

**GEOLOGICAL SOCIETY OF AMERICA TOPICAL SESSION 71
GRANITIC PEGMATITES: RECENT ADVANCES IN MINERALOGY, PETROLOGY,
AND UNDERSTANDING**

Granitic Pegmatites I: Sunday, November 7, 2004: 8:00 AM-12:00 PM, Colorado Convention Center 607
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Convener: David London, dlondon@ou.edu

PRESENTATIONS

8:00 AM

INTRODUCTORY REMARKS

LONDON, David, School of Geology and Geophysics, Univ of Oklahoma, 100 East
Boyd Street, SEC 810, Norman, OK 73019, dlondon@ou.edu

8:15 AM

**WHERE DO LCT AND NYF PEGMATITES FIT IN? A CONTRIBUTION TO A REVISED
CLASSIFICATION OF GRANITIC PEGMATITES**

MARTIN, Robert F., Earth and Planetary Sciences, McGill Univ, 3450 University Street,
Montreal, QC H3A 2A7, Canada, bobm@eps.mcgill.ca and DE VITO, Caterina,
Dipartimento di Scienze della Terra, Universita di Roma "La Sapienza", P.le Aldo Moro,
5, Roma, I-00185, Italy

8:30 AM

PETROGENESIS OF THE CROSS LAKE PEGMATITE FIELD, CENTRAL MANITOBA

ANDERSON, Alan J., Department of Earth Sciences, St. Francis Xavier Univ,
Antigonish, NS B2G 2W5, aanderso@stfx.ca, TOMASCAK, Paul B., Department of
Earth Sciences, SUNY - Oswego, Oswego, NY 13126, tomasca@oswego.edu, and
CERNÝ, Petr, Department of Geological Sciences, Univ of Manitoba, Winnipeg, MB
R3T 2N2, Canada

8:45 AM

**GEOCHEMISTRY OF THE PETALITE-BEARING AND SPODUMENE-BEARING VEINS
OF THE BARROSO-ALVÃO PEGMATITE-APLITE FIELD (NORTHERN PORTUGAL)**

LIMA, Alexandre M.C.¹, FARINHA, João A.², VIEIRA, Romeu C.³, MARTINS, Tania
C.3, BOBOS, Iuliu¹, and NORONHA, Fernando¹, (1) Dep. de Geologia, Faculdade de
Ciencias da Universidade do Porto, Pr. Gomes Teixeira, Porto, 4099-002,
allima@fc.up.pt, (2) INETI, Lisbon, Portugal, (3) GIMEF, Porto, Portugal

9:00 AM

THE LITTLE NAHANNI PEGMATITE GROUP, NORTHWEST TERRITORIES

BARNES, E.M., Earth and Ocean Sciences, Univ of British Columbia, 6339, Stores
Road, Vancouver, BC V6T 1Z4, elmb81@hotmail.com, GROAT, L.A., Earth and Ocean
Sciences, Univ of British Columbia, 6339 Stores Road, Vancouver, BC V6T 1Z4,

Canada, and WEIS, Dominique, Earth & Ocean Sciences, Univ of British Columbia,
6339 Stores Road, Vancouver, BC V6T 1Z4

9:15 AM **INVITED**

THE CRYO-GENIE PEGMATITE: A COMPLEXLY ZONED, LCT PEGMATITE IN THE
PENINSULAR RANGES BATHOLITH, SAN DIEGO COUNTY, CALIFORNIA

CLANIN, R.J. Jim, 8557 Rancho Canada Road #38, El Cajon, CA 92021,
jclanin54@aol.com.

9:35 AM

GROUND PENETRATING RADAR IMAGING OF MIAROLITIC CAVITIES: A
GEOPHYSICAL APPROACH TO PEGMATITE EXPLORATION AND MINING

PATTERSON, Jeffrey E., Geology & Geophysics, Univ of Calgary, 2500 University
Avenue, NW, Calgary, AB T2N 1N4, Canada, jeffreyp@pegmatite.com and COOK,
Frederick A., Univ Calgary, 2500 University Dr NW, Calgary, AB T2N 1N4, Canada

9:50 AM

Break

10:05 AM

RHEOLOGY OF PARTIALLY MOLTEN ROCKS

VIGNERESSE, Jean Louis, CREGU, UMR CNRS 7566 G2R, BP 23, Vandoeuvre-
Nancy, F-54501, France, jean-louis.vignerese@g2r.uhp-nancy.fr, BURG, Jean Pierre,
Geologisches Institut, ETH-Zentrum, Sonneggstrasse 5, Zurich, 8006, Switzerland, and
RABINOWICZ, Michel, UMR 5562, Observatoire Midi-Pyrénées, 14 Av. Edouard
Belin, Toulouse, 31400, France

10:20 AM

COMPOSITION AND DISTRIBUTION OF MELT DURING PARTIAL MELTING OF A
LEUCOGRANITE AT 200 MPA H₂O

ACOSTA-VIGIL, Antonio, LONDON, David, and MORGAN, George B., School of
Geology and Geophysics, Univ of Oklahoma, 100 East Boyd Street, SEC 810, Norman,
OK 73019, aacosta@hoth.gcn.ou.edu

10:35 AM **INVITED**

FROM EVOLVED GRANITE TO PEGMATITE: WHAT CAN WE LEARN FROM MELT
AND FLUID INCLUSIONS?

THOMAS, Rainer, Division 4, GeoForschungsZentrum Potsdam, Telegrafenberg,
Potsdam 14473 Germany, thomas@gfz-potsdam.de.

10:55 AM

THE MAGMATIC-HYDROTHERMAL EVOLUTION OF A WATER-, B- AND F-RICH
GRANITE-PEGMATITE SYSTEM: A MELT/FLUID INCLUSION STUDY

RICKERS, Karen¹, THOMAS, Rainer², and HEINRICH, Wilhelm², (1)
HASLAB/DESY, Notkestrasse 85, Hamburg, D-22607, karen.rickers@desy.de, (2)
Division 4, GeoForschungsZentrum Potsdam, Telegrafenberg, Potsdam, 14473, Germany

11:10 AM

PHOSPHORUS DISTRIBUTION BETWEEN POTASSIC ALKALI FELDSPAR AND (HAPLO-) GRANITIC LIQUID AT 200 MPA (H₂O): THE EFFECT OF UNDERCOOLING ON CRYSTAL /LIQUID SYSTEMATICS

MORGAN, George B. and LONDON, David, School of Geology and Geophysics, Univ of Oklahoma, 100 East Boyd Street, SEC 810, Norman, OK 73019, gmorgan@ou.edu

11:25 AM

ALKALI FRACTIONATION AND FELDSPAR ZONATION IN GRANITIC PEGMATITES

LONDON, David, MORGAN, George B., and ACOSTA-VIGIL, Antonio, School of Geology and Geophysics, Univ of Oklahoma, 100 East Boyd Street, SEC 810, Norman, OK 73019, dlondon@ou.edu

11:40 AM

DISCUSSION

GSA Granitic Pegmatites II: Sunday, November 7, 2004: 1:30 PM-5:30 PM, Colorado Convention Center 607
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Convener: David London, dlondon@ou.edu

PRESENTATIONS

1:30 PM **INVITED**

UNDERSTANDING CONSOLIDATION OF GRANITIC PEGMATITES: THE FELDSPAR STORY

CERNÝ, Petr, Department of Geological Sciences, Univ of Manitoba, Winnipeg, MB R3T 2N2 Canada, p_cerny@umanitoba.ca.

1:50 PM

PETR CERNY CAREER RECOGNITION

2:05 PM

A CATHODOLUMINESCENCE STUDY OF MICROCLINE FROM THE MOREFIELD PEGMATITE, VIRGINIA

GARCIA, Amie E., Geology and Geological Engineering, South Dakota School of Mines and Technology, 501 E. Saint Joseph St, Rapid City, SD 57701, purplepenguin2011@hotmail.com and WISE, Michael A., Dept. of Mineral Sciences, Smithsonian Institution, NHB-119, Washington, DC 20560-0119

2:20 PM

PHOSPHATE MINERALOGY AND PARAGENESIS OF THE PALERMO #2 PEGMATITE, NORTH GROTON, NEW HAMPSHIRE

NIZAMOFF, James W., SIMMONS, William B., and FALSTER, Alexander U., Geology and Geophysics, Univ of New Orleans, New Orleans, LA 70148, jnizamoff@hotmail.com

2:35 PM

THE STABILITY OF ALLUAUDITE IN GRANITIC PEGMATITES

HATERT, Frédéric and FRANSOLET, André-Mathieu, Department of Geology, Univ of Liège, Laboratory of Mineralogy, B.18, Liège, B-4000, Belgium, fhatert@ulg.ac.be

2:50 PM

DIVERSE BOROSILICATE ASSEMBLAGES IN ANATECTIC GRANITIC PEGMATITES CUTTING BORON-RICH GRANULITE-FACIES ROCKS OF THE LARSEMANN HILLS, PRYDZ BAY, EAST ANTARCTICA

GREW, Edward S.¹, CARSON, Christopher J.², and YATES, Martin G.¹, (1) Earth Sciences, Univ of Maine, 5790 Bryand Center, Orono, ME 04469, esgrew@maine.edu, (2) 44 Boger Street, Benalla, 3672, Australia

3:05 PM

CRYSTALLIZATION CONDITIONS AND FLUID CHEMISTRY OF THE ANIMIKIE RED ACE PEGMATITE, FLORENCE COUNTY, WISCONSIN

HARTWICK, Emily E., SIRBESCU, Mona-Liza C., and STUDENT, James J., Geology Department, Central Michigan Univ, 314 Brooks Hall, Mt. Pleasant, MI 48859, rayllee@cmich.edu

3:20 PM **INVITED**

FERROCOLUMBITE-MANGANOTANTALITE TRENDS IN GRANITES AND PEGMATITES: EXPERIMENTAL AND NATURAL CONSTRAINTS

LINNEN, Robert L., Department of Earth Sciences, Univ of Waterloo, Waterloo, ON N2L 3G1 Canada, rlinnen@uwaterloo.ca.

3:40 PM

BREAK

3:55 PM

SAMARSKITE-(YB): A NEW MINERAL INDICATING EXTREME HREE ENRICHMENT IN THE SOUTH PLATTE NYF PEGMATITE DISTRICT, COLORADO

HANSON, Sarah L.¹, SIMMONS, William B.², and FALSTER, Alexander U.², (1) Earth Science Department, Adrian College, Adrian, MI 49221, slhanson@adrian.edu, (2) Department of Geology, Univ of New Orleans, New Orleans, LA 70148

4:10 PM

EVOLUTION OF ZIRCON CRYSTALLIZATION FROM THE BLACK MOUNTAIN PEGMATITE, MAINE

WISE, Michael, Department of Mineral Sciences, Smithsonian Institution, Washington, DC 20560, wise.michael@nmnh.si.edu.

4:25 PM

CESIUM REMOBILIZATION AND THE FORMATION OF PEZZOTTAITE AT THE SAKAVALANA PEGMATITE, MADAGASCAR

SIMMONS, William B.¹, FALSTER, Alexander U.¹, LAURS, Brendan M.², PEZZOTTA, Federico³, and HAWTHORNE, Frank C.⁴, (1) Geology and Geophysics, Univ of New Orleans, New Orleans, LA 70148, wsimmons@uno.edu, (2) Gems & Gemology, Gemological Institute of America, 5345 Armada Drive, Carlsbad, CA 92008, (3) Museo di Storia Naturale di Milano, Corso Venezia 55, Milano, I-20121, Italy, (4) Dept. of Geological Sciences, Univ of Manitoba, 125 Dysart Road, Winnipeg, MB R3T 2N2, Canada

4:40 PM

CR-DOMINANT EMERALD MINERALIZATION ASSOCIATED WITH PEGMATITIC GRANITE AT GHOST LAKE, ONTARIO

BRAND, A.¹, GROAT, L.A.¹, and GARLAND, M.², (1) Earth and Ocean Sciences, Univ of British Columbia, 6339 Stores Road, Vancouver, BC V6T 1Z4, allisonbrand@hotmail.com, (2) London, ON

4:55 PM

CRYSTALLIZATION HISTORY OF A RHYOLITE DIKE: INSIGHTS FROM CRYSTAL SIZE DISTRIBUTION ANALYSIS

O'DONNELL, Sean P. and HOGAN, John P., Geological Sciences and Engineering, Univ of Missouri - Rolla, 125 McNutt Hall, 1870 Miner Circle, Rolla, MO 65409-0410, odonnell@umr.edu

5:10 PM

DISCUSSION

GSA Granitic Pegmatites Posters: Tuesday, November 9, 2004: 8:00 AM-12:00 PM, Colorado Convention Center Exhibit Hall
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PRESENTATIONS

BOARD #1

MICA AS A PETROGENETIC INDICATOR OF PEGMATITIC EVOLUTION: THE LI-F-BE-B-P-BEARING PINILLA PEGMATITE (ZAMORA, SPAIN)

RODA-ROBLES, Encarnación¹, PESQUERA, Alfonso¹, GIL-CRESPO, Pedro P.¹, TORRES-RUIZ, José², and FONTAN, François³, (1) Departamento de Mineralogía y Petrología, Univ. País Vasco, P.O.BOX 644, Bilbao, E-48080, Spain, npporroe@lg.ehu.es, (2) Departamento de Mineralogía y Petrología, Univ. de Granada, Fac.de Ciencias, Fuentenueva s/n, Granada, 18002, Spain, (3) Laboratoire Cristallographie et Minéralogie, Univ. Paul Sabatier de Toulouse, Allées Jules-Guesde 39, Toulouse, F-31400

BOARD #2

GEOCHEMISTRY OF THE LITHINIFEROUS VEINS OF THE PEGMATITE-APLITE FIELD OF ALMENDRA-BARCA DE ALVA (NORTHERN PORTUGAL)

BOBOS, Iuliu, Porto, ibobos@fc.up.pt, LIMA, Alexandre M.C., Dep. de Geologia, Faculdade de Ciencias da Universidade do Porto, Pr. Gomes Teixeira, Porto, 4099-002, ALMEIDA, Carlos, GIMEF, Porto, VIDE, Rui, Mangualde, Portugal, and NORONHA, Fernando

BOARD #3

A MODEL FOR THE FORMATION AND EMPLACEMENT OF 'POCKET' CLAY IN THE GRANITIC PEGMATITES OF SAN DIEGO COUNTY, CALIFORNIA

KLECK, Wallace D., geology, California State Univ., Bakersfield, 23940 Basin Harbor Ct, Tehachapi, CA 93561-7488, wdkleck@earthlink.net.

BOARD #4

OSCILLATION PHENOMENA AT MAGMATIC CRYSTALLIZATION: ROLE OF DEVOLATILIZATION

ZARAIISKY, George P., Institute of Experimental Mineralogy, Moscow District, Chernogolovka, 142432, Russia, zaraisky@iem.ac.ru, BALASHOV, Victor N., Chemistry and Biochemistry, Univ of Delaware, Newark, DE 19716, and SELTMANN, Reimar, Department of Mineralogy, Nat History Museum, Cromwell Road, London, SW7 5BD, England