

INTERESTING PAPERS IN OTHER JOURNALS

ECONOMIC GEOLOGY prints partial tables of contents of a number of journals as an information service. *Please do not write to us to obtain copies of the journals or papers.* If you cannot arrange to get copies of interesting No.s through your normal library sources, please contact the offices of the individual journals for assistance. Where possible, their U.S. addresses are given. Addresses are listed in No. 1.

AAPG BULLETIN

Vol. 86, No. 4, 2002

Fold-accommodation faults—*Shankar Mitra****6

Vol. 86, No. 5, 2002

Outcrop-based reservoir characterization: A composite phylloid-algal mound, western Orogrande basin (New Mexico)—*Patrick D. Doherty, Gerilyn S. Soreghan, and John P. Castagna****779

Kilometer-scale upward migration of hydrocarbons in geopressed sediments by buoyancy-driven propagation of methane-filled fractures—*Jeffrey A. Nunn and Peter Meulbroek****907

ACTA GEOLOGICA SINICA

Vol. 76, No. 1, 2002

Petrology of an arc-oceanic crust contact zone in the Laohushan Back-arc Basin, the eastern section of the North Qilian Mountains, NW China—*Yang Houn-Yi, Wu Yenming, and Wu Cailai****1

AMERICAN JOURNAL OF SCIENCE

Vol. 301, No. 9, 2001

Subduction-margin assemblages in the Proterozoic Pinal and Cochise blocks, southeastern Arizona—*Peter N. Swift and Eric R. Force****755

Crustal growth in southern Arizona; U-Pb geochronologic and Sm-Nd isotopic evidence for addition of the Paleoproterozoic Cochise block to the Mazatzal Province—*Jürgen Eisele and Clark E. Isachsen****773

Adsorption mechanism of Zn on hectorite as a function of time, pH, and ionic strength—*Michel L. Schlegel, Alain Manceau, Laurent Charlet, and Jean-Louis Hazemann****798

Vol. 301, No. 10, 2001

The incorporation of hydroxyl groups and molecular water in natural zircon (ZrSiO₄)—*Lutz Nasdala, Anton Beran, Eugen Libowitzky, and Dieter Wolf****831

REE, U, Th, and Hf distribution in zircon from Western Carpathian Variscan granitoids: A combined cathodoluminescence and ion microprobe study—*Ulrike Poller, Joachim Juth, Peter Hoppe, and Ian S. Williams****858

Alkaline intrusions in a near-trench setting, Franciscan Complex, California: Constraints from geochemistry, petrology, and ⁴⁰Ar/³⁹Ar chronology—*Dieter F. Metz, Andreas J. Weinrich, Warren D. Sharp, and Paul R. Renne****877

AMERICAN MINERALOGIST

Vol. 87, No. 5-6, 2002

- Formation of secondary pyrite and carbonate minerals in the Lower Williams Lake tailings basin, Elliot Lake, Ontario, Canada—*A. Dogan Paktunc and Nand K. Davé***593*
- High-pressure IR-spectra and the thermodynamic properties of chloritoid—*Monika Koch-Müller, Anne M. Hofmeister, Yingwei Fei, and Zhenxian Liu***609*
- Surface structures, stabilities and growth of magnesian calcites: A computational investigation from the perspective of dolomite formation—*Nora H. De Leeuw***679*
- Spinel and other oxides in Mn-rich rocks from the Hutter Mine, Pittsylvania County, Virginia, U.S.A.: Implications for miscibility and solvus relations among jacobsonite, galaxite, and magnetite—*James S. Beard and Robert J. Tracy***690*
- Isotopic and elemental partitioning of boron between hydrous fluid and silicate melt—*Richard L. Hervig, Gordon M. Moore, Lynda B. Williams, Simon M. Peacock, John R. Holloway, and Kurt Roggensack***769*
- Experimental evidence of three coexisting immiscible fluids in synthetic granitic pegmatite—*Ilya V. Veksler, Rainer Thomas, and Christian Schmidt***775*

ANALYTICA CHIMICA ACTA

Vol. 457, No. 2, 2002

- Determination of nanomolar concentrations of lead and cadmium by anodic-stripping voltammetry at the silver electrode—*Y. Bonfil and E. Kirowa-Eisner***285*

Vol. 458, No. 2, 2002

- Determination of niobium, tantalum, zirconium and hafnium in geological materials by extraction chromatography and inductively coupled plasma mass spectrometry—*X. J. Yang and C. Pin***375*

APPLIED GEOCHEMISTRY

Vol. 17, No. 6, 2002

- The geohydrologic setting of Yucca Mountain, Nevada—*John S. Stuckless and William W. Dudley***659*
- Geochemistry of rock units at the potential repository level, Yucca Mountain, Nevada—*Zell E. Peterman and Paul L. Cloke***683*
- Mineralogical heterogeneity in fractured, porous media and its representation in reactive transport models—*William E. Glassley, Ardyth M. Simmons, and James R. Kercher***699*
- U-Pb ages of secondary silica at Yucca Mountain, Nevada: implications for the paleohydrology of the unsaturated zone—*L. A. Neymark, Y. Amelin, J. B. Paces, and Z. E. Peterman***709*
- Physical and stable-isotope evidence for formation of secondary calcite and silica in the unsaturated zone, Yucca Mountain, Nevada—*Joseph F. Whelan, James B. Paces, and Zell E. Peterman***735*
- $^{234}\text{U}/^{238}\text{U}$ evidence for local recharge and patterns of ground-water flow in the vicinity of Yucca Mountain, Nevada, USA—*James B. Paces, Kenneth R. Ludwig, Zell E. Peterman, and Leonid A. Neymark***751*
- Uranium-series disequilibrium in tuffs from Yucca Mountain, Nevada, as evidence of pore-fluid flow over the last million Years—*M. Gascoyne, N. H. Miller, and L. A. Neymark***781*
- Conceptual model of the controls on natural water chemistry at Yucca Mountain, Nevada—*Arend Meijer***793*
- Percolation flux and transport velocity in the unsaturated zone, Yucca Mountain, Nevada—*I. C. Yang***807*
- Lithium sorption to Yucca Mountain tuffs—*I. Anghel, H. J. Turin, and P. W. Reimus***819*
- Tracer and radionuclide sorption to vitric tuffs of Busted Butte, Nevada—*H. J. Turin, A. R. Groffman, L. E. Wolfsberg, J. L. Roach, and B. A. Strietelmeier***825*
- Solubility and sorption of redox-sensitive radionuclides (Np, Pu) in J-13 water from the Yucca Mountain site: comparison between experiment and theory—*Wolfgang Runde, Steve D. Conradson, D. Wes Efurud, NingPing Lu, Craig E. VanPelt, and C. Drew Tait***837*

INTERESTING PAPERS IN OTHER JOURNALS VOL. 97-4

Vol. 17, No. 7, 2002

Geochemistry and mineralogy of saprolite in Finnish Lapland—*M. R. Islam, V. Peuraniemi, R. Aario, and S. Rojstaczer****885
Pyritization of iron and trace metals in anoxic fjord sediments (Nordåsvannet fjord, western Norway)—*Anne Müller****923
Erratum to: "Geochemistry of rock units at the potential repository level, Yucca Mountain, Nevada", *Applied Geochemistry*, 17:6, 2002, pp. 683-698—*Zell E. Peterman and Paul L. Cloke****955

AUSTRALIAN JOURNAL OF EARTH SCIENCES

Vol. 49, No. 1, 2002

Thematic issue – Regolith geology of the Yilgarn Craton. Introduction—*A.C. Cockburn****1

BASIN RESEARCH

Vol. 14, No. 1, 2002

Neoproterozoic tectonic and climatic evolution recorded in the Gariep Belt, Namibia and South Africa—*H.E. Frimmel, P.G. Fölling, and P.G. Eriksson****55
Chemostratigraphic correlation of carbonate successions in the Bariep and Saldania Belts, Manibia and south Africa—*P.G. Fölling and H.E. Frimmel* ***69

BULLETIN DE LA SOCIÉTÉ GÉOLOGIQUE DE FRANCE

Vol. 173, No. 2, 2002

Leaching of polished sections: An integrated approach for studying the liberation of heavy metals from lead-zinc metallurgical slags—*Vojtech Ettler, Martin Mihaljevic, Jean-Claude Touray, and Patrice Piantone****161

BULLETIN OF THE GEOLOGICAL SURVEY OF JAPAN

Vol. 52, No. 6/7, 2001

Zinc-bearing actinolite from the Kakkonda geothermal system, Iwate Prefecture, northeastern Japan—*Takayuki Sawaki, Munetake Sasaki, Koichiro Fujimoto, and Naoto Takeno****315

Vol. 52, No. 8, 2001

Geology and geochemistry of geothermal fields and hot-spring type gold deposits in Sanjiang orogen, southwestern China—*Pin'an Wang****327

Vol. 52, No. 9, 2001

Characterizing fracture systems of Kyushu, southwest Japan through satellite-image derived lineaments superimposed on topographic and lithologic data—*Katsuaki Koike, Ryoichi Kouda, and Toshiaki Ueki****405
Chemical compositions of amphiboles in hematite-bearing schists from the Saruta-gawa area in the Sanbagawa belt, central Shikoku, Japan—*Yasuyuki Banno****425

BULLETIN OF VOLCANOLOGY

Vol. 64, No. 2, 2002

- Petrological study of Nasu-Chausudake Volcano (ca. 16 ka to Present), northeastern Japan—*Masao Ban and Takahiro Yamamoto****100
- Origin of silicic volcanic rocks in Central Costa Rica: A study of a chemically variable ash-flow sheet in the Tiribí Tuff—*Rachel S. Hannah, Thomas A. Vogel, Lina C. Patino, Guillermo E. Alvarado, Wendy Pérez, and Diane R. Smith****117
- Asymmetric, multiple-block collapse at Rotorua Caldera, Taupo Volcanic Zone, New Zealand—*D. M. Milner, J. W. Cole, and C. P. Wood****134

Vol. 64, No. 3-4, 2002

- Volcanic and tectonic processes coinciding with glaciation and crustal rebound: An early Holocene rhyolitic eruption in the Dyngjufjöll volcanic centre and the formation of the Askja caldera, north Iceland—*Guðmundur E. Sigvaldason****192
- A conceptual model of the Mount Spurr magmatic system from seismic and geochemical observations of the 1992 Crater Peak eruption sequence—*J. A. Power, A. D. Jolly, C. J. Nye, and M. L. Harbin****206
- Relationships between diffuse CO₂ emissions and volcanic activity on the island of Vulcano (Aeolian Islands, Italy) during the period 1984-1994—*Iole Serena Diliberto, Sergio Gurrieri, and Mariano Valenza****219

CANADIAN JOURNAL OF EARTH SCIENCES

Vol. 39, No. 4, 2002

- A gravity profile across southern Saganash Lake fault: Implications for the origin of the Kapuskasing Structural Zone—*B. Nitescu and H.C. Halls****469
- A comparative ⁴⁰Ar/³⁹Ar conventional and laserprobe study of muscovite from Port Mouton Pluton, southwest Nova Scotia: Erratum—*Raymond P. Fallon, Peter H. Reynolds, and D. Barrie Clarke****559
- Interaction among Upper Crustal, Lower Crustal, and Mantle Materials in the Port Mouton Pluton, Meguma Zone, Southwest Nova Scotia: Erratum—*D. Barrie Clarke, Raymond Fallon, and Larry M. Heaman****560

CANADIAN MINERALOGIST

Vol. 40, No. 1, 2002

- Partial melting of sulfide ore deposits during medium- and high-grade metamorphism—*B. Ronald Frost, John A. Mavrogenes, and Andrew G. Tomkins****1
- Sphalerite and arsenopyrite at the Brunswick No. 12 massive-sulfide deposit, Bathurst Camp, New Brunswick: constraints on P-T evolution—*David R. Lentz****19
- Phase separation in (Fe,Co)_{1-x}S monosulfide solid-solution below 450°C, with consequences for coexisting pyrrhotite and pentlandite in magmatic sulfide deposits—*Shannon P. Farrell and Michael E. Fleet****33
- Fluid inclusions in late-stage Pb–Mn–As–Sb mineral assemblages in the Långban deposit, Bergslagen, Sweden—*Erik Jonsson and Curt Broman****47
- Polymetamorphic amphibole veins in metabasalts from the Betic Ophiolitic Association at Cóbdar, southeastern Spain: relics of ocean-floor metamorphism preserved through the Alpine orogen—*Encarnación Puga, Maria Dolores Ruiz Cruz, and Antonio Díaz De Federico****67
- Reaction zones developed between corundum metapelite and marble, Alborán Sea basement, western Mediterranean: Origin and phase relations—*Vicente López Sánchez-Vizcaíno and Juan Ignacio Soto****85
- Calcite – amphibole – clinopyroxene rock from the Afrikanda Complex, Kola Peninsula, Russia: mineralogy and a possible link to carbonatites. II. Oxysalt minerals—*Anatoly N. Zaitsev and Anton R. Chakhmouradian****103
- Strontium-apatite: New occurrences, and the extent of Sr-for-Ca substitution in apatite-group minerals—*Anton R. Chakhmouradian, Ekaterina P. Reguir, and Roger H. Mitchell****121

- The distribution of rare-earth elements in K-feldspar as an indicator of petrogenetic processes in granitic pegmatites: examples from two pegmatite fields in southern Norway—*Rune B. Larsen****137
- The new mineral species brodtkorbite, Cu_2HgSe_2 , and the associated selenide assemblage from Tuminico, Sierra de Cacho, La Rioja, Argentina—*Werner H. Paar, Dan Topa, Andrew C. Roberts, Alan J. Criddle, Gerhard Amann, and Ricardo J. Sureda****225

Vol. 40, No. 2, 2002

- The Cabri Issue: Preface—*T.T. Chen, J.E. Dutrizac, and J.L. Jambor****273
- Magmatic and hydrothermal platinum-group minerals and base-metal sulfides in the Baula complex, India—*T. Augé, I. Salpêtre, L. Bailly, M.M. Mukherjee, and R.N. Patra****277
- Relationship between PGE and PGM in the Bushveld Complex—*R.G. Cawthorn, C.A. Lee, R.P. Schouwstra, and P. Mellowship****311
- Sobolevskite, taimyrite and Pt_2CuFe (tulameenite?) in complex massive talnakhite ore, Noril'sk orefield, Russia—*N.J. Cook, C.L. Ciobanu, R.K.W. Merkle, and H.-J. Bernhardt****329
- Botryoidal platinum, palladium and potarite from the Bom Sucesso Stream, Minas Gerais, Brazil: compositional zoning and origin—*M.E. Fleet, C.M. de Almeida, and N. Angeli****341
- Composition and paragenesis of Pt alloys from chromitites of the Uralian–Alaskan-type Kytlym and Uktus complexes, northern and central Urals, Russia—*G. Garuti, E.V. Pushkarev, and F. Zaccarini****357
- The platinum-group minerals in the upper section of the Keivitsansarvi Ni–Cu–PGE deposit, northern Finland—*F. Gervilla and K. Kojonen****377
- Pt–Fe nuggets derived from clinopyroxenite–dunite massifs, Russia: A structural, compositional and osmium-isotope study—*K.N. Malitch and O.A.R. Thalhammer****395
- An unusual occurrence of Pd, Pt, Au, Ag and Hg minerals in the Pilbara region of Western Australia—*E.H. Nickel****419
- Platinum-group minerals and other detrital components in the Karoo-age Somabula gravels, Gweru, Zimbabwe—*T. Oberthür, T.W. Weiser, L. Gast, R. Schoenberg, and D.W. Davis****435
- New data on vincentite—*M. Tarkian, K.-H. Klaska, and E.F. Stumpff****457
- Composition of the platinum-group minerals in the Salmon River placer deposit, Goodnews Bay, Alaska—*N.D. Tolstykh, J.Y. Foley, E.G. Sidorov, and K.V.O. Laajoki****463
- Coarse-grained cabriite from Noril'sk, Russia—*G.C. Wilson, J.C. Rucklidge, and C. Cermignani****473
- Platinum-group minerals in chromitite xenoliths from the Onverwacht and Tweefontein ultramafic pipes, eastern Bushveld Complex, South Africa—*F. Zaccarini, G. Garuti, and R.G. Cawthorn****481
- The system Fe–Os–S at 1180°, 1100° and 900°C—*S. Karup-Møller and E. Makovicky****499
- The system Fe–Pt–S at 1100°C—*J. Majzlan, M. Makovicky, E. Makovicky, and J. Rose-Hansen****509
- The system Fe–Rh–S at 900° and 500°C—*E. Makovicky, M. Makovicky, and J. Rose-Hansen****519
- Collectors of Pt, Pd and Rh in a S-poor Fe–Ni–Cu sulfide system at 760°C: Experimental data and application to ore deposits—*A. Peregoedova and M. Ohnenstetter****527
- Phase equilibria in the system Zn–Fe–Ga–S at 900° and 800°C—*T. Ueno and S.D. Scott****563
- The system PtS–PdS–NiS between 1200° and 700°C—*S.M.C. Verryn and R.K.W. Merkle****571
- Corrosion mineralogy of an 1800 Spanish Piece of Eight—*J.R. Craig, J.E. Callahan, J.T. Kimbell, and T.N. Solberg****585
- Platinum-group elements in basalts from Maui, Hawai'i: low abundances in alkali basalts—*J.H. Crocket****595
- Mineralogy and sulfide mineral chemistry of the Neves–Corvo ores, Portugal: Insight into their genesis—*O.C. Gaspar****611
- Selenium, tellurium, arsenic and antimony contents of primary mantle sulfides—*K.H. Hattori, S. Arai, and D.B. Clarke****637
- Platinum-group minerals from the Wellgreen Cu–Ni–PGE deposit, Yukon, Canada—*A.Y. Barkov, J.H.G. Laflamme, L.J. Cabri, and R.F. Martin****651
- Laflammeite, $\text{Pd}_3\text{Pb}_2\text{S}_2$, a new platinum-group mineral species from the Penikat layered complex, Finland—*A.Y. Barkov, R.F. Martin, T.A.A. Halkoaho, and A.J. Criddle****671
- Menshikovite, $\text{Pd}_3\text{Ni}_2\text{As}_3$, a new platinum-group mineral species from two layered complexes, Russia—*A.Y. Barkov, R.F. Martin, Ya.A. Pakhomovsky, N.D. Tolstykh, and A.P. Krivenko****679
- A solution to the crystal structures of bismutite and beyerite—*J.D. Grice****693
- The use of end-member charge-arrangements in defining new mineral species and heterovalent substitutions in complex minerals—*F.C. Hawthorn****699
- Hongshiite, PtCu, from itabirite-hosted Au–Pd–Pt mineralization (jacutinga), Itabira District, Minas Gerais, Brazil—*R. Kwitko, A.R. Cabral, B. Lehmann, J.H.G. Laflamme, L.J. Cabri, A.J. Criddle, and H.F. Galbiatti****711

Cobaltarthurite, $\text{Co}^{2+}\text{Fe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$, a new member of the arthurite group—*J.L. Jambor, J. Viñals, L.A. Groat and M. Raudsepp****725

The crystal structure of cobaltarthurite, $\text{Co}^{2+}\text{Fe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$: a Rietveld refinement—*M. Raudsepp and E. Pani****733

Tischendorfite, $\text{Pd}_8\text{Hg}_3\text{Se}_9$, a new mineral from Tilkerode, Harz Mountains, Germany—*C.J. Stanley, A.J. Criddle, H.-J. Förster, and A.C. Roberts****739

CHEMICAL GEOLOGY

Vol. 185, No. 1-2, 2002

Fatty acid carbon isotope signatures in chemosynthetic mussels and tube worms from gulf of Mexico hydrocarbon seep communities—*S. E. MacAvoy, S. A. Macko, and S. B. Joye****1

Geochemical characteristics across the oxic/anoxic interface (Rote Fäule front) within the Kupferschiefer of the Lubin-Sierszowice mining district (SW Poland)—*A. Bechtel, R. Gratzel, W. Püttmann, and S. Oszczepalski****9

Adsorption of Au(I, III) complexes on Fe, Mn oxides and humic acid—*Yong Ran, Jiamo Fu, A. W. Rate, and R. J. Gilkes****33

Stable isotope geochemistry of cold CO_2 -bearing mineral spring waters, Daylesford, Victoria, Australia: Sources of gas and water and links with waning volcanism—*Ian Cartwright, Tamie Weaver, Sarah Tweed, Douglas Ahearne, Michelle Cooper, Katherine Czapnik, and Joseph Tranter****71

Microanalysis of ^{13}C , ^{15}N , and N abundances in diamonds by secondary ion mass spectrometry—*Erik H. Hauri, J. Wang, D. G. Pearson, and G. P. Bulanova****149

Vol. 185, No. 3-4, 2002

Uranium and thorium isotopic and concentration measurements by magnetic sector inductively coupled plasma mass spectrometry—*Chuan-Chou Shen, R. Lawrence Edwards, Hai Cheng, Jeffrey A. Dorale, Rebecca B. Thomas, S. Bradley Moran, Sarah E. Weinstein, and Henrietta N. Edmonds****165

Analysis of platinum group elements and gold in geological materials using NiS fire assay and Te coprecipitation; the NiS dissolution step revisited—*Michel Gros, Jean-Pierre Lorand, and Ambre Luguet****179

Improving isochron calculations with robust statistics and the bootstrap—*Roger Powell, Janet Hergt, and Jon Woodhead****191

O and Pb isotopic analyses of uranium minerals by ion microprobe and U-Pb ages from the Cigar Lake deposit—*Mostafa Fayek, T. Mark Harrison, Rodney C. Ewing, Marty Grove, and Chris D. Coath****205

An assessment of mass discrimination in MC-ICPMS using Nd isotopes—*Derek Vance and Matthew Thirlwall****227

Temporal changes in the lead isotopic composition of red clays: Comparison with ferromanganese crust records—*L. V. Godfrey****241

Sm-Nd isotope systematics in garnet from different lithologies (Eastern Alps): Age results, and an evaluation of potential problems for garnet Sm-Nd chronometry—*Martin Thöni****255

The evolution of aqueous-carbonic fluids in the Amba Dongar carbonatite, India: Implications for Fenitisation—*A. E. Williams-Jones and D. A. S. Palmer****283

Does metal adsorption onto bacterial surfaces inhibit or enhance aqueous metal transport? Column and batch reactor experiments on Cd-Bacillus subtilis-quartz systems—*Nathan Yee and Jeremy B. Fein****303

Oxygen isotope analysis of phosphates: A comparison of techniques for analysis of Ag_3PO_4 —*Torsten W. Vennemann, Henry C. Fricke, Ruth E. Blake, James R. O'Nei, and Albert Colman****321

CIM BULLETIN

Vol. 95, No. 1059, 2002

Phase relations in the Cu_2S -FeS-ZnS and Cu_2S -PbS-ZnZ ternary systems at 1473°K: Extraction of zinc from sulphide ore using liquid copper as a reagent—*A.K. Singh, R. Singh, M. Sarkar, P.K. Mandal, and D. Sharma****129

CLAYS AND CLAY MINERALS

Vol. 50, No. 1, 2002

- Thermal evolution of fluorine from smectite and kaolinite—*Steve J. Chipera and David L. Bish****38
Microbiotic formation of silicate minerals in the weathering environment of a pyroclastic deposit—*Motoharu Kawano and Katsutoshi Tomita****99

Vol. 50, No. 2, 2002

- Transmission electron microscopy study of smectite illitization during hydrothermal alteration of a rhyolitic hyaloclastite from Ponza, Italy—*Blanca Bauluz, Donald R. Peacor, and Robert F. Ylagan****157
Biogenic saponite from an active submarine hot spring, Iceland—*A. Geptner, H. Kristmannsdóttir, J. Kristjansson, and V. Marteinson****174
Lepidocrocite in hydrothermal sediments of the Atlantis II and Thetis Deep, Red Sea—*Nurit Taitel Goldman, Christian Bender Koch, and Arieh Singer****186

COMPTEs RENDUS GEOSCIENCES

Vol. 334, No. 1, 2002

- Silica and the cycle of carbon in the ocean—*Paul Tréguer****3
Seismic structure of the Doukkala basin, Palaeozoic basement, western Morocco: A hint for an Eovariscan fold-and-thrust belt—*Hassan Echarfaoui, Mohamed Hafid, and Abdallah Aït Salem****13
Raman spectroscopy of natural silica in Chicxulub impactite, Mexico—*Mikhail Ostroumov, Eric Faulques, and Elena Lounejeva****21
Initial explosive phases during extrusion of volcanic lava domes: Example from rhyodacitic dome of Dikkartin Dag, Erciyes stratovolcano, Central Anatolia, Turkey—*Erdal Sen, Erkan Aydar, Alain Gourgaud, and Biltan Kurkcuoglu****27
Characterization of the paragenesis and the fluid palaeo-circulations in the gold showings of Bleida (Anti-Atlas, Morocco)—*Ahmed Barakat, Christian Marignac, Marie-Christine Boiron, and Mohamed Bouabdelli****35
Distribution of chromium in soils developed into metamorphic rocks: Variability at the hillslope scale—*Sébastien Salvador-Blanes, Sophie Cornu, and Dominique King****51

Vol. 334, No. 2, 2002

- Role of metamorphic strain in the crystallinity of graphite: The example of the graphitic schists from the Lotru Valley (Carpathians, Romania)—*Sorin-Constantin Barzoi and Bernard Guy****89
Fractional crystallisation and crustal contamination in the transitional Jurassic magmatic series of Central High Atlas (Morocco)—*Rachid Zayane, Abderrahim Essaiïfi, René C. Maury, Alain Piqué, Edgard Laville, and Mohamed Bouabdelli****97
Geochemical characteristics of an intracontinental shoshonitic association: The example of the Damavand Volcano, Iran—*Hossein Mehdizadeh, Jean-Michel Liotard, and Jean-Marie Dautria****111
The Campanian-Maastrichtian synsedimentary tectonic activity: Implications for the geodynamic evolution of the North African Margin—*Mahmoud Dlala****135

Vol. 334, No. 3, 2002

- Genesis of a mottled horizon by Fe-depletion within a laterite cover in the Amazon Basin—*Vania Rosolen, Mathieu Lamotte, René Boulet, Jean Trichet, Olivier Rouer, and Adolpho José Melfi****187
States of stresses and opening/closing mechanisms of the Permian basins in Hercynian Morocco. The example of the Jebilet and Réhamna Basins—*Amal Saidi, Abdelfatah Tahiri, Lahcen Ait Brahim, and Maraim Saidi****221

CONTINENTAL SHELF RESEARCH

Vol. 22, No. 5, 2002

Organic carbon in shelf seas: Sinks or sources, processes and products—*Henk de Haas, Tjeerd C. E. van Weering, and Henko de Stigter****691

CONTRIBUTIONS TO MINERALOGY AND PETROLOGY

Vol. 143, No. 1, 2002

Peridotites from the Mariana Trough: First look at the mantle beneath an active back-arc basin—*Yasuhiko Ohara, Robert J. Stern, Teruaki Ishii, Hisayoshi Yurimoto, and Toshitsugu Yamazaki****1

The effect of fluorine, boron and excess sodium on the critical curve in the albite-H₂O system—*John R. Sowerby and Hans Keppler****32

Gradients in fluid composition across metacarbonate layers of the Wepawaug Schist, Connecticut, USA—*Jay J. Ague****38

Eclogitic and websteritic diamond sources beneath the Limpopo Belt - is slab-melting the link?—*Sonja Aulbach, Thomas Stachel, K. Stephanus Viljoen, Gerhard P. Brey, and Jeff W. Harris****56

Abyssal peridotites >3,800 Ma from southern West Greenland: Field relationships, petrography, geochronology, whole-rock and mineral chemistry of dunite and harzburgite inclusions in the Itsaq Gneiss Complex—*C. R. L. Friend, V. C. Bennett, and A. P. Nutman****71

The mineralogy of Ba- and Zr-rich alkaline pegmatites from Gordon Butte, Crazy Mountains (Montana, USA): Comparisons between potassic and sodic agpaitic pegmatites—*Anton R. Chakhmouradian and Roger H. Mitchell****93

Experimental investigation of zoisite-clinozoisite phase equilibria in the system CaO-Fe₂O₃-Al₂O₃-SiO₂-H₂O—*A. Brunsmann, G. Franz, and W. Heinrich****115

In situ investigations of allanite hydrothermal alteration: Examples from calc-alkaline and anorogenic granites of Corsica (southeast France), Erratum—*Franck Poitrasson****131

Vol. 143, No. 2, 2002

The behaviour of platinum-group elements in basalts from the East Greenland rifted margin—*Peter Momme, Christian Tegner, C. Kent Brooks, and Reid R. Keays****133

Coupled evolution of back-arc and island arc-like mafic crust in the late-Neoproterozoic Agardagh Tes-Chem ophiolite, Central Asia: Evidence from trace element and Sr-Nd-Pb isotope data—*Jörg A. Pfänder, Klaus Peter Jochum, Ivan Kozakov, Alfred Kröner, and Wolfgang Todt****154

High-temperature dehydration melting and decompressive P-T path in a granulite complex from the Eastern Ghats, India—*S. Bhattacharya and R. Kar****175

Oxygen, carbon and strontium isotope systematics in two profiles across the Glarus thrust: Implications for fluid flow—*R. Abart, N. Badertscher, M. Burkhard, and E. Povoden****192

Experimental study of Cl solubility in hydrous alkaline melts: Constraints on the theoretical maximum amount of Cl in trachytic and phonolitic melts—*S. Signorelli and M. R. Carroll****209

Experimental constraints on phase relations in subducted continental crust—*Jörg Hermann****219

DEEP SEA RESEARCH PART I

Vol. 49, No. 5, 2002

Bacterial sulfate reduction in hydrothermal sediments of the Guaymas Basin, Gulf of California, Mexico—*Andreas Weber and Bo Barker Jørgensen****827

Iron in the western Pacific: A riverine or hydrothermal source for iron in the Equatorial Undercurrent?—*D. J. Mackey, J. E. O'Sullivan O'Sullivan, and R. J. Watson****877

EARTH AND PLANETARY SCIENCE LETTERS

Vol. 196, No. 3-4, 2002

- Factors contributing to high $\delta^{13}\text{C}$ values in Cryogenian limestones of western Mongolia—*Graham A. Shields, Martin D. Brasier, Peter Stille, and Dorj-iin Dorjnamjaa****99
- Origin of ^{226}Ra - ^{230}Th disequilibria in arc lavas from southern Chile and implications for magma transfer Time—*O. Sigmarsson, J. Chmeleff, J. Morris, and L. Lopez-Escobar****189
- The role of sediment recycling in EM-1 inferred from Os, Pb, Hf, Nd, Sr isotope and trace element systematics of the Pitcairn hotspot—*Jürgen Eisele, Mukul Sharma, Stephen J. G. Galer, Janne Blichert-Toft, Colin W. Devey, and Albrecht W. Hofmann****197
- Helium in the Archean komatiites revisited: Significantly high $^3\text{He}/^4\text{He}$ ratios revealed by fractional crushing gas extraction—*Takuya Matsumoto, Akihiro Seta, Jun-ichi Matsuda, Masamichi Takebe, Yuelong Chen, and Shoji Arai****213
- The control of lithium budgets in island arcs—*Paul B. Tomascak, Elisabeth Widom, Laurie D. Benton, Steven L. Goldstein, and Jeffrey G. Ryan****227

Vol. 197, No. 1-2, 2002

- Archaean boninite-like rocks in an intracratonic setting—*R. H. Smithies****19
- Relationship between the early Kerguelen plume and continental flood basalts of the paleo-Eastern Gondwanan Margins—*Stephanie Ingle, Dominique Weis, James S. Scoates, and Frederick A. Frey****35
- The Santa Rosa Event: $^{40}\text{Ar}/^{39}\text{Ar}$ and paleomagnetic results from the Valles rhyolite near Jaramillo Creek, Jemez Mountains, New Mexico—*Brad Singer and Laurie L. Brown****51
- Thallium isotope variations in seawater and hydrogenetic, diagenetic, and hydrothermal ferromanganese deposits—*Mark Rehkämper, M. Frank, J. R. Hein, D. Porcelli, A. Halliday, J. Ingri, and V. Liebetrau****65
- Very high slip rates on continental extensional faults: New evidence from (U-Th)/He thermochronometry of the Buckskin Mountains, Arizona—*Robert J. Brady****95
- Hot fingers in the mantle wedge: New insights into magma genesis in subduction zones—*Yoshihiko Tamura, Yoshiyuki Tatsumi, Dapeng Zhao, Yukari Kido, and Hiroshi Shukuno****105

Vol. 197, No. 3-4, 2002

- Constraints on the age and halogen composition of mantle fluids in Siberian coated diamonds—*R. Burgess, E. Layzelle, G. Turner, and J. W. Harris****193
- Probing Archean lithosphere using the Lu-Hf isotope systematics of peridotite xenoliths from Somerset Island kimberlites, Canada—*Stefanie S. Schmidberger, Antonio Simonetti, Don Francis, and Clément Gariépy****245
- Seismic evidence for a tilted mantle plume and north-south mantle flow beneath Iceland—*Yang Shen, Sean C. Solomon, Ingi Th. Bjarnason, Guust Nolet, W. Jason Morgan, Richard M. Allen, Kristin Vogfjörð, Steinun Jakobsdóttir, Ragnar Stefánsson, B. R. Julian, and G. R. Foulger****261
- Late Cretaceous-Cenozoic deformation of northeast Asia—*C. Gaina, W. R. Roest, and R. D. Müller****273
- Indirect dating of mafic intrusions by SHRIMP U-Pb analysis of monazite in contact metamorphosed shale: An example from the Palaeoproterozoic Capricorn Orogen, Western Australia—*Birger Rasmussen and Ian R. Fletcher****287

EARTH-SCIENCE REVIEWS

Vol. 57, No. 3-4, 2002

- Quantitative analysis of detrital modes: Statistically rigorous confidence regions in ternary diagrams and their use in sedimentary petrology—*Gert Jan Weltje****211
- Structural analysis of flow-related textures in lavas—*John V. Smith****279
- The Carolina Zone: Overview of Neoproterozoic to Early Paleozoic peri-Gondwanan terranes along the eastern flank of the southern Appalachians—*James P. Hibbard, Edward F. Stoddard, Donald T. Secor, and Allen J. Dennis****299

ENVIRONMENTAL GEOLOGY

Vol. 41 No. 8, 2002

Lead distribution on a public shotgun range—*James R. Craig, David Edwards, J. Donald Rimstidt, Patrick F. Scanlon, Thomas K. Collins, Oliver Schabenberger, and Jeffrey B. Birch****873

Environmental fluxes of arsenic from lignite mining and power generation in northern Thailand—*Vladimir N. Bashkin and Kanitta Wongyai****883

The geological and technical characterisation of Ömer-Gecek geothermal area and the environmental impact assessment of geothermal heating system in Afyon, Turkey—*Mustafa Yavuz Çelik and Eyüp Sabah****942

Natural hydrogeological laboratories: A new concept in regional hydrogeology studies. A case history from central Italy—*Roberto Salvati****960

Exploration of subsurface strata conditions for a limestone mining area in India with ground-penetrating radar—*K. K. Singh and R. K. Chauhan****966

Vol. 42 No. 1, 2002

Mineralogical characterization of microbial ferrihydrite and schwertmannite, and non-biogenic Al-sulfate precipitates from acid mine drainage in the Donghae mine area, Korea—*J. J. Kim, S. J. Kim, and K. Tazaki****19

Mineralogical-chemical composition and environmental risk potential of pond sediments at the geothermal field of Los Azufres, Mexico, Erratum—*P. Birkle and B. Merkel****116

ENVIRONMENTAL SCIENCE & TECHNOLOGY

Vol. 36, No. 7, 2002

Chemical speciation and toxicity of nickel species in natural waters from the Sudbury Area (Canada)—*Rupasri Mandal, Nouri M. Hassan, John Murimboh, Chuni L. Chakrabarti, Margaret H. Back, Ucu Rahayu, and David R. S. Lean****1477

Hg(II) adsorption by bacteria: A surface complexation model and its application to shallow acidic lakes and wetlands in Kejimikujik National Park, Nova Scotia, Canada—*Christopher J. Daughney, Steven D. Siciliano, Andrew N. Rencz, David Lean, and Danielle Fortin****1546

Advanced mercury removal from gold leachate solutions prior to gold and silver extraction: A field study from an active gold mine in Peru—*Matthew M. Matlock, Brock S. Howerton, Mike A. Van Aelstyn, Fredrik L. Nordstrom, and David A. Atwood****1636

Vol. 36, No. 8, 2002

Scavenging of As from acid mine drainage by schwertmannite and ferrihydrite: A comparison with synthetic analogues—*L. Carlson, J. M. Bigham, U. Schwertmann, A. Kyek, and F. Wagner****1712

Mechanisms of arsenic uptake from aqueous solution by interaction with goethite, lepidocrocite, mackinawite, and pyrite: An x-ray absorption spectroscopy study—*Morag L. Farquhar, John M. Charnock, Francis R. Livens, and David J. Vaughan****1757

EPISODES

Vol. 25, No.1, 2002

Marine minerals for the 21st century—*Peter A. Rona****2

EXPLORATION AND MINING GEOLOGY

Vol. 9, Nos. 3-4, 2000
Published March 20, 2002

- Petrology of the Mechanic Settlement pluton and related platinum-group element mineralization—*A.D. Paktunc****157
Geologic setting, geochemistry of alteration, and U-Pb age of hydrothermal zircon from the Silurian Stog'er Tight gold prospect, Newfoundland Appalachians, Canada—*J. Ramezani, G.R. Dunning, and M.R. Wilson****171
The geology of the volcanic-associated polymetallic (Zn, Cu, Ag and Au) Selbaie deposits, Abitibi, Quebec, Canada—*M.F. Tanner****189
Use of till geochemistry and mineralogy to outline areas underlain by diamondiferous spessartite dikes near Wawa, Ontario—*D. Thomas and C.F. Gleeson****215
Miocene epithermal Au-Ag vein mineralization, Dixie claims, Midas district, North-central Nevada; characteristics and controls—*E. Ioannou and E.T.C. Spooner****233
The Derni Cu-Co massive sulfide deposit, Qinghai Province, China: Ultramafic volcanic-hosted submarine-exhalative mineralization—*Y. Wang, K. Qin, Y. Tan, and Z. Hou****253
The geology, mineralogy, and occurrence of bedded sepiolite deposits in the Akçay-Yürükakçay (Eski, şehir) lacustrine basin, Central Turkey—*K. Sariiz****265
A Shaba-type Cu-Co (-Ni) deposit at Luamata, west of the Kabompo Dome, northwestern Zambia—*N.M. Steven****277

GEOCHEMICAL TRANSACTIONS, ROYAL SOCIETY OF CHEMISTRY

Vol. 3, No. 4, 2002

- Experimental determination of the hydrothermal solubility of ReS₂ and the Re-ReO₂ buffer assemblage and transport of rhenium under supercritical conditions—*Yongliang Xiong and Scott A. Wood****1
Inorganic speciation of dissolved elements in seawater: the influence of pH on concentration ratios—*Robert H. Byrne****11
Raman spectroscopic study of arsenite and thioarsenite species in aqueous solution at 25°C—*Scott A. Wood, C. Drew Tait, and David R. Janecky****31

GEOCHEMISTRY, EXPLORATION, ENVIRONMENT, ANALYSIS

Vol. 1, No. 4, 2001

- Dispersion of gold and associated elements in the lateritic regolith, Mystery Zone, Mt Percy, Kalgoorlie, Western Australia—*C.R.M. Butt****291
Gold mass balance in the regolith, Mystery Zone, Mt Percy, Kalgoorlie, Western Australia—*N.B. Sergeev and D.J. Gray****307
Hydrothermal alteration and geochemical dispersion in the regolith at Panglo, Eastern Goldfields, Western Australia—*K.M. Scott and R.W. Howard****313
Multi-element dispersion within salt-lake environments: case study of the buried Hannan South gold deposit, Western Australia—*L.M. Lawrance****323
Weathering in the Parkinson Pit and its implications for exploration in the Mt Magnet Mining District, Western Australia—*K.M. Scott****341
Regolith geology and geochemical exploration around the Stellar and Quasar gold deposits, Mt Magnet, Western Australia—*I.D.M. Robertson, J.D. King, and R.R. Anand****353
Komatiite volcanology, volcanological setting and primary geochemical properties of komatiite-associated nickel deposits—*R.E.T. Hill****365
Regolith mapping for geochemical exploration in the Yilgarn Craton, Western Australia—*M.A. Craig****383
Weathering, element distribution and geochemical dispersion at Mt Keith, Western Australia: implication for nickel sulphide exploration—*N.W. Brand and C.R.M. Butt****391

GEOCHEMISTRY, GEOPHYSICS, GEOSYSTEMS, G³

2002

- Strong heterogeneity caused by deep mantle layering—*P.J. Tackley****167
D/H ratios in basalt glasses from the Salas y Gomez mantle plume interacting with the East Pacific Rise: Water from old D-rich recycled crust or primordial water from the lower mantle?—*R.H. Kingsley, J.-G. Schilling, J.E. Dixon, P. Swart, R. Poreda, and K. Simons****199
Consequences of diffusive reequilibration for the interpretation of melt inclusions—*E. Cottrell, M. Spiegelman, and C.H. Langmuir****205

GEOCHEMISTRY INTERNATIONAL

Vol. 40, No. 4, 2002

- Compositions of minerals of the lamprophyllite group from alkaline massifs worldwide—*V.A. Zaitsev and L.N. Kogarko****313
Mineral formation and P–T parameters in the pana layered intrusion, Kola Peninsula, at the contact with country rocks—*Z.M. Voloshina, V.P. Petrov, V.K. Karzhavin, A.E. Borisov, and S.M. Karpov****323
Geochemical model for the lower crust in the pamir and tien shan folded areas, Tajikistan: Evidence from studies of xenoliths in alkaline mafic rocks—*V. S. Lutkov, V. V. Mogarovskii, and V.Ya. Lutkova****342
Hydrothermal effect on radiogenic argon diffusion in minerals from western erzgebirge granites—*A.S. Batyrmurzaev****366
Alkaline elements in tin and silver mineralization of different stages at the Pestrinskoe Ore Field, Northeastern Russia—*R.G. Kravtsova and O.I. Korkina****371
Geochemical relation of gold to NH₄⁺ in hydrothermal gold ore deposits—*V.I. Belevantsev, N.A. Roslyakov, and Yu.A. Kalinin****411

GEOCHIMICA ET COSMOCHIMICA ACTA

Vol. 66, No. 8, 2002

- Advances in lithium analysis in solids by means of laser-induced breakdown spectroscopy: An exploratory study—*Cécile Fabre, Marie-Christine Boiron, Jean Dubessy, Aliouka Chabiron, Bernard Charoy, and Tomas Martin Crespo****1401
Geochemistry of diffuse low-temperature hydrothermal fluids in the North Fiji basin—*Andrea Koschinsky, Richard Seifert, Peter Halbach, Michael Bau, Sabine Brasse, Leandro M. de Carvalho, and Nuno M. Fonseca****1409
Source, genesis, and timing of giant ignimbrite deposits associated with Ethiopian continental flood basalts—*Dereje Ayalew, Pierre Barbey, Bernard Marty, Laurie Reisberg, Gezahegn Yirgu, and Raphael Pik****1429
Vesiculation and vesicle loss in mid-ocean ridge basalt glasses: He, Ne, Ar elemental fractionation and pressure influence—*Philippe Sarda and Manuel Moreira****1449

GEOFLUIDS

Vol. 2, No. 1, 2002

- Geochemistry of the Bagnères-de-Bigorre thermal waters from the North Pyrenean Zone (France)—*S. Levet, J.P. Toutain, M. Munoz, G. Berger, P. Negrel, N. Jendrzewski, P. Agrinier, and F. Sortino****25
Petroleum infiltration of high-grade basement, South Norway: Pressure-Temperature-time-composition (P-T-t-X) constraints—*I.A. Munz, B.W.D. Yardley, and S.A. Gleeson****41

GEOLOGICAL MAGAZINE

Vol. 139, No. 1, 2002

- Geochemical and isotopic studies of the sedimentary and granitic rocks of the Altai orogen of northwest China and their tectonic implications—*Bin Chen and Bor-Ming Jahn****1
- The emplacement of peridotites and associated oceanic rocks from the Lizard Complex, southwest England—*C.A. Cook, R.E. Holdsworth, and M.T. Styles****27
- Early Proterozoic nappe formation: An example from Sodankylä, Finland, Northern Baltic Shield—*P.M. Evins and K. Laajoki****73

GEOLOGICAL SOCIETY OF AMERICA BULLETIN

Vol. 114, No. 5, 2002

- Tectonic history of a Jurassic backarc-basin sequence (the Gran Cañon Formation, Cedros Island, Mexico), based on compositional modes of tuffaceous deposits. Salvatore Critelli—*Kathleen M. Marsaglia and Cathy J. Busby****515
- Tightening the Belt: Paleomagnetic-stratigraphic constraints on deposition, correlation, and deformation of the Middle Proterozoic (ca. 1.4 Ga) Belt-Purcell Supergroup, United States and Canada—*D.P. Elston, R.J. Enkin, J. Baker, and D.K. Kisilevsky****619

GEOLOGY

Vol. 30, No. 5, 2002

- Northern Galápagos Province: Hotspot-induced, near-ridge volcanism at Genovesa Island—*Karen S. Harpp, Karl R. Wirth, and Daniel J. Korich****399
- Mass wasting, methane venting, and biological communities on the Mendocino transform fault—*Debra S. Stakes, Anne M. Trehu, Shana K. Goffredi, Thomas H. Naehr, and Robert A. Duncan****407
- How many plates?—*Don L. Anderson****411
- Mantle shear zones revisited: The connection between the cratons and mantle dynamics—*Lori A. Kennedy, J. Kelly Russell, and Maya G. Kopylova****419
- Miocene rifting in the Los Angeles basin: Evidence from the Puente Hills half-graben, volcanic rocks, and P-wave tomography—*Tom Bjorklund, Kevin Burke, Hua-wei Zhou, and Robert S. Yeats****451
- Extreme chemical heterogeneity of granite-derived hydrothermal fluids: An example from inclusions in a single crystal of miarolitic quartz—*Vadim S. Kamenetsky, Esme van Achterbergh, Chris G. Ryan, Vladimir B. Naumov, Terrence P. Mernagh, and Paul Davidson****459

Vol. 30, No. 6, 2002

- Tropical laterites, life on land, and the history of atmospheric oxygen in the Paleoproterozoic—*Nicolas J. Beukes, Herman Dorland, Jens Gutzmer, Munetomo Nedachi, and Hiroshi Ohmoto****491
- Slab-derived fluids and quartz-vein formation in an accretionary prism, Otago Schist, New Zealand—*Christopher M. Breeding and Jay J. Ague****499
- Breathing of the seafloor: Tidal correlations of seismicity at Axial volcano—*Maya Tolstoy, Frank L. Vernon, John A. Orcutt, and Frank K. Wyatt****503
- Extreme enrichment of high field strength elements in Jericho eclogite xenoliths: A cryptic record of Paleoproterozoic subduction, partial melting, and metasomatism beneath the Slave craton, Canada—*Larry M. Heaman, Robert A. Creaser, and Harrison O. Cookenboo****507
- Sedimentary pyrite: A window into the microbial past—*Jürgen Schieber****531
- Hot orogens, tectonic switching, and creation of continental crust—*W.J. Collins****535
- Formation of Archean continental lithospheric roots: The role of mantle plumes—*Derek A. Wyman and Robert Kerrich****543
- Active detachment faulting above the Peruvian flat slab—*Brendan McNulty and Daniel Farber****567

GEOLOGY OF ORE DEPOSITS

Vol. 44, No. 2, 2002

- Mineralogy, Composition of Inclusions, and Cathodoluminescence of Carbonado from Bahia State, Brazil—*A.B. Makeev, W. Ivanuch, S.K. Obyden, G.V. Saparin, and V.N. Filippov****87
- Precious Metals and Carbonaceous Substance in Ores of the Sukhoi Log Deposit (Eastern Siberia, Russia)—*E.A. Razvozzhaeva, V.Yu. Prokof'ev, A.M. Spiridonov, D.Kh. Martikhaev, and S.I. Prokopchuk****103
- Geochemical Model of the Formation of the Spokoininsk Tungsten Deposit (Eastern Transbaikal Region, Russia)—*S.S. Matveeva, M.Yu. Spasennykh, T.M. Sushchevskaya, A.Yu. Bychkov, and A.V. Ignat'ev****111
- Phosphate-Rare Metal Carbonatites of the Belaya Zima Massif (Eastern Sayan, Russia)—*Yu.A. Bagdasarov****132
- The Monchegorsk Ore District as an example of the Paleoproterozoic ore-bearing chamber structure (Kola Peninsula, Russia)—*V.V. Chashchin, T.B. Bayanova, and E.A. Apanasevich****142
- On cognition of giant ore gold deposits: Review and bibliography—*I.N. Tomson****150

GEOPHYSICAL RESEARCH LETTERS

Vol. 29, No. 6, 2002

- Upper mantle structure of the Kaapvaal craton from surface wave analysis—a second look—*Rebecca L. Saltzer****3702

Vol. 29, No. 7, 2002

- The initiation of orogenic margin reverse faulting—*R.C. Bailey****3102
- Fluid in mineral interfaces—molecular simulations of structure and diffusion—*D.K. Dysthe, F. Renard, F. Porcheron, and B. Rousseau****3208
- The uppermost mantle beneath the Kenya dome and relation to melting, rifting and uplift in East Africa—*Paul M. Davis and Philip D. Slack****3676
- Magmatic activity beneath the quiescent Three Sisters volcanic center, central Oregon Cascade Range, USA—*Charles W. Wicks, Daniel Dzurisin, Steven Ingebritsen, Wayne Thatcher, Zhong Lu, and Justin Iverson****4205
- Equation of state of the hydrous phase?-AlOOH at room temperature up to 22.5 GPa—*Carine B. Vanpeteghem, Eiji Ohtani, and Tadashi Kondo****4224

GEOTECTONICS

Vol. 36, No. 2, 2002

- Upper Devonian clastic rock complexes in the geological history of the South Urals—*G.A. Mizens****124
- Structure associations and kinematics of the Central Karelian Shear Zone (Baltic Shield)—*S.Yu. Kolodyazhnyi****139

GEO THERMICS

Vol. 31, No. 3, 2002

- Mass transfer from hot dry rock to water flowing through a circular fracture—*Masato Yamamura and Fumimaru Ogino****283
- Monitoring production using surface deformation: The Hijiori test site and the Okuaizu geothermal field, Japan—*Don W. Vasco, Kenzi Karasaki, and Osamu Nakagome****303
- The Sudetic geothermal region of Poland—*Jan Dowgiao****343
- Change in color of the hot spring deposits at the Chinoike-Jigoku hot pool, Beppu geothermal field—*Kazuthoshi Oue, Shinji Ohsawa, and Yuki Yusa****361
- Reservoir engineering assessment of Dubti geothermal field, Northern Tendaho Rift, Ethiopia—*Alfredo Battistelli, Amdeberhan Yiheyis, Claudio Calore, Corrado Ferragina, and Wale Abatneh****381

GFF: JOURNAL OF THE GEOLOGICAL SOCIETY OF SWEDEN

Vol. 124, No. 1, 2002

- Palaeomagnetism of Mesoproterozoic dykes from the Protogine Zone, southern Sweden and the enigmatic Sveconorwegian Loop—*G. Bylund and S.A. Pisarevsky****11
- ^{187}Re - ^{187}Os evidence for crustal lenses of Svecofennian age within the Mylonite Zone, SW Sweden—*A. Scherstén****35
- Hurlbutite, the first Be mineral from Västana iron mine, Skåne, Sweden—*D. Svensson, S. Hanson, and J.-O. Bovin****41
- Geochemistry and age of two orthogneisses in the Proterozoic Mjosa-Vanern ore district, southwestern Scandinavia—*E. Alm, K. Sundblad, and H. Schöberg****45

INTERNATIONAL GEOLOGY REVIEW

No. 12, 2001

- Initiation and long-term slip history of the Altyn Tagh Fault—*Yongjun Yue, Bradley D. Ritts, and Stephan A. Graham****1087
- Origin of the felsic and basaltic dikes and flows in the Rajula-Palitana-Sihor Area of the Deccan Traps, Saurashtra, India: A geochemical and geochronological study—*Nilanjan Chatterjee and Somdev Bhattacharji****1094
- Geology and geotectonic classification of Pan-African gold mineralizations in the Red Sea Hills, Sudan—*Yousif Elsamani, Abd Allah Almuslem, and Mohamed El Tokhi****1117
- Conductivity structure along the Gediz Graben, West Anatolia, Turkey: Tectonic implications—*Aysan Gürer, Ö. Feyzi Gürer, Alaattin Pinçe, and O. Metin Ilkisik****1129

INTERNATIONAL JOURNAL OF MINERAL PROCESSING

Vol. 65, No. 1, 2002

- Application of natural gamma radiometric equipment in an underground mine in Spain—*M. Cruz Álvarez Álvarez and M Teresa Dopico Vivero****1

JOURNAL OF AFRICAN EARTH SCIENCES

Vol. 33, No. 2, 2001

- Tectonic evolution of the Allaqi shear zone and implications for Pan-African terrane amalgamation in the south Eastern Desert, Egypt—*Y.A.H.A. El-Kazzaz and W.E.G. Taylor****177
- Structural and tectonic evolution of the Umm Gheig/El-Shush region, central Eastern Desert of Egypt—*S. Ibrahim and J. Cosgrove****199
- Pan-African nappe system in southwest Nigeria: The Ife-Ilesha schist belt—*R. Caby and J.M. Boessé****211
- Geochemistry and petrogenesis of Pan-African late- to post-orogenic younger granitoids at Shalatin-Halaib, south Eastern Desert, Egypt—*A. El-Nisr, M.M. El-Sayed, and G.M. Saleh****261
- Geochemistry, geochronology and isotope geology of Nakfa intrusive rocks, northern Eritrea: Products of a tectonically thickened Neoproterozoic arc crust—*M. Teklay, A. Kröner, and K. Mezger****283
- Constrictional deformation in the Central Zone of the Damara Orogen, Namibia—*L.C. Poli and G.J.H. Oliver****303
- A titanite fission track profile across the southeastern Archæan Kaapvaal Craton and the Mesoproterozoic Natal Metamorphic Province, South Africa: Evidence for differential cryptic Meso- to Neoproterozoic tectonism—*J. Jacobs and R.J. Thomas****323
- Mineral and fluid inclusion study of emeralds from the Lake Manyara and Sumbawanga deposits, Tanzania—*I. Moroz, Y. Vapnik, I. Eliezri, and M. Roth****377
- Origin of tourmaline in the metamorphosed Sikait pelitic belt, south Eastern Desert, Egypt—*H.Z. Harraz and M.F. El-Sharkawy****391

JOURNAL OF ASIAN EARTH SCIENCES

Vol. 20, No. 5, 2002

- Invisible gold within sulfides from the Archean Hutti-Maski schist belt, Southern India—*I. Saha and A.S. Venkatesh****449
- Records of the evolution of the Himalayan orogen from in situ Th-Pb ion microprobe dating of monazite: Eastern Nepal and western Garhwal—*E. J. Catlos, T. M. Harrison, C.E. Manning, M. Grove, S.M. Rai, M.S. Hubbard, and B.N. Upreti****459
- Thermal evidence for early Cretaceous metamorphism in the Shyok suture zone and age of the Khardung volcanic rocks, Ladakh, India—*W.J. Dunlap and R. Wysoczanski****481
- Sediment-hosted micro-disseminated gold mineralization constrained by basin paleo-topographic highs in the Youjiang basin, South China—*Jianming Liu, Jie Ye, Hanlong Ying, Jiajun Liu, Minghua Zheng, and Xuexiang Gu****517

JOURNAL OF GEOCHEMICAL EXPLORATION

Vol. 75, No. 1-3, 2002

- Applications of magnetic sector ICP-MS in geochemistry—*Hans-Eike Gäbler****1
- Chemical characteristics of groundwater around two massive sulphide deposits in an area of previous mining contamination, Iberian Pyrite Belt, Spain—*Hélène Pauwels, Marie-Lou Tercier-Waeber, Miguel Arenas, Ricardo Castroviejo, Yves Deschamps, Arnault Lassin, Flavio Graziottin, and Francisco-Javier Elorza****17
- Supergene mineralization in mining residues of the Matchless cupreous pyrite deposit (Namibia) – a clue to the origin of modern and fossil duricrusts in semiarid climates—*H.G. Dill, H. Pöllmann, K. Bosecker, L. Hahn, and S. Mwiya****43
- Trace metal occurrence in a mineralised and a non-mineralised spodosol in northern Sweden—*Magnus Land, Jonas Thunberg, and Björn Öhlander****71
- Combining dissolved, suspended and bed load stream geochemistry to explore for volcanic massive sulfide deposits: Big Salmon Complex, northern British Columbia—*Kevin Telmer, Heidi E. Pass, and Stephen Cook****107

JOURNAL OF GEOPHYSICAL RESEARCH - SOLID EARTH

Vol. 107, No. B4, 2002

- Mechanisms of normal fault development at mid-ocean ridges—*Mark D. Behn, Jian Lin, and Maria T.Zuber****503
- Calculation of dike trajectories from volcanic centers—*Catherine Mériaux and John R.Lister****436
- New evidence for syntectonic fluid migration across the hinterland-foreland transition of the Canadian Cordillera—*Stuart R Knoop, Lori A. Kennedy, and Gregory M.Dipple****217
- Homogeneous bubble nucleation in rhyolitic magmas: An experimental study of the effect of H₂O and CO₂C.C.—*Mourtada-Bonnefoi and D.Laporte****290
- Insights into the mechanism for orogen-related carbonate remagnetization from growth of authigenic Fe-oxide: A scanning electron microscopy and rock magnetic study of Devonian carbonates from northern Spain—*Arlo B. Weil and Rob Van der Voo****200
- Loading and unloading of sedimentary basins: The effect of rheological hysteresis—*A.C. Fowler and Xin-She Yang****389

JOURNAL OF PETROLOGY

Vol. 43, No. 4, 2002

- Origin of geochemical variability by arc-continent collision in the Biru Area, Southern Sulawesi (Indonesia)—*Marlina A. Elburg, Theo Van Leeuwen, John Foden, and Muhardjo****581
- Evolution of crystallizing interstitial liquid in an arc-related cumulate determined by LA ICP-MS mapping of a large amphibole oikocryst—*William P. Meurer and Dick T. Claeson****607
- Origin of low-k intermediate lavas at Nekoma Volcano, NE Honshu Arc, Japan: Geochemical constraints for lower-crustal melts—*Jun-Ichi Kimura, Takeyoshi Yoshida, and Shigeru Iizumi****631

- Petrogenesis and implications of calc-alkaline cryptic hybrid magmas from Washburn Volcano, Absaroka Volcanic Province, USA—*T.C. Feeley, M.A. Cosca, and C.R. Lindsay****663
- Ancient and modern subduction zone contributions to the mantle sources of lavas from the Lassen Region of California inferred from Lu–Hf isotopic systematics—*Lars E. Borg, Janne Blichert-Toft, and Michael A. Clyne****705
- Metamorphic conditions and fluid compositions of scapolite-bearing rocks from the Lapis Lazuli Deposit at Sare Sang, Afghanistan—*Shah Wali Faryad****725

Vol. 43, No. 5, 2002

- Kinetic controls on the partitioning of trace elements between silicate and sulfide liquids—*J. E. Mungall****749
- High-grade fluid metasomatism on both a local and a regional scale: The Seward Peninsula, Alaska, and the Val Strona di Omegna, Ivrea–Verbano Zone, Northern Italy. Part I: Petrography and silicatemineral chemistry—*Daniel E. Harlov and Hans-Jürgen Förster****769
- High-Grade Fluid Metasomatism on both a local and a regional scale: The Seward Peninsula, Alaska, and the Val Strona di Omegna, Ivrea–Verbano Zone, Northern Italy. Part II: Phosphate mineral chemistry—*Daniel E. Harlov and Hans-Jürgen Förster****801
- Mantle Xenoliths from Tenerife (Canary Islands): Evidence for reactions between mantle peridotites and silicic carbonatite melts inducing Ca metasomatism—*E.-R. Neumann, E. Wulff-Pedersen, N.J. Pearson, and E.A. Spencer****825
- Petrology and geochemistry of Volcán Cerro Azul: Petrologic diversity among the Western Galápagos volcanoes—*Terry Naumann, Dennis Geist, and Mark Kurz****859
- Gabbroic pegmatite intrusions, Iberia Abyssal Plain, ODP Leg 173, Site 1070: Magmatism during a transition from non-volcanic rifting to sea-floor spreading—*James S. Beard, Paul D. Fullagar, and A. Krishna Sinha****885
- Petrogenesis of early neogene magmatism in the Northern Puna: Implications for magma genesis and crustal processes in the Central Andean Plateau—*Pablo J. Caffee, Robert B. Trumbull, Beatriz L. Coira, and Rolf L. Romer****907

JOURNAL OF SEDIMENTARY RESEARCH

Vol. 72, No. 3, 2002

- Is quartz cathodoluminescence color a reliable provenance tool? A quantitative examination—*Sam Boggs, Jr., Young-Ihn Kwon, Gordon G. Goles, Brian G. Rusk, David Krinsley, and Abbas Seyedolali****408

Vol. 73, No. 4, 2002

- Atmospheric dust and algal dominance in the late Paleozoic: A hypothesis—*G.S. (Lynn) Soreghan and Michael J. Soreghan****

JOURNAL OF SOUTH AMERICAN EARTH SCIENCES

Vol. 15, No. 1, 2002

Special Issue on flat-slab subduction in the Andes—*Victor Ramos and Brendan McNulty****1

- Andean subduction styles and their effect on thermal structure and interplate coupling—*Marc-André Gutscher****3,
- Seismotectonic and stress distribution in the central Chile subduction zone—*M. Pardo, D. Comte, and T. Monfret****11
- The Challenger-Juan Fernández-Maipo major tectonic transition of the Nazca-Andean subduction system at 33-34°S: Geodynamic evidence and implications—*G. Yáñez, J. Cembrano, M. Pardo, C. Ranero, and D. Selles****23
- Magmatism as a probe to the Neogene shallowing of the Nazca plate beneath the modern Chilean flat-slab—*Suzanne Mahlburg Kay and Constantino Mpodozis****39
- The Pampean flat-slab of the Central Andes—*Victor A. Ramos, E.O. Cristallini, and Daniel J. Pérez****59
- Geological setting of the Argentine Frontal Cordillera in the flat-slab segment (30°00'-31°30'S latitude)—*N. Heredia, L.R. Rodríguez Fernández, G. Gallastegui, P. Busquets, and F. Colombo****79

- Structural evolution of the Andes in a transitional zone between flat and normal subduction (33°30'-33°45'S), Argentina and Chile—*L.B. Giambiagi and V.A. Ramos****101
- Evidence for Cenozoic extensional basin development and tectonic inversion south of the flat-slab segment, southern Central Andes, Chile (33°-36°S.L.)—*R. Charrier, O. Baeza, S. Elgueta, J.J. Flynn, P. Gans, S.M. Kay, N. Muñoz, A.R. Wyss, and E. Zurita****117
- The structural and stratigraphic evolution of the La Rioja basin, Argentina—*Nathan D. Fisher, Teresa E. Jordan, and Larry Brown****141

JOURNAL OF STRUCTURAL GEOLOGY

Vol. 24, No. 6-7, 2002

Special Issue on Microstructures

- Microprobe monazite geochronology: Putting absolute time into microstructural analysis—*Michael L. Williams and Michael J. Jercinovic****1013
- Experimental study of syntaxial vein growth during lateral fluid flow in transmitted light: First results—*Christoph Hilgers and Janos L. Urai****1029
- Finite-element modelling of shear zone development in viscoelastic materials and its implications for localisation of partial melting—*Neil S. Mancktelow****1045
- Finite element modelling of the evolution of pressure solution cleavage—*Frank Fueten, Pierre-Yves F. Robin, and Michael Schweinberger****1055
- Competency contrast, kinematics, and the development of foliations and lineations in the crust—*Laurel B. Goodwin and Basil Tikoff****1065
- Interaction of flexural shear, S-C fabrics, and oblique shear during folding of micaceous quartzite—*J. Hippertt and E. Tohver****1087

JOURNAL OF THE GEOLOGICAL SOCIETY, LONDON

Vol. 159, No. 3, 2002

- Ore genesis age of the Tharsis Mining District (Iberian Pyrite Belt): A palynological approach—*F. González, C. Moreno, R. Sáez, and G. Clayton****229
- Mid-crustal partitioning and attachment during oblique convergence in an arc system, Palaeoproterozoic Ketilidian orogen, southern Greenland—*A.A. Garde, B. Chadwick, J. Grocott, M.A. Hamilton, K.J.W. Mccauffrey, and C.P. Swager****247
- Differential neotectonic rotations in Anatolia and the Tauride Arc: Palaeomagnetic investigation of the Erenlerdag Volcanic Complex and Isparta volcanic district, south-central Turkey—*O. Tatar, H. Gürsoy, and J.D.A Piper****281
- Palaeozoic tectonic evolution of the Middle Urals in the light of the ESRU seismic experiments—*M. Friberg, C. Juhlin, M. Beckholmen, G.A. Petrov, and A.G. Green****295
- Composition and Cretaceous thermal structure of the upper mantle beneath the Damara Mobile Belt: Evidence from nephelinite-hosted peridotite xenoliths, Swakopmund, Namibia—*K. Whitehead, A. le Roex, C. Class, and D. Bell****307
- Dating the Late Precambrian volcanicity of England and Wales—*W. Compston, A.E. Wright, and P. Toghiani****323

JOURNAL OF THE GEOLOGICAL SOCIETY OF INDIA

Vol. 59, No. 4, 2002

- Gold – India's passion for possession: A survey—*L.C. Curtis and B.P. Radhakrishna****291
- Uranium mineralisation in the Neoproterozoic Bhima Basin at Gogi and near Ukinal: An ore petrological study—*R. Dhana Raju, Maryu K. Kumar, E.V.S.S.K. Babu, and S.A. Pandit****299
- Malanjkhand Copper Deposit, India: Is it not a porphyry type?—*D.B. Sikka and C.E. Nehru****339

Bihar Mica Belt Plutons – an example of post-orogenic granite from Eastern Indian Shield—*Saumitra Misra and Somnath Dey****363

Incidence of gold in subgreenschist facies to greenschist facies metabasalt of Bhowali, Nainital District, Uttaranchal—*Ravi Shanker, S. Nag, and S. Shome****379

JOURNAL OF VOLCANOLOGY AND GEOTHERMAL RESEARCH

Vol. 113, No. 1-2, 2002

Variations in magnetic anisotropy and opaque mineralogy along a kilometer deep profile within a vertical dyke of the syenogranite porphyry at Cínovec (Czech Republic)—*František Hrouda, Marta Chlupáková, and Jiří K. Novák****37

Rayleigh scattering by aqueous colloidal silica as a cause for the blue color of hydrothermal water—*Shinji Ohsawa, Takao Kawamura, Nobuki Takamatsu, and Yuki Yusa****49

Chemical variations of tephra-fall deposit leachates for three eruptions from Popocatepetl volcano—*M.A. Armienta, S. De la Cruz-Reyna, O. Morton, O. Cruz, and N. Cenicerós****61

Chemical equilibria of thermal waters for the application of geothermometers from the Guanzhong basin, China—*Zheng Xilai, Halldor Armannsson, Li Yongle, and Qiu Hanxue****119

The Quetzalapa Pumice: A voluminous late Pleistocene rhyolite deposit in the eastern Trans-Mexican Volcanic—*Sergio-Raúl Rodríguez, Claus Siebe, Jean-Christophe Komorowski, and Michael Abrams****177

A comparison between subaerial and submarine eruptions at Kilauea Volcano, Hawaii: Implications for the thermal viability of lateral feeder dikes—*Elisabeth A. Parfitt, Tracy K.P. Gregg, and Deborah K. Smith****213

Shear viscosity of rhyolite-vapor emulsions at magmatic temperatures by concentric cylinder rheometry—*Daniel J. Stein and Frank J. Spera****243

The proximal part of the giant submarine Wailau landslide, Molokai, Hawaii—*David A. Clague and James G. Moore****259

LITHOLOGY AND MINERAL RESOURCES

Vol. 37, No. 3, 2002

Mud volcanoes, their distribution regularities and genesis: Communication 1. Mud volcanic provinces and morphology of mud volcanoes—*V.N. Kholodov****197

Catagenetic mineralization in the platform cover of the Mikhailov Deposit, Kursk Magnetic Anomaly—*Yu. G. Tsekhovskii, V.Yu. Lavrushin, V.N. Kuleshov, E.V. Shchepetova, I.E. Stukalova, L.P. Nosik, V.Yu. Prokof'ev, and A.V. Areshin****210

The lithogenic nature of some gold deposits in carbonaceous–terrigenous sequences—*S.G. Parada****239

Ore-clastic olistostromes, ore clasts, and allochthonous antimony–mercury deposits in the Alay Range, southern Tien Shan—*V.I. Belousov****251

Mobility of phosphorus during the weathering of volcanic ashes—*S.B. Felitsyn and V.Yu. Kirianov****275

MARINE GEOLOGY

Vol. 181, No. 4, 2002

Sulphide mineralisation in the deep sea hydrothermal vent polychaete, *Alvinella pompejana*: Implications for fossil preservation—*Ellis J. Maginn, Crispin T.S. Little, Richard J. Herrington, and Rachel A. Mills****337

Vol. 182, No. 3-4, 2002

Fast-growing, shallow-water ferro-manganese nodules from the western Baltic Sea: Origin and modes of trace element incorporation—*S. Hlawatsch, T. Neumann, C.M.G. van den Berg, M. Kersten, J. Harff, and E. Suess****373

Late Quaternary hydrothermal sedimentation adjacent to the Central Lau Spreading Center—*L.W. Daesslé and D.S. Cronan****389

MARINE GEORESOURCES AND GEOTECHNOLOGY

Vol. 20, No. 1, 2002

Diagenetically modified buried hydrothermal manganese crusts from the Lau Basin, S.W. Pacific—*D.S. Cronan, R. Hodkinson, and T.D.S. Rogers****51

Heavy minerals concentration along the Baluchistan Coast, Pakistan from Gadani to Phornala—*M.A. Chaudry, M.Q. Memon, and M. Danish****73

MINERALOGY AND PETROLOGY

Vol. 75, No. 1-2, 2002

Geochemistry of metasomatised spinel peridotite xenoliths from the Dariganga Plateau, South-eastern Mongolia—*V.A. Kononova, G. Kurat, A. Embey-Isztin, V.A. Pervov, C. Koeberl, and F. Brandstätter****1

Fluorine mineralisation from burning coal spoil-heaps in the Russian Urals—*E.V. Sokol, E.N. Nigmatulina, and N.I. Volkova****23

Petrology and geochemistry of Pan-African granitoids, Kab Amiri area, Egypt - implications for tectonomagmatic stages in the Nubian Shield evolution—*A.M. Moghazi****41

Kristiansenite, a new calcium-scandium-tin sorosilicate from granite pegmatite in Tørdal, Telemark, Norway—*G. Raade, G. Ferraris, A. Gula, G. Ivaldi, and F. Bernhard****89

Geochemistry and petrography of gold-quartz-tourmaline veins of the Okote area, southern Ethiopia: implications for gold exploration—*D.J. Deksissa and C. Koeberl****101

MINERALS ENGINEERING

Vol. 15, No. 4, 2002

The influence of cathodic reduction, Fe^{2+} and Cu^{2+} ions on the electrochemical dissolution of chalcopyrite in acidic Solution—*A.E. Elsherief****215

Enhanced dissolution of minerals: Conjoint effects of particle size and microtopography—*Desmond Tromans and John A. Meech****263

NATURE

No. 416, 2002

Geobacter metallireducens accesses insoluble Fe(III) oxide by Chemotaxis—*Susan E. Childers, Stacy Ciuffo, and Derek R. Lovley****767

No. 417, 2002

A new phylum of Archaea represented by a nanosized hyperthermophilic symbiont—*Harald Huber, Michael J. Hohn, Reinhard Rachel, Tanja Fuchs, Verena C. Wimmer, and Karl O. Stetter****63

Microbiology: Eukaryotic diversity in Spain's River of Fire—*Linda A. Amaral Zettler, Felipe Gómez, Erik Zettler, Brendan G. Keenan, Ricardo Amils, and Mitchell L. Sogin****137

Ocean productivity before about 1.9 Gyr ago limited by phosphorus adsorption onto iron oxides—*Christian J. Bjerrum and Donald E. Canfield****159

Phylogeny: A non-hyperthermophilic ancestor for Bacteria—*Céline Brochier and Hervé Philippe****244

NEUES JAHRBUCH FÜR MINERALOGIE – MONATSFESTE

No. 4, 2002

- Bismutocolumbite, $\text{Bi}(\text{Nb}_{0.79}\text{Ta}_{0.21})\text{O}_4$, stibiocolumbite, $\text{Sb}(\text{Nb}_{0.67}\text{Ta}_{0.33})\text{O}_4$, and their structural relation to the other ABO_4 minerals with stibiotantalite (SbTaO_4) structure—*N.V. Zubkova, D.Yu. Pushcharovsky, G. Giester; A.S. Smolin, E. Tillmanns, F. Brandstätter, V. Hammer, I.S. Peretyazhko, A.N. Sapozhnikov, and A.A. Kashaev****145
- Cattiite, $\text{Mg}_3(\text{PO}_4)_2 \cdot 22\text{H}_2\text{O}$, a new mineral from Zhelezny Mine (Kovdor Massif, Kola Peninsula, Russia)—*Sergey N. Britvin, Giovanni Ferraris, Gabriella Ivaldi, Alla N. Bogdanova, and Nikita V. Chukanov****160

No. 5, 2002

- On the occurrence of selenium in sulfides of the ore deposit of Baccu Locci (Gerrei, SE Sardinia)—*Ida Venerandi Pirri****207

ORE GEOLOGY REVIEWS

Vol. 19, No 3-4, 2002

- Metallogeny of gold in relation to the evolution of the Nubian Shield in Egypt—*Nagy Shawky Botros****137
- Uranium isotopic evidence for the origin of the Bahariya iron deposits, Egypt—*Adel A. Dabous****165
- SHRIMP U-Pb zircon geochronology of granitoids from Dongping area, Hebei Province, China: Constraints on tectonic evolution and geodynamic setting for gold metallogeny—*Laicheng Miao, Yumin Qiu, Neal McNaughton, Zhenkuan Luo, David Groves, Yusheng Zhai, Weiming Fan, Mingguo Zhai, and Kang Guan****187

Vol. 20, No 1-2, 2002

- Ore mineralogy of PGM placers in Siberia and the Russian Far East—*Nadezhda Tolstykh, Aleksandr Krivenko, Evgeniy Sidorov, Kauko Laajoki, and Maksim Podlipsky****1
- The geometry and anatomy of the Los Pijiguas bauxite deposit, Venezuela—*F. Michael Meyer, Uwe Happel, Joachim Hausberg, and Annemarie Wiechowski****27
- Characteristics and conditions of formation of an excellent fossil wood cell texture from the vein copper deposits in—Lanping-Simao basin, SW China—*Jiajun Liu, Yuping Liu, Chaoyang Li, Qian Zhang, Zhiming Li, Mingqin He, Shirong Liu, and Shuxun Shao****55
- Genesis of the Eastern Paratethys manganese ore giants: Impact of events at the Eocene/Oligocene Boundary—*Igor M. Varentsov****65

ORGANIC GEOCHEMISTRY

Vol. 33, No 5, 2002

- Molecular distributions and geochemical implications of pyrrolic nitrogen compounds in the Permian Phosphoria Formation derived oils of Wyoming—*James E. Silliman, Maowen Li, Huangxin Yao, and Rong Hwang****527

PHOTOGRAMMETRIC ENGINEERING AND REMOTE SENSING

Vol. 68, No 4, 2002

- Special Issue on Advances and Applications of GIS in China—*Jun Chen and Zhilin Li****294

PHYSICS AND CHEMISTRY OF MINERALS

Vol. 29, No. 3, 2002

Experimental investigation of the origin of majoritic garnet inclusions in diamonds—*T. Gasparik****170

Vol. 29, No. 4, 2002

Low-temperature crystal structures of stibnite implying orbital overlap of Sb 5s² inert pair electrons—*A. Kyono, M. Kimata, M. Matsuhisa, Y. Miyashita, and K. Okamoto****254

PROCEEDINGS OF THE RUSSIAN MINERALOGICAL SOCIETY

Vol. 130, No 5, 2002

Platinum-palladium and gold-silver mineralization in carbonatite ores of the Loolekop deposit (Phalaborwa massif, South Africa—*N.S. Rudashevsky, Yu.L. Kretser, A.G. Bulakh, N.I. Krasnova, V.N. Rudashevsky, and P.I. Karchevsky****21

Achtarandite from the Talnakhskeye ore field area. The second occurrence of achtarandite—*P.A. Pletnev, M.S. Alferova, and E.M. Spiridonov****74

Semiconductor typomorphism of pyrite from massive sulfide ore (with the example of the Dzhusinskoye deposit, southern Urals)—*A.A. Burtsev and I.A. Bogush****78

Ca-Sr-Ba carbonates from carbonatites of the Kola Peninsula—*N.V. Sorokhtina, A.V. Voloshin, and Ya.A. Pakhomovsky****91

Vol. 130, No 6, 2002

Mineralogical mapping of ore areas: Targets, methods, applied efficiency, complexing. 1. The common principles of mineralogical mapping—*A.G. Zhabin, I.Z. Isakovich, and V.B. Chekvaizde****15

On the history of mineral discoveries and a look to the future—*A.G. Bulakh, A.A. Zolotarev, and S.V. Britvin****42

Stages and zonation of epigenetic mineralization in jaspilites of Mikhailovskoye banded iron ore deposit (KMA)—*S.V. Kashin, E.V. Plyushchev, and N.V. Popkova****95

QUATERNARY INTERNATIONAL

Vol. 92, No 1, 2002

Environmental impact of diamond mining on continental shelf sediments off southern Namibia—*J. Rogers and X. C. Li****101

RESOURCE GEOLOGY

Vol. 51, No 4, 2002

A Special Issue Devoted to the Geology and Mineralization of the Southern Da Hinggan Mountains Area, Inner Mongolia, China

Geo-tectonic Position of tin polymetallic mineralization zone in the southern Da Hinggan Mountains Area, Inner Mongolia, China:

An introduction to this Special Issue—*Shihua Sun and Shin-ichi Akiyama****257

Tin-polymetallic mineralization in the southern part of the Da Hinggan Mountains, China—*Jing Bin Wang, Yu Wang Wang, Li Juan Wang, and Takeshi Uemoto****283

The upper permian sedimentary facies and its role in the Dajing Cu-Sn Deposit, Linxi County, Inner Mongolia, China—*Gongjiong Qin, Yosuke Kawachi, Liqing Zhao, Yongzheng Wang, and Qiang Ou****293

Geology and mineralization at the Dajing Tin-polymetallic Ore Deposit, Inner Mongolia, China—*Yu Wang Wang, Jing Bin Wang, Takeshi Uemoto, and Li Juan Wang****307

- Petrogenetic and metallogenetic background of the Dajing Cu-Sn-Ag-Pb-Zn Ore Deposit, Inner Mongolia, and characteristics of the mineralizing fluid—*Wei Liu, Xin-Jun Li, and Jun Tan****321
- Sulfur, carbon and lead isotope studies of the Dajing Polymetallic Deposit in Linxi County, Inner Mongolia, China - Implication for metallogenic elements from hypomagmatic source—*Xuelei Chu, Weiguo Huo, and Xun Zhang****333
- A preliminary study on exhalative mineralization in permian basins, the southern segment of the Da Hinggan Mountains, China - Case studies of the Huanggang and Dajing Deposits—*Jianming Liu, Jie Ye, Yongbing Li, Xusong Chen, and Ruibin Zhang****345
- Skarns and genesis of the Huanggang Fe-Sn Deposit, Inner Mongolia, China—*Li Juan Wang, Hidehiko Shimazaki, and Yoshihide Shiga****359
- Characteristic features of tin-iron-copper mineralization in the Anle-Huanggangliang Mining Area, Inner Mongolia, China—*Daizo Ishiyama, Ryoji Sato, Toshio Mizuta, Yohei Ishikawa, and Jingbin Wang****377
- A gold-bearing alkaline pluton in eastern Linxi District, Inner Mongolia: Its geochemistry and metallogenic significance—*Yongfeng Zhu, Shihua Sun, and Neng Jiang****393
- 3-D tomographic images and deep ore-control in northern margin of the north China Plate—*Yike Liu and Xu Chang****401

RUSSIAN GEOLOGY AND GEOPHYSICS

Vol. 41, No. 9, 2000
Rec'd April 30, 2002

- Early Paleozoic granitoid associations of the Altai-Sayan folded area: Their types and role in paleogeodynamic reconstructions—*A.N. Distanova****1202
- Distribution of trace elements in sulfides and norites of the Elan' instruvie body (*Voronezh Crustalline Massif*) and genesis of boninite-like magmas—*E.G. Konnikov****1214
- Gold-bearing metasomatites of the Olondo greenstone belt (*Aldan shield*)—*M.N. Shaporina and N.V. Popov****1225
- Exsolution in natural carbonatite systems—*E.I. Vorob'ev****1231
- The mechanism of supramolecular crystallization in suspensions of monodisperse silica spheres during the formation of precious opal—*V.V. Serdobintseva and D.V. Kalinin****1255
- The role of biota in geochemical evolution and Earth's crust energetics—*V.S. Golubev****1263

Vol. 41, No. 10, 2000
Rec'd May 7, 2002

- Oceanic ore-bearing ferrobasalts: Physicochemical conditions of formation—*V.N. Sharapov and A.S. Zhmodik****1335
- Distribution of gold deposited under reducing adsorption from HAuCl₄ solution on magnetite, sphalerite, and galenite crystals—*V.L. Tauson, O.V. Ovchinnikova, O.I. Bessarabova, N.V. Smagunov, and T.M. Pastushkova****1427

SCIENCE

No. 296, 2002

- Superplumes from the core-mantle boundary to the lithosphere: implications for heat flux—*Barbara Romanowicz and Yuancheng Gung****513
- Evidence for an ancient osmium isotopic reservoir in Earth—*Anders Meibom and Robert Frei****516
- The Cause of carbon isotope minimum events on glacial terminations—*Howard J. Spero and David W. Lea****522
- Special issue on environmental microbiology—*Caroline Ash, Brooks Hanson, and Colin Norman****1055
- Life and the evolution of earth's atmosphere—*James F. Kasting and Janet L. Siefert****1066
- Microbial behavior in a heterogeneous world—*Tom Fenchel****1068
- Geomicrobiology: How molecular-scale interactions underpin biogeochemical systems—*Dianne K. Newman and Jillian F. Banfield****1071
- Merging genomes with geochemistry in hydrothermal ecosystems—*Anna-Louise Reysenbach and Everett Shock****1077

THE SCIENCE OF THE TOTAL ENVIRONMENT

Vol. 290, No 1-3, 2002

- Scaling of atmospheric mercury emissions from three naturally enriched areas: Flowery Peak, Nevada; Peavine Peak, Nevada; and Long Valley Caldera, California—*Mark A. Engle and Mae Sexauer Gustin****91
- Bioaccumulation of As, Cd, Cu, Fe and Pb in wild grasses affected by the Aznalcóllar mine spill (SW Spain)—*P. Madejón, J.M. Murillo, T. Marañón, F. Cabrera, and R. López****105

SEDIMENTOLOGY

Vol. 49, No. 2, 2002

- Stable isotopic signature of a palaeoaquifer, Mississippian Alamogordo Member limestones, Sacramento Mountains, New Mexico, USA—*Y. Wu and H.S. Chafetz****227
- Isotopic constraints on growth conditions of multiphase calcite-pyrite-barite concretions in Carboniferous mudstones—*R. Raiswell, S.H. Bottrell, S.P. Dean, J.D. Marshall, A. Carr, and D. Hatfield****237
- Silicification and dolomitization of anhydrite nodules in argillaceous terrestrial deposits: An example of meteoric-dominated diagenesis from the Triassic of central Spain—*A.M. Alonso-Zarza, Y. Sánchez-Moya, M.A. Bustillo, A. Sopeña, and A. Delgado****303

TECTONICS

Vol. 21, No. 5, 2002

- Mechanisms and timing of exhumation of collision-related metamorphic rocks, southern Brooks Range, Alaska: Insights from $^{40}\text{Ar}/^{39}\text{Ar}$ thermochronology—*James J. Vogl, Andres T. Calvert, and Phillip B. Gans****1270

TECTONOPHYSICS

Vol. 346, No. 1-2, 2002

- Special Issue on tectonics of sedimentary basins: From crustal structure to basin fill—*S. Cloetingh, M. Marzo, J.A. Munoz, J. Verges****1

- Lithosphere structure of European sedimentary basins from regional three-dimensional gravity modeling—*T.P. Yegorova and V.I. Starostenko****5
- Crustal structure of the Levant Basin, eastern Mediterranean—*Zvi Ben-Avraham, Avihu Ginzburg, Jannis Makris, and Lev Eppelbaum****23
- Structure of the earth's crust in Jordan from potential field data—*A. Al-Zoubi and Z. Ben Avraham****45
- Seismic reflection profiles across the southern Dead Sea basin—*Abdallah Al-Zoubi, Haim Shulman, and Zvi Ben-Avraham****61
- Fault and salt tectonics in the southern Dead Sea basin—*Birgitte D. Larsen, Zvi Ben-Avraham, and Haim Shulman****71
- Tectonic evolution of the Qumran Basin from high-resolution 3.5-kHz seismic profiles and its implication for the evolution of the northern Dead Sea Basin—*Ronald K. Lubberts and Zvi Ben-Avraham****91
- 3-D flexural modelling of the Silurian Baltic Basin—*Jurga Lazauskien, Randell Stephenson, Saulius liaupa, and Jan-Diederik van Wees****115

Vol. 346, No. 3-4, 2002

- Magnetotelluric images of the crustal structure of Chyulu Hills volcanic field, Kenya—*V. Sakkas, M.A. Meju, M.A. Khan, V. Haak, and F. Simpson****169

- A modern structural regime in the Paleoproterozoic (~3.64 Ga); Isua Greenstone Belt, southern West Greenland—*Simon Hanmer and David C. Greene****201
- Deformation processes at fast to ultra-fast oceanic spreading axes: Mechanical approach—*Erwan Garel, Olivier Dauteuil, and Yves Lagabrielle****223
- The Migif-Hafafit gneissic complex of the Egyptian Eastern Desert: Fold interference patterns involving multiply deformed sheath folds—*Abdel-Rahman Fowler and Baher El Kalioubi****247

TRANSACTIONS OF THE ROYAL SOCIETY OF EDINBURGH: EARTH SCIENCES

Vol. 92, No. 2, 2001
Issued Feb. 22, 2002

- The nature and origin of pegmatites in a fluorine-rich leucogranite East Kemptville Tin Deposit, Nova Scotia, Canada—*Daniel J. Kontak, Kevin Ansdell, Jaroslav Dostal, Werner Halter, Robert Martin, and Anthony E. William-Jones****173

TRANSACTIONS (DOKLADY) OF THE RUSSIAN ACADEMY OF SCIENCES/
EARTH SCIENCE SECTION

Vol. 383, No. 3, 2002

- Inclusions of oil gases in agate-type secretions: Implications for forecast of the oil- and gas-bearing potential of the Polar Urals—*V. I. Silaev, S. N. Shanina, and V. S. Ivanovskii****246
- Alkaline volcanism at the eastern margin of Eurasia: Evidence of the Pacific superplume—*N. I. Filatova****271
- Isotopic (Rb–Sr and K–Ar) age of rocks from the Mongolian–Transbaikalian volcanic belt—*K. B. Bulnaev and V. F. Posokhov****311
- The behavior of Pt, Pd, and Au during the formation of porphyry gold–copper systems: Evidence from the Tominsk–Michurinsk ore cluster, Southern Urals—*A. F. Korobeinikov, A. I. Grabezhev, and V. P. Moloshag****314
- Oxygen and hydrogen isotopic compositions in trap intrusions of the Noril'sk District—*B. G. Pokrovskii, S. F. Sluzhenikin, and N. A. Krivolutsкая****321
- Age of the Katugin Ta–Nb Deposit, Aldan–Stanovoi Shield: Evidence for the identification of the global rare metal metallogenic epoch—*A. M. Larin, A. B. Kotov, E. B. Sal'nikova, V. I. Kovalenko, V. P. Kovach, S. Z. Yakovleva, N. G. Berezhnaya, and V. E. Ivanov****336
- The influence of H₃BO₃ on fluid pressure in granitic pegmatite miaroles: A computation of isochores and the density of boric acid solutions—*I. S. Peretyazhko and V. E. Zagorsky****340