

IMA2010

20th General Meeting of the
International Mineralogical Association
21–27 August, 2010

Budapest, Hungary

PROGRAMME

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IMA2010 in brief

Aug. 20 (Fri)

- Registration starts
- Pre-conference field trips arrive at Budapest [AT3, HU6, PL2, RO3, RO4, RS1, SI1, SK1]
- Fireworks in Budapest

Aug. 21 (Sat)

- Poster mounting (Poster sessions N1, S1)
- Business meetings of IMA Commissions and Working Groups; IMA Council (1)
- Museum visits
- Pre-conference field trips [AT2(IT), HUSK1, RO1] and Pre-conference short course [WSC1] arrive at Budapest

Aug. 22 (Sun)

- Poster mounting (Poster sessions N1, S1)
- IMA 1st Business Meeting
- Museum visits
- Opening ceremony
- Plenary lecture [Bob Hazen]
- E5 talk [Eva Valsami-Jones]
- Posters
- Icebreaker Party

Aug. 23 (Mon)

- Oral presentations
- E5 talk [Rod Ewing]
- Posters
- Exhibitors' lectures (N – room 100A)
- Plenary lecture [Peter Buseck]
- Oral presentations
- Business meetings of IMA Commissions and Working Groups
- Field Trip [HU2] (optional)
- Folklore event (optional)

Aug. 24 (Tue)

- Oral presentations
- E5 talk [Nigel Kelly]
- Posters
- Exhibitors' lectures (N – room 100A)
- Plenary lecture [Bill Griffin]
- Oral presentations
- Business meetings of IMA Commissions and Working Groups; IMA Council (2)
- Field Trips [HU1, HU2, HU3, HU4] (optional)
- Mid-conference Workshop [WSC2]
- Folklore event (optional)
- Poster removal (Poster sessions N1, S1)

Aug. 25 (Wed)

- Poster mounting (Poster sessions N2, S2)
- Oral presentations
- E5 talk [Mihály Pósfai]
- Plenary lecture [Olgeir Sigmarsson]
- IMA-CNMNC Open session (room S-A)
- Posters
- Plenary lecture [Jonathan R. Lloyd]
- Oral presentations
- IMA2010 Conference dinner (optional)

Aug. 26 (Thurs)

- Oral presentations
- E5 talk [Nita Sahai]
- Posters
- Exhibitors' lectures (N – room 100A)
- Plenary lecture [Frank Hawthorne, IMA Medallist]
- Oral presentations
- IMA 2nd Business Meeting
- Field Trips [HU1, HU2, HU4] (optional)
- MECC2010 Conference dinner (optional)

Aug. 27 (Fri)

- Oral presentations
- E5 talk [Glenn Waychunas]
- Posters
- Plenary lecture [Max Wilke, EMU Medallist]
- Closing ceremony
- Poster removal (Poster sessions N2, S2)
- Business meetings of IMA Commissions and Working Groups; IMA Council (3)
- Post-conference field trips depart from Budapest [BG1, HR1, MECC2010]
- Post-conference short course [WSC7/MECC2010]: departure to Szeged

Aug. 28 (Sat)

- Post-conference field trips depart from Budapest [AT1, ATHU1, CZ2, CZ3, HU5, PL1, PL3, RO2, RO5, SK3]
- Post-conference workshops and short courses start [WSC3, WSC4, WSC5, WSC6, WSC8]

EG50G_P24_N1 – Concentration technology for Devonian bauxites of Timan, Russia
Vakhrushev, A.V. & Kotova, O.B.

EG50G_P25_N1 – Ti-V oxide deposits in the Kunene anorthositic complex (SW Angola)
Villanova, C., Galí, S., Torró, L., Castillo, M., Campeny, M., Gonçalves, A.O. & Melgarejo, J.C.

EG50G_P26_N1 – Geology and geochronology of magmatic centers in the Urumieh-Dokhtar Arc, Iran
Zarasvandi, A.

EG50G_P27_N1 – Gold-bearing ore occurrence of Karasay, Uzbekistan: mineral-geochemical characteristics of ores
Zavarzina, M.S. & Jukov, A.V.

EG54 – Mineral deposits in terrestrial volcanic-hydrothermal systems

Poster discussion day: Tuesday, 24 Aug.

EG54_P01_N1 – Native minerals found in the Baogutu gold deposit, west Junggar (Xinjiang, NW China)
An Fang & Zhu Yongfeng

EG54_P02_N1 – Hydrothermal alteration related to the formation of the Pb-Zn-Ag deposit Crnac, Mts. Rogozna
Borojević Šoštarić, S., Palinkaš, A.L. & Neubauer, F.

EG54_P03_N1 – The origin of hydrothermal fluids in the Kumarlar Pb-Zn veins, Çanakkale, NW Turkey
Bozkaya, G. & Celik, S.

EG54_P04_N1 – A statistics-based method for the short-wave infrared (SWIR) spectral analysis of altered rocks: an example from the Aocolcalo caldera, eastern Trans-Mexican Volcanic Belt
Canet, C., Arana, L., González-Partida, E., Pi, T., Prol-Ledesma, R.M., Franco, S.I., Villanueva-Estrada, R.E., Camprubí, A. & López-Hernández, A.

EG54_P05_N1 – The Zn-Pb-Ag skarns of Zacatepec, Northeastern Oaxaca (Mexico): a study of mineral assemblages and ore-forming fluids
Canet, C., Romero-Guadarrama, J.A., Sánchez-Vargas, L.I., Camprubí, A., Castro-Mora, J., González-Partida, E., Martín Romero, F., Prol-Ledesma, R.M. & Linares-López, C.

EG54_P06_N1 – Occurrence of the colusites-(Sn) at the ore-body „T“ of the Bor copper deposit (Serbia)
Cvetković, L., Pačevski, A. & Tončić, T.

EG54_P07_N1 – Illite and kaolinite in the Coranda low sulphidation type epithermal deposit, Apuseni Mts., Romania
Gal, Á., Kristály, F., Szakács, A., Molnár, F. & Weiszbürg, T.G.

EG54_P08_N1 – Low-sulfidation Eusan (Se-type) and Moisan (Te-type) epithermal gold-silver deposits, Korea
Kim Chang Seong, Choi Chang Seong & Koo Minho

EG54_P09_N1 – Biely vrch Au-porphyry deposit, Slovakia: a new economic mineralization type in the Carpathian volcanic arc
Koděra, P., Lexa, J., Bakos, F., Biroň, A., Fallick, A.E., Fuchs, P., Hanes, R. & Žitňan, P.

EG54_P10_N1 – Mineralogical, petrological and fluid inclusion study of the Brehov ore deposit (Eastern Slovakia)
Molnár, F., Molnár, L. & Bačo, P.

EG54_P11_N1 – Variety in texture and chemical composition of pyrite from the Čoka Marin polymetallic deposit, Serbia
Pačevski, A. & Šarić, K.

EG54_P12_N1 – Relationships of rhyolite magmatism and epithermal systems in the Central Slovakia and Tokaj Mts. regions of the Western Carpathians: K/Ar dating of volcanic and hydrothermal processes
Picskay, Z., Lexa, J. & Molnár, F.

EG54_P13_N1 – Native copper ore-bearing formation
Rudenko, K.V., Derevska, K.I. & Shumlyansky, V.O.

EG54_P14_N1 – Progressive oxidation of magma in gabbro-granodiorite intrusives in the Cretaceous-Paleogene Inner Zone batholith of southwest Japan - very pure magnetite formation
Yamaguchi, Y. & Kawakatsu, K.

EG54_P15_N1 – Metal sulfide minerals from deep-seated granitic geothermal reservoir
Yanagisawa, N.

EG54_P16_N1 – Te-bearing gold-silver-basemetal mineral deposit of Arinem, Western Java, Indonesia
Yuningsih, E.T., Matsueda, H. & Rosana, M.F.

**GM71 – From the protoplanetary disc to lower mantle: Celebrating 170 years of perovskite research
(session dedicated to Roger H. Mitchell)**

Poster discussion day: Tuesday, 24 Aug.

GM71_P01_N1 – Non-stoichiometry in perovskites: the role of “surplus” oxygen
Chakhmouradian, A.R. & Mitchell, R.H.

GM71_P02_N1 – Perovskite from the Proterozoic Tikshezero carbonatite (Russia): age and genesis
Lepekhina, E.N., Antonov, A.V., Belyatsky, B.V. & Sergeev, S.A.

GM71_P03_N1 – Major and trace elements in perovskite from a micaceous kimberlite nodule, Udachnaya-East pipe, Siberia
Sharygin, V.V. & Kamenetsky, V.S.

GM71_P04_N1 – Pyrophanite after perovskite from serpentinite at Perkupa, northern Hungary
Zajzon, N., Kristály, F., Szakáll, S., Fehér, B., Váczi, T. & Pekker, P.

GM72 – Accessory minerals: Tracers of magmatic and metamorphic evolution

Poster discussion day: Tuesday, 24 Aug.

GM72_P01_N1 – Uranium and thorium distribution in the Double S Zone of the uraniferous Lac Turgeon Intrusive Complex, Quebec, Canada
Beal, K., Lentz, D.R. & McFarlane, C.

GM72_P02_N1 – PGE compositions of magnetite from porphyry Cu-Mo deposits of Siberia and Mongolia
Berzina, A.N.

GM72_P03_N1 – Zircon U-Pb and Hf isotope constraints from Gandese Paleogene granitoids on the collisional magmatism and tectonic evolution in Tibet
Dong Guochen, Mo Xuanxue, Zhao Zhidan & Zhu Dicheng

GM72_P04_N1 – Fluid-mediated re-equilibration and self-irradiation of euxenite-zircon assemblage in pegmatites, South Norway
Duran, C., Seydoux-Guillaume, A.M., Bingen, B., de Parseval, Ph. & Ingrin, J.

GM72_P05_N1 – Partitioning of As and Sn among apatite, vesuvianite, Ca-garnet and malayaite in calc-silicate rocks
Houzar, S., Hrazdil, V., Škoda, R. & Cempírek, J.

GM72_P06_N1 – Progressive alteration of spinel phases in listvenitization
Huang Ko-Chun & Jiang Wei-Teh

GM72_P07_N1 – Cathodoluminescence spectra of zircons from some eruptive and endogenous rocks located in Romanian Western and Southern Carpathians
Iancu, O.G., Robu, I.N. & Brandtstaetter, F.

GM72_P08_N1 – Recrystallisation of monazite as a potential monitor of cryptic fluid events
Kelly, N.M. & Möller, A.

GM72_P09_N1 – First report of apatite with pyrrhotite exsolution lamellae in retrogressed Ky-eclogites from the Rhodope UHP metamorphic province (Greece)
Kostopoulos, D.K., Moulas, E. & Burg, J.-P.

GM72_P10_N1 – Yttrium mineralization in the north-west of Russia (Pre-Polar Urals)
Kozyreva, I.V. & Shvetsova, I.V.

Te-bearing gold-silver-basemetal mineral deposit of Arinem, Western Java, Indonesia

Yuningsih, E.T.^{1*}, Matsueda, H.² & Rosana, M.F.³

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² Hokkaido University Museum, Hokkaido University, Japan

³ Faculty of Geology, Padjadjaran University, Indonesia

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The Arinem area is located in a part of the Sunda-Banda magmatic arc (well known as gold copper belt) within the Indonesia archipelago at the southern margin of the Sundaland and the Eurasian plate (Fig. 1). The mineralized body is in form of quartz vein trending N140-160°E for about 5,900m long and 3-5m width, exposed at elevation 365-530m above sea level. The ore body is hosted in andesitic lava, breccias and tuff of the Oligocene-Middle Miocene Jampang Formation. The pyroclastic host rocks mainly suffered of propylitic and argillic alterations and are characterized by the occurrence of chlorite, sericite, kaolinite, and in place by carbonate. Outcrop and drill core samples containing gold-silver are intimately associated with basemetal minerals of copper, lead and zinc. K-Ar dating of sericite associated with the quartz vein indicates a Late Miocene age (8.8 ± 0.3 Ma) for the ore mineralization.

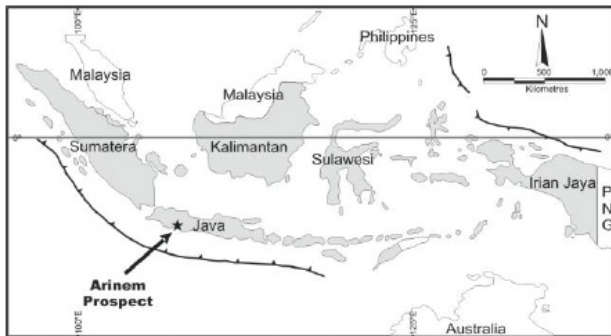


Fig. 1. Map of the Indonesia region, where the location of the Arinem prospect is also indicated by the star with black arrow.

The ore mineral deposition could be categorized into three stages, where stages I and II are Au-Ag bearing, and stage III is barren. The ore mineral assemblages of the deposit consist of sphalerite, galena, chalcopyrite, pyrite, marcasite, arsenopyrite with a little amount of pyrrhotite, bornite, calcocite, covellite, hematite, argentite, electrum and sulfosalt minerals of enargite and tennantite. Some of Te-bearing minerals such as hessite, tetradymite, stutzite, petzite and altaite are observed in the mineralization stage II. The deposit is characterized by low iron content in sphalerite, ranging from 0.25-4.71 wt%. Gold is detected in petzite with the ranges of 14.32-18.32 wt%, while in some hessite and altaite grains up to 1.77 and 0.55 wt%, respectively. Otherwise, up to 1.31 wt% selenium element is detected in tetradymite.

Fluid inclusion studies for quartz of the stages I and II reveal the homogenization temperatures with the ranges of 176.6-325.1°C and 156.9-311.8°C, and with the low salinity of less than 4.3 wt% NaCl equiv. in both. Based on the microscopic observation of the occurrences of inclusions there are some boiling phenomena observed. They also tend to show a slight cooling of ore-forming fluids through stages I to II. In the decrease of temperature, it might be followed by both decrease of sulphur fugacity and increase of tellurium one.

Considering the preliminary stable isotopic studies of sulphide and quartz minerals from the deposit, it might be suggested that the mixing of magmatic ore fluids with meteoric water caused the ore precipitation in underground beside of boiling.