level."

The conference invited several internationally famous scholars of ore deposits community, including internationally renowned big economic geologists Richard Sillitoe and Jeffery Hedenquist, two 'independent heroes' and geologists, former chairman of the Society of Economic Geology (SEG), Richard Goldfarb, former Chairman of the Society for Geology Applied to Mineral Deposits (SGA), David Leach, the former chairman of IAGOD, Nigel Cook, one of the world's leading
economic geologist on skarn deposits, Lawrence Meinert and other well-known scientists and geologists.

In the conference, there were more than 200 talks and more than 150 poster presentations. Richard Sillitoe demonstrated in his plenary talk the geological rules of prospecting porphyry copper deposit type, including porphyry copper metallogenic model and examples of typical ore deposits and the deposit model under the guidance of the prospecting method.

Richard Goldfarb gave one lecture on the regional metallogeny and ore deposits with focus on China with reference to metallogenic time-space relationship definition changes.

Nigel Cook introduced the research results about the distribution of trace elements in sulfide minerals, and points out the application potential of analysis technology in reconstructing the genesis of mineral formation serving prospecting, exploration and mining environment in the field of mineral micro zone.

Ottawa University professor Keiko Hattori (Canada) gave a speech on the plate convergent margin metal enrichment mechanism, including the enrichment of porphyry copper metal and sulfur deposition mechanism of migration.

Academician of Chinese Academy of Engineering, Pei Rongfu gave one lecture on the prospecting theory of metallogenic series of ore deposits. "This can be compared with our human society. The deposits in the world are equivalent to the human society, deposits of natural body corresponds to the family, the deposit is equivalent to the members of the family, the family is also controlled by the time of the dynasty, the social environment and family affinity" he said.
For decades, the concept of metallogenic series of ore deposits has been widely used in China, and deepened the research. Academician Chen Yuchuan said, metallogenic series of ore deposits in order to better study on regional metallogenic regularity, plays a role of the ore prospecting. This event let more exchanges between Chinese and foreign scientists and geologists, this will improve the mutual understanding and academic exchanges.

Photograph: Kutina-Smirnov Medal ceremony with awardees Dr. Franco Pirajno and Dr. Richard Goldfarb

In the closing ceremony of IAGOD2014, the IAGOD council awarded the Honorary Life Membership to Academician Yuchuan Chen and to Dr. Richard Grauch, and the Kutina-Smirnov Medals to Dr. Franco Pirajno and Dr. Richard Goldfarb, and nine Outstanding Student Paper awards have been awarded.

The 15th IAGOD Symposium will be held in Salta, Argentina, 2018.
Kutina-Smirnov Medal

IAGOD created a new award, the “Kutina-Smirnov medal”. IAGOD was founded in 1963 to build a bridge between west and east during times of cold war and to bypass the iron curtain to allow under IUGS umbrella the continuation of cooperation between the hostile hemispheres. Both Kutina and Smirnov were among the initiators of this initiative to build a global society for studies on ore genesis, meanwhile more than 50 years ago.

The late Prof. Jan Kutina (1924-2008) was IAGOD’s first Secretary General and, coming originally from Czechoslovakia, he spent the second half of his life and the peak of his career in the USA where he founded the Laboratory of Metallogeny that published under IAGOD flag over about 20 years his journal “Global Tectonics and Metallogeny”, now continued by Schweizerbart and under the auspices of IAGOD.

The late Prof. V.I. Smirnov was an Academician of the Russian Academy of Sciences and made global impact with his reference book on the “Ore deposits of the USSR”. The first awardees who received the Kutina-Smirnov medal in a ceremony at the IAGOD Symposium in Kunming, August 2014:

1) Prof. Richard Goldfarb, USGS Denver, USA, for his loyal support to IAGOD activities over the past decade, specifically for the Chinese National IAGOD Group, and his outstanding contribution to global metallogeny and catalysing close cooperation among the ore’s community across the world

2) Prof. Franco Pirajno, GSWA, Perth, Australia, for his outstanding track record in the study of hydrothermal ore deposits, hydrothermal processes and mineral systems, his case studies mainly in Africa, Australia and China, and his performance as Editor in Chief of Ore Geology Reviews, the official journal of IAGOD that became the leading journal in mineral deposit studies from its Impact Factor.
CV of Kutina-Smirnov Medal award winner Richard Goldfarb

Richard Goldfarb received his BS degree in geology from Bucknell University, an MS degree in hydrology from the MacKay School of Mines at the University of Nevada-Reno, and a PhD degree in geology from the University of Colorado. He is a senior research geologist with the Minerals Program of the U.S. Geological Survey, where he has worked for 34 years. Rich worked on the program’s Alaskan
resource assessment projects for three decades, leading the Survey’s Alaska
geochemical exploration research group throughout much of the late 1980s and 1990s.
Since the middle 1990s, he has been more involved with many of the Survey’s
international economic geology studies and was most recently chief of the Mineral
Deposit Models project.

Rich’s major expertise is the geology of gold deposits. He has conducted studies
on the distribution of gold deposits throughout the world, compiling some of the most
comprehensive global descriptions of their spatial-temporal setting and evaluating
their controlling factors. His research has been focused on global metallogeny,
geology of ore deposits in the North American Cordillera with emphasis on orogenic
gold, distribution and geology of lode gold deposits in China and elsewhere in Asia,
and fluid inclusion and stable isotope applications to the understanding of ore genesis.
Rich has senior authored and co-authored more than 200 papers on mineral resources,
with many recognized as the authoritative research on orogenic gold and on aspects of
regional metallogeny, as well as editing numerous books.

Rich is a Fellow and a Past-President of the Society of Economic Geologists (SEG)
and an Honorary Lifetime Member of the Society for Geology Applied to Mineral
Deposits. He is presently Vice-President of the International Association for
Gondwana Research and Chair of the Publications Board for SEG. He has been
awarded the Silver Medal and Marsden Medal by SEG, as well as having served as
the society’s Thayer Lindsley and International Exchange Lecturers. Rich was past
chief editor of Mineralium Deposita, and is now on the editorial boards of Economic
Geology, Gondwana Research, Acta Geologica Sinica, and GEEA; he has also served
on the advisory board to China Mining. He is an adjunct professor at Colorado
School of Mines, University of Colorado, Colorado State University, and University
of Western Australia, as well as an overseas professor for the China University of Geosciences Beijing. These appointments have allowed Rich to work closely with and mentor many young economic geologists from throughout the international community.

**CV of Kutina-Smirnov Medal award winner Franco Pirajno**

Franco Pirajno, a mineral resources geoscientist in the Geological Survey of Western Australia (GSWA), has considerable experience in tectonics, ore deposit geology and mineral exploration in many parts of the world.

Prior to joining the GSWA in 1993, Franco worked for the Anglo American Corporation of South Africa Ltd, as Exploration Geologist, following a spell as a post-doctoral research scientist at the Vesuvius Volcano Observatory. Whilst with Anglo American, he participated and supervised exploration projects in many parts of southern Africa, Australia, New Zealand, the South West Pacific islands and Indonesia. Promoted to Exploration Manager of the Company’s activities in the South West Pacific till 1983, when appointed to the Chair of Exploration Geology at Rhodes University, Grahamstown, South Africa.

In the last 20 years Franco Pirajno has worked extensively in Western Australia’s Proterozoic terranes and was instrumental in the discovery of a new large igneous province in Australia. Visiting Professor at Peking University in 2003 and China University of Geosciences, Beijing in 2004. Distinguished Foreign Professor at Hefei University of Technology, September-October 2012. Adjunct Professor at the Institute of Mineral Resources (Chinese Academy of Geological Sciences; Beijing) from 2008 to 2011. Appointed Foreign Editor for the GeoScience Frontiers journal of Peking University and China University of Geosciences in 2004. Appointed Chairperson of SEG Fellowship Admissions Committee for 2009-2011. Associate

Franco Pirajno has supervised and/or reviewed 59 MSc and PhD theses, published more than 170 peer-reviewed papers, twenty geological maps, four text books on mineral systems and co-authored a monograph on the metallogeny of New Zealand. His latest book, published in 2013, describes the tectonic settings of China’s mineral deposits.

The International Association on the Genesis of Ore Deposits

IAGOD Council Meeting and General Assembly held on Wednesday the 24th of August 2014 at the 14th IAGOD Symposium in Kunming, China, have voted to award IAGOD’s Kutina–Smirnov Medal to Dr. Franco Pirajno (Australia)

In recognition of his outstanding contribution to the field of economic geology

Signed

IAGOD President
Academician Yuchuan Chen, born on December 7, 1934, in Pinghu city of Zhejiang province, China, is an economic geologist well known not only in China but all over the world. He was selected to be an Academician of the Chinese Academy of Engineering (CAE) in 1997.

Prof. Chen graduated from the Donetsk National University in 1959. The long list of outstanding leadership includes his duties as the Chief Geologist of the Ministry of Geology and Mineral Resources, Head of the Chinese Academy of Geological Sciences, Deputy Group Leader and Director of the Executive Office of the National Gold Working Group, Executive Vice-president of the Geological Society of China, Vice-president of the China Ocean Mineral Resources R & D Association, Director of the Division of Energy and Mining Engineering of the Chinese Academy of Engineering (CAE). He has been the director of the Mineral Deposit Committee, GSC for 18 years. He has dedicated himself to the fields of economic geology, geochemistry, regional metallogeny, mineral prospecting and exploration for 60 years.

Up to this day, Prof. Chen has published more than 80 scientific papers and 14 books. His outstanding research on the supergiant Dachang Sn polymetallic ore deposit in the Guangxi province of China has greatly spurred the prospecting in the district, leading to the discovery of huge resources. Another of his achievements is the well-known
Ningwu porphyry iron ore deposit model, which was proposed from his studies on the ore deposits of the Middle – Lower Yangtze River Valley region. The model describes iron deposits in terrestrial setting, and is still used for prospecting in regions within terrestrial volcanic rocks. In the past ten years several new iron deposits have been explored in the light of the model. Through collaborative research with Prof. Yuqi Cheng and others, Prof. Yuchuan Chen created a new theory entitled “metallogenic series”, which is a significant contribution to the development of mineralization theory and has been extensively used for prospecting in China. Professor Yuchuan Chen has been the leader of the National Mineral Exploration during 1981-1985, and the leader of National Gold Prospecting during 1986-1990. Under his guidance the prospecting and exploration in China achieved brilliant progress. Because of his hard work and excellent achievements, he has been awarded repeatedly with the National Prize of Science and Technology.

Prof. Yuchuan Chen attended in the founding meeting of IAGOD in Prague in 1964, and served as vice present during 2000 to 2004. His most important contribution to IAGOD is that he promotes IAGOD in China and links IAGOD with China Society of Mineral Deposits. Under his guidance more and more Chinese colleagues involve in IAGOD making China one of the most important teams of IAGOD.
The International Association on the Genesis of Ore Deposits

IAGOD Council Meeting and General Assembly
held on Wednesday the 20th of August 2014
at the 15th IAGOD Symposium in Kunming, China,
have voted to award

Honorary Life Membership
to
Dr. Richard Graueh (USA)

In recognition of his service to the association and its commissions in the course of many years

Signed
[Signature]
IAGOD President
Dr Grauch succeeded Dr CB Sclar as IAGOD’s Chief Treasurer in 1992 and served three terms on IAGOD Executive Council until 2004. During his tenure he was the driving force to modernize IAGOD - to adopt a modern and audible accounting system, he facilitated and engaged with huge personal energy in updating the IAGOD constitution (statutes and by-laws) as prerequisite for renewal of legal registration of IAGOD as a not-for-profit learned society in the State of Colorado (U.S.A.) that was signed by Council and endorsed by the IAGOD General Assembly in London 1999. He also was the think tank in preparing and introducing the guidance notes and regulations (By-Laws) on IAGOD Travel Grants and IAGOD publications that shaped IAGOD’s scientific and administrative work for the future.

The following resume was extracted from his professional CV:

**Consulting:**

- Consulting Geologist/Petrologist specializing in Rare Earth Elements

**Education:**

- B.A. (Geology) Franklin and Marshall College, 1966
• Ph.D. (Geology) University of Pennsylvania, 1971

Career:

• Consulting Geologist/Petrologist 2011-present; specializing in rare earth element deposits (experience globally and in diverse REE deposit types)
• Research Geologist, U.S. Geological Survey 1974-2010 (retired); positions include:
  Chief, Branch of Uranium and Thorium Resources, U.S. Geological Survey
  Manager, various research projects including those oriented to REE
  Coordinator, Uranium and Thorium Investigations Program
• Postdoctoral Scholar, University of California, Los Angeles, 1972-1974
• Postdoc Researcher, State Univ of New York, Binghamton, 1971-1972

U.S.G.S. Research History:

• Research locations in Norway, China, Canada, Russia, Australia, and the U.S.
• Hard-rock uranium deposits, especially Australia and Canada
• Volcanic-hydrothermal, precious-and base-metal deposits, San Juan Mountains, Colorado
• Precambrian terrains of the eastern United States
• Metamorphic beryllium deposit in Norway
• Unconventional resources of PGE, precious metals, Mo, Ni, and REE
• Global distribution of mineral resources
• Environmental issues related to mineral deposits: Se, As, Tl, and Hg
• Environmental issues related to weathering of shale: Se and “salt” residence
• Experimental partitioning of elements during the generation of petroleum

Prior to employment with USGS, thesis and post-doctoral work included regional geology, field and experimental petrology, and glacial stratigraphy in the Andean region, Venezuela, with support from Ministerio de Minas e Hidrocarburos.

Professional Accomplishments include:

• Participated in the first on-site inspection of the Soviet nuclear test site in Kazakhstan; geologic drilling confirmation of the US-USSR Nuclear Verification Treaty.

• International vice-leader and U.S. national leader for IGCP Project #254, "Metalliferous Black Shales and Related Ore Deposits".

• Designed and negotiated an agreement between USGS and ROSKOMNEDRA (Russia) to compare resource assessment techniques used by the two agencies.

• Negotiated and initiated a cooperative research effort between the Chinese Uranium Institute and the USGS.

Professional Organizations:


• Fellow, Mineralogical Society of America MSA

• Fellow, Geological Society of America GSA

• Member, Denver Miners Club

• Member, DREGS (Denver Region Exploration Geologists' Society)

• Member, American Association for the Advancement of Science AAAS

• International Association on the Genesis of Ore Deposits (IAGOD)

Honors and Awards:

• NSF Undergraduate Traineeships, 1964, 1965


• NSF Graduate Traineeships, 1968, 1969, 1970

• University of Pennsylvania Fellowships, 1970, 1971

• Fellowship Royal Norwegian Council Scientific Industrial Research, 1986

• National Academy of Sciences exchange scientist to Czechoslovakia, 1987

• USGS Special Act Service Award, 1995


Publications:

More than 100 peer-reviewed articles and book chapters.

Over 120 published abstracts for oral presentations.
2. IAGOD sponsored International Geoscience Congress in Iran

IAGOD sponsored International Geoscience Congress was held in Iran, February 2014. The Geological Survey of Iran, in cooperation with the Earth Science Matters Foundation, organizes the First International Geosciences Conference in Iran, entitled "Geosciences and Politics, Economy & Culture in a Changing World". The International Conference was held on 18 and 19 February 2014 in Tehran and is back-to-back to the 32nd National Geosciences Conference.

A large number of conferences was held simultaneously in different cities:

**THEME/ City**

- Fundamental Geology / Mashhad
- Speleology/ Hamedan
- Exploration of Concealed mineral/Kerman
- Exploration of Rare Earth Elements / Yazd
- Earthquake Geology, Seismology, Earthquake Engineering & Tectonics / Tabriz
- Petroleum Geology/ Ahwaz
- Geosciences & Sustainable development/ Sari
- Geosciences & Water/ Shiraz
- Geoinformatics & Geomatics / Isfahan
- Geosciences and Marine Geophysics, Oceanography, International waters & Antarctic/ Chabahar
- Urmia Lake Rescue / Urmia
- Medical, Agricultural and environmental geology / Rasht
- Exploration of Mineral Resources (metallic & nonmetallic) / Tehran
- Ore dressing & Mineral Processing / Tehran
- Airborne Geophysics / Tehran
- Gemstones / Tehran
- Instrumental Analysis Methods / Tehran
- Geosciences & New topics / Tehran
- Geoheritage / Tehran
- Geosciences Training/ Tehran
- Investment Opportunities in Mines and Mining Industries / Tehran
- Geosciences & Society/ Tehran
- Geosciences & Information Technology/ Tehran

IAGOD supported the conference informally with advertising it on the IAGOD website and also co-sponsored Professor David Lentz’s participation as authorized official IAGOD representative with a grant of €2500 Euro. Professor David Lentz attended the REE & Technology conference held in Yazd on the 16th of February.

**Keynote Speakers:**

Prof. Bernd Lehmann - *Economic Geology of Rare Earth Elements*

Prof. David Richard Lentz - *Thermochemical Constraints on Extreme Fractionation of Felsic Magmas, in particular the formation of HREE-Y-Nb deposits*

**Invited Lecturers:**

Dr. Farhad Mohammad Torab - *Geochemistry Distribution and Geostatistical Reserve on REE in Esfordi Deposit*

Dr. Ali Asghar Mokhtari - *REE Mineralization in the Poshte-e-Badam Block: Esfordi Phosphate or REE Deposit*
Dr. Zahra Bonyadi - *Enrichment Mechanism of Rare Earth Elements in Se-Chahun IOA Deposit, Bafq, Central Iran*

Dr. Maryam Kargar Razi - *Recovery of Rare Earth Elements Concentrate Waste of Industrial Phosphoric Acid Purification Process*

Dr. Ali Ghasemi - *Development of Energetic Thin Film Based On Periodic Flexible Rare Earth Magnets with Composition of Nd Fe B-Fe Co*

Dr. Mohammad Reza Suizi - *Rare Earth Elements; Vital Elements for Emerging Technologies*
On February 17th, a large group went to visit the Esfordi P (Fe+REE) deposits in the Bafq District. There was considerable discussion on the end-member models postulated for the genesis of the deposits, although convincing evidence by various researchers clearly pointed to a hydrothermal origin related to replacement of the limestone/dolostones, although the context for that sequence and evolution of the basin were disputed. Everyone enjoyed the host company and the field trip leader’s hospitality and the great weather. A few of the participants of the Esfordi field trip, from left to right, Hassan Heidarian (PhD student), Dave Lentz, Prof. Hassan Mirnejad, Prof. Nima Nezafati, Dr. Farhad Torab, Aidia Mohebbi (PhD student), and Saman Shahraz. There were over 75 participants on the field trip.
On the last day, February 19th, Professor David Lentz presented a talk within the 1st International Geosciences Congress first introducing IAGOD to the attendees, as well as the upcoming IAGOD conference in Kunming China in mid August (2014). Due to their keen interest in the context of their Iron deposits, Professor David Lentz presented "A Review of the Petrogenesis of the Iron Ore Deposits: an examination of key to subtle characteristics and the end-member processes responsible for ore formation in a wide variety of geodynamic environments".

Later that Day is the main session, Professor David Lentz presented within the Geology for Society Session "Building Confidence in the Mineral Exploration and Mining Sectors in Canada and worldwide through Accreditation, Regulatory Compliance, and Ethical Practice: A Canadian Perspective".
There is considerable optimism in the Iranian geoscience community with the possibility of progressive lifting of sanctions, increasing foreign investment, and greater engagement in society development all across their vast, resource rich country.

There were numerous other talks that last day directed to their various theme areas and there was considerable participation. There is a lot of interest in IAGOD within the Iranian academic community, because of our distinguished 50 year history, variety of engagements with research communities throughout Eurasia, excellent journals, and our level of interaction & communication.

(Report by Prof. David Lentz)
3. IAGOD co-sponsored "Precious metals, rare and radioactive elements in the ore-forming system" conference

Conference “Precious metals, rare and radioactive elements in the ore-forming system” was held in Novosibirsk, Russia on October 28–30 2014. The Conference dedicated to the 120th anniversary of the birth of Corresponding Member of the USSR Academy of Sciences, Professor Felix Shakhov (24.10.1894–30.10.1971). The organizing committee represented by Institute of geology and mineralogy Siberian Branch of Russian Academy of Science, Siberian Research Institute of Geology, Geophysics and Mineral Resources, Tomsk Polytechnic University and Novosibirsk State University. The conference topics include:

1. Geodynamic settings of deposits formation of precious metals, rare and radioactive elements; the role of the plume magmatism
2. Precious metals, rare and radioactive elements in endogenous processes
3. Precious metals, rare and radioactive elements in exogenous processes
4. The role of micro- and nano-scale components in ore-forming processes
5. Geochemistry of precious metals, rare and radioactive elements in carbonaceous ore-forming systems
6. Modern processes of deposits formation of precious metals, rare and radioactive elements
7. The role of microorganisms in the concentration of precious metals, rare and radioactive elements
8. Problems of estimation and development of technogenic deposits
9. Problems of training (specialists, graduate students)
10. Modeling and GIS-technologies in the study and evaluation of deposits of noble, rare and radioactive elements
4. IAGOD co-sponsored Conference

"Modern Information Technologies in the Earth Sciences"

The third meeting of the International Conference on Modern Information Technologies in the Earth Sciences, organized by Far East Geological Institute FEB RAS, Institute of Volcanology and Seismology FEB RAS, Geophysical Center RAS, with previous meetings in Magadan (2008) and Vladivostok (2010), was held on Kamchatka, Russia, September 8-13, 2014. The conference provided a specialized forum to researchers and practitioners interested in information technologies in Earth Sciences. The goal of the International conference is to attract the leading researchers and experts working in information technologies, applied mathematics, geoinformatics, geophysics, system analysis, to exchange acquired knowledge and experience, as well as to discuss possibilities for setting up joint projects and programs.
The scopes of conference include:

Networking for data acquisition. Development of the systems for remote monitoring of natural phenomena.
Remote sensing. Satellite monitoring of the environment. Techniques to analyze satellite data. Services for operational access to satellite data and systems for their processing.

Open access as the modern practice of scientific communication. Electronic libraries and collections. Integration of territory-distributed heterogeneous data collected in the field of Earth sciences.

Virtual research media and laboratories.


Geoinformation provisions of fundamental investigations in Earth sciences. Infrastructure of spatial data. Problems of spatial data integration, services and applications. Intellectual GIS.


5. IAGOD co-sponsored 12th International Platinum Symposium

The 12th International Platinum Symposium was held on August 11th - 14th, 2014 in Yekaterinburg, Urals, Russia. The topics include:

Session 1. Magma dynamics, cumulates and ore genesis

Session 2. PGE mineralization in mafic-ultramafic intrusions of Russia: geology and petrogenesis

Session 3. PGE-Cu-Ni sulphide-bearing ultramafic-mafic intrusions of the Noril'sk Province: insights into ore genesis and exploration.

Session 4. Models and exploration methods for magmatic Ni-Cu-PGE sulphide and PGE-oxide deposits from around the World
Session 5. Ophiolites and Ural-Alaskan-type intrusions: traditional and innovative looks on the PGM formation
Session 6. PGE and Au through experiments
Session 7. New advances in the understanding of PGE mineralogy from magmatic to supergene environments
Session 8. Open Session

2.3.2 Other activities

1. IAGOD Council Meeting held during the 14th Quadrennial IAGOD Symposium, Kunming, China

Date: Wednesday 20th August 2014, 7:00 p.m. to 12:00 a.m.,
Location: International Conference Hall, 6th-floor

Presence of Council Members:
Jingwen Mao, IAGOD President (Chairman);
Pengrui Sun, Secretary-General;
Reimar Seltmann, Publication Manager;
David Lentz, Chief Treasurer;
Franco Pirajno, Chief Editor of OGR;
Evgeniy Naumov, Webmaster;
Nigel Cook, Past President;
Ziying Li, 1st Vice President at Large;
Eduardo Zappetini, Regional Councilor for South America

(1). The meeting was called to order by IAGOD President (Jingwen Mao) who welcomed everyone to Kunming. The agenda was adopted. The names of those present were recorded. All of the attending council members briefly introduced themselves to the others.

Dr. Jingwen Mao gave a half-term report over his presidency since the last IGC in Brisbane, Australia. President Mao briefly reviewed what he had done during the last two years, and stressed that his major job was to prepare for the forthcoming IAGOD
conference. In order to seek for help, he had to keep in contact with SEG and SGA (represented by Richard Goldfarb and Jan Pašava, respectively). So far he has done a lot to promote the association whenever possible. Mao also expressed his appreciation for the great support and contributions from all executive council members of the IAGOD as well as its sister societies SEG and SGA with respect to promoting the IAGOD symposium.

Then Mao gave a briefing on the IAGOD Quadrennial Symposium 2014 (A total of 750 participants attended this conference; 692 people among them have paid the registration fees; 10 persons free of charge, and 15 students got funded). He was so glad to keep the conference budget in balance. He also hoped to renew some working groups, reform old systems and establish new regulations for the association. He requested that, as time for the council meeting was limited, those present should strictly adhere to the agenda.

(2). Secretary-General Xiaoming Sun referred to the general state of his affairs, and gave a short outline of key activities for the association (2013 – 2014).

Dr. Xiaoming Sun admitted that although he was elected as Secretary-General two years ago in Brisbane. He expressed his appreciation to Chairman Mao, Reimar and David for their great help, guidance and patience during the last two years.

As a part-time SG, he has sent many e-mails to every council member, leaders of commissions and working groups in order to collect materials for the IAGOD Newsletter, and finally completed the draft of Newsletter 2012 – 2013 early this year. In addition, he together with his students did some complementary work to assist Chairman Mao and Reimar in organizing the IAGOD Quadrennial Symposium 2014. He also listed the four most important tasks for him to finish in the next two years, which are as follows: (1) Try his best to complete the IAGOD Newsletter 2012 – 2013 and release it as soon as possible; then continue to collect new materials and prepare for future editions of the Newsletter 2014. (2) Work with Dr. David to sort out the full list of memberships; call on every councilor to recruit new members (especially students) to join in IAGOD and keep paying the membership fees. (3) To set up a number of new IAGOD regulations and revise some old ones. (4) To renew or cancel
inactive working groups and reorganize some outdated commissions.

(3). Chief Editor Franco Pirajno gave a brief report on the society journal ‘Ore Geology Reviews’.

Franco was pleased to announce that the current state of OGR developed extremely well. So far its impact factor has risen up to 3.383, with a 5-year IF as high as 3.153. According to his introduction, approximately 300 manuscripts have been submitted to OGR in 2014. Quite a number of special issues have been published till now, and two more will be coming soon.

He also pointed out the main problem of language (especially for Chinese submitters) faced by English editors, and provided two corresponding ways to solve this problem. Most council members gave very high appraisals to Franco’s job, while some members were still concerned about controlling the quality of papers (especially from special issues). They all agreed to seek a balance between speed and quality in reviewing and publication, and kept on giving financial support to Franco as well as the society journal.

(4). Chief Treasurer David Lentz gave a report on the status of IAGOD accounts and membership.

David introduced some details of the scoping trip to Iran. Unfortunately, the outcome was not as good as expected. On behalf of the IAGOD, David tried hard but it still requires hard work to engage Iran to perform as new national member because they cannot pay membership fees online without usable credit cards outside of Iran. He eventually figured out that total expenses related to the Iranian trip were approximately 2,707 Dollars.

A detailed list of anticipated income and main items of expenditure has been summarized in his financial statement for the period up to the council meeting (e.g., IAGOD provided sponsorship to support the International Conference on Ore Genesis last year; the cost of advertisements for the promotion of IAGOD meetings in the journal Elements; the expenses for supporting Franco to attend the LIPS conference). Overall, David highlighted that there were still 46,500 EURO in the IAGOD account.
(5). IAGOD Publication Manager Prof. Reimar Seltmann presented a report on current and future publications. A new flyer for promoting the activities of IAGOD and to generate new members has been produced for the 14th Quadrennial IAGOD Symposium in Kunming.

Authorised by Executive Council, a previous agreement with Elsevier has been formalised and signed, valid until 2016, defining the terms and conditions to promote ORE GEOLOGY REVIEWS as the official journal of IAGOD with IAGOD logo on front cover, with IAGOD in advisory role for nominating the Editor in Chief and through him the Editorial Board (subject to approval by the Publisher), a free society page for informal IAGOD content, and five free online subscriptions for IAGOD NG leaders or deserving IAGOD activists from economic disadvantaged background selected at discretion of IAGOD Council (currently Mongolia, Kyrgyzstan, Kazakhstan, Uzbekistan, Georgia). The current volumes 64-66 of OGR inform on the free society page about IAGOD Council, PacRim 2015 advertisement and Argentina 2018 advertisement. Future society pages will inform about forthcoming activities sponsored by IAGOD and its Working Groups and Commissions.

The agreement signed in 2009 with Schweizerbart Publishing House about revival of the IAGOD sponsored journal GLOBAL TECTONICS AND METALLOGENY (founded by Jan Kutina) and to provide free access to the journal for IAGOD members for two years has regardless the tireless efforts of the chief editor Prof Wenjiao Xiao not yet brought the expected results. Reason is mainly that GTM has no impact factor registration yet. One paper by Prof. De Boorder was published online in late 2013; a second article is accepted and in the proof stage and two more articles from Chinese authors are under review. The first volume of the re-launched journal is expected to be complete and released in printed format in late 2014.

The promotion and sale of IAGOD monographs and guidebooks is an ongoing activity.

(6). Webmaster Evgeniy Naumov gave a report on current status of IAGOD website, outlining the main problems and technical issues he faced.

The IAGOD website was stable and working well. Naumov has done a great deal
of work to facilitate e-mail communications between IAGOD members. He aimed to attract more people to visit the website and register membership online in the future. With respect to annual renewal of web domain, Evgeniy Naumov decided to register ‘iagod.org’ in the United States, and tried to explain several reasons for his choice (e.g., it can provide technical supports, safety and high speed network to secure online registration or payment). He also considered that it was necessary to spend some money (~ 1,000 Euro budget) on technical support to maintain and upgrade the IAGOD website. Reimar suggested that the IAGOD web domain should be registered in London.

(7). Dr. Ziying Li gave a short report on the current status of International Uranium Group (IUG).

(8). Regional Councilor for South America Eduardo Zappettini gave a 20-minute presentation on Argentina’s bid for the 15th Quadrennial IAGOD Symposium 2018. The Council took a vote and approved Argentina’s bid.

(9). Two new Honorary Life Members of IAGOD were nominated, cited (by Reimar and Mao, respectively) and duly elected: Richard Grauch (USGS) and Chen Yuchuan (China). And then Chairmen Mao also recommended Franco Pirajno and Richard Goldfarb as candidates awarded the first ‘Kutina-Smirnov’ Medal of IAGOD. Mao’s proposal has been approved by the Council.

(10). Several new working groups have been approved to set up or revived:

(a) Set up Working Group on Trace Elements in Minerals, proposed by Nigel Cook;
(b) Set up Working Group on IOCG, proposed by David Lentz;
(c) Set up Working Group on Mineral Deposits in Collisional Orogens, proposed by Yanjing Chen and Franco Pirajno;
(d) Revive COFFI, proposed by Robert J. Bodnar (Chair) and Prof. Ni Pei (Secretary);
(e) Revive WG Tectono-Magmatic Activization (DIWA); Commission on Tectonics of Ore Deposits (CTOD) still retained its original name.

(11). Discussions and decisions were made regarding future planned IAGOD activities.
(a) Send Franco (in the name of IAGOD) to attend PACRIM 2015 Congress in Hong Kong, China;
(b) Send a keynote speaker (in the name of IAGOD) to promote Nickel Symposium 2016;
(c) Organize three IAGOD sessions (including working groups on IOCG, Trace Elements and Ore Deposits) during International Geological Congress 2016;
(d) The Council took a vote and approved a 4-year societal subscription plan (2015 – 2018) for ‘Elements’ Magazine.

2. Reestablishment of Commission on Tectonics of Ore Deposits (CTOD) of the International Association on Genesis of Ore Deposits (IAGOD)

In 1956, the activated tectonic theory (DIWA) and its metallogeny were proposed by Prof. Chen Guoda, who was a well-known geotectonic and metallogenic geologist in China. In 1988, “International Research Center for Activated Tectonics (DIWA) and Metallogeny” was founded in China. In 1990, when the “Activated Tectonics (DIWA) Group” (CTOD WG4: Tectono-Magmatic Activation (DIWA)) was established as a working group of the Commission on Tectonics of Ore Deposits (CTOD) of the International Association on Genesis of Ore Deposits (IAGOD), Prof. Chen Guoda became the vice chairman of the CTOD and the Chairman of DIWA Group. It was Prof. Chen Guoda who brought up the new idea of tectonometallogenic type, i.e. the mineralization in activated regions, and established the concept of multi-genetically formed ore deposits, which not only provides a new approach to understand ore genesis of complex ore deposits but also opens up our mind to the prospecting of new mineral resources. Despite Prof. Chen Guoda’s passing away in 2004, his thoughts on the relationship of activated tectonics and metallogeny have had great impact on academic sector and mining industries.

On August 20, 2014, the Commission on Tectonics of Ore Deposits (CTOD) was formally reestablished by IAGOD during the 14TH Quadrennial International Association on the Genesis of Ore Deposits (IAGOD) Symposium in Kunming, Yunnan Province, P.R. China. The Commission on Tectonics of Ore Deposits (CTOD) of the IAGOD aims to understand metallogenetnic processes associated with tectonism and magmatism, to further reveal the relationship between activated regions and
super-large ore deposits, and to facilitate the exchange of ideas, research methods, and reporting of progress in studies on activated tectonics and associated metallogeny, and thereby to help exploration for multi-genetically formed ore deposits in activated regions and to improve the understanding on ore mineral systems related to tectono-magmatic activity. The Commission on Tectonics of Ore Deposits (CTOD) will organize meetings, sessions at conferences, short courses/workshops and publications. The CTOD of the IAGOD has a new committee composed of a Chairman, five vice Chairmen and two Secretary Generals. The current committee members are:

**Chairman: Prof. Xu Deru**

Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, No. 511, Kehua Street, Guangzhou, 510640, P.R.China; Mobile phone (+86) 13539821572; (+86) 20-85292713 (office); fax (+86) 20-85290130; e-mail xuderu@gig.ac.cn

**Vice Chairman:**

Prof. Chi Guoxiang, University of Regina, 3737 Wascana Parkway, Regina, SK S4S 0A2, Canada; Phone (+1) 306-585-4583; fax (+1) 306-585-5433; e-mail guoxiang.chi@uregina.ca

Prof. Lin Ge, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, No. 511, Kehua Street, Guangzhou, 510640, P.R.China; Mobile phone (+86) 13973161811; (+86) 20-85290321 (office); fax (+86) 20-85290130; e-mail gelin@gig.ac.cn

Prof. Chen Guoneng, School of Earth Sciences and Geological Engineering, Sun Yat-sen University, No. 135, the western Xingang Road, Guangzhou, 510275, P.R.China; Mobile phone (+86) 135535255180; fax (+86) 20-84112390; e-mail chengn@mail.sysu.edu.cn

Prof. Wang Jingbin, China Non-ferrous Metal Resource Geological Survey, wjb@cnnem.com
Prof. Shao Yongjun, School of Geosciences and Info-Physics, Central South University, Changsha, 410083, P.R. China; Mobile phone (+86) 13973149482; fax (+86) 731-88830616; e-mail shaoyongjun@126.com

Committee:

Prof. Chen Guoneng, Sun Yat-sen University, chengn@mail.sysu.edu.cn

Prof. Chen Shengzao, U.S. Geological Survey, szchen@usgs.gov

Prof. Chen Zhenglei, Institute of Geomechanics, Chinese Academy of Geological Science, chenzhengle@263.net

Prof. Chi Guoxiang, University of Regina, Canada, guoxiang.chi@uregina.ca

Prof. Choi Dong R., Editor-in-Chief of NCGT Journal, Australia, raax@ozemail.com.au

Prof. Deng Jun, China University of Geosciences (Beijing), djun@cugb.edu.cn

Prof. Han Runsheng, Kunming University of Science and Technology, 554670042@qq.com

Prof. Hu Baoqun, East China Institute of Technology, bqhu@ecit.cn

Prof. Lai Jianqing, Central South University, liq@csu.edu.cn

Prof. Lev Maslov, University of Northern Colorado, Lev.Maslov@unco.edu

Prof. Li Feng, Kunming University of Science and Technology, lifeng@kmust.edu.cn

Prof. Lin Ge, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, gelin@gig.ac.cn

Prof. Lv Guxian, Institute of Geomechanics, Chinese Academy of Geological Science, lvguxian@yahoo.com.cn

Prof. Shao Yongjun, Central South University, shaoyongjun@126.com

Prof. Tan Kaixuan, Southern China University, nhtkx@126.com
Prof. Wang Jingbin, China Non-ferrous Metal Resource Geological Survey, wjb@cnnem.com

Prof. Wang Ling, Chengdu University of Science and Technology, wangling@cdut.edu.cn

Prof. Xiao Wenjiao, Institute of Geology and Geophysics, Chinese Academy of Sciences, wj-xiao@mail.igcas.ac.cn

Prof. Xu Deru, Guangzhou Institute of Geochemistry Chinese Academy of Sciences, xuderu@gig.ac.cn

Prof. Yan Yi, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences, yanyi@gig.ac.cn

Prof. Yang Liqiang, China University of Geosciences (Beijing), lqyang@cugb.edu.cn

Prof. Zhang Baolin, Institute of Geology and Geophysics, Chinese Academy of Sciences, blzhang@mail.igcas.ac.cn

Prof. Zhang Yanhua, Principal Research Scientist with CSIRO Exploration & Mining, Australia, Yanhua.Zhang@csiro.au

Prof. Zhang Zhaocong, China University of Geosciences (Beijing), zczhang@cugb.edu.cn

Prof. Zhong Jianhua, China University of Petroleum (Shandong), 95756033@qq.com

Secretary Generals:

Prof. Lai Jianqing, Central South University.
Address: School of Geosciences and Info-Physics, Central South University, Changsha, Hunan Province, China 410083; Tel. 86-013875983805; Email: liq@csu.edu.cn

Prof. Yan Yi, Guangzhou Institute of Geochemistry, Chinese Academy of Sciences
Post address: No. 511, Kehua Street, Tianhe District, Guangzhou 510640, Guangdong, China; T: 86-20-85290212; F: 86-20-85290130; yanyi@gig.ac.cn

Supported Unit: Guangzhou Institute of Geochemistry, CAS
3. Academic lectures co-given by David Groves and Richard Goldfarb

With the invitation of Prof. Jun Deng, the vice-chairman of Chinese National Commission of the International Association on Genesis of Ore Deposits (IAGOD), and Prof. Liqiang Yang, the member of the Commission on Tectonics of Ore Deposits (CTOD) of the IAGOD, a series of wonderful academic lectures themed with *Orogenic Gold Deposits: Global Distribution to Deposit Models to Exploration Methods* were co-given by David Groves, the ex-president of Society for Geology Applied to Mineral Deposits, and Richard Goldfarb, the ex-president of the Society of Economic Geologists, during September 17th to 19th, 2014, in China University of Geosciences (Beijing; CUGB).

Prof. David Groves is the pre-director of the Global strategic deposit Research Center in University of Western Australia, lifelong emeritus professor in University of Western Australia. He is an honorary member of the Australian Academy of Science, and had served as the chairman of the Geological Society of Australia, Geological Society of Economic Geology and the International Association of deposit, respectively. So far, He has supervised 85 doctoral students, 55 graduate students and 120 undergraduate students from the University of Western Australia and different countries. He has co-published more than 500 articles and writings, mainly associated with the Archean gold deposits, nickel-copper deposit associated with komatiites, orogenic gold deposits, the lithosphere’s response to global mineralization and forecasting mineralization prospect. Together with Prof. Goldfarb, they founded the metallogenic theory of orogeny-type gold deposits which has a significant and widespread effect on international academic area.

Prof. Goldfarb is an international honorable lecturer and the ex-President in the Society of Economic Geologists, Geological Society of Australia’s distinguished
lecturer in economic geology, and also had worked as a chief editor of “Mineralium Deposita”. Now, he works in the United States Geological Survey as a senior research geologist and also an honorary professor in CUGB, University of Colorado, Colorado State University, Colorado School of Mines and University of Western Australia. In addition, he is a vice-President of International Association of Gondwana Research, a workshop coordinator of Society of Economic Geologists and in Scientific Advisory Board of Natural Sciences and Engineering Research Council of Canada. He won United States Geological Survey (USGS) Achievement Award in 1980, 1985, 1989 and 1996, USGS Meritorious Service Award in 2008, USGS Star Award in 1999, and Silver Medal for Scientific Achievement, Ralph Marsden Medal for Significant Volunteer Contributions of Society of Economic Geologists.
Before the lecture on the morning of September 17th, the president of the CUGB, Prof. Jun Deng introduced the research field and achievements of the two lecturers, David Groves and Richard Goldfarb. Then, Professors Goldfarb and Groves made wonderful presentations respectively. The titles of the reports of David Groves include (1) “Other Types of Gold Deposits often Confused with Orogenic Gold” (2) “Precambrian Orogenic Gold” and (3) “Conceptual Exploration for Orogenic Gold”. And Professor Goldfarb’s are “Introduction to Orogenic Gold and Phanerozoic Orogenic Gold (I, II)”.

There are six subjects of the academic report series, and one subject per half day: (1) Orogenic Gold Deposits: Global Distribution to Deposit Models to Exploration Concepts; (2) Other Types of Gold Deposits often Confused with Orogenic Gold; (3) Precambrian Au; (4) Tertiary-Mesozoic Orogenic Gold Deposit; (5) Paleozoic/late Neoproterozoic Orogenic Au; (6) Conceptual Exploration for Orogenic Gold. There were no empty seats in the scene of the reports and the audience came from CUGB, Guangzhou Institute of Geochemistry of Chinese Academy of Sciences, Central South
University, Chinese Academy of Geological Sciences, Peking University, Institute of Geology and Geophysics of Chinese Academy of Sciences, and China Non-ferrous Metals Resource Geological Survey. They showed great enthusiasm on the theme of Orogenic Gold Deposits: Global Distribution to Deposit Models to Exploration Methods. And they were eager to speak out their views and ask questions. Professors Groves and Goldfarb answered the questions patiently and both sides discussed in an enthusiastic environment. Through this academic report series, Professors David and Goldfarb taught us the theory system and exploration method of Orogenic Gold Deposit systematically and they also showed us the spirits of preciseness, innovation and query on academy and the attitude of humor and optimistic toward life. All of these will encourage us to make progress scrupulously but also happily.

Finally, Xuanxue Mo, an academician of Chinese Academy of Sciences, delivered a speech as a conclusion. He summarized the content of the academic communication between Professors Groves and Goldfarb and the teachers and students. He encouraged us to follow the two professors’ example and obtain new height in geosciences. And he also expressed sincere thanks and good wishes to the two excellent ore-deposit scientists.
Financial report

IAGOD

International Association
on the Genesis of Ore Deposits

Financial Report

This is the annual report on the financial position of IAGOD for the calendar year 2014, of which an interim report was presented to the IAGOD Council at the meeting in Kunming, China of August 20th, 2014.

IAGOD bank access and account maintenance are maintained by Dr. Andreas Naegle of E. Schweizerbart'sche Verlagsbuchhandlung OHG (Naegle u. Obermiller) Science Publishers, Johannesstr. 3A, 70176 Stuttgart, Germany; Tel. +49-711-351456-0 / www.schweizerbart.de, mail@schweizerbart.de. The banking procedures form part of services provided to IAGOD and were established in 2013. This expands the cooperation on IAGOD Proceedings published by Schweizerbart since the foundation of IAGOD. I am grateful for our professional relationship with them.

FINANCIAL REPORT
January 1st, 2014 to December 31st, 2014

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<th>Description</th>
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<td>Membership Fees 2014</td>
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<td>Kazakhstan NG fees (2014-2017, paid through R. Seltmann)</td>
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<td>Kunming travel support (Seltmann)</td>
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<td>Transfer J. Anderson to support WG Critical Metals excursion</td>
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<td>1st Iranian International Congress (flight cost for Dave Lentz)</td>
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<td>(advance to Dave Lentz of 2,500 € and 614.99 € returned)</td>
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<td>Travel support to Franco Pirajno (PACRIM)</td>
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<td>Editorial support for OGR</td>
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<td>Transfer to Mr. Belyanin (support for Novosibirsk meeting)</td>
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<td><strong>Closing Balance as of December 31st, 2014</strong></td>
<td><strong>46,829.71 €</strong></td>
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Dr. David R. Lentz, IAGOD Chief Treasurer & Membership Chair

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4. Publication report

4.1 Publication manager report

A new flyer for promoting the activities of IAGOD and to generate new members has been produced for the 14th Quadrennial IAGOD Symposium in Kunming (Enclosure).

Authorised by Executive Council, a previous agreement with Elsevier has been formalised and signed, valid until 2016, defining the terms and conditions to promote ORE GEOLOGY REVIEWS as the official journal of IAGOD with IAGOD logo on front cover, with IAGOD in advisory role for nominating the Editor in Chief and through him the Editorial Board (subject to approval by the Publisher), a free society page for informal IAGOD content, and five free online subscriptions for IAGOD NG leaders or deserving IAGOD activists from economic disadvantaged background selected at discretion of IAGOD Council (currently Mongolia, Kyrgyzstan, Kazakhstan, Uzbekistan, Georgia). The currently prepared volumes (2014-2015) of OGR inform on IAGOD’s free journal society page about IAGOD Council (list of elected officers), PacRim 2015 advertisement and Argentina 2018 advertisement. Future society pages will inform about forthcoming activities sponsored by IAGOD and its Working Groups and Commissions.

The agreement signed in 2009 with Schweizerbart Publishing House about revival of the IAGOD sponsored journal GLOBAL TECTONICS AND METALLOGENY (founded by Jan Kutina) and to provide free access to the journal for IAGOD members for two years has regardless the tireless efforts of the chief editor Prof Wenjiao Xiao not yet brought the expected results. Reason is mainly that GTM has no impact factor registration yet. A much acknowledged paper by Prof. Hugo De Boorder was published online in late 2013; in Autumn 2014 a second article
"Geological understanding of plate tectonics" has been published by Yaoling Niu, and two more articles from Chinese authors are under review. The first volume of the re-launched journal is expected to be complete and released in printed format in 2014/2015.


The promotion and sale of IAGOD monographs and guidebooks is an ongoing activity.

References of IAGOD-sponsored Open Access publications (courtesy of Schweizerbart):

De Boorder, Hugo (2014) The Central European, Tarim and Siberian Large Igneous Provinces, Late Palaeozoic orogeny and coeval metallogeny. Global Tectonics and Metallogeny 10(1), 1-22(DOI: 10.1127/gtm/2013/0008; free download sponsored by IAGOD: https://www.schweizerbart.de/papers/gtm/list/10#issue1 )

4.2 Report from ORE GEOLOGY REVIEWS’ Editor-in-Chief, Prof F. Pirajno, about the journal in 2014

2014 has been a productive and successful year for our journal. And of course, as you all know, OGR achieved a substantial rise in IF. I trust that this trend continues and even improves for 2015 (five papers submitted in the first 3 days).

With this message, I would like to convey my gratitude to the Associate Editors, Hemalatha Moorthy (Journal manager), Yanping Hou (special issues manager), Paul Cumine (Elsevier, Geophysics & Geochemistry Journals) and Tim Horscroft (Review papers coordinator), for their valuable contributions and enduring support.

A point of note is that the EES is at times somewhat erratic or inconsistent. This needs to be resolved; hopefully the Journal managers and Support Team will take action on this issue in order to avoid time delays. Finally, I take this opportunity to wish everyone a Happy and Fruitful New Year and looking forward to harmoniously working with you all.

Franco Pirajno
Editor-in-Chief

<table>
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<tr>
<th>Total articles submitted</th>
<th>443</th>
<th>405 remaining excluding those withdrawn</th>
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<tbody>
<tr>
<td>Accepted</td>
<td>244</td>
<td>Including 83 articles from 2013 submissions accepted in 2014</td>
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<tr>
<td>In review or revision in progress</td>
<td>176</td>
<td>Includes articles submitted in 2013</td>
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<tr>
<td>Rejected</td>
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<td>Withdrawn</td>
<td>38</td>
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<td>Special Issues published or completed</td>
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</table>
5. Reports of IAGOD National Groups

5.1 Report of Chinese IAGOD National Group in 2014

The main events and activities of Chinese IAGOD group in 2014 were:

5.1.1 The 12th National Conference of China was held in the Xiamen city, Fujian province in December 12-14, 2014

The 12th National Conference of China was held in the Xiamen city, Fujian province in December 12-14, 2014, mainly sponsored by IAGOD China National Group. More than 1000 participants from academic, industrial and government attended in the conference. Prof. Chen Yuchuan, president of China Society of Mineral Deposits (China National Group, IAGOD), also a new long-life IAGOD member and one of the attendees of founding ceremony of IAGOD in 1963 in Prague, made an address. He stressed that the new breakthrough for mineral prospecting demand advanced scientific and technological progress. He called for economic geologists to pay more time working in the field where peoples will find more new scientific problems. When focusing the researches on the current key points which are bafflers to realize the new mineral discovery geologists and solving them can make great significant achievements. Dr. Shao Xu, the director of Bureau of Geology, Mineral Resources and Development of Fujian Province, made a warm welcome address. He briefly introduced the mineral resources, particularly the new discoveries in past 5 years in Fujian province. He hoped that the geologists in the whole country pay more attentions for the mineral resources in Fujian and push to find more minerals by applying the new theories and new technologies.

After the opening ceremony 14 well-known scientists and industrial chief geologists gave plenary presentation. Total 16 sessions were arranged in the two days, comprising 1) Introduction the exploration process of large – superlarger ore deposits
in past five years; 2) Large scale tectonic events – related large-scale mineral episodes, 3) Granitic rocks – related minerals, 4) Fluids and ores; 5) Syngenetic and hypergenic processes – related minerals, 6) Mineral models, technologies and assessments, 7) Strategy of energy and mineral resources, 8) Ore – related petrology and petrochemistry, 8) Critic mineral resources, 9) Brown field exploration, 10) Prediction for new minerals; 11) New discovery in the ore dense areas and so on.

At the close ceremony 10 Ph. D and Master students are awarded to the prize for their excellent presentations. During the conference a new council of China Society of Mineral Deposits was elected and started to work from that time. Prof. Mao Jingwen and Prof. Xing Shuwen are elected to be president and secretary in general.

Three post-conference field trips are arranged to the major mineral resources, for instance, the Zijin porphyry Cu-Mo – epithermal Cu-Au system, Makeng skarn Fe, Dingfengshan Pb-Zn (Reported by Mao Jingwen, Institute of Mineral Resources, Chinese Academy of Geological Sciences)

5.1.2 Conference of Regional metallogeny and Prospecting

It was held on Dec. 7, 2014 in honor of Prof. Chen Yuchuan on the occasion of his 80th birthday and career of 60 years. The conference was hosted by Chinese Academy of Geological Sciences. Total 190 participants were there for gathering as well as academic exchanges. Among them there are Dr. Wang Min, deputy of Minister of Ministry of Land and Resources, President of China Geological Survey, President of CAGS, and Mr. Song Ruixiang, former minister of Ministry of Geology and Mineral Resources. Except for three scientific presentations four of his friends and colleagues recalled something about the interesting experiences. Three special issues appeared in Journal of Asian Earth Sciences, Mineral Deposits, and Acta Geologica Sinica, respectively, are contributed to his 80th birthday.
Professor Yuchuan Chen, born on December 7, 1934, in Pinghu city of Zhejiang province, China, is a distinguished economic geologist well known not only in China, but also abroad. Since graduating from the Donetsk National University in 1959, he has devoted himself to the fields of economic geology, geochemistry, regional metallogeny, mineral prospecting and exploration.

Prof. Chen spent a long time as prospecting field geologist and has visited almost all major ore deposits in China, as well as many other ore districts in the world. As a leading scientist he and his colleagues completed several major research projects funded by the central government and the Ministry of Land and Resources of China. Professor Chen and co-workers have published more than 80 scientific papers and 14 books. His outstanding research work on the giant Dachang tin-polymetallic ore deposit in Guangxi province has greatly stimulated exploration in the district, and has led to the discovery of additional large resources. Another of his achievements is the well-known Ningwu porphyry iron ore deposit model, which was proposed based on the study of the ore deposits in the Middle – Lower Yangtze River Valley. The model has been extensively used for prospecting in regions containing continental volcanic rocks. In the past ten years several new iron ore deposits have been discovered based on Prof. Chen’s model. Through collaborative research with Prof. Yuqi Cheng and others, Prof. Yuchuan Chen created a theory entitled “metallogenic series” refining previous studies, which is a significant contribution to the development of mineralization theory and has been extensively used for prospecting in China. The model suggests that a group of mineral deposits in an ore district or ore belt has temporal - spatial and genetic relationships, and has been very successful in the discovery of new ore deposits in China and elsewhere.

Prof. Chen and his team have repeatedly been awarded the National Prize of
Science and Technology, and he became an Academician of the Chinese Academy of Engineering (CAE) in 1997. In addition, Prof. Chen was the President of the Chinese Academy of Geological Sciences during 1985 – 1998, and has been the Director of the Society of Mineral Deposit Committee for 18 years. As Chief Geologist of the Ministry of Geology and Mineral Resources of China, he was in charge of national mineral exploration from 1981 to 1985, and he was the leader of the National Gold Prospecting Office between 1986 and 1990, when prospecting and exploration in China achieved brilliant results.

Prof. Yuchuan Chen is a founding member of the International Association on the Genesis of Ore Deposits (IAGOD) in Prague in 1964, and served as IAGOD vice president from 2000 to 2004. His most important contribution to IAGOD is the advancement of the association in China and the linkage of IAGOD with the China Society of Mineral Deposits. Under his guidance, many Chinese colleagues have been involved in IAGOD activities, and now China is one of the most important participating countries in this organization.

Professor Chen is exceptionally dedicated, creative, and passionate in his work. He retains a strong belief and motivation to never stop in order to accomplish his goals. At present he still leads a large project on “Chinese records of mineral deposits”, and we look forward to new and important achievements from this work (Reported by Mao Jingwen, Wang Yitian, Cheng Yanbo (Institute of Mineral Resources, Chinese Academy of Geological Sciences)

5.1.3 Guanghua Engineering Scientific – Technological prize.

Prof. Pei Rongfu, former IAGOD president (1992-1996) was honorably awarded for the Guanghua Engineering Scientific – Technological prize for his important contribution of mineral Exploration. He used to be leader of expert to work in the
Africa and middle – east countries for exploration. After their hard work they discovered and then explored more 10 ore deposits, which are the great contribution for the local countries and people life. He also did outstanding job for the exploration of the Daye skarn Fe deposit in Middle – Lower Yangtze River Valley. In past 10 years he organized an international group to compile several world map of minerals. Although 91 years old he still is full of energy and quite sharp. He is leader of research team to compile several maps in varied scale for minerals in China and even over the world (Reported by Mao Jingwen and Mei Yanxiong, Institute of Mineral Resources, Chinese Academy of Geological Sciences)

5.2 Report of the Russian IAGOD National Group

5.2.1 Leadership

President of Russian NG – Academician Nikolay BORTNIKOV, Director of IGEM RAS, Moscow. Contact: director@igem.ru

Secretary – Dr. Alexei P. ALESHIN (leading scientist of IGEM RAS, Council Member of IAGOD). Contact: alexei.aleshin@gmail.com

Russian NG comprises 168 members (including Russian Far East IAGOD Group). The list of members was published in the Newsletter 2012-2013.

5.2.2 Main events in 2014

Members of Russian NG participated in numerous Russian and international conferences and symposia related to different aspects of ore deposit formation. They are listed below in chronological order.

1. Russian National Scientific-Practical Conference “Geology and Mineral Resources of North-Eastern Russia” was held 1-3 April 2014 in Yakutsk. The
conference gathered 120 participants from 38 academic institutes, universities, exploration companies and mining enterprises. It was organised by North-Eastern Federal University, Institute of Geology of Diamond and Precious Metals (Russian Academy of Sciences), and Scientific-Study Center “Mineral Resources and Their Evaluation Technologies”.

Four thematic sections covered different aspects of the conference: (1) Facilities and technology of ore deposit exploration; (2) Hydrogeology and geocryology; (3) Regional geology and geophysics; and (4) Geology and mineralogy of diamond and precious metal deposits. The Conference Proceedings comprise 134 abstracts on 576 pages.

2. XI Russian National Fersman Scientific Session (with international participation) “Geology and Strategic Mineral Resources” took place in Apatity (Kola peninsula) 7-8 April 2014. It was organised by Geological Institute (Kola Scientific Center of RAS), and Kola branch of Russian Mineralogical Society. It is an annual event that join geologist working in Kola peninsula and adjacent territories of Finland, Sweden, and Norway.

Three sections have been outlined: (1) History of geologic investigation of Kola peninsula, (2) Geology and mineralogy of the peninsula, and (3) Regional geology and geochronology of the peninsula.

3. Mineralogical seminar with international participation “Problems and Perspectives of Modern Mineralogy (Readings from Yushkin-2014)” occurred 19-22 May 2014 in Syktyvkar. It was organised by Geological Institute of Komi Scientific Center (Ural Branch of RAS) under financial support of Russian Foundation of Basic Research and programs of Russian Academy of Sciences.

4. 12th International Platinum Symposium went off in Ekaterinburg, Russia, 11-14 August 2014. The symposium was organised by Zavaritsky Institute of Geology and Geochemistry (Ural Branch of RAS), and Russian Foundation for Basic research (RFBR), with IAGOD as a co-organiser along with other societies.

The symposium covered the following topics: (1) Magma dynamics, cumulates and ore genesis, (2) PGE mineralization in mafic-ultramafic intrusions of Russia: geology and petrogenesis, (3) PGE-Cu-Ni sulphide-bearing ultramafic-mafic intrusions of the Noril'sk Province: insights into ore genesis and exploration, (4) Models and exploration methods for magmatic Ni-Cu-PGE sulphide and PGE-oxide deposits from around the
World, (5) Ophiolites and Ural-Alaskan-type intrusions: traditional and innovative looks on the PGM formation, (6) PGE and Au through experiments, (7) New advances in the understanding of PGE mineralogy from magmatic to supergene environments, (8) Open Session.

Pre-symposium workshop “Processes in magma chambers with implication to genesis of ore deposits” forewent the main event 9-10 August 2014. Three pre-symposium and three post-symposium field trips have been organised for participants: (1) PGE-Cu-Ni deposits of the Noril’sk Province, (2) PGM placer deposits at Kondyor massif, (3) chromite deposits of Rai-Iz ophiolite complex, (4) platinum and copper deposits related to Nizhny Tagil clinopyroxenite-dunite massif, (5) the Kachkanar titanomagnetite deposit, platinum placers and lode deposits related to the Svetly Bor intrusion, (6) PGE-Cu-Ni deposits associated with the Ioko-Dovyren mafic-ultramafic layered intrusion.

Abstract volume issued on the results of the symposium (342 pages) included 160 contributions made by 392 authors.


5. The main event of the year – 14th Quadrennial IAGOD Symposium in Kunming (China) held 19-22 August 2014.

Eleven geologists from Russia participated in the event. They made presentations in 7 sessions: (1) Mesozoic Ore Deposits along the Eastern Eurasian Continental Margin, (2) Black Shale-Hosted Mineral Deposits, (3) Critical Metals in Ore-Forming Systems: New Perspectives on Ore Formation, Exploration and Extraction, (4) Porphyry Cu (±Au, Mo) Deposits, (5) Gold Deposits: Epithermal,

In total, 27 authors from 13 Russian institutes and universities shared their results in the presentations. Participation in few post-conference trips was very exciting and fruitful.

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6. International conference “Modern Information Technologies in the Earth Sciences (ITES)” was held 8-13 September 2014 in Petropavlovsk-on-Kamchatka organised by Institute of Volcanology and Seismology (Far East Branch of RAS), with information support of OneGeology, IAGOD, SEG, and IUGS. It was the 3rd conference, two first took place in Magadan (2008) and Vladivostok (2010). The goal of this conference is to attract the leading researchers and experts in information technologies, applied mathematics, geoinformatics, geophysics, system analysis, exchange acquired knowledge and experience, and discuss possibilities for setting up joint projects and programs.

One hundred nineteen geologists from 11 countries (Australia, Austria, China, France, Hungary, Kazakhstan, Mexico, Russia, Slovenia, Taiwan, and Uzbekistan) participated in the conference. Abstract volume issued on the results of the event comprised 201 contributions.
The program included excursion at the Institute of Volcanology and Seismology, a sightseeing tour in the city of Petropavlovsk on Kamchatka and a one-day excursion/field trip around the Mutnovsky volcano to learn about its origin and relation with the geological evolution of the Kamchatka peninsula.


7. XVI Russian National Conference on Thermobarogeochemistry occurred in Irkutsk 10-14 September 2014. It was organised by the Vinogradov Institute of Geochemistry (Siberian Branch of RAS) chaired by academician Nikolay BORTNIKOV and corresponding member of RAS Vladislav SHATSKY.

The conference covered the following topics: (1) Fluid regime of hydrothermal systems, (2) Fluid and melt inclusions as indicators of magmatic and metamorphic processes, (3) Analytical and experimental methods in fluid and melt inclusion study. Field trip around the Baikal lake has been organised for participants of the conference. Published abstracts comprised 149 pages.

8. XV International Conference “Physicochemical and petrophysical studies in Earth Sciences” was held 29 September – 1 October in Moscow. The conference was organised by Vernadsky Institute of Geochemistry and Analytical Chemistry (GEOKhI RAS), Shmidt Institute of Physics of the Earth (IPE RAS), Institute of Geology of Ore Deposits (IGEM RAS), Institute of Experimental Mineralogy (IEM RAS), and Petrophysical Commission.

Seven topics outlined the scope of the conference: (1) Physicochemical properties of rocks and melts at high temperatures and pressures, (2) Contemporary methods of experimental studies, (3) Cosmochemistry, (4) Isotope equilibria, (5) Petrophysics and its role in interpretation of geophysical data and in prospecting of ore deposits, (6) Petrological-geophysical approaches in compilation of composition and
structure models of planets, and (7) Petrophysical and geodynamic studies in ecologic concerns.

Electronic version of the conference proceedings was posted at websites of institutes-organisers.

9. 2nd Russian National Youth Geological Conference “Geology, Geocology and resource potential of Ural and adjacent territories” went off in Ufa (Ural region) 20-24 October 2014. It was organised by Institute of Geology (Ufa Scientific Center of RAS), Bashkir State University, and Russian Mineralogical Society.


Abstract volume published on the results of the conference comprised 43 abstracts on 281 pages. Post-conference trip on the Shikhany limestone mountains was organised for participants.

10. 5th Russian National School of Young Scientists “Experimental Mineralogy, Petrology, Geology and Geochemistry” occurred 24-25 October in Chernogolovka. It was organised by Institute of Experimental Mineralogy (IEM RAS), Russian Foundation for Basic Research (RFBR), and Russian Mineralogical Society (RMS). The following topics have been outlined: (1) Conditions of origination and evolution of magmas, (2) Mineral equilibria in silicate and ore systems, (3) Studies of hydrothermal

Abstract volume included 35 contributions on 116 pages.

11. Russian scientific conference with international participation “Precious Metals, Rare and Radioactive Elements in the Ore-Forming System” dedicated to the 120th anniversary of Professor Felix Shakhov was held 28-30 October 2014 in Institute of Geology and Mineralogy (IGM SB RAS, Novosibirsk). IAGOD was a co-sponsor of the conference.

Nine topics comprised the basis of the conference: (1) geodynamic environments of formation of precious, rare, and radioactive ore deposits; the role of plume magmatism, (2) precious, rare, and radioactive elements in endogeneous processes, (3) precious, rare, and radioactive elements in exogeneous processes, (4) the role of micro- and nanosize components in ore-forming processes, (5) geochemistry of precious, rare, and radioactive elements in carboniferous ore-forming systems, (6) contemporary processes of precious, rare, and radioactive ore deposit formation, (7) the role of microorganisms in concentration of precious, rare, and radioactive elements, (8) problems of assessment and mining of technogeneous deposits, and (9) problems of personnel training.

Pre-conference field trip was organised for participants to Zmeinogorsk (Altay region). Kolyvansky stone-cutting mill, established in 1728, and the Novofirsovsky gold deposit were the main objects of interest in this trip.

One hundred twelve contributions made by 211 authors from Russia and abroad have been published in proceedings volume of 754 pages.

12. 7th Siberian Scientific-Practical Conference of Young Scientists on the Earth Sciences (with international participation) took place in Novosibirsk. It was organised
by Sobolev Institute of Geology and Mineralogy (IGM SB RAS) and Trofimuk Institute of Petroleum-Gas Geology and Geophysics (IPGG SB RAS).

The conference gathered 146 young scientists from 18 cities of Russia, as well as from China and Azerbaijan. Wide program included 13 sessions: (1) Petrology, (2) Mineralogy, (3) Metallogenesis, mineragenesis, and ore genesis, (4) Geochemistry and geochronology, (5) Regional geology and tectonics, (6) Paleontology and stratigraphy, (7) Geomorphology and quaternary geology, (8) Geocoeology, hydrogeology, geologic engineering and nature management, (9) Experimental mineralogy, (10) Oil and gas geology and geochemistry, (11) Modern problems of geophysics, (12) Geomechanics, mining machinery, and technology of deposit mining, and (13) New information and geoinformation technologies in geology.

Young participants of the conference
Abstract volume of 468 pages included 212 contributions made by 335 authors. It is accessible for download at the website of the conference: 


13. 4th Scientific Youth School “Modernity in Study of Ore-Forming Processes” (with international participation) occurred 1-5 December in Moscow. It was organised by the Institute of Geology of Ore Deposits (IGEM RAS).


5.2.3 Our losses

Two our members unfortunately passed away in 2014:

1. Felix P. MITROFANOV (22 June 1935 – 8 May 2014) – Academician, Professor, well-known Russian geologist in the field of ancient formations of Kola peninsula and Fennoscandia.

5.2.4 Forthcoming events

Two main scientific events are scheduled for 2015:

1. **Russian National Scientific-Practical Conference “Geology and Mineral Resources of North-Eastern of Russia”** is going to be organised 31 March – 02 April 2015 in Yakutsk. It is organising by the Institute of Geology of Diamond and Precious Metals (SB RAS), Sobolev Institute of Geology and Mineralogy (SB RAS), Ammosov North-Eastern State University, and the Scientific-Study Center “Mineral Resources and Their Evaluation Technologies”.

   Eight sessions will cover the scope of the conference: (1) Geology of the North-East of Russia, (2) Regional minerageny, (3) Geodynamic environments of deposit formation, (4) Forecast, prospecting, exploration and assessment of deposits, (5) New and unconventional types of deposits, (6) Ore deposit models, (7) Geophysical methods of geological environment study, (8) Approaches and techniques of ore deposit exploration.

   Website of the conference:


2. **XV International Conference on Geology of Placers and Weathering Crust Deposits “Placers and Deposits of Weathering Crusts: Investigation, Exploration and Ecology”** is scheduled 24-28 August in Perm State University.

   Six thematic sessions are planned: (1) Placers, weathering crust deposits and technogenic-mineral entities, (2) Appraisal and rational exploration of placers, weathering crust deposits and technogeneous mineral entities, (3) New technologies of forecast, prospecting, exploration, mining, and management of quantitative composition of placers, weathering crust deposits and technogeneous mineral entities,
(4) Ecological and geological-engineering problems of exploration of placers, weathering crust deposits and technogeneous mineral entities, (5) Investigation of a system “Primary source – placer – technogeneous mineral entity”, and (6) Methods of mineral composition study of placers, weathering crust deposits and technogeneous mineral entities.

Proposed excursions: (1) Kungur ice cave, (2) Wooden architecture of Prikamie, and (3) field trip “Gold-bearing placers of Ural”. Website of the conference:


5.3.1 Leaders:

The chairman of the Russian Far East IAGOD Group is Academician A.I. Khanchuk. 
director@fegi.ru

The secretary of this Group is G.A.Gonevchuk gonevchuk@fegi.ru

5.3.2 Events:

1. Participation in conferences.

(1) Geological processes in the lithospheric plates subduction, collision, and slide environments.

Second Russian Scientific Conference with foreign participants. Vladivostok, 17-20
September, 2014. Far East Geological Institute of Russian Academy of Sciences and Far Eastern Federal University. 13 members of our group took part and gave reports.


(3) **Second International geological conference.** Sr-Nd-Hf isotopic characterization of granitoids in accretionary orogens-comparison between the Central asian orogenic belt (CAOB) and NW Pacific Orogens (Japan and Sikhote-Alin, Russian Far East) and implications. Novosibirsk, 17-20 August 2014.


(4) **RMS Annual Session 2014. Mineralogy in a whole space of the world. Conference. St.-Petersburg. 2014.**


(5) **Second International Conference of Environmental Engineering and Science (CEES2014)**

Qingdao, Shandong, China October 31 to November 2, 2014.

Medvedev E.I. Methods of Extraction of Precious Metals from High Carbon Rock.

Many members of the Russian Far East IAGOD group took part in the projects of the Russian Basic Research Foundation studying the ore deposits genesis.

5.3.3 The patent

The patent of the Russian Federation №2494378 «The way of definition of gold in ores and products of their processing» (Zheleznov V.V., Medkov M. A, Krysenko G. F,
5.3.4 Selected publications


(Contributed by the Secretary of the Russian Far East IAGOD Group G.A. Gonevchuk, Far East Geological Institute of the Far East Branch of Russian Academy of Sciences. 159, Prospect 100-letya, Vladivostok, 690022, e-mail: gonevchuk@fegi.ru)
5.4 Report of IAGOD National Group of Mongolia

5.4.1 Leadership:

Chairwoman: Prof. Ochir Gerel (Department of Geology & Hydrogeology, School of Geology and Mining Engineering, Mongolian University of Science & Technology. P.O. 46, Box 520, Ulaanbaatar 210646, Mongolia. Tel: 976-11-326425; Fax: 976-11-312291; e-mail: gerel@must.edu.mn).

Secretary: Bayaraa Batkhishig (Mongolian University of Science & Technology) Tel: 976-11-326425; Fax: 976-11-312291; e-mail: bkhishig@must.edu.mn

5.4.2 New members:

Otgontuul Javkhlan. Working at Department of Geology & Hydrogeology, School of Geology and Mining Engineering, Mongolian University of Science & Technology. He got PhD in Geoscience from Shimane University, Japan, in 2014. His research field is high grade metamorphic petrology. Recent publications.

Battseren Soyolmaa. Working at Department of Geology & Hydrogeology, School of Geology and Mining Engineering, Mongolian University of Science & Technology. She is PhD student at the MUST. Her research field is iron skarn deposit in western Mongolia.

Baatar Munkhtsengel. Working as Head of Department of Geology & Hydrogeology, School of Geology and Mining Engineering, Mongolian University of Science & Technology. She got PhD in geoscience from MUST in 2000, and PhD in engineering from Tohoku University, Japan, in 2008. His research field is alkaline rock petrology and porphyry copper deposit research.

Pagam Batchuluun. Working at MAX Mining Co.Ltd. He is PhD student at MUST. He attended the Kunming-2014, 14th Quadrennial IAGOD Symposium.

5.4.3 Publications:

Bayaraa Batkhishig, Tsuchiya Noriyoshi, and Greg Bignall. 2014.


5.4.4 Conferences and Symposium

IAGOD Mongolia Group members co-organized and participated in Mongolia Mineral Exploration ROUNDP 2014 and IFOST-2014 International Conference in Ulaanbaatar with presentations and publications:

Ochir Gerel. Origin and evolution of granitoids and related mineralization (keynote speech)

Ulziiburen Burenjargal. Thermal evolution of Tseel metamorphic terrane and its relations to granitoid intrusions


N. Amitan. Tungsten deposits of Mongolia, their investigation level and future development

5.4.5 Future plan for 2015:
- To activate more the IAGOD Mongolia Group actions
- To extend membership by active and young researchers, who are interesting and working on ore deposit research and exploration field.
- To support our members’ for scientific publications and attendance to international conferences and meetings
- To continue supporting our responsibility to organize Annual ROUNDUP Mongolia Forum.
- To concern including our IAGOD group logo to our activities.

5.5 Report of the Kyrgyz National IAGOD Group for 2014

The main events in activity of Kyrgyz IAGOD group in 2014 were:

5.5.1 Conference and international projects participation in 2014

IAGOD members take part with oral and poster presentation (selected):

**International Conference: “Giant gold mine in Central Asia. Strengthening the gold potential of Kazakhstan”, Almaty, March 2014.** Papers presented:

1. Djenchuraeva R.: “Giant ore deposit Kumtor and problems of its sustainable development”.

2. Ivleva, E, Pak N.: Model of formation of the superlarge gold deposits Kumtor.

**International Conference “Current state and prospects of development of the mining industry”, State Technical University, Bishkek, 15-17 October 2014**

1. Djenchuraeva R. Some aspects of the formation of large ore accumulations in carbonaceous rocks.

2. Djenchuraeva R, Ashirova Z.: Gold deposit Dolpran


5. Mombekov Ch.: Methods and study problems of the fine gold in sulfides.
International Conference "Rare and radioactive elements in the ore-forming systems." Novosibirsk, 28-30 October 2014

1. Pak N., Ivleva, E. Geodynamic environments and typing of Tien Shan large gold deposits (Kyrgyzstan)

**Participation in projects:**

International project “Enhanced georelevance of master Programs” Norwegian Centre for International Cooperation in Education (SIU), Sept. 2011- 2014.

### 5.5.2 Selected publications

**Scientific monographs:**


**Abstracts:**


6. Alexeev D.V, Cook H.E., Djenchuraeva A.V., Miklaichuk A.V. Depositional environments and tectonic evolution of the Middle Devonian to Early Permian basins

5.5.3 List of members of Kyrgyzstan IAGOD National Group (18 members):

Aitmatova Djamila (PRMI),
Bakirov Apas (IG, NAS),
Bogdetsky Valentin (SAG&MR),
Ghes’ Michael (IG, NAS),
Djenchuraeva Alexandra (SAG&MR),
Djenchuraeva Rosalia (IG, NAS),
Kabaev Omorkul (MRI),
Maksumova Rena (IG NAS),
Malyukova Nataly (KRSU),
Pak Nikolay (IG NAS),
Shamshyev Orunbay (OTU),
Savchenko Gennady (SAG&MR),
Usmanov Iltyzar (IG NAS),
Bektemirova Tursunay (IG NAS),
Mombekov Chingiz (IG NAS),
Zhaanbaeva Aizat (IG NAS),

Resigned:
Nikonorov Valentin (SAG&MR),
Usubaliev Tourat (CJ C).

New members (2013): young scientists:
Djumagulov Ulan (IG NAS),
Asilbekov Kyaz (IG NAS),
Orozbaev Rustam (IG NAS),
Explanations:
PRMI - Physics and Rock Mechanics Inst., NAS; IG NAS – Institute of Geology National Academy of Sciences, Bishkek; SAG&MR – State Agency on Geology and Mineral Resources of Kyrgyz Republic; MRI – Mineral Resources Inst., Bishkek; KRSU – Kyrgyz-Russian Slavic University, Bishkek; KSTU – Kyrgyz State Technical University, Bishkek; OTU – Osh Technical University, town Osh, CJC- Chaarat Joint-stock Company

E-mail addresses of Kyrgyz Group IAGOD Members:
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Orozbaev Rustam geol_kg@mail.ru; +996 (312) 66 47 37;

Contributed:
Rosalia Djenchuraeva, Chairwoman of the Kyrgyz IAGOD Group, Institute of Geology, National Academy of Sciences, 30, Erkindik pr., 720000, Bishkek.
Office: +996 (312) 62 44 34; Fax.+ 996 (312) 66 21 89;
Mob. +996 555 00 62 58; E-mail: rosalia@list.ru
5.6 REPORT of Ukrainian National Group IAGOD (UkrIAGOD)

5.6.1 Message from the President

Dear Colleagues!

We are sincerely welcome all of you to renewal of Ukrainian national group UkrIAGOD. Currently, we have a little bit, but we rallied for serious work. Huge help to ensure for us a Tutkovsky Partnership

Network which provides using for our scientific investigation their infrastructure, possible financial assistance, participates in joint investigations.

Therefore, consider it my duty to express my gratitude to Pavlo Zagorodnuk - President of the All-Ukrainian Public Organization “Ukrainian Association of Geologists” (http://geolog.org.ua/en) and TUTKOVSKY's Chief (http://tutkovsky.com/en/). Because there are no limits in geology. Now it is important to understand that we are. As we continue to receive new and interesting results.

During the International Scientific Conference "Geochronology and geodynamics of Early Precambrian of the Eurasian continent", September 17, 2014 in the premises of the Institute of Geochemistry, Mineralogy and Ore Formation NAS of Ukraine (Kyiv) was held the Ukr IAGOD general meeting. I request to get acquainted with him below:

PROTOCOL № 2/09-2014
of the Ukr IAGOD general meeting

Kyiv September 17, 2014

Present: Representatives of UkrIAGOD corporate members:

- Ukrainian Association of Geologists and subsidiary «Expert Council of the Ukrainian Association of Geologists»;
- TUTKOVSKY Co;
- International Centre for the rational use of natural resources;
- Geological Department of Taras Shevchenko National University of Kyiv;
- Geological Department of Ivan Franko National University of Lviv;
- Institute of Geological Sciences NAS of Ukraine (Kyiv);
- Institute of Geochemistry, Mineralogy and Ore Formation NAS of Ukraine (Kyiv);
- Style Research (SL) Ltd

**Invited:** participants of the International conference "Geochronology and Geodynamics of Early Precambrian (3.6 - 1.6 byr) of the Eurasian continent"

**Agenda:**

1. Information about the reactivation of the Ukrainian national group IAGOD;

2. Report of the UkrIAGOD work in 2014 and plans for 2015;

3. The renewal of UkrIAGOD

**Listened:** Alexander Bobrov’s information (President of the IAGOD Ukrainian National group) about the Agenda.

IAGOD is an international association of individual members and National Groups that are involved in the study of problems of geology and genesis of ore deposits. The objective of IAGOD is to promote international co-operation in the study of the genesis of ore deposits and to further the growth of knowledge in this field. IAGOD was established at the 22nd International Geological Congress in New Delhi in 1964. The Association continues to extend its international activity and membership. UkrIAGOD is a Ukrainian national group, a full collective member of the international organization IAGOD and all rights and duties assigned to members of that organization apply on
each of UkrIAGOD members. Considering acting in UkrIAGOD, including a series of international symposia, conferences, geological tours and some scientific achievements in 2008 at the 33rd International Geological Congress in Norway Alexandr Bobrov was elected Vice-President of IAGOD. For some objective and subjective reasons Ukrainian national group IAGOD for a few years has not worked. Since the last year, it has resumed its activity and confirmed its status.

Ukrainian national group IAGOD (UkrIAGOD) is represented by such Ukrainian organizations of geological profile State Geological Survey of Ukraine, Ukrainian State Geological Research Institute, Institute of Geochemistry, Mineralogy and Ore Formation NAS of Ukraine, Institute of Environmental Geochemistry NAS of Ukraine, Institute of Fundamental Studies of the Ukrainian Scientific Association, Taras Shevchenko National University of Kyiv, Ivan Franko National University of Lviv, Ukrainian State Scientific-Research and Design Institute of Mining Geology, Rock Mechanics and Mine Surveying (Donetsk). Currently UkrIAGOD has over 50 active members.

During the last years such esteemed members of UkrIAGOD as Yesipchuk K., Kichurchak V., Kulish, E., Lytvynovych O., Metalidi V., Monakhov V., Shcherbakov I. and others have withdrawn from life. We express our sorrow and grief on this occasion and honor the memory of famous Ukrainian geologists.

Membership in the Association is open to candidates who are interested in the problems of studying the geological structure and genesis of ore deposits, if:

1. they were educated in geosciences, chemistry and physics in higher educational institutions (college, university, Mining Academy and others);
2. at least three years after graduation have worked in the field of earth sciences;
3. the membership is recommended by two full IAGOD members;
4. have published valuable research results that are important for the study the
genesis of ore deposits.

The annual membership fee for IAGOD members is an amount equivalent to 10
USD.

The UkrIAGOD report for 2013 have been prepared and published in an interactive
version. In order the report for 2014 and subsequent years to be more "intense" and
fully consistent with UkrIAGOD members (individual and collective) it is required to
submit reports on their activity to the secretariat of the national group under the existing
reporting forms.

By early next year, it is necessary to conduct a general meeting of members of the
national group to hear the report of the UkrIAGOD President, discuss plans for the
nearest future, determine the individual and the collective UkrIAGOD membership and
leadership, consider the charter of the organization, etc.

Today the President of the national group is Olexandr Bobrov, the Vice Presidents -
Mykhailo Heychenko (Institute TUTKOVSKY) and Leonid Stepaniuk (the Deputy
Director Institute of Geochemistry, mineralogy and ore formation of the National
Academy of Sciences of Ukraine). However, the current UkrIAGOD leadership offers
each member to participate in the discussion of proposals for a possible full rotation of
senior staff.

The General Meeting concluded:

1. Aleksandr Bobrov (The President of the Ukrainian national IAGOD group) take into
account following information:

   Approve for the nearest period the UkrIAGOD leadership that consist of: O.Bobrov
   (Ukrainian Association of Geologists; TUTKOVSKY Co) – the President;
   M.Heychenko (TUTKOVSKY Co) and L.Stepanyuk (Institute of Geology,
Geochemistry and Ore Formations of the Ukrainian National Academy of Science) –
the Vice Presidents;

2. To instruct the UkrIAGOD leadership:

• to publish on the UkrIAGOD website the today's meeting protocol;
• to contact the editorial boards of the geological profile journals to publish
  information about the general meeting and this protocol;
• to prepare and hold at the beginning of 2015 the general meeting UkrIAGOD;

3. The UkrIAGOD members during the 2 months should submit the information
reports on their activity to the national group leadership.

The President
of the
UkrIAGOD

Bobrov

The secretary
Krochak
5.6. 2 UkrIAGOD in brief (organization structure, management, membership)

UkrIAGOD is a Ukrainian National Group - full collective member of the international organization IAGOD and all rights and duties assigned to members of that organization apply on each of UkrIAGOD members.

UkrIAGOD Coordinating Council is operative managing authority of this public organization. It includes:

Chairman of the Board - the president of Ukrainian national group UkrIAGOD (Doctor of Geological and Mineralogical sciences, Professor Alexander BOBROV, al_bobrov@rambler.ru) – A.BOBROV’s CV see http://ukriagod.geolog.org.ua/en/structure

First Deputy Chairman of the Board (1st Deputy L.Stepanyuk - (Institute of Geology, Geochemistry and Ore Formations of the Ukrainian National Academy of Science) – the Vice Presidents;

Second Deputy Chairman of the Board (1st Deputy Mykhailo HEYCHENKO, geich@ukr.net).

Secretary of the Board (Maria KROCHAK, marykrochak@gmail.com).

The Chairman of the Board and the President of Ukrainian National Group UkrIAGOD is elected by a simple majority of members votes for a period of 5 years at a congress that is convened once a year. Voting is carried out by open or secret ballot that is determined by delegates.

During the year elected governing body of this public organization provides measures, regulated by UkrIAGOD Charter, to coordinate activities of members and other activities of the organization. UkrIAGOD management and its members work on a voluntary basis, so do not receive wages for their activities within the organization.
Privileges of IAGOD members include:

- Participation in the International Association aimed at studying ore deposits.
- Promoting participation in IAGOD symposia, meetings and conferences.
- Get an annual IAGOD newsletter.
- Work in IAGOD committees and working groups.
- Reduced registration fee to attend symposia.
- Reduced price on the literature published by IAGOD.

Membership is open to candidates who are interested in the problems of studying the geological structure and genesis of ore deposits if:

1) they were educated in the field of earth sciences, chemistry, physics and other related sciences in world higher educational institutions (college, university, Mining Academy, etc.),

2) at least three year experience in the field of Earth Sciences after graduation,

3) membership is recommended by two full members of IAGOD,

4) that you are somehow related to the study of the genesis of ore deposits.

Annual membership fee for UkrIAGOD members is an amount equivalent to $ 10 plus bank charges.

The governing body of UkrIAGOD is the general meeting of national group members that gather once a year. Coordinating Committee is elected by the general meeting for a term of 3 years and includes the President, two Vice Chairmen and Secretary. This committee administers the organization between meetings.

Bulletin of the Ukrainian national group is issued by Coordinating Committee UkrIAGOD as annual information and distributed free to members.
Ukrainian national group IAGOD (UkrIAGOD)

Ukrainian national group IAGOD (UkrIAGOD) is a corporate member of the International Association on the Genesis of Ore Deposits (IAGOD).

The partners of UkrIAGOD are also following Ukrainian and multinational organizations of geological profile:

- International Association on the Genesis of Ore Deposits (IAGOD);
- Ukrainian Association of Geologists;
- Subsidiary «Expert Council of the Ukrainian Association of Geologists»;
- TUTKOVSKY LLC;
- International Centre for the rational use of natural resources;
- Geological Department of the National University of Kyiv;
- Geological Department of the National University of Lviv;
- Institute of Geological Sciences NAS of Ukraine (Kyiv);
- Institute of Geochemistry, Mineralogy and Ore Formation NAS of Ukraine (Kyiv);
- Style Research (SL) Ltd

On March 18, 2013, the initiative group meeting was held of the recovery of UkrIAGOD, which was attended by representatives of the Ukrainian Association of Geologists, State Geological Survey of Ukraine, Ukrainian State Geological Research Institute, Institute of Geochemistry, Mineralogy and Ore Formation NAS of Ukraine, Institute of Environmental Geochemistry NAS of Ukraine, Institute of Fundamental Studies of the Ukrainian Scientific Association, Taras Shevchenko National University
of Kyiv, Ukrainian State Scientific-Research and Design Institute of Mining Geology, Rock Mechanics and Mine Surveying (Donetsk). There was registered 30 members of UkrIAGOD and was elected Coordinating Council UkrIAGOD. hen UkrIAGOD stock was registered 30 members, elected Coordinating Council UkrIAGOD.

Now Ukraine is experiencing difficult economic times, government agencies of geological profile disappear. There is permanent reorganization of existing institutions, their transition from department to department. Instead, there is undisguised aggression of Russia against Ukraine.

But even in this situation, Ukrainian geological community does not stop its research and production activity and close working contacts of such well-known public organizations as Ukrainian Association of Geologists (Kyiv), Mineralogical Society (Kyiv); Lviv Mineralogical Society (Lviv).

Now UkrIAGOD is in a reset phase. Known economic and political events in Ukraine have hindered the normal work during the last four years and now Ukrainian geologists are starting virtually from scratch. This was aided a benevolent leadership position of IAGOD and one of its most active members - CERCAMS.

Apart from purely scientific activity UkrIAGOD members together with corporate members and partners are involved in the implementation of commercial projects around the world, getting the unique opportunity to work with the new ore-geological structures and bodies, explore them and expanding the geography of studies.

Annually UkrIAGOD expands the geography and strategy of its research, as you will soon be able to visit the relevant pages of this site and the relevant reports.

We are also planning to put on the website the main results of the recent research, because we do believe that they are interesting for the wide geological society. Among these materials are those obtained for the first time and therefore constitute a substantial interest.
List of UkrIAGOD members:

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Payment of membership fees

For membership payment please use the web shop at: http://www.schweizerbart.de/iagod/membership-payment

5.6. 3 Projects

In the near future, scientists of the Ukrainian national team UkrIAGOD try to begin work in the following main areas of research.
Execution works of the project

1. "Native rhenium in natural geological systems"

At one time, UkrIAGOD scientists together with colleagues from IMGRE (A.A.Kremenetskyy et al) and for possible assistance in laboratory studies by Reimar Seltmann (CERCAMS) and Chris Stanley (Natural History Museum, London, UK) tried to verify the suspected phase of native Rhenium in Kapitanivka group ultramafic massifs of the Ukrainian Shield. The results were ambiguous, and results require continuation through geological and petrographic investigations. Detection phase metal rhenium (not mineral form!) at that time was the first fact of establishment sufficiently large selections of rhenium (50 microns) in the form of separate phases, and as a part of the natural intermetallic compounds.

Suspicion of Re-contamination of surface abrasive preparations mixtures used in their preparation, has been refuted on our experiment.

Its essence was to conduct in spectral analysis of abrasives before beginning of reworking of sample (rhenium was absent) and later use them after polishing surfaces (rhenium appeared in different quantities). For us It was granted confirmation of the native rhenium - he actually present in the ultramafic rocks.

It also confirms the presence of rhenium in ultramafic rocks of the crust zones existing pits.

Detection of metallic rhenium in ultramafic rocks, especially ore genesis and geochemical characteristics give reason to expect a number of unknown regularities, new forms of intermetallic compounds or minerals, status of this element, inclusive. Exactly for this purpose we call upon any experts to whom it is interesting to participate in collaborative research as part of a Team, which we are ready to create. We need opportunities for cooperation with the experts of the European Union or the
World who have access to laboratory capacities and funding of research from different sources of European funds support research projects of major importance. We appeal to all to hear us and help us!

Contacts to discuss forms of cooperation:

Research group leader prof. A. Bobrov

(http://ukriagod.geolog.org.ua/en/geological-excursions);

e-mail: al_bobrov@rambler.ru

In order for our potential partners imagine the state of knowledge of this issue, we present the main results of studies that have been conducted on the study of metallic rhenium in ultramafic Ukrainian Shield we are propose see Application №1, p.22.

2. The Restructuring Project of the geological industry of Ukraine

To implement of the Project we are going to attract world-class specialists qualifications that have experience in assessing the condition and value of mineral reserves and could help the Government of Ukraine.

Please, help make the Ukraine as a part of a friendly and close-knit family of the international community!

If someone from colleagues may recommend such specialists or ready itself to take part in this activity, please contact the following address of the Coordinator of the Public Council under the Ministry of Natural Resources of Ukraine (prof. Alexander Bobrov): al_bobrov@rambler.ru

5.6. 4 UkrIAGOD scientific news briefly

1. The discovery of kimberlite bodies in non-traditional areas of Sierra Leone, where they were previously unknown

In carrying out the planned exploration in Sierra Leone non-traditional areas in which these species were previously unknown, we have found several bodies (pipes
and ultra basic rocks on the basic parameters of mineral and chemical composition related to kimberlites. Below (Application №2, p.55) we present only the most important results that the obtained on this.

2. The discovery Pd and Re phases in kimberlites (Sierra Leone)

During exploration activity for the Research (SL) Ltd. (Sierra Ltd. we have identified a new kimberlites bodies (dikes, tubes) that were unknown until now ReS$\text{2}$ phase. The Research are continues.

3. New results of geophysical study for gold deposits to improve the exploration methods

In the gold deposits of the Republic of Tuva (Russia) conducted researches using ground penetrating radar «Loza» (see results in (Application №3, p.60).

During 2014 we have also prepared several routes geological excursions to unique sections of the Ukrainian Precambrian.
They are grouped thematically:

- on unique cross-sections from the greenstone belts basement and across they Precambrian age terrigenous cover, K (see Application 4);
- according to ancient charnockite-granulite complex (see Application 5);
- on greenstone belt of the Ukrainian Shield;
- on deposits associated with them

4. Technology news

In Designer Bureau Tutkovsky we are working on the creation of experimental-industrial complex sample drilling for exploration of placers. It is mounted on the chassis of the vehicle-terrain vehicle KrAZ-65101, equipped with logging complex (equipment manufacturing plant Tutkovsky); field concentration plant (5m³/h) for the field to concentrate its special finishing in the stationary laboratory conditions. Bearing rod equipped with a device pumping water from bottomhole. Is underway a video wall pit with automatic recording parameters on the surface of a special PC. Drilling diameter - 50-130 cm; hydraulic operating system; provided for the casing wall of the pit.
5.6.5 Major events

In 2014 there were held 3 conferences which have international status involving UkrIAGOD:

1. Scientific and practical conference "Actual problems of geology, forecasting, search and evaluation of solid mineral resources" (Odessa, 7-13 Sept. 2014):

   As part of the International Geological Forum "Actual problems and prospects of geology, science and production" were considered the latest data collected during regional geological studies and exploration works on the genesis, patterns of distribution of deposits and ore manifestations, molybdenum mineralization types (green stone structure), lithium (pegmatite), uranium, iron - all of the Ukrainian Shield; gold and other ore minerals in sedimentary strata; as well as new trends and approaches in the search for solid minerals. There were interesting reports of representatives of the Russian Federation on increase of efficiency of searching diamondiferous kimberlites on the results of work on the Siberian Platform.

2. International Scientific Conference "Geochronology and geodynamics of the Early Precambrian of the Eurasian continent" (Kyiv, 16-17 September 2014)

   On the conference have been represented (including as a poster) more than 50 reports. Most of them were devoted to formation conditions, material composition, metallogeny, age, etc. of megablocks, structures and massifs of basement of the East European platform (for example, Ukrainian and Finno-Scandinavian shields, Voronezh crystalline massif).

   Within the conference there was held the general meeting of UkrIAGOD on which, inter alia, was approved leadership of Ukrainian group (see protocol).
85 years anniversary of Academician of NAS of the Ukraine, Prof. Nikolai Petrovich Shcherbak !

Active and most award-winning member of the Ukrainian National UkrIAGOD Academician Nikolai Shcherbakov celebrated its 85-th Anniversary.
In the photo he tests the prepared cake in his honor in the circle of students and colleagues. We wish to him health and scientific success !


In addition general geological issues some attention was paid to the genesis, structural and lithological features, mineralogical and geochemical characteristics and morphology of the deposits and ore manifestations biomorphic and fine gold diamond conglomerates, titanium and zirconium ores, iron, manganese, copper and so on. The conference was attended by President of the European Federation of Geologists Vitor Coreia. He made two reports - "Pan European reporting standards of exploration mineral resources and approved by the UN the structure of their classification" and "Raising the prestige of professional geology in Europe. The role of the European Federation of Geologists in it".

5.6.6. Remembering the prominent members of UkrIAGOD

In recent years such esteemed UkrIAGOD members have withdrawn from life - Yesipchuk K.Y., Kichurchak V.M., Kulish E.O., Lytvynovych O.R., Metalidi V.S., Monakhov V.S., Shcherbakov I.B. We express our sorrow and grief in this regard and honor the memory of famous Ukrainian geologists.
5.6.7 IAGOD Edition

Official Journal of the International Association for the genesis of ore deposits (IAGOD) "Ore geology reviews" published since 1986.

Beginning in April 2003, IAGOD has assumed editorial responsibility for the international journal Ore Geology Reviews, published by Elsevier. As the journal's subtitle says, the journal is devoted to comprehensive studies of ore genesis and ore exploration. The journal publishes peer-reviewed scientific articles that profile major ore deposits and districts from around the world. The articles range from comprehensive reviews to new data and interpretations. Currently, the journal publishes 2 volumes annually, each volume consisting of 4 issues, both in printed and in on-line formats.

5.6.8. List of Selected publications by the UkrIAGOD members:

Government Programs

Bobrov O.B., Geychenko M.V. The Program of reorganization geological industry of the Ukraine. First year. Kyiv, 2014.- p.31

Educational Materials

Bekesha S. Series of lectures on "Methods of mineralogical studies" / Bekesha S., Slyvko Y., Bilyk N. / - Lviv: Ivan Franko National University of Lviv. - 2013. - 152 p. (in Ukrainian)

Bobrov O.B. Kospekt of lectures “Geology and Minerals of Ukraine” shield” // Lviv.- National University, 2014.-124p


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Key Articles


Geychenko M.V., Bobrov O.B., Stepanjuk .LM., Dovbush T.I., Geology and geochronology of the granitoids Pechanivsky massif (Volun domain of the Ukrainian shield) // Granitoids: formation conditions and genesis. Scientific Conference.-Kiev.-Institute of Geochemistry, Mineralogy and Ore Formation by
N.P.Semenenko, 2013.- p. 39-41


Furman V. Features of creating thermal model with the upper mantle convection / Furman V. // Electronics and Information Technologies. "- 2013. - Issue 3 - pp.108-121 (in Ukrainian).


Goshovskyy S. Scientific justification for changes to the national program for the development of the mineral resource base of Ukraine for a period up to 2030 / Goshovskyy S., Lysenko O. // Proceedings of the International
scientific-practical conference, September 16-22, 2013 "Actual problems of geology, prediction, exploration and evaluation of solid mineral deposits" (Sudak Geological Reading - IV (IX)) (in Russian).


deposits” (Sudak Geological Reading - IV (IX)) (in Ukrainian).

Isakov L. Problematic issues of stratigraphy and magmatism of West Azov megastructure / Isakov L., Shpylchaka V. // Mineral resources, № 2, pp. 18-23 (in Ukrainian)


Isakov L. The role of deep magma plume in the formation of mega structures of the Ukrainian shield / Isakov L., Paranko I. // Collection of Scientific Papers of UkrSGI. - Kyiv, - №2. – pp. 41-56 (in Ukrainian)


Lysenko O. Features of monitoring and scientific support industrial mining of refractory clays / Lysenko O. // Abstracts: Current issues of monitoring and scientific support subsoil use and geological expertise "Heomonitorynh - 2013." Kyiv, 2013 (in Ukrainian)


Lyuta N. Analysis of the implementation of a comprehensive interagency program of
work on scientific and methodological support of regional geologic research and perspectives of these studies / Lyuta N., Shevchenko O., Lysenko O. // Mineral Resources, № 3, pp. 15-20 (in Ukrainian)


Pavlun M. About the scientific and practical value of some extremely unexpected


Piddubna T. The process of classification the material in different nodes of the circuit for the enrichment of waste from iron-ore enterprises on high frequency screens // Proceedings of the International scientific-practical conference, September 16-22, 2013 "Actual problems of geology, prediction, exploration and evaluation of solid mineral deposits" (Sudak Geol. Reading - IV(IX) (Russian).


Vasylenko A. The first results of the monitoring and scientific support the development of placer titanium deposits in the western part of Ukrainian Shield / Vasylenko A., Trohymenko V. // Abstracts: Current issues of monitoring and scientific support subsoil use and geological expertise "Heomonitorynh - 2013." Kyiv, 2013 (in Russian).

Vihot Y. Reconstruction of Cenozoic stress fields in flysch complexes of Opir river


**Contract Reports**


**Internet/Web Sites/Modules** (http://ukriagod.geolog.org.ua/en/geological-excursions)


Bobrov A.B. Geology, geochronology and mining in Kryvyj Rig Basin. Unique cross-sections from the bottom (Paleo- and MezoArchean age) to the upper (Paleo-Proterozoic age) section of the Kryvyj Rig structure (http://tutkovsky.com/en/services/geological-excursions)

Bobrov A.B. Mayske gold deposit
Bobrov A.B. Zavallivske graphite deposit
(Bobrov A.B. Apolonivskiy paleovolcano
(Bobrov A.B. Greenstone outcrops in Balka Kalynova
(Bobrov A.B. Berestivska structure
(Bobrov A.B. Surozh gold ore deposit
(Bobrov A.B. Kapitanivka group of ultrabasite massifs. Metallic Rhenium
(Bobrov A.B. Fedorivske apatite-ilmenite deposit
(Bobrov A.B. Golovynske deposit of labradorite and gabbro-norite
(Bobrov A.B. Leznykivske granite deposit
(Bobrov A.B. Mizhirchne ilmenite placer deposit
(Bobrov A.B. Volyn deposit of chamber pegmatites
(Bobrov A.B. Copper-bearing rocks of trap formation
5.6.9 Outlook for 2015

During 2015 among for the research directions, we plan to conduct active research studies on inclusions in minerals of rocks and ores. This work will be focused on two areas: the study of PT-conditions mineral species (1) and characteristics of physical and chemical environment during ore formation (2). Recent work is planned to focus on the study of several typical ore gold and polymetallic deposits.

Thermobarogeochemistry (TBGC) - a new scientific field of geological science world - through study of fluid inclusions in minerals allows space and time to reconstruct the physical and chemical conditions of processes ore genesis: determine the temperature and pressure, a density aggregate-state and chemical composition, salt concentration and gas saturation of fluids in various fields of ore formations and genetic classes. This important trend started in the geological department of Ivan Franko National University of Lviv Professor Yermakov (monographs: "Exploration mynerals that forms of solutions", 1950; "Geochemical systems included in mynerals", 1972 and "Termobarogeochemistry", 1979). Today TBGC is defined content structure: theoretical, analytical, methodical and most important applied. Last in an integrated space-time analysis of patterns of trends in physico-chemical conditions and TBGC - mineralization parameters allows to synthesize the corresponding models of the ore genesis and on the basis of different kinds of gradients change TBGC - zoning to forecast and evaluate potential sites, to determine the level of erosion cut mineralization, its vertical scope and degree of preservation in modern erosion cut, diagnose after ore direction and magnitude of tectonic displacement of ore-bearing blocks ahead set ore formational type mineralization and the likely scale of the accumulation of ore, and more.
Research in Applied TBGC initiated and successfully developed also in the geological department of the Lviv National Ivan Franko University. Certain of their result is the following extraordinary professor of labor, which revealed not only the physical and chemical conditions of the fields (the mechanism of the origin, migration and accumulation of matter), but forecasting, investigation and assessment of developments at various stages of exploration. In particular, in 1972, were published the latest "Methodological instructions by analysis of solutions and ore-forming s Application for prohnozic comments ore-bearing area and in practice exploration and operatind of work." In 1981 he published "Nedra" (Moscow) staff of the department of geology mineral published a fundamental monograph "Physical - chemical bases prediction post magmatic mineralization (in TBGC - DATA )", the third of which is entirely devoted to solving applied problems using TBGC. Finally, in 1995, published a monograph " thermobarogeochemistry gold (prediction, search and evaluation of mineralization)" - this is the third attempt to introduce scientists of the theory of ore genesis and exploration work in practice TBGC - method. And already in 2004 published another monograph - "Geology and genetic typing of gold deposits Ukraine", which on the basis of detailed studies TBGC first pointed out six different natural phenotype gold deposits in the Ukrainian Shield and Phanerozoic edging, including the use of value degree temperature control paleohydrothermal systems.

**EurGeol as Competent Person title**

Under an agreement with the management of EFG Ukrainian public organization "Association of Geologists Ukraine" with the Ukrainian national team UkrIAGOD started the procedure of consideration of objective data on candidates from Ukraine to award the title of European Geologist.
5.7 Report of the Kazakhstan National IAGOD Group for 2014

5.7.1 Conference participation in 2014

Names of IAGOD members, who were attended with oral and poster presentations, was indicated in brackets):


5.7.2 Selected publications


DyachkovB.A., ZagorskyV.Ye., VladimirovA.E., KuznesovaL.G. and
all. Large fieldsof spodumene pegmatites in the settings of rifting and postcollisional shear – pull – apart dislocations of continental lithosphere – In: Russian Geology and Geophysics. 55 (2); 01/2014. 237-251


5.7.3 Planned activities for 2015

1. New publications (monographs, reviews, methodical recommendations) in the sphere of the geology and genesis of ore deposits (national and international publishing firms and magazines).

2. Organization and participation in International Scientific Conferences and Meetings (Kazakhstan, Uzbekistan, Russia, China and others).

3. Cooperation with others IAGOD National Groups (joint projects and monographs, exchange of experience).

5.7.4 Current list of Kazakhstan IAGOD National Group (December 2014)

Chairman: Since 2014, October - Prof. Dyachkov B.A., East-Kazakhstan State Technical University (EKSTU), Serikbaev Str., 19, 414 app., Ust-Kamenogorsk y, Republic of Kazakhstan. Tel.: (723)2540919, Fax: (723)540975, E-mail: bdyachkov@mail.ru.

Prof. Bespaev Kh.A. (Almaty), Dr. Dolgopolov V.F. (Almaty), Prof. Dyachkov B.A. (Ust-Kamenogorsk), Dr. Glukhan I.V. (Karaganda), Prof. Los V.L. (Almaty), Prof. Mizernaya M.A. (Ust-Kamenogorsk), Prof. Sapargaliev E.M. (Ust-Kamenogorsk), Prof. Serykh V.I. (Karaganda), Dr. Usoltsev I.I. (Almaty), Dr. Yartseva L.A. (Almaty)

Contributed by Boris Dyachkov, chairman, e-mail: bdyachkov@mail.ru.
Mikhail Sergeevich Rafailovich

(1947-2014)

Mikhail Sergeevich Rafailovich sadly passed away on 24 August 2014 following a protracted illness. Mikhail Sergeevich was a Professor, Doctor of geological-mineralogical sciences, highly-respected specialist of international calibre in metallogeny, geology and geochemistry of gold in Kazakhstan and Central Asia and simply an intelligent and generous colleague and a good friend of many of us.

Mikhail Sergeevich was born on 1 January 1947 in the Chuvash Republic of the former Soviet Union (USSR). After graduating from the Kazan State University (1970) he worked as a geologist in many field expeditions of Central and Southern Kazakhstan. From 1974 to 1995, Mikhail Sergeevich worked in the Department of Gold at the Kazakh Institute of Mineral Resources in Almaty in positions of chief geologist and
finally as head of the department. During 1995-1997, Dr Rafailovich joined as a chief geochemist the Kazakh-Canadian company “Central Asia Goldfields”. Since 2000 he has been working at the Research Institute “YugGeo” in Almaty as a Head of the Laboratory and Leading Specialist on Metallogeny as well as supervisor of metallogenic projects in Central Asia and Kazakhstan.

In 2001 Mikhail Sergeevich was appointed as Professor at the East-Kazakhstan State Technical University in Ust-Kamenogorsk (EKSTU Oskemen, Rudny Altai, Kazakhstan), where he read lectures and supervised PhD students. His main research interests included metallogeny of precious metals, non-traditional types of gold deposits, modelling, and studying zoning of mineral deposits. Prof. Rafailovich published more than 300 articles and monographs.

His series of books on gold of Kazakhstan and Central Asia that he published in the last few years (two of which were translated under IAGOD flag by CERCAMS NHM into English) are a unique source of information that he compiled on deposits of precious metals. He paid special attention to the study and prognosis of large and super-large deposits of precious metals. In March 2014 he was one of the organisers of the
international symposium on “Giant gold deposits of Central Asia. Strengthening of gold-bearing potential of Kazakhstan”.

Despite being a holder of prestigious awards and occupying high-rank positions during his career, in real life Mikhail Sergeevich was a remarkably modest person. It was always inspiring to communicate with him both at professional and inter-personal level. His tact and tolerance always motivated people around him to believe in own strengths and abilities.

During the last 6 years of his career Mikhail Sergeevich was bravely fighting a very serious illness. Nevertheless, he managed to publish four monographs and series of articles on metallogeny, prospecting and exploration of gold.

Prof. Mikhail Rafailovich representing Kazakhstan (right), with Prof. Alexandra Jenchuraeva (Kyrgyzstan) and the late Prof. Igor Golovanov (Uzbekistan)
Mikhail Sergeevich was a highly respected scientist in the international scientific community too and participated for YUGGEO beside multinational regional projects also in many international conferences as well as in IGCP, CERCAMS and INTAS projects.

As elected IAGOD Councillor he was very active for several terms of duty, established as Leader of the National IAGOD Group of Kazakhstan a very active group involving also young scientists, and served on the editorial board of IAGOD’s journal “Ore Geology Reviews”.

For his colleagues and friends he will always be remembered as an example of an unselfish person who was loyal to his profession and science. He was also a wonderful husband, father and grandfather. We express our sincere condolences to his family, friends and colleagues on this great loss.

Selected landmark books (English translation by CERCAMS NHM):


IAGOD Executive Council
5.8 Regional Councilor Report (2012-2014) for SE Asia

5.8.1 Activities to promote and develop IAGOD 2012-2014 and future plans

During 2012-2013, at three international Conferences in SE Asia, IAGOD was promoted and explained about IAGOD: (1) GeoMyanmar 2012, First International Conference on Regional Geology, Stratigraphy and Tectonics and Economic Geology of Myanmar and neighbouring countries, 1-2 March 2012, Yangon, Myanmar, (2) GEOSEA 2012, 12th Regional Congress on Geology, Mineral and Energy Resources of SE Asia, 7-8 March 2012, Bangkok, Thailand (where I gave keynote addresses), and (3) 9th Meeting AsiaOceania Geosciences Society (AOGS)-AGU (WPGM) Joint Assembly, 13-17 August 2012, Singapore and followed up in 2013, 10th Meeting Asia Oceania Geosciences Society, 24-28 June 2013, Brisbane, Australia.

During 2014, this year, the following conference in SE Asia, GEOSEA 2014, 13th Regional Congress on Geology, Mineral and Energy Resources of SE Asia, 10-11 March 2014, Yangon, Myanmar and a few days ago at 11th Meeting Asia Oceania Geosciences Society, 28 July-1 August 2014, Sapporo, Japan.

Promotion of IAGOD was done at Sundaland Resources 2014, 17-18 November 2014, Palembang, Indonesia where I give a keynote address on ‘Metallogeny of SE Asia’ and PACRIM2015, 18-21 March, 2015 Hong Kong. I will organise the following session with Dr Cromie from Anglo American at PACRIM2015 as below.

West Pacific and SE Asia session; Convenors:
Khin Zaw (CODES Centre of Excellence in Ore Deposits, University of Tasmania, Hobart, Tasmania, Australia; email Khin.Zaw@utas.edu.au)
Paul Cromie (Anglo American Exploration (Australia) Pty Ltd, 245 Canning Highway, Como WA 6152, PO Box 475, Como WA 6152 Perth, Australia; email Paul.Cromie@angloamerican.com)
Description

Western Pacific and SE Asia region is a most diverse tectonic and metallogenic environment in the world and lies at the intersection of a number of tectonic plates. The ore deposit types in the region vary from currently ore-forming systems on the seafloor to a variety of magmatic and basin-related ore deposits in mainland SE Asia. Formation of these many deposits is spatially and temporally linked with a long and complex tectonic history of the Gondwana supercontinent break-up and assembly, arc magmatism, backarc basin development, together with arc-continent and continent-continent collisions.

We aim to attract high-quality contribution on the discovery and exploration history, geodynamic setting and metallogeny, geochemistry, geochronology and ore deposit geology and genesis to highlight the vast endowment of world class mineral deposit types and commodities in the region and to stimulate further research, as well as exploration and mining activity in this emerging region.

Major future plan for IAGOD will be at SEG 27-30 September, 2015, Hobart, Australia. As I live in Hobart, Tasmania, and work at CODES, promotion of IAGOD session is proposed to be done at SEG Conference. Further direction and instruction are required from Council.

5.8.2 Organised IAGOD conferences, sessions, workshops, excursions

No IAGOD conferences, sessions, workshops, and excursions have been made and these can be done in future if funding is available from IAGOD and/or industry.

5.8.3 Contribution to IAGOD publications (with IAGOD logo, under IAGOD auspices) Recruited new members for IAGOD

As above, new recruitment were always involved when promotion of IAGOD was made during 2012-2014. (Reported from Prof Khin Zaw)
6. Reports of Working Groups (WG) and Commissions

6.1 Report for 2014 activities of International Uranium Group (IUG)

6.1.1 Leadership and members:

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<th>Chairman</th>
<th>Co-Chairman</th>
<th>Secretary</th>
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<tr>
<td><strong>Chairman</strong>&lt;br&gt;Professor Michel CUNEY</td>
<td><strong>Co-Chairman</strong>&lt;br&gt;Dr. Yuri MIRONOV</td>
<td><strong>Secretary</strong>&lt;br&gt;Dr. Elena AFANASYEVA</td>
</tr>
<tr>
<td>CNRS Research Director Emeritus&lt;br&gt;CREGU &amp; UMR GeoRessources&lt;br&gt;Universite Henry Poincare – NANCY I&lt;br&gt;Domaine Scientifique Victor Grignard – Entree 3B&lt;br&gt;BP 70 239 – F 54 506 Vandoeuvre-les-Nancy, France</td>
<td>Head of the Uranium Deposits Geology and Radioecology Department&lt;br&gt;A.P.Karpinsky Russian Geological Research Institute (VSEGEI), 74, Sredny pr., 199106, Saint-Petersburg, Russia</td>
<td>Leading Research Associate of the Uranium Deposits Geology and Radioecology Department&lt;br&gt;A.P.Karpinsky Russian Geological Research Institute (VSEGEI), 74, Sredny pr., 199106, Saint-Petersburg, Russia</td>
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<td>Internet:&lt;br&gt;<a href="http://georessources.univ-lorraine.fr/">http://georessources.univ-lorraine.fr/</a>;&lt;br&gt;e-mail: <a href="mailto:Michel.Cuney@g2r.uhp-nancy.fr">Michel.Cuney@g2r.uhp-nancy.fr</a>;&lt;br&gt;tel.:33(0)3 83 68 47 09;&lt;br&gt;fax: 33(0)3 83 68 47 01</td>
<td>Internet:&lt;br&gt;<a href="http://vsegei.com/uranium.html">http://vsegei.com/uranium.html</a>;&lt;br&gt;e-mail: <a href="mailto:ogumr@vsegei.ru">ogumr@vsegei.ru</a>;&lt;br&gt;tel.: +7 (812)328 91 01;&lt;br&gt;fax: +7 (812)328 91 18</td>
<td>Internet:&lt;br&gt;<a href="http://vsegei.com/uranium.html">http://vsegei.com/uranium.html</a>;&lt;br&gt;e-mail: <a href="mailto:elena_afanasievar@vsegei.ru">elena_afanasievar@vsegei.ru</a>;&lt;br&gt;tel.: +7 (812)328 91 00;&lt;br&gt;fax: +7 (812)328 91 18</td>
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Members:

1. Prof. David LENTZ (Univ. of New Brunswick, Canada) – dlentz@unb.ca;
2. Prof. Reimar SELTMANN (NHM, London, UK) – r.seltmann@nhm.ac.uk;
3. Prof. Vasily VELICHKIN (IGEM RAS, Moscow, Russia) – vel@igem.ru;
4. Prof. Irvine ANNESLEY (Jnr Resources Inc, Canada) – jnrirvine@sasktel.net;
5. Dr. Alexei ALESHIN (IGEM RAS, Moscow) – alexei.aleshin@gmail.com;
6. Dr. Elena AFANASIEVA (VSEGEI, Russia) – Elena_Afanasieva@vsegei.ru;
7. Dr. Alla DOLGOPOLOVA (NHM, London> UK) – allad@nhm.ac.uk;
8. Dr. Vladimir DOLGOPOLOV (Almaty, Kazakhstan) – Vladimir.dolgopolov38@gmail.com;
9. Dr. Elga ISHEVSKAYA (VIMS, Moscow, Russia) - aleshin@igem.ru;
10. Dr. Tatiana KRYLOVA (IGEM RAS, Moscow, Russia) – ktl@igem.ru;
11. Dr. Victor MALKOVSKY (IGEM RAS, Moscow, Russia) – malk@igem.ru;
12. Dr. Nicolay TARASOV (IGEM RAS, Moscow, Russia) – tnn@igem.ru;
13. Dr. Alexander REDKIN (GEOKhI RAS, Moscow, Russia) – redkin@iem.ac;
14. Dr. Robert BOWELL (SRK Consulting, Cardiff, UK) – rbowell@srk.co.uk;
15. Dr. Jarda DOSTAL (Saint Mary’s University, Halifax, Canada) – j.dostal@ns.sympatico.co;
16. Dr. David QUIRT (AREVA Resources, Canada) – David.Quirt@areva.ca;
17. Dr. Thomas SEIFERT (TUBAF, Freiberg, Germany) – Thomas.seifert@mineral.tu-freiberg.de;
18. Dr. Reg OLSON (Canada) – rolson@xplornet.com;
19. Dr. Leonid SEROV (VSEGEI, Saint-Petersburg, Russia) – serov.box@gmail.com;
20. Mr. Ilya DMITRIEV (VSEGEI, Saint-Petersburg, Russia) –
EliasDmitriev@gmail.com;

21. Mr. Martin FAIRCLOUGH (PIRSA, Australia) – Martin.Fairclough@sa.gov.au;

22. Mr. Alexei KULYOV-NEGRUTSA (VSEGEI, Saint-Petersburg, Russia) – alnue_negrutsa@geologist.com;

23. Mr. Yaroslav EMELIN – trainee researcher (IGEM RAS, Moscow) – ason198925@gmail.com;

24. Mr. Victor KOMAROV – junior research associate (IGEM RAS, Moscow) – ras238@gmail.com;

25. Mr. Vladimir KOMAROV – junior research associate (IGEM RAS, Moscow) – kwowin@gmail.com;

New members (2013-2014):

26. Prof. Alexander VERCHEBA (MSPGA, Moscow, Russia) - aa_ver@mail.ru;

27. Prof. Petr IGNATOV (MSPGA, Moscow, Russia) - pignatov@gmail.com;

28. Dr. Vyatcheslav GOLUBEV (IGEM RAS, Moscow, Russia) – golub238@gmail.com;

29. Dr. Olga DOINIKOVA (IGEM RAS, Moscow, Russia) – doa@igem.ru;

30. Dr. Alexei ZHDANOV (MSPGA, Moscow, Russia) - geo-mpi@rambler.ru;

31. Ms. Maria IVANCHENKO – trainee researcher (IGEM RAS, Moscow) - ivanchenko.marija@gmail.com;

32. Ms. Marina NESTEROVA (IGEM RAS, Moscow, Russia) - nestmv@igem.ru;

33. Ms. Alina KUPTSOVA (SPSU, Saint-Petersburg, Russia) - alina-kuptsova@yandex.ru;

34. Mr. Alexei PSHENITSYN (MSPGA, Moscow, Russia) - northzzz@mail.ru;

35. Mr. Paul NEX – Univ Witwatersrand (Johannesburg) - Paul.Nex@wits.ac.za
6.1.2 Main events 2014:

1-2 April: Scientific and practical conference “Scientific principles and current technologies of prediction, prospecting and evaluation of mineral deposits”. M., VIMS.

MIRONOV Yu.B., MAKARIEV L.B. Methodology of exploration in uranium districts in Northern Transbaikalia.

March 2014: Meeting at the Ministry of Mining of Mongolia, Ulaanbaatar.

MIRONOV Yu.B. Uranium of Mongolia.

7-10 June 2014: International Symposium on Uranium Raw Material for the Nuclear Fuel Cycle: Exploration, Mining, Production, Supply and Demand, Economics and Environmental Issues (URAM2014), IAEA, Vienna, Austria, Chaired by Michel CUNEY.

The purpose of this symposium was to analyse U supply–demand scenarios and to present and discuss new developments in U geology, exploration, mining and processing, as well as in environmental requirements for U operations and site decommissioning with the aim to:

• Lead to a better understanding of the adequacy of uranium sources (both primary and secondary) to meet future demand;

• Provide information on geological models, new exploration concepts, knowledge and technologies that will potentially lead to the discovery and development of new U resources;

• Describe new production technologies that have the potential to more efficiently and sustainably develop new uranium resources;

• Document the environmental compatibility of uranium production and the overall effectiveness of progressive final decommissioning and, where required, remediation of production facilities. Contributions:

Cuney, M. Felsic magmatism and uranium deposits.
Lopez, L., Cuney, M. Uranium Deposit Types and Resources of Argentina

Emetz, A., Cuney, M. Central Ukraine Uranium Province: The Genetic Model

Mercadier, J., Richard, A., Cathelineau, M. Boiron, Mc., Annesley, I., Cuney, M. Recent advances about the unconformity-related U deposits

Bruneton, P., Cuney, M., Dahlkamp, F., Zaluski, G. IAEA geological classification of uranium deposits

8-13 June 2014: Goldschmidt Conference, Sacramento, USA

Fleurance, S., Cuney, M. U in phosphates from Central Jordan lithologies: sedimentary, metamorphic to supergene evolution

1-4 September 2014: Technical Meeting on Advances in Exploration Techniques for U Deposits and Other Radioactive Element Deposits, held at the IAEA, Vienna, Austria. Chaired by Michel CUNEY.

The Technical Meeting will aim to provide an international forum for presentation and discussion of a variety of exploration and evaluation techniques, particularly in regards to discovery of uranium ore deposits and other radioactive element deposits (e.g. rare earth element deposits). The emphasis will be on geophysical and geochemical techniques and novel and new approaches for the analysis, interpretation and collection of data.

CUNEY, M., MERCADIER, J. Distal footprints of diagenetic-hydrothermal fluid circulations related to the genesis of basement-hosted unconformity-related U deposits.

4-7 November 2014: Technical Meeting on the "Uranium from Unconventional Resources" (Vienna, Austria, IAEA) chaired by Michel Cuney

The purpose of the meeting was to discuss a wide spectrum of technical issues related to uranium from unconventional resources, including geology, mineralization, exploration models, resource estimation, challenges in the extraction, economics, and social and environmental aspects. The target participants of the meeting are
professionals engaged in uranium geology, exploration and production, researchers, energy planners and officials from Member States interested in uranium resources.

Cuney, M. Origin of uranium mineralization in unconventional geological settings.

Cuney, M. Genetic aspects of selected unconventional uranium deposits

**24-25 November 2014: Specialized meeting of the « Société Géologique de France »: . Uranium, Orsay, France**

Bidaud A., Mima S., Gabriel S., Monnet A., Mathonniere G., Criqui P., Menenteau P., Cuney M., Bruneton P. Ressources d'uranium, scénarios, dynamique du Nucleaire et de l’energie

Cuney, M., Barbey, P. Granites uranifères et granulitisation.


**15-17 December 2014 : Indian Nuclear Society Annual Conference (INSAC 2014), HYDERABAD, INDIA. Invited Key Note Address by Michel CUNEY.**

Cuney, M. A genetic classification of uranium deposits

**6.1.3 Other events:**

Michel CUNEY and Alexei ALESHIN delivered lectures on uranium in East-China Institute of Technology (ECIT, Nanchang, Jiangxi province) 13-18 October 2014. Lectures given by Michel CUNEY concerned questions of deciphering of uranium potential of acidic melts using magmatic inclusions (“The use of magmatic inclusions for the characterization of the uranium potential of volcanic related deposits”), and the influence of high-grade metamorphism on enrichment of granites in U and Rare Metals (“The role of granulite facies metamorphism in the genesis of U and Rare Metal enriched granites”).
Alexei ALESHIN shared his results in compilation of magmatogeneous-hydrothermal model of Mo-U deposits of the Streltsovsky ore field in Eastern Transbaikalia, Russia (“Genetic model of the Streltsovsky Mo-U deposits: from the Earth crust structure to mineral features”). After, a talk on problems of revealing of uranium deposits using combined techniques was introduced (“A set of prospecting approaches and techniques efficient for discovery of the Streltsovsky-type uranium deposits”).

Michel CUNEY gives a lecture on uranium behaviour in magmatic melts

Walking in Nanchang

Besides, Alexei ALESHIN presented talks in Kazakh National Technical University (KazNTU, Almaty, Kazakhstan) 12-27 December 2014. The lectures concerned uranium deposits of the Streltsovsky ore field, innovative method of microseismic sounding for ore deposit exploration, statistical treatment of geochemical data for prospecting of uranium and other deposits, basing on geochemical aureoles.


AFANASYEVA E.N. Report on the latest achievements of various uranium
companies involved in the study, exploration and extraction of uranium deposits in different parts of the World, such as: FORUM Uranium Corp, PUREPOINT, CanAlaska Uranium Ltd., Azimut Exploration, Alderhot Resources Ltd., Mawson Resources Ltd., Uranium Energy Corp (NYSE MKT:UEC), UEX Corporation, Ur-Energy USA Inc., Uranerz Energy Corporation, Toro Energy Limited, European Uranium Resources Ltd., Cameco and other.

CUNEY M. Participation at the research Planning Meeting on Sunday 02 March 2014 as Scientific advisor for the “Footprint Project” (Canada Mining Innovation Council Natural Sciences and Engineering Council of Canada CMIC-NSERC Exploration Footprints Research Network). The objective of the CMIC-Exploration Innovation Consortium (EIC) Footprints Project is to develop new and innovative approaches to more effectively target hidden ore deposits through multi-parameter, integrated exploration.

Basinal Uranium Subproject: The research network will focus on i) identifying the shallow exploration footprint caused by both syn- and post-mineralization fluid flow centered on the Millennium-McArthur River corridor, ii) fingerprinting and differentiating various sandstone- and basement-hosted alteration facies, iii) defining the outer extent of alteration and any geochemical, mineralogical and petrophysical zoning that can define vectors towards ore, iv) characterizing the rock property and multiparameter geophysical footprint of mineralized versus barren parts of the Millennium-McArthur River trend, v) cataloguing and interpreting kinematic indicators to determine fault history in relation to alteration and mineralizing events, and vi) testing the effectiveness of layered and scaled geophysics and geochemistry in focusing exploration on areas of high potential along the trend.
6.1.4 SELECTED PUBLICATIONS of IUG for 2014:


REPORTS of IUG for 2014


A.A. Pugovkin, Yu.B. Mironov et al. Report on results of work under Contract 1/207 of 02.04.2012. “Compilation of the morphostructural map of the Vitim-Karenga area, scale 1:50,000 with data for studying the soil and peat horizon, the most productive for the localization of uranium mineralization, on granite occurrence in surface and ground water sediments, and identification of areas with their active hydrodynamics” under the State Contract of JSC Vitimgeoprom K-01/12-5, Project 100-9/90-9 “Exploration of surface hydrogenic uranium deposits for heap leaching in the Vitim-Karenga area with their geological and economic assessment (Transbaikal Territory)”. St. Petersburg, 2014. 183 p.

We regret to inform that an outstanding Russian mineralogist, the member of IUG Yury DYMKOV passed away 21 December 2014.

Yury DYMKOV was a worldwide known mineralogist who made a great contribution in uranium mineralogy. Along with Dmitry GRIGORIEV and Arkady ZHABIN, he profoundly developed genetic mineralogy, mainly on the example of uranium deposits. He studied mineral parageneses in Jachymov (Czech Republic) after graduation from Moscow Geological Prospecting Institute. In 1954-1959, mineralogical studies in uranium deposits of Saxonian Erzgebirge (Germany) and Příbram (Czech Republic) have been undertaken. A synthesis of the results obtained was published in his first monograph “Uranium mineralisation of Erzgebirge” (1960).
He continued his studies in uranium deposits of the Caucasus Mountains, Kazakhstan, Ukraine, Eastern Transbaikalia and other regions of the USSR. The results have been published in the second monograph “The nature of pitchblende. Questions of genetic mineralogy” (1973). There is a story that famous leader of Soviet “Atomic Project” academician Igor KURCHATOV encouraged his young nuclear physicists “to study how to make well-founded conclusions under a geologist Yury DYMKOVA”.

Yury DYMKOVA deciphered ontogeny and mechanism of nucleation and growth of shperocrystals, disclosed process of spherulite fiber splitting, and forms of phase transformations during crystallisation. He was the first scientist who found mineral aggregates crystallised on the Vapor-Liquid-Crystal mechanism, revealed signs of gas-gravity fluid differentiation during crustified and metasomatic mineral growth, developed a model of membranous growth mechanism of metacrystals and metaspherulites. Various questions of paragenetic analysis and ontogenesis of uranium and associated minerals were published in the monograph “Paragenesis of minerals of uranium-bearing veins” (1985).

A new mineral dymkovite \([\text{Ni(UO}_2\text{)}_2(\text{As}^{3+}\text{O}_3)_2\times 7\text{H}_2\text{O}]\) founded in the Belorechensky U-As deposit (North Caucasus) was named in honour of Yury DYMKOVA. Numerous ideas stated by this outstanding mineralogist and elaborated approaches to recovery of ambiguous life of minerals will lead young scientists in their studies for a long time.

Reported in February 2014

Co-Chairman
Yuri MIRONOV

Secretary
Elena AFANASYEVA
6.2. Commission on Placer Deposits (COPD)

Report of main events in 2014

6.2.1 Annual Workshop on placer deposit research.
Institute of Natural Science of Permian State University, June 18-20. Co-organizer IAGOD Commission on Placer Deposits. Main purpose of the workshop was studying of new technologies of exploration of fine gold placers and technogenic deposit as most perspective objects for extension of placer gold production of ecologically pure gold extracted by hydraulic separation without harmful chemical components.

Field study of fine-gold exploration equipment in the Shaldinka gold placer mine of Permian region by participants of the workshop.

Placer gold of North Ural

6.2.2 Selected publications

6.2.3 Forthcoming events


   www.sedimentologists.org/ims2015   e-mail: lalomov@mail.ru

2. The 15-th International Conference on “Placer Deposits and Weathered Crusts: research, development and ecology” will be held in the Permian State University (Perm, Russia) in August 24-29, 2015, under the auspices of Russian Academy of Science and the IAGOD Commission on the Placer Deposits (COPD). Chairman of Program Committee academician N.P.Laverov.

   e-mail: lalomov@mail.ru

(Reported by Dr. Alexander Lalomov, Secretary of Commission on Placer Deposits)
7. Announcements of future activities

7.1 IAGOD sponsored sessions at the 35th International Geological Congress

From Ore Deposits to Global Metallogeny: implications for exploration success

CONVENERS: Mao Jingwen, Franco Pirajno, Reimar Seltmann

The session comprises papers on all aspects of key study of genesis of ore deposits, the regional metallogeny and its related tectonic settings, mineral prospecting and exploration with mineral models, geodynamic models and integrated methods of geology, geochemistry, geophysical and remote sensing, as well as introduction of new discovery and new explored ore deposits over the world.
Processes governing ore formation in the Bushveld Complex and other mafic and ultramafic magmatic systems

CONVENORS: Dave Holwell, Rais Latypov

Mafic-ultramafic magmatic systems are the world’s most important repositories of Ni-Cu-PGE sulfide and Cr-V-Fe-oxide deposits, with the style, grade and size of deposit governed by a range of processes. This special session will cover all aspects of ore-forming processes associated with mafic-ultramafic magmatic systems, including, but not exclusive to, the Bushveld Complex of South Africa. The emphasis will be on emplacement dynamics, processes that trigger sulfide saturation, precious and base metal partitioning, physical and chemical associations of metals with sulfides and oxides, the role of crustal contamination, alteration and upgrading processes, advancements in exploration models, especially for unconventional styles of deposit. New developments in our understanding of established deposits are also welcomed. Organised by CODMUR.

Ore-forming processes associated with hypabyssal magmatic and related volcanic systems.

CONVENERS: David Lentz, Fernando Tornos, Brian Rusk, Khin Zaw, Jian-Wei Li

Hypabyssal or subvolcanic systems at or near the Earth’s surface host many of the world’s most important types of mineral deposits from giant porphyry Cu-Mo-Au deposits to epithermal Au, iron-oxide copper and gold (IOCG), submarine base-metal exhalites, and critical resources (W-Sn to U to Li-Ta to REE-Y-Nb). This symposium will cover all aspects of ore-forming processes associated with hypabyssal magmatic and related volcanic systems, with emphasis on emplacement dynamics, thermal and hydrologic evolution, magmatic specialization, volatile exsolution, metal – halogen partitioning, fluid-rock reaction, and conditions
favourable for focusing and saturation of those ore-forming fluids.

**Trace element analysis of minerals: applications in ore geology**

**CONVENER: Nigel Cook**

The session will include papers on all aspects of trace element analysis of minerals, including new techniques, methodology, applications to understanding ore genesis, mineral exploration and ore processing.

### 7.2 IAGOD co-sponsored PACRIM 2015

The IAGOD co-sponsored PACRIM 2015 will be held in Hong Kong in March 18-21, 2015. It's an international congress of geoscience research and project case studies for mineralisation styles found around the Pacific Rim and from similar convergent tectonic settings through earth history. The congress themes include:

- Exploration and Mining Investment
- Exploration Techniques
- Mineralisation Processes
- Mineralisation Styles
- Project and Development
- Provinces and Case Studies

The keynote speakers will be:

- Mac Canby, VP/Eurasian Exploration, Freeport-McMoRan Copper and Gold
- Cornel de Ronde, Principal Scientist, GNS Science
- Larry Meinert, U.S. Geological Survey, United States of America
- Franco Pirajno, University of Western Australia
- Richard Schodde, MinEx Consulting
- Richard Sillitoe, Consultant
- John Thompson, Petra Science Consultants
PACRIM is a quadrennial congress that focuses on research, exploration and development of mineral deposits around the Pacific Rim. Its appeal extends far and wide to geologists, geophysicists, geochemists exploring in the Pacific Rim and people interested in the mineralisation processes of active tectonic margins, and those developing projects following discovery in those regions.

**Keynote Speakers**
- Mac Cutler, Vice-President/European Exploration, Freeport-McMoRan
- Conrad de Ruyve, Principal Scientist, GNS Science
- Jeffrey Hedenquist, Hydrogeo Consulting Inc
- Larry Brinton, U.S. Geological Survey, United States of America
- Franca Pires, University of Western Australia
- Richard Schumhauser, MinEx Consulting
- Richard Gillies, Consultant
- John Thompson, Petra Science Consultants

**Sponsorship and Exhibition Opportunities**
PACRIM 2015 will attract mining professionals and geoscientists involved in developing projects around the Pacific Rim or in transition with a similar tectonic setting. Opportunities are now available for sponsors and exhibitors to create, develop and enhance your organisations' profiles leveraging from target marketing, media exposure and brand recognition.

**CALL FOR ABSTRACTS**
Abstracts are invited for PACRIM 2015. All abstracts will be reviewed by the organising committee and session conveners' and authors of accepted abstracts will be required to submit an extended abstract not exceeding 1,500 words. Abstract submission is via the congress website.

**Sponsors and Convenors**
- Tim Baker, Eldorado Gold Corporation, Canada
- Tim Blackman, Cardiff University, United Kingdom
- Zhanhe Deng, James Cook University
- Hangyan Chen, Guangzhou Institute of Geochemistry, China
- Ken Terry, University of Hong Kong, Hong Kong
- Terry Odell, GNS Science, New Zealand
- Dave Crow, University of Otago, New Zealand
- Paul Cusack, Anglo American Exploration (Australia)
- Ronald de Ruyve, GNS Science, New Zealand
- Steve Barrie, Independent Consultant, University of Western Australia and Australian National University
- Rick Godbold, Centre for Exploration Targeting, USA
- Anthony Harris, Vancouver Mining Limited
- Craig Hart, University of British Columbia, Canada
- Terry Nechuck, Abcecon
- David Houston, Geological Survey of Canada
- Robert Ruff, Mines in the Deep Sea (CUSB)
- Vic Jensen, Barnes Minerals, USA
- Ross Lark, University of Tasmania
- Jianwei Li, China University of Geosciences, China
- Larry Heinert, U.S. Geological Survey, USA
- Steve Proctor, Rhodes University, South Africa
- Roger Storrar, Geoscience Australia
- Andrew Warf, Global Barick Gold Corporation, Canada
- Ben Zhong, University of Tasmania
- Niehve Zane, University of Hong Kong, Hong Kong

The 15th Symposium of the International Association on the Genesis of Ore Deposits (IAGOD) will be held in 28 to 31, August, 2018 in Salta, Argentina.
7.4 The 13th International Nickel-Copper-PGE symposium will be held in 5 to 9, September, 2016 in Perth, Australia (Co-sponsored by IAGOD)
7.5.1. The IAGOD co-sponsored 8th International Siberian Early Career GeoScientists Conference will be held 13-17 June 2016 in Novosibirsk.

The 8th International Siberian Early Career GeoScientists Conference

First Circular

13-17 June, 2016
Novosibirsk, Russia

V.S. Sobolev Institute of Geology and Mineralogy SB RAS
(IGM SB RAS)
A.A. Trofimuk Institute of Petroleum Geology and Geophysics SB RAS
(IPGG SB RAS)
Novosibirsk State University (NSU)
Young scientists (under 35 years) are invited to participate in the 8th International Siberian Early Career GeoScientists Conference.

**VENUE**

The 8th International Siberian Early Career GeoScientists Conference will be held at the most extraordinary district of Novosibirsk, situated in 35 km to the South of the city-center on the shore of an artificial Ob’ sea. Officially, it is called Novosibirsk Scientific Center, but people simply call it Akademgorodok (Academy Town). Akademgorodok began its history in the late 1950s and now is a world-renowned scientific center. Lots of scientific institutes and Novosibirsk State University make the core of the scientific center.

**V.S. Sobolev Institute of Geology and Mineralogy (IGM) and A.A. Trofimuk Institute of Petroleum Geology and Geophysics (IPGG) Siberian Branch of Russian Academy of Sciences (SB RAS)** are academic institutions growth from Institute of Geology and Geophysics, which was founded in 1957 by initiative of academician A.A. Trofimuk. Since this date, the history of Institute of Geology and Mineralogy began as well. Scientific activity of V.S. Sobolev Institute of Geology and Mineralogy SB RAS includes: 1) Earth’s dynamics and evolution of geological processes, magmatism, metamorphism, ore-formation and metallogeny; 2) mineral growth and fluid circulation in deep Earth, diamond origin; 3) global changes of environment and climate, geocology and geoinformatics.

A.A. Trofimuk Institute of Petroleum Geology and Geophysics SB RAS performs fundamental and applied research in the oil and gas geology, stratigraphy, sedimentology, geophysics, oil-and-gas borehole geophysics, and geochemical and geophysical engineering.

IGM and IPGG SB RAS have joint research projects together with different scientific organizations: Universities of Valencia (Spain), Tohoku, Tokyo, Hokkaido (Japan), Tallinn, Tartu (Estonia), Dublin (Ireland), Cambridge (Great Britain), China University of Petroleum, Lanzhou, Hong Kong (China), Tasmania and Curtin (Australia), Oulu (Finland), Carneigle (USA) etc.

Novosibirsk State University was established in 1958, six months after the decision to found the Siberian Branch of the Academy of Sciences. The University was growing up together with the Novosibirsk Scientific Center focusing on training highly qualified specialists for science and education. Among the University graduates there are many laureates of prestigious world awards and prizes such as Fields Medal, EPS Europa physica Prize, etc. The feature of NSU is the system of competitive selection and training of talented young people. The system of selection and training of highly qualified specialists consists of Olympiads, correspondence schools on various subjects, winter and summer schools for students and applicants as well as undergraduate, graduate and postgraduate training at NSU.


**REGISTRATION IS FREE FOR ALL PARTICIPANTS. THE REGISTRATION FEE IS CHARGED ONLY FOR FIELD TRIPS.**
ORGANIZING COMMITTEE
Co-chairmen
Dr. Nikolay P. Pobihin, Academician of the Russian Academy of Sciences, director of IGM SB RAS
Dr. Vladimir A. Kashirin, Corresponding Member of the Russian Academy of Sciences, Deputy Director IPGG SB RAS

Conference Secretariat
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CORRESPONDENCE
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Tel.: Fax: +7(383) 333 27 91
V.S. Sobolev Institute of Geology and Mineralogy SB RAS

Conference e-mail (for any questions): sbconf2016@igm.nsc.ru, sbconf2016@gmail.com

IMPORTANT DATES
6 April 2015 – 1st circular, early bird opening and subscribing
7 September 2015 – 2nd circular and abstract submissions starting
20 February 2016 – abstract submission deadline and visa invitation deadline
15 March 2016 – accepted abstract notification
1 April 2016 – 3rd circular
13-17 June 2016 – the 8th International Siberian Early Career GeoScientists Conference

EARLY BIRD SUBSCRIBING
Pre-registration can be made at the Conference website in order to receive notifications for important updates of the Conference and release of the next circulars.

PRELIMINARY SCHEDULE
The scientific program of the 8th Siberian Early Career GeoScience Conference includes various short courses and workshops, plenary session as well as oral and poster sessions. Lectures of eminent scientists from Russia and other countries will be presented during the plenary sessions.
13-14 June 2016 – pre-conference short courses
15-17 June 2016 – the 8th International Siberian Early Career GeoScientists Conference
18-24 June 2016 – post-conference field trips

CONFERENCE LANGUAGE
English will be the official language of the meeting and no translation facilities will be available. All abstracts, posters, and presentations have to be submitted in English.

ABSTRACT SUBMISSION
Abstracts are to be submitted in an extended form in English language, through the Conference website. According to the results of the conference will be published abstracts volume in printed and electronic forms. Detailed information concerning abstract submission will be in the 2nd circular.

THE MAIN SCOPE OF THE CONFERENCE:
* Petrology and geochemistry of igneous rocks
* Petrology and geochemistry of metamorphic rocks
* Geochemistry and geochronology
* Mineralogy and experimental mineralogy
* Mineral and ore deposits
* Geodynamics and tectonics
* Evolution of sedimentary basins
* Geomorphology and neotectonics
* Paleoclimatology
* Petroleum geosciences
* Economic geology
* Geocology and natural hazards
* Hydrogeology and applied geology
* Geophysical researching
* Mining machinery and technology for the development of mineral deposits
* Geoinformation systems in the Earth Science
The list of sections to be discussed, and will depend on uploaded materials.

SOCIAL EVENTS
Excursions to the Central Siberian Geological Museum, Exhibition Centre of Siberian Branch of the Russian Academy of Sciences, the Archaeology and Ethnography Museum, Novosibirsk planetarium, Zoo and sightseeing tour will be organized for participants during the conference.

FIELD TRIP
Post-conference field trips to the Gorny Altai and Northwestern Altai will be offered to conference attendees and accompanying persons. During these trips will be able to familiarize themselves with mineralogical, petrographic features of this mountain structure, as well as trace the geodynamic evolution of the central part of the Central Asian fold belt. Detailed information will be posted later at the Conference website and the 2nd circular.

TRAVEL AND VISAS INFORMATION
The Organizing Committee requires about 2 months for the preparation of the formal invitation, a letter in order to obtain entrance visa, Russian visa, and time for posting it by ordinary mail. Thus, please, send by e-mail following information (deadline - 20 February 2016):
- a copy of passport pages with information of full name, date and place of birth, passport number, nationality
- full name and address of Institution/University where you work/study, place of employment and position details
- science degree
- city and organization where you are planning make a visa (Embassy/Consulate)
- planning dates of entrance and leave Russia
- phone and fax numbers and e-mail address
- information about previous visits to Russia
In case you need to have an official invitation letter earlier than the above date, an e-mail message to explain the reason is requested.

MEDICAL CARE
Please take care about your health insurance during the conference. Also health insurance from an insurance company that provides international insurance policy program is required during field trips. Novosibirsk, Gorno-Altaisk and Rahtesovsk cities should be included in your health insurance. Please don’t forget your specific medicine if you could need one during stay in Novosibirsk or in the course of field trip.

ACCOMMODATION
The organizers have the opportunity to book a room in the hotel "Golden Valley" and in student dormitories at special prices provided by the conference participants and accompanying persons.

SEE YOU IN AKADEMGORODOK!
8. Application form for IAGOD membership

International Association on the Genesis of Ore Deposits
APPLICATION FOR MEMBERSHIP

Personal Information
First Name:
Last Name:
Company:
Position/Occupation:
Address:
City:
State/Province:
Zip/Postal Code:
Country:
Male
Female
Date of birth (dd.mm.yyyy)
Nationality:
Email:
Fax:
Phone:
Skype:
webpage:

Membership in other Societies
SGA
SEG
Other:

Education
Highest Degree:
Years (from-to):
University:
Location of University:
IAGOD Sponsor (not required for members of SEG and SGA)
First Name:
Last Name:
National group:
Signature:

Membership Fees
IAGOD, the International Association on Genesis of Ore Deposits has appointed Schweizerbart Science Publishers to collect IAGOD membership fees online.

For membership payment please use the secure web shop at: http://www.schweizerbart.de/iagod/membership-payment

minimal payment for individual membership is for 3 years (£30)

For credit card payment outside the secure webshop:

☐ Individual / Personal (£10 annually; minimal £30 for 3 years)
☐ Corporate (£100 annually)
☐ Student (Free for 3 years)
☐ Donation

Total:

Comments:

☐ Mastercard
☐ Visa

Card Number:
Expiration Date:
Cardholder Name:
Card Security Code:

Please send completed form to:
IAGOD chief treasurer Prof Dave Lentz (e-mail: dlentz@unb.ca)
and copy to account holder Dr Andreas Naegele (e-mail: mail@schweizerbart.de)

Submit by Email
International Association on the Genesis of Ore Deposits

APPLICATION FOR MEMBERSHIP
Additional Information

PROFESSIONAL EXPERIENCE (Use separate sheet if necessary)

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CURRENT SPECIALIZATION OR INTEREST

Keywords:

KNOWLEDGE OF LANGUAGE

Spoken: ☐ English ☐ French ☐ German ☐ Spanish ☐ Italian ☐ Russian ☐ Chinese

Other (specify):

Written: ☐ English ☐ French ☐ German ☐ Spanish ☐ Italian ☐ Russian ☐ Chinese

Other (specify):

PRINCIPAL PUBLICATIONS (Use separate sheet if necessary)
9. New Publication of Interest:

Now published!
Large Igneous Provinces

Richard E. Ernst,
Carleton University, Ottawa

Hardback ISBN: 9780521871778
Published: 25th September 2014

Original Price: £85/$130
Discounted Price: £68/$104
Offer Expires: 31st January 2015

Large Igneous Provinces (LIPs) are intraplate magmatic events, involving volumes of mainly mafic magma upwards of 100,000 km³, and often above 1 million km³. They are linked to continental break-up, global environmental catastrophes, regional uplift and a variety of ore deposit types. In this up-to-date, fascinating book, leading expert Richard Ernst explores all aspects of LIPs, beginning by introducing their definition and essential characteristics. Topics covered include continental and oceanic LIPs; their origins, structures, and geochemistry; geological and environmental effects; association with silicic, carbonatite and kimberlite magmatism; and analogues of LIPs in the Archean, and on other planets. The book concludes with an assessment of LIPs' influence on natural resources such as mineral deposits, petroleum and aquifers. This is a one-stop resource for researchers and graduate students in a wide range of disciplines, including tectonics, igneous petrology, geochemistry, geophysics, Earth history, and planetary geology, and for mining industry professionals.

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