



DAVID LONDON

Current Appointments

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Director, Electron Microprobe Laboratory, 108 Sarkeys Energy Center, 100 East Boyd Street, Norman, Oklahoma 73019; Phone: (405) 325-2642

Chair and Managing Editor, the Pegmatite Interest Group, an international organization of scientists, gemologists, and hobbyists interested in the mineralogy and petrology of pegmatites, and hosted by the Mineralogical Society of

Research Interests

Mineralogy, Igneous & Metamorphic Petrology, Experimental Geochemistry, Economic Geology

Education

- Ph.D., Geology (1981), "Lithium Mineral Stabilities in Pegmatites," Arizona State University, Tempe, Arizona
- M.S., Geology (1979), "Alteration of Lithium Minerals, White Picacho Pegmatites, Arizona," Arizona State University, Tempe, Arizona
- B.A., Geology (1975), Department of Earth & Environmental Sciences, Wesleyan University, Middletown, Connecticut

Postdoctoral Research Appointment

Carnegie Research Fellow, Geophysical Laboratory, Carnegie Institution of Washington, D.C., Hatten S. Yoder, Jr., sponsor (9/81-1/83)

Other Educational Appointments

Predocctoral Guest Investigator, Geophysical Laboratory, Carnegie Institution of Washington, DC, Hatten S. Yoder Jr., sponsor (6/80-12/80); Predocctoral Guest Investigator, U.S. Geological Survey, Reston, VA, David B. Stewart, sponsor (6/80-12/80); Predocctoral Guest Investigator, Smithsonian Institution, Washington, D.C., Daniel E. Appleman, sponsor (6/80-12/80)

Other Professional Appointments

Geologist, US Geological Survey, Boston, MA (6/75-8/75); Geologist, U.S. Geological Survey, Middletown, CT (7/75-8/76)

Consulting Appointments

Inspiration Consolidated Copper, Cabot Mineral Resources, General Electric Corporation, Feldspar Corporation, The Georgia Talc Company

Professional Affiliations

Mineralogical Society of America (1975-present); American Geophysical Union (1983-present); Mineralogical Association of Canada (1977-present); Oklahoma Microscopy Society (1989-present)

Professional Service

Councilor, Mineralogical Society of America (2004-2006), Panel member, NSF Earth Sciences (1999-2002); Associate Editor, *American Mineralogist* (1998-2002); chair, Benefactors Committee (educational fundraising) Mineralogical Society of America (1998-2001); Mineralogical Society of America representative to Pegmatite Interest Group (1990-present); Physical Sciences Representative, Executive Committee to Oklahoma Society for Electron Microscopy (1989-1992); Mineralogical Society of America, Research Grants Committee (1988-1989, 1989-1990)

University and Related

OU Scholars Selection Committee (2004-2007); President's Distinguished Faculty Mentor (2002-2005); Faculty Senate (2002, 1991-1994); University Tenure Committee (1998-2004, 2 consecutive terms, chair 2000-2001); Interim Director of the School of Geology & Geophysics (1999-2000); Executive Committee, School of Geology & Geophysics (1991-1993, 1998-2000); Faculty Appeals Board (1997-2001); Faculty Welfare Committee (1994-1997); University Faculty Senate Executive Committee (1992-1993); Director, Electron Microprobe Laboratory (1987-present); Advisory Committee Member, S.R. Noble Electron Microscopy Laboratory (1990-present); President's Strategic Planning Task Force (1987-1989); University Research Council Review Panel (1987); President, Sigma Xi OU Chapter (1987); Vice President, Sigma Xi OU Chapter (1986)

Honors and Awards

Stubbeman-Drace Presidential Professor (2004-2008); honorary namesake of new mineral species, londonite (1999); elected to Fellow Status, Mineralogical Society of America (1996); Cunningham Teaching Award, School of Geology & Geophysics (1994); Associates Distinguished Lectureship Award (1988); Men of Achievement, International Bibliographic Centre (1987); Associates Distinguished Lectureship Award (1987); Sigma Xi Centennial Lecturer, University of Oklahoma Chapter (1986); American Men and Women of Science, J. Catell Press (1986); Associates Distinguished Lectureship Award (1986); Associates Distinguished Lectureship Award (1985); Sigma Xi Faculty Research Award (1984); Associates Distinguished Lectureship Award (1984); Carnegie Foundation Fellowship (1981-1983); Phelps Dodge Copper Co. Scholarship (1980); Arizona State University Academic Scholarship (1979); Scottsdale Mineralogical Society Scholarship (1978-1979); Cities Service Oil Company Scholarship (1978-1979); Inspiration Consolidated Copper Co. Scholarship (1976-1978); Sigma Xi (1975)

External Grants Awarded

1. National Science Foundation, Earth Sciences Division, Petrology & Geochemistry, "Multicomponent Diffusion and Speciation Reactions of Major Melt Components, High Field Strength Elements, and Ligands in Haplogranite Melt": EAR-0124179, supplemental \$26,628 for Electron Microprobe Laboratory upgrades (with George Morgan), 2002-2005.
2. Battelle Pacific Northwest National Laboratory, "Analysis of Titanate Ceramics and Autunite": Task Ordering Agreement No. 4467, \$7,000 (with G.B. Morgan)(2002).

3. National Science Foundation, Earth Sciences Division, Petrology & Geochemistry, "Multicomponent Diffusion and Speciation Reactions of Major Melt Components, High Field Strength Elements, and Ligands in Haplogranite Melt": EAR-0124179, \$330,000 (with Tom Dewers), 2002-2005.
4. U.S. Department of Energy, Environmental Management Program, "Origins of Deviations from Transition-State Theory: Formulating a New Kinetic Rate Law for Dissolution of Silicates": DE-FG07-01ER63287, \$50,000 to OU, total award: \$810,000 (2001-2004)(with J.P. Icenhower and B.P. McGrail, Pacific Northwest National Laboratory, and A. Lütge, Rice University).
5. National Science Foundation, Earth Sciences Division, Instrumentation and Facilities, "Acquisition of a Cathodoluminescence System: Applications to Sedimentologic, Mineralogical, Geochemical, and Structural Analyses": EAR-9906029, \$22,578 (1999-2000)(with Tom Dewers, Kevin Smart, and Lynn Soreghan)
6. National Science Foundation, Earth Sciences Division, Petrology & Geochemistry, "A Kinetic Model for Crystallization in the Hydrous Haplogranite System (Ab-Or-Qtz-H₂O)": EAR-990165, \$229,580 (with Tom Dewers), REU Supplement EAR-990165, 1999-2002
7. National Science Foundation, International Programs, "Trace-Element Signatures of Crustal Melts: Application of Experimental Results to Peraluminous Granites of Western and Southern Spain": INT-9603199, \$8,000 (1997-1998)
8. National Science Foundation, Earth Sciences Division, Facilities and Research Infrastructure, "Renovation and Upgrade of the Experimental Petrology Laboratory, University of Oklahoma": EAR-9618867, \$34,230 plus \$22,820 match from Univ. Oklahoma (1997-1998)
9. National Science Foundation, Mineralogy and Petrology, "Halogen Partitioning in Magmatic Systems": EAR-9625517, \$49,345 to OU, plus \$12,000 OU Microprobe Lab, total award: \$115,000 (1996-1999)(with M.B. Wolf, Augustana College and G.B. Morgan, OU)
10. National Science Foundation, Geoscience Instrumentation and Facilities, "Upgrade of Hardware, Computer, and Peripheral Equipment for the Electron Microprobe Laboratory, University of Oklahoma": EAR-9404658, \$41,485 (1994-1996)(with George B. Morgan VI)
11. Linnean Society of London, Percy Sladen memorial Fund, "Relations among Granites, Pegmatites, and Quartz-tourmaline Rocks at Cape Cornwall, near St. Just, UK": £500 (1993)
12. National Science Foundation, EPSCoR Cluster Program (NSF - State of Oklahoma Cooperative contract EHR-9108771), "Fluid-Rock Interactions in Crustal Rocks": \$1,100,267 (1992-1995)(with C. Barker, J. Haggerty, P. Michael, B. Tapp, D. Teeters, Univ. Tulsa)
13. National Science Foundation, Experimental and Theoretical Geophysics, "Chemical Remagnetization: Testing for Relationships with Basinal Fluids and In Situ Diagenetic Processes": EAR-8917181, \$70,000 (1989-1992)(with R.D. Elmore)
14. National Science Foundation, Petrogenesis and Mineral Resources, "Magmatic-Hydrothermal Evolution of Granitic Systems in Cornwall, SW England: The Role of Boron": EAR-8915014, \$38,458 (1989-1992)
15. National Science Foundation, Experimental and Theoretical Geochemistry, "Principles of Lithophile Element Concentration in Silicic Magmas: The Role of Phosphorus": EAR-8821950, \$79,326 (1989-1992)
16. National Science Foundation, Experimental and Theoretical Geochemistry, "Principles of Lithophile Element Concentration in Silicic Magmas: The Role of Phosphorus": \$12,906 (1989, PRC postdoctoral award)
17. National Science Foundation, Research Experiences for Undergraduates Supplement, "Stability of Tourmaline During Anatexis of Metapelites": \$4,832 (1988)

18. National Science Foundation, International Programs, US-UK Cooperative, "The Role of Boron in the Magma-Vapor Evolution of Granitic Systems in Cornwall and Devon, SW England": INT-8814260, \$14,896 (1989-1991)
19. National Science Foundation, Experimental and Theoretical Geochemistry, "Geochemistry of Boron in Minerals, Melts, and Glasses": continuation of EAR-8516753, \$34,358 (1988-1989)
20. National Science Foundation, Geoscience Instrumentation and Facilities, "Upgrading of Experimental Petrology Facilities, School of Geology and Geophysics, University of Oklahoma": EAR-8720498, \$27,507 (1988-1990)
21. Oklahoma Center for the Advancement of Science and Technology, "Upgrading of Experimental Petrology Facilities, School of Geology and Geophysics, University of Oklahoma": \$20,500 (1988)
22. U.S. Department of Energy, "Electron Microprobe Facility at the University of Oklahoma": DE-FG22-87FE1146, \$620,000 (1986)
23. U.S. Department of Education, "Acquisition of Electron Microscopy Facilities at the University of Oklahoma": \$500,000 (1986) (with S.D. Russell)
24. State of Oklahoma, MOST Program, "Acquisition of Electron Microscopy Facilities": \$500,000 (1986) (with S.D. Russell)
25. National Science Foundation, Experimental and Theoretical Geochemistry, "Principles of Lithophile Element Concentration in Silicic Magmas: The Role of Boron": EAR-8516753, \$90,000 (1986-1989)
26. National Science Foundation Grant in Experimental and Theoretical Geochemistry, "Lithium Mineral Stabilities in Pegmatites and the Lithium Aluminosilicate Phase Diagram" (D.M. Burt, principal investigator): \$68,000 (1979-1981)
27. Sigma Xi Grant-in-Aid of Research: \$500 (1978)
28. Geological Society of America Graduate Research Grant: \$550 (1978)

Internal Grants Awarded

1. University of Oklahoma, Office of the Vice President of Research, matching funds for supplement to EAR-0124179, Electron Microprobe Laboratory upgrades: \$20,000 (2003-2004)(with George Morgan)
2. University of Oklahoma, Office of the Vice President of Research, "Acquisition of a Cathodoluminescence Spectrophotometer, Electron Microprobe Laboratory": \$48,000 (1999)
3. University of Oklahoma, Office of the Vice President of Research, "Upgrade of Energy-Dispersive X-ray Analyzer, Electron Microprobe Laboratory": \$22,000 (1998)
4. University of Oklahoma, Office of the President, Instructional and Advising Improvement Award, "Upgrading of Teaching Collections in Mineralogy, School of Geology & Geophysics, College of Geosciences: \$5,000 (1992)
5. University of Oklahoma Research Council Grant, "Acquisition of Preparation Equipment for Physical Sciences Transmission Electron Microscopy": \$7,500 (1991) (with G. Atkinson, T. Batchman, R. Daniels)
6. College of Geosciences, Instructional and Research Enhancement Fund: \$13,525 (1990)
7. U.S. Bureau of Mines Allotment Grant, Oklahoma Mining and Mineral Resources Research Institute, "Relations of Hydrocarbons, Aqueous Fluids, and Base Metal Precipitation in Hydrothermal Veins of the Northern Arbuckle Mountains, Oklahoma": \$7,813 (1989)
8. U.S. Bureau of Mines Allotment Grant, Oklahoma Mining and Mineral Resources Research Institute, "The Petrogenesis and Strategic Mineral Potential of the Quanah Granite, Wichita Mountains, Oklahoma": \$6,805 (1989)

9. U.S. Bureau of Mines Allotment Grant, Oklahoma Mining and Mineral Resources Research Institute, "Relations of Hydrocarbons, Aqueous Fluids, and Base Metal Precipitation in Hydrothermal Veins of the Northern Arbuckle Mountains, Oklahoma": \$10,906 (1988)
10. University of Oklahoma Research Council Grant, "Chemistry of Boron in Minerals, Melts, and Glasses: \$4,800 (1988)
11. U.S. Bureau of Mines Allotment Grant, Oklahoma Mining and Mineral Resources Research Institute, "Phase Equilibria of Peraluminous Rare-Element Magmas: Experimental Investigation of the Macusani Rhyolite": \$17,600 (1986)
12. University of Oklahoma Research Council Grant, "Petrogenetic and Economic Significance of Wall Rock Alteration Around the Tanco Rare-Element Pegmatite, Manitoba": \$4,052 (1986)
13. University of Oklahoma, University College, "Acquisition of Teaching Materials": \$500 (1986)
14. U.S. Bureau of Mines Allotment Grant, Oklahoma Mining and Mineral Resources Research Institute, "Principles of Lithophile Element Concentration in Silicic Magmas": \$14,000 (1985)
15. U.S. Bureau of Mines Allotment Grant, Oklahoma Mining and Mineral Resources Research Institute, "Petrogenesis of Rare-Element Pegmatites: Experimental Models as Guides to Exploration": \$19,500 (1984)
16. University of Oklahoma Research Council Grant, "Light Rare Element Distributions in Granitic Liquids and Synthetic Analogues": \$3,441 (1984)
17. University of Oklahoma Junior Faculty Research Award, "Fluid Inclusions in Rare-Element Pegmatites: Petrogenetic Indicators of Crystallization and Ore Deposition": \$3,500 (1984)
18. Arco Junior Faculty Research Fellowship, "Experimental Models of Granite-Pegmatite Systems": \$11,500 (1983)
19. University of Oklahoma Research Council Grant, "Magmatic-Hydrothermal Processes in Rare-Metal Pegmatites: Evidence from Fluid Inclusions and Experimental Studies", \$2,560 (1983)

Student/Postdoctoral Supervision

Kathleen S. Goodman, M.S. (1986): geologic consultant and founding partner, Enviros Inc., Seattle, WA
 George B. Morgan VI, M.S. (1986), Ph.D. (1989): adjunct Associate Professor and Electron Microprobe Operator, University of Oklahoma
 Jonathan P. Icenhower (Ph.D., 1995): geochemistry group leader, Battelle Corporation, Pacific Northwest National Laboratory, Richland, WA
 Michael B. Wolf (postdoctoral appointment, 1992-1995): tenured Associate Professor, Augustana College, Rock Island, IL
 Joseph M. Evensen (Ph.D., 2001): research scientist, Exxon-Mobil Upstream Research, Houston, TX
 Eric A. Fritz (M.S., 2001): graduate gemology degree candidate, Gemological Institute of America, Carlsbad, CA
 Antonio Acosta-Vigil: predoctoral and postdoctoral appointments, 1999-present: Granada, Spain

PUBLICATIONS

Articles, Monographs, Book Chapters, and Geologic Maps:

1. Acosta-Vigil, A., **London, D.**, Morgan, G.B. VI, and Dewers, T.A. (2003e) Solubility of excess aluminum in hydrous granitic melts in equilibrium with peraluminous minerals at 700-800°C and 200 MPa: significance and applications of the aluminum saturation index. *Contributions to Mineralogy and Petrology*, **146**, 100-119.

2. Ertl, A., Hughes, J.M., Prowatke, S., Rossman, G.R., **London, D.**, and Fritz, E.A. (2003d) Mn-rich tourmaline from Austria: structure, chemistry, optical spectra, and relations to synthetic solid solutions. *American Mineralogist*, **88**, 1369-1376.
3. Morgan, G.B. VI and **London, D.** (2003c) Trace element partitioning at conditions far from equilibrium: Ba and Cs distributions between alkali feldspar and undercooled hydrous granitic liquid at 200 MPa. *Contributions to Mineralogy and Petrology*, **144**, 722-738.
4. Evensen, J.E. and **London, D.** (2003b) Experimental partitioning of Be and other trace elements between cordierite and silicic melt, and the chemical signature of S-type granite. *Contributions to Mineralogy and Petrology*, **144**, 739-757.
5. **London, D.** and Evensen, J.M. (2003a) Beryllium in silicic magmas and the origin of beryl-bearing pegmatites. Invited chapter for Beryllium: mineralogy, petrology, and geochemistry (E.S. Grew, ed.). *Mineralogical Society of America Reviews in Mineralogy & Geochemistry*, **50**, 445-486.
6. Acosta-Vigil, A., **London, D.**, Dewers, T.A., and Morgan, G.B. VI (2002c) Dissolution of corundum and andalusite in H₂O-saturated haplogranitic melts at 800°C and 200 MPa: constraints on diffusivities and the generation of peraluminous melts. *Journal of Petrology*, **43**, 1885-1908.
7. Evensen J.M. and **London, D.** (2002b) Experimental silicate mineral/melt partition coefficients for beryllium, and the beryllium cycle from migmatite to pegmatite. *Geochimica Cosmochimica Acta*, **66**, 2239-2265.
8. **London, D.** and Soreghan, M.J. (2002a) Identification and understanding of minerals. Oklahoma Geological Survey *Notes*, 61, 96-103.
9. **London, D.**, Morgan, G.B. VI, and Wolf, M.B. (2001b) Amblygonite-montebasite solid solutions as monitors of fluorine in evolved granitic and pegmatitic melts. *American Mineralogist*, **86**, 225-233.
10. Acosta, A., Pereira, M.D., Shaw, D.M. and **London, D.** (2001a) Contrasting behaviour of B during crustal anatexis. *Lithos*, **56**, 15-31.
11. Lewis, J.C., Byrne, T.B., Pasteris, J.D., **London, D.**, and Morgan, G.B. VI (2000) Early Tertiary fluid flow and pressure-temperature conditions in the Shimanto accretionary complex of south-west Japan: constraints from fluid inclusions. *Journal of Metamorphic Petrology*, **18**, 319-333.
12. Morgan, G.B. VI and **London, D.** (1999f) Crystallization of the Little Three layered pegmatite-aplite dike, Ramona District, California. *Contributions to Mineralogy and Petrology*, **136**, 310-330.
13. Price, J., Hogan, J.P., Gilbert, M.C., **London, D.**, and Morgan, G.B. VI (1999e) An experimental study of titanite-fluorite equilibria in the A-type Mount Scott Granite: implications for assessing F contents of felsic magmas, *Geology*, **27**, 951-954.
14. Evensen J.M., **London D.**, and Wendlandt R.F. (1999d) Solubility and stability of beryl in granitic melts. *American Mineralogist*, **84**, 733-745.
15. **London, D.** (1999c) Preface to the Gene Foord issue. *American Mineralogist*, **84**, 693-694.
16. **London, D.** (1999b) Stability of tourmaline in peraluminous granite systems: the boron cycle from anatexis to hydrothermal aureoles. Invited keynote lecture for special issue on tourmaline, proceedings of Tourmaline 1997 (Czech Republic). *European Journal of Mineralogy*, **11**, 253-262.
17. **London, D.**, Wolf, M.B., Morgan, G.B. VI, and Gallego Garrido, M. (1999a) Experimental silicate-phosphate equilibria in peraluminous granitic magmas, with a case study of the Albuquerque batholith at Tres Arroyos, Badajoz, Spain. *Journal of Petrology*, **40**, 215-240.
18. **London, D.** (1998d) Phosphorus-rich peraluminous granites. Invited paper for keynote address. *Acta Universitatis Carolinae, Geologica*, **42**, 64-68.
19. **London, D.**, Morgan, G.B. VI, and Icenhower, J. (1998c) Stability and solubility of pollucite in granitic systems at 200 MPa H₂O. *Canadian Mineralogist*, special issue honoring Petr Cerny & Eugene Foord, **36**, 497-510.

20. **London, D.** (1998b) Review of "The Nature and Origin of Granite, 2nd Edition (1997), by Wallace Spencer Pitcher. *Journal of Petrology*, **39**, 1249-1252.
21. Morgan, G.B. VI, **London, D.**, and Luedke, R. (1998a) The late-Miocene peraluminous silicic volcanics of the Morococala field, Bolivia. *Journal of Petrology*, **39**, 601-632.
22. Wolf, M.B. and **London, D.** (1997c) Boron in granitic magmas: stability of tourmaline in equilibrium with biotite and cordierite. *Contributions to Mineralogy and Petrology*, **130**, 12-30.
23. **London, D.** (1997b) Estimating abundances of volatile and other mobile components in evolved silicic melts through mineral-melt equilibria. Keynote address for IAVCEI special session on granites, and invited paper for special issue "High level silicic magmatism and related hydrothermal systems" (R. Seltmann, B. Lehmann, J. Lowenstern, P. Candela, eds.), *Journal of Petrology*, **38**, 1691-1706.
24. Icenhower, J. and **London, D.** (1997a) Partitioning of fluorine and chlorine between biotite and granitic melt: experimental calibration at 200 MPa H₂O. *Contributions to Mineralogy and Petrology*, **127**, 17-29.
25. Egger, C. and **London, D.** (1996f) Experiments in geologic process for earth science teachers. In Rockhounding and earth-science activities in Oklahoma, 1995 workshop (K.S. Johnson and N.H. Suneson eds.), *Oklahoma Geological survey special Publication*, **96-5**, 97-102.
26. **London, D.** (1996e) Collecting, preparing, and displaying mineral specimens. In Rockhounding and earth-science activities in Oklahoma, 1995 workshop (K.S. Johnson and N.H. Suneson eds.), *Oklahoma Geological survey special Publication*, **96-5**, 27-31.
27. Morgan, G.B. VI and **London, D.** (1996d) Optimizing the electron microprobe analysis of hydrous alkali aluminosilicate glasses. *American Mineralogist*, **81**, 1176-1185.
28. **London, D.** (1996c) Granitic Pegmatites. Invited for Third Hutton Symposium on the Origin of Granites and Related Rocks. *Transactions of the Royal Society of Edinburgh, Earth Sciences*, **87**, 305-319.
29. **London, D.**, Morgan, G.B. VI, and Wolf, M.B. (1996b) Boron in granitic rocks and their contact aureoles. Invited chapter for Boron: Mineralogy, Petrology, and Geochemistry of Boron in the Earth's Crust (E.S. Grew and L. Anovitz, eds.), *Mineralogical Society of America Reviews in Mineralogy*, **33**, 299-330.
30. Icenhower, J.P. and **London, D.** (1996a) Experimental partitioning of Rb, Cs, Sr, and Ba between alkali feldspars and peraluminous melt. *American Mineralogist*, **81**, 719-734.
31. Icenhower, J.P. and **London, D.** (1995d) An experimental study of element partitioning between biotite, muscovite and coexisting peraluminous granitic melt at 200 MPa (H₂O). *American Mineralogist*, **80**, 1229-1251.
32. **London, D.** and Manning, D.A.C. (1995c) Compositional variation and significance of tourmaline from southwest England. Invited for special issue on rare-element deposits (P. Pollard, ed), *Economic Geology*, **90**, 495-519.
33. Wolf, M.B. and **London, D.** (1995b) Incongruent dissolution of REE- and Sr-rich apatite in peraluminous granitic liquids: differential apatite, monazite, and xenotime solubilities during anatexis. *American Mineralogist*, **80**, 765-775.
34. **London, D.** (1995a) Geochemical features of peraluminous granites, pegmatites, and rhyolites as sources of lithophile metal deposits. Invited chapter for "Magmas, Fluids, and Ore Deposits" (John F.H. Thompson, ed.). *Mineralogical Association of Canada Short Course Handbook*, **23**, 175-202.
35. Wolf, M.B. and **London, D.** (1994) Apatite dissolution into peraluminous haplogranitic melts: an experimental study of solubilities and mechanisms. *Geochimica et Cosmochimica Acta*, **58**, 4127-4145.
36. Elmore, R.D., **London, D.**, D. Bagley, and G. Gao (1993c) Evidence for paleomagnetic dating of diagenesis by basinal fluids, Ordovician carbonates, Arbuckle Mountains, southern Oklahoma.

- Invited for Application of Paleomagnetism to Sedimentary Geology, *Society of Economic Paleontologists and Mineralogists*, Special Publication #49, 115-128.
37. Elmore, R.D., **London, D.**, D. Bagley, Fruit, D., and G. Gao (1993b) Remagnetization by basinal fluids: Testing the hypothesis in the Viola Limestone, southern Oklahoma. *Journal of Geophysical Research*, **98 (B4)**, 6237-6254.
 38. **London, D.**, Morgan, G.B., VI, Babb, H.A., and Loomis, J.L. (1993a) Behavior and effects of phosphorus in the system $\text{Na}_2\text{O}-\text{K}_2\text{O}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{P}_2\text{O}_5-\text{H}_2\text{O}$ at 200 MPa(H_2O). *Contributions to Mineralogy and Petrology*, **113**, 450-465.
 39. **London, D.**, (1992e) The application of experimental petrology to the genesis and crystallization of granitic pegmatites. Invited for special issue on Granitic Pegmatites (R.F. Martin and P. Cerny, eds.) *Canadian Mineralogist*, **30**, 499-540.
 40. Bagley, D.S., **London, D.**, Fruit, D., Cates, K.D., and Elmore, R.D. (1992d) Paleomagnetic dating of basinal fluid migration, base-metal mineralization, and hydrocarbon maturation in the Arbuckle Mountains, Oklahoma. In Source Rocks in the Southern Midcontinent, 1990 Symposium (K.S. Johnson and B.J. Cardott, eds.). *Oklahoma Geological Survey*, Circular 93, 289-298.
 41. Palmer, M.R., **London, D.**, Morgan, G.B., VI, and Babb, H.A. (1992c) Experimental determination of fractionation of $^{11}\text{B}/^{10}\text{B}$ between tourmaline and aqueous vapor: A temperature- and pressure-dependent isotopic system. Invited contribution for Frontiers in Isotope Geosciences (R.S. Harmon and R.W. Hinton, eds.) *Chemical Geology (Isotope Geoscience Section)*, **101**, 123-129.
 42. **London, D.** (1992b) Phosphorus in S-type magmas: the P_2O_5 content of feldspars from granites, pegmatites, and rhyolites. *American Mineralogist*, **77**, 126-145.
 43. Loomis, J., **London, D.**, Morgan, G.B. VI, and Huang, W. (1992a) Preliminary observations on the behavior of phosphorus in the haplogranite system at 2 Kbar H_2O . *The Compass of Sigma Gamma Epsilon*, **68**, 160-164.
 44. Foord, E.E., **London, D.**, Kampf, A.R., Shigley, J.E., and Snee, L.W. (1991) Gem-bearing pegmatites of San Diego County, California. In Geological excursions in southern California and Mexico (M.J. Walawender and B.B. Hanan, eds.), 128-146. Guidebook for the 1991 Annual Meeting, *Geological Society of America*: published by Department of Geological Sciences, San Diego State University, San Diego, California.
 45. **London, D.**, Cerny, P., Loomis, J.L., and Pan, J.J. (1990c) Phosphorus in alkali feldspars of rare-element granitic pegmatites. *Canadian Mineralogist*, **28**, 771-786.
 46. Ferrow, E., **London, D.**, Goodman, K.S., and Veblen, D.R. (1990b) Sheet silicates of the Lawler Peak granite, Arizona: Chemistry, structural variations, and exsolution. *Contributions to Mineralogy and Petrology*, **105**, 491-501.
 47. **London, D.** (1990a) Internal differentiation of rare-element pegmatites: A synthesis of recent research. Invited contribution, "Ore-Bearing Granite Systems; Petrogenesis and Mineralizing Processes" (H.J. Stein and J.L. Hannah, eds.), *Geological Society of America Special Paper* **246**, 35-50.
 48. Morgan, G.B., VI and **London, D.** (1989c) Experimental reactions of amphibolite with boron-bearing aqueous fluids at 200 MPa: Implications for tourmaline stability and partial melting in mafic rocks. *Contributions to Mineralogy and Petrology*, **102**, 281-297.
 49. **London, D.**, Morgan, G.B., VI, and Hervig, R.L. (1989b) Vapor-undersaturated experiments in the system macusanite- H_2O at 200 MPa, and the internal differentiation of granitic pegmatites. *Contributions to Mineralogy and Petrology*, **102**, 1-17.
 50. **London, D.** (1989a) Bedrock Geology of the Moodus Seismic Area, Connecticut. *Connecticut Geological and Natural History Survey Reports of Investigations*, **11**, 25 p.
 51. **London, D.** (1988c) Bedrock geologic map of the Moodus Seismic Area, Connecticut. *Connecticut Geological and Natural History Survey Reports of Investigations*.

52. **London, D.**, Hervig, R.L., and Morgan, G.B., VI (1988b) Melt-vapor solubilities and element partitioning in peraluminous granite-pegmatite systems: Experimental results with Macusani glass at 200 MPa. *Contributions to Mineralogy and Petrology*, **99**, 360-373.
53. **London, D.** (1988a) Characteristics and regional significance of the Cremation Hill ductile fault at the Bronson Hill - Merrimack boundary, south-central Connecticut. *American Journal of Science*, **288**, 353-375.
54. Morgan, G.B., VI and **London, D.** (1987c) Alteration of amphibolitic wallrocks around the Tanco rare-element pegmatite, Bernic Lake, Manitoba. *American Mineralogist*, **72**, 1097-1121.
55. **London, D.**, Zolensky, M.E., and Roedder, E. (1987b) Diomignite: natural $\text{Li}_2\text{B}_4\text{O}_7$ from the Tanco pegmatite, Bernic Lake, Manitoba. *Canadian Mineralogist*, **25**, 173-180.
56. **London, D.** (1987a) Internal differentiation of rare-element pegmatites: effects of boron, phosphorus, and fluorine. Invited for *Geochimica et Cosmochimica Acta*, Special Issue on "Granites, Pegmatites, and Skarns", **51**, 403-420.
57. **London, D.** (1986e) Pegmatite. Invited contribution, *McGraw-Hill Yearbook of Science and Technology*, 359-362.
58. Shigley, J.E., Kampf, A.R., Foord, E.E., and **London, D.** (1986d) Gem pegmatites of Southern California. Guidebook to fieldtrips, 14th General Meeting, *International Mineralogical Association*, Stanford, CA.
59. **London, D.** (1986c) Holmquistite as a guide to pegmatitic rare metal deposits. *Economic Geology*, **81**, 704-712.
60. **London, D.** (1986b) Formation of tourmaline-rich gem pockets in miarolitic pegmatites. Invited, *American Mineralogist*, Jahns Memorial Issue, **71**, 396-405.
61. **London, D.** (1986a) The magmatic-hydrothermal transition in the Tanco rare-element pegmatite: evidence from fluid inclusions and phase equilibrium experiments. Invited, *American Mineralogist*, Jahns Memorial Issue, **71**, 376-395.
62. **London, D.** (1985b) Origin and significance of inclusions in quartz: a cautionary example from the Tanco pegmatite, Manitoba. *Economic Geology*, **80**, 1988-1995.
63. **London, D.** (1985a) Pegmatites of the Middletown district, Connecticut. 77th Annual Meeting, New England Intercollegiate Geological Conference, Yale University: *Connecticut Geological and Natural History Survey Guidebook No. 6*, 509-533.
64. **London, D.** (1984b) Experimental phase equilibria in the system $\text{LiAlSiO}_4\text{-SiO}_2\text{-H}_2\text{O}$: a petrogenetic grid for lithium-rich pegmatites. *American Mineralogist*, **69**, 995-1004.
65. Hemingway, B.S., Robie, R.A., Kittrick, J.A., Grew, E.S., Nelen, J.A., and **London, D.** (1984a) The heat capacities of osumilite from 298.15 to 1000K, and the thermodynamic properties of petalite to 1800K. *American Mineralogist*, **69**, 701-710.
66. Cerny, P. and **London, D.** (1983) Crystal chemistry and stability of petalite. Invited, tribute to Josef Zemmann, *Tschermak's mineralogische und petrographische Mitteilungen*, **31**, 81-96.
67. Barosh, P.J., **London, D.**, and de Boer, J.Z. (1982h) Structural geology of the Moodus seismic area, south-central Connecticut. New England Intercollegiate Geological Conference, 74th Annual Mtng., Fieldtrips in Connecticut and South-Central Massachusetts. *Connecticut Geological and Natural History Survey Guidebook No. 5*, 419-451.
68. **London, D.** (1982g) Stability of spodumene in acidic and saline fluorine-rich environments. *Carnegie Institution of Washington Year Book*, **81**, 331-334.
69. **London, D.**, Spooner, E.T.C., and Roedder, E. (1982f) Fluid-solid inclusions in spodumene from the Tanco pegmatite, Manitoba. *Carnegie Institution of Washington Year Book*, **81**, 334-339.
70. Burt, D.M. and **London, D.** (1982e) Subsolvus equilibria. Invited chapter, "Granitic Pegmatites in Science and Industry", Cerny, P., ed). *Mineralogical Association of Canada, Short Course Handbook*, **8**, 329-346.

71. **London, D.** and Burt, D.M. (1982d) Lithium minerals in pegmatites. Invited chapter, "Granitic Pegmatites in Science and Industry", (Cerny, P., ed). *Mineralogical Association of Canada, Short Course Handbook*, **8**, 97-133.
72. **London, D.** and Burt, D.M. (1982c) Chemical models for lithium aluminosilicate stabilities in pegmatites and granites. *American Mineralogist*, **67**, 494-509.
73. **London, D.** and Burt, D.M. (1982b) Lithium aluminosilicate occurrences in pegmatites and the lithium aluminosilicate phase diagram. *American Mineralogist*, **67**, 483-493.
74. **London, D.** and Burt, D.M. (1982a) Alteration of spodumene, montebrasite, and lithiophilite in pegmatites of the White Picacho district, Arizona. *American Mineralogist*, **67**, 97-113.
75. **London, D.** (1981) Preliminary experimental results in the system $\text{LiAlSiO}_4\text{-SiO}_2\text{-H}_2\text{O}$. *Carnegie Institution of Washington Year Book*, **80**, 341-345.
76. **London, D.** and Burt, D.M. (1978) Lithium pegmatites of the White Picacho district, Arizona. In Burt, D.M. and Pewe, T.L., eds., "Guidebook to the Geology of Central Arizona". *Arizona Bureau of Geology and Mineral Technology Special Report*, **2**, 61-72.

Abstracts:

1. **London, D.**, Morgan, G.B. VI, and Acosta-Vigil, A. (2004e) Alkali fractionation and feldspar zonation in granitic pegmatites. *Geological Society of America Abstracts with Programs*, **36**, 46.
2. Morgan, G.B. VI and **London, D.** (2004d) Phosphorus distribution between potassic alkali feldspar and (haplo-) granitic liquid at 200 MPa (H_2O): The effect of undercooling on crystal /liquid systematics. *Geological Society of America Abstracts with Programs*, **36**, 45.
3. Acosta-Vigil, A., **London, D.**, and Morgan, G.B. VI (2004c) Composition and distribution of melt during partial melting of a leucogranite at 200 MPa H_2O . *Geological Society of America Abstracts with Programs*, **36**, 45.
4. **London, D.**, Morgan, G.B. VI, Fritz, E.A., Harms, B.S. (2004b) Incorporation of silver in tourmaline. Special session on Rare-element geochemistry of ore deposits (R. Linnen, convener). *Geological and Mineralogical Association of Canada, Abstracts Volume*, **29**, 221.
5. **London, D.** (2004a) Vertical zonation of alkalis in mineralized granites and pegmatites. Invited keynote lecture for special session on Rare-element geochemistry of ore deposits (R. Linnen, convener). *Geological and Mineralogical Association of Canada, Abstracts Volume*, **29**, 197.
6. **London, D.** (2003) Granitic Pegmatites. Invited, in Rämö, O.T., Kosunen, P.J., Lauri, L.S., and Karhu, J.A. (eds.) *Granitic systems – state of the art and future avenues*. An international symposium in honor of professor Ilmari Haapala, January 12-14, 2003, abstract volume. Helsinki University Press, 72-74.
7. Acosta, A., **London, D.**, Dewers, T.A., Morgan VI, G.B. (2002b) Dissolution of quartz, albite and K-feldspar into H_2O -saturated haplogranitic melt at 800oC and 200 MPa: diffusive transport properties of granitic melts at crustal anatectic temperatures. (abstr.) *EOS Transactions, American Geophysical Union*, **83**, 1419.
8. Evensen, J.M., **London, D.**, Hughes, J.M., Rakovan, J.F., Hervig, R.L., and Kaszuba, J.P. (2002a) Crystal chemistry, crystallography and petrogenesis of the beryllium micas. *International Mineralogical Association Programs with Abstracts*, **18**, MH12, 207.
9. **London, D.**, Acosta, A., Dewers, T.A., and Morgan, G.B. VI (2001e) Anatexis of metapelites: the ASI of S-type granites. 11th Annual Goldschmidt Conference Abstract 3363, Lunar Planetary Institute Contribution 1088, Lunar Planetary Institute, Houston (CD-ROM).
10. **London, D.** and Evensen, J.M. (2001d) The beryllium cycle from anatexis of metapelites to beryl-bearing pegmatites. 11th Annual Goldschmidt Conference Abstract 3367, Lunar Planetary Institute Contribution 1088, Lunar Planetary Institute, Houston (CD-ROM).

11. **London, D.**, Evensen, J.M., Fritz, E., Icenhower, J.P., Morgan, G.B. VI, and Wolf, M.B. (2001c) Enrichment and accommodation of manganese in granite-pegmatite systems. 11th Annual Goldschmidt Conference Abstract 3369, Lunar Planetary Institute Contribution 1088, Lunar Planetary Institute, Houston (CD-ROM).
12. Evensen, J.M., **London, D.**, and Dewers, T.A. (2001b) Effects of starting state and superliquidus-subliquidus pathways on crystal growth from silicic melts. 11th Annual Goldschmidt Conference Abstract 3729, Lunar Planetary Institute Contribution 1088, Lunar Planetary Institute, Houston (CD-ROM).
13. **London, D.**, (2001a) The chemical signature of S-type granitic melts. In S-type granites and related rocks (B. Chappell and P. Fleming, eds.). *Australian Geological Survey Organization Record* **2001/02**, 73-74.
14. Acosta, A., Dewers, T., and **London, D.** (2000d) Multicomponent diffusion and mineral dissolution in water saturated haplogranitic melts. (abstr) *EOS Transactions of AGU*, **81**, 1295.
15. **London, D.**, Acosta, A., and Dewers, T. (2000c) The Aluminum Saturation Index of S-Type Granites. (abstr) *EOS Transactions of AGU*, **81**, 1292.
16. Evensen, J.M., **London, D.**, and Dewers, T. (2000b) Process-dependent crystal growth in the granite system. (abstr) *EOS Transactions of AGU*, **81**, 1299-1300.
17. Evensen, J., Acosta, A., Dewers, T., Morgan, G., and **London, D.** (2000a) Toward a model for textural evolution in pegmatites. Geological Association of Canada - Mineralogical Association of Canada - Canadian Geophysical Union Joint Annual Meeting Program with Abstracts, 946.
18. **London, D.**, Morgan, G.M., and Wolf, M.B. (1999g) Amblygonite-montebrazite solid solutions as monitors of fluorine in evolved granitic and pegmatitic melts. (abstr.) *Geological Society of America Abstracts with Programs*, **31**, 354.
19. Acosta, A., **London, D.**, and Dewers, T.A. (1999f) Alumina saturation in granitic melts. (abstr.) *Geological Society of America Abstracts with Programs*, **31**, 162.
20. Evensen, J.M. and **London, D.** (1999e) Beryl saturation in granitic melts: the role of cooling. (abstr.) *Geological Society of America Abstracts with Programs*, **31**, 306.
21. Evensen, J.M. and **London, D.** (1999d) Beryllium reservoirs and sources for granitic melts: the significance of cordierite. (abstr.) *Geological Society of America Abstracts with Programs*, **31**, 305.
22. Price, J., Hogan, J.P., Gilbert, M.C., **London, D.**, and Morgan, G.B. VI (1999c) Titanite-fluorite equilibria in the A-type Mount Scott granite: a means for assessing the F content of felsic magma. (abstr) (B. Barbarin, ed.) *The Origin of Granitic Rocks*, IVth Hutton Symposium, Clermont-Ferrand, France. *BRGM*, **290**, 239.
23. **London, D.** (1999b) Melt boundary layers and the growth of pegmatitic textures. (abstr.) *Canadian Mineralogist*, **37**, 826-827.
24. Evensen, J.M. and **London, D.** (1999a) Beryllium budgets in granitic magmas: consequences of early cordierite for late beryl. (abstr.) *Canadian Mineralogist*, **37**, 821-823.
25. **London, D.** (1998e) Experimental simulation of pegmatite texture. (abstr) invited for special session on Granitic Pegmatites, Nature versus Experiment (D. London and P. Cerny, organizers). *International Mineralogical Association General Assembly Abstracts with Program*, **17**, 144.
26. Evensen J.M., **London D.**, and Wendlandt R.F. (1998d) Solubility of beryl in haplogranite melts. (abstr) *International Mineralogical Association General Assembly Abstracts with Program*, **17**, 149.
27. Wolf, M.B. and **London, D.** (1998c) Experimental study of tourmaline stability in granitic magmas. (abstr) *International Mineralogical Association General Assembly Abstracts with Program*, **17**, 152.
28. **London, D.** and Morgan, G.B. VI (1998b) Experimental crystal growth from undercooled granitic melts: nucleation response, texture, and crystallization sequence. (abstr) *EOS, Transactions of the American Geophysical Union*, **79**, 366.

29. Evensen, J.M., **London, D.**, and Wendlandt, R.F. (1998a) Solubility of beryl in haplogranite melts. (abstr.) *Geological Society of America Abstracts with Programs*, **30**, 5.
30. Hervig, R.L., **London, D.**, Morgan, G.B., and Wolf, M.B. (1997f) Large boron isotope fractionation between hydrous vapor and silicate melt at igneous temperatures. In Seventh Annual V.M. Goldschmidt Conference, p. 93-94, *LPI Contribution No. 921*, Lunar and Planetary Institute, Houston.
31. Morgan, G.B. VI and **London, D.** (1997e) Ferromagnesian silicates as tracers of crystallization process in the Little Three pegmatite, Ramona, San Diego County, California. (abstr) *Geological Society of America Abstracts with Programs*, **29**, 457.
32. **London, D.** and Wolf, M.B. (1997d) The boron cycle in metasedimentary-peraluminous granite systems. Meeting abstracts, invited for Tourmaline 1997, International Symposium on Tourmaline (F.C Hawthorne and M. Novak, organizers), *Ministry of Education*, Czech Republic, 47-48.
33. Hervig, R.L., **London, D.**, Morgan, G.B. VI, and Wolf, M.B. (1997c) Large boron isotope fractionation between hydrous vapor and silicate melt at igneous temperatures. Seventh Annual V.M. Goldschmidt Conference, *Lunar & Planetary Institute Contribution*, **921**, 93-94.
34. Wolf, M.B. and **London, D.** (1997b) The effect of boron in granitic magmas on tourmaline-biotite-cordierite equilibria. (abstr) *Geological Society of America Abstracts with Programs*, **29**, 79.
35. **London, D.** (1997a) Boron, phosphorus, and fluorine in evolved silicic magmas. (abstr) Invited for keynote address, International Association of Volcanology and Chemistry of the Earth's Interior, Commission on Granites Special Session; *Unidad Editorial Estado Jalisco*, 60.
36. Icenhower, J. and **London, D.** (1996d) Stability of pollucite in granitic melts at 600°-750°C, 200 MPa H₂O. (abstr) *Mineralogical Association of Canada, Program with Abstracts*, **21**, 46.
37. **London, D.**, Wolf, M.B., and Morgan, G.B. VI (1995f) Silicate-phosphate equilibria in peraluminous granites and pegmatites: monitors and buffers of P₂O₅ in melt. (abstr) *Geological Society of America Abstracts with Programs*, **27**, 411.
38. **London, D.** (1995e) Rose Rock Revival!. (abstr) *Oklahoma Geology Notes*, **55**, 78-79.
39. Price, J.D., Hogan, J.P., Gilbert, M.C., **London, D.**, and Morgan, G.B. VI (1995d) Fluorine in A-type granites: experimental studies of the Mount Scott Granite. (abstr) *Geological Society of America Abstracts with Programs*, **27**, 431.
40. **London, D.** (1995c) Pegmatites. Invited for 3rd International Hutton Symposium on the Origin of Granites and Related Rocks (M.B. Brown and P.M. Piccoli, eds.). *U.S. Geological Survey Circular 1129*, 89-90.
41. **London, D.**, Wolf, M.B., Morgan, G.B. VI, and Gallego, M. (1995b) The phosphorus cycle in peraluminous granitic magmas. 3rd International Hutton Symposium on the Origin of Granites and Related Rocks (M.B. Brown and P.M. Piccoli, eds.). *U.S. Geological Survey Circular 1129*, 90-91.
42. Morgan, G.B. VI, **London, D.**, and Luedke, R.G. (1995a) Melt inclusion, matrix glass, and mineral compositions from a zoned S-type peraluminous rhyolite suite, Morococala Volcanic Field, Bolivia. 3rd International Hutton Symposium on the Origin of Granites and Related Rocks (M.B. Brown and P.M. Piccoli, eds.). *U.S. Geological Survey Circular 1129*, 99-100.
43. Wolf, M.B., **London, D.**, and Morgan, G.B. VI (1994d) Effects of boron on the solubility of cassiterite and tantalite in granitic liquids. (abstr) Invited for theme session on Boron: Mineralogy, Petrology, and Geochemistry in the Earth's Crust, *Geological Society of America Abstracts with Programs*, **26**, A-450.
44. Icenhower, J.P., **London, D.**, and Layne, G.D. (1994c) Element partitioning among biotite, muscovite, garnet, cordierite, and peraluminous melt: behavior of Li and Mn. (abstr) *Geological Society of America Abstracts with Programs*, **26**, A-290.
45. **London, D.**, Wolf, M.B., and Morgan, G.B. VI (1994b) Boron saturation in granitic magmas: tourmaline-biotite-cordierite equilibria. (abstr) Invited for theme session on Boron: Mineralogy,

- Petrology, and Geochemistry in the Earth's Crust, *Geological Society of America Abstracts with Programs*, **26**, A-516.
46. Wolf, M.B. and **London, D.** (1994a) Incongruent melting of REE-rich apatite in peraluminous granitic melts: differential apatite & monazite solubilities. (abstr) *EOS Transactions of AGU*, **75**, 372.
 47. **London, D.** and Manning, D.A.C. (1993h) Compositional variation and significance of tourmaline from southwest England. (abstr) *Geological Society of America Abstracts with Programs*, **25**, A43.
 48. Icenhower, J.P. and **London, D.** (1993g) An experimental study of the partitioning of fluorine between biotite and silicic melts. (abstr) Invited for special session on Fluorine and Chlorine as Monitors of Fluid-Rock Interaction, *Geological Society of America*, **25**, A372.
 49. Icenhower, J.P. and **London, D.** (1993f) Experimentally determined partitioning of Ba and Rb between alkali feldspar, biotite, muscovite, and peraluminous, silicic melt. (abstr) Invited, special session "Trace Element Partitioning in Magmatic Systems: Experiments and Applications". *EOS Transactions of AGU*, **74**, 342.
 50. Icenhower, J.P. and **London, D.** (1993e) Experimental anatexis and trace-element behavior in the system Qtz-Ab-Mu+Bt+Als at 200 MPa(H₂O). (abstr) Special session "Trace Element Partitioning in Magmatic Systems: Experiments and Applications". *EOS Transactions of AGU*, **74**, 343.
 51. **London, D.**, Gallego, M., and Wolf, M.B. (1993d) Phosphorus in S-type felsic magmas: a case history from the Alburquerque batholith, Badajoz, Spain. (abstr) Special session "Trace Element Partitioning in Magmatic Systems: Experiments and Applications". *EOS Transactions of AGU*, **74**, 343.
 52. Wolf, M.B. and **London, D.** (1993c) Apatite solubility in the peraluminous haplogranite system - not deja vu all over again. (abstr) Invited, special session "Trace Element Partitioning in Magmatic Systems: Experiments and Applications". *EOS Transactions of AGU*, **74**, 341.
 53. Wolf, M.B. and **London, D.** (1993b) Preliminary results of HFS and RE element solubility experiments in 'granites' as a function of B and P. (abstr) Special session "Trace Element Partitioning in Magmatic Systems: Experiments and Applications". *EOS Transactions of AGU*, **74**, 343.
 54. Icenhower, J.P. and **London, D.** (1993a) Element distributions between crystals and melt in peraluminous granitic systems: An experimental study. (abstr) Invited, special session "Fractionation Processes in High-Temperature Systems". *Geological Society of America*, **25**, 16.
 55. Icenhower, J.P. and **London, D.** (1992c) Behavior of lithophile trace elements and F in peraluminous granitic systems: an experimental study. (abstr.) Oklahoma Academy of Sciences, 81st Annual Meeting, Lawton, Oklahoma; Oklahoma Society for Electron Microscopy Timpano Student Award Winner. *OkSEM Newsletter*, **14**, 12.
 56. **London, D.** (1992b) Volatile characteristics of S-type felsic magmas. (abstr.) Invited for special session "Volatile Elements in Magmatic Systems", *EOS Transactions of AGU*, **73**, 366.
 57. Elmore, R.D., **London, D.**, and Gao, G. (1992a) Geochemical constraints on the origin of chemical remagnetizations. Invited, *EOS Transactions of AGU*, **73**, 53.
 58. Elmore, R.D., Bagley, D.S., **London, D.** and Nick, K. (1991b) Paleomagnetic dating of diagenesis by basinal and meteoric fluids, Ordovician carbonates, Arbuckle Mountains, southern Oklahoma. Invited, *American Association of Petroleum Geologists Bulletin*, **75**, 569.
 59. **London, D.** (1991a) A dynamic chemical model for pegmatite crystallization. Invited for symposium "Genesis and Mineralogy of Pegmatites in the Central and Southern Rocky Mountains", *Geological Society of America Abstracts with Programs*, **23** (4), 43.
 60. **London, D.**, Loomis, J.L., Huang, W., and Morgan, G.B., VI (1990f) Behavior and effects of phosphorus in the system Ab-Or-Qz-H₂O at 200 MPa(H₂O). *Geological Society of America*, **22**, A346.

61. **London, D.** (1990e) The berlinite substitution, $AlP=2Si$, in alkali feldspars from differentiated peraluminous igneous rocks (granites, pegmatites, and rhyolites). *Geological Society of America*, **22**, A346.
62. **London, D.** and Palmer, M.R. (1990d) Fractionation of $^{11}B/^{10}B$ between tourmaline and aqueous vapor. *Geological Society of America*, **22**, A157.
63. **London, D.**, Cates, K.D., Elmore, R.D., Bagley, D., and Fruit, D. (1990c) Relations of hydrocarbons, aqueous fluids, and base-metal precipitation in hydrothermal veins of the northern Arbuckle Mountains, Oklahoma. *Geological Society of America*, **22**, A136.
64. Morgan, G.B., VI, **London, D.**, and Kirkpatrick, R.J. (1990b) Reconnaissance spectroscopic study of hydrous sodium aluminum borosilicate glasses. *Geological Society of America*, **22**, A167.
65. Elmore, R.D., Bagley, D., **London, D.**, Fruit, D., Zhong, Y. and Xiaoqin, X. (1990a) Pervasive synfolding CRM in the Ordovician Viola Limestone: remagnetization by in situ diagenetic processes? *EOS Transactions of AGU*, **17**, 492.
66. Elmore, R.D., Bagley, D., and **London, D.** (1989c) Timing and origin of the mineralization and alteration associated with migration of basinal fluids, Oklahoma. Invited contribution, *Geological Society of America, Abstracts with Programs*, **21 (6)**, A260.
67. Elmore, R.D., **London, D.**, Nick, K., and Cates, K. (1989c) Fluid control on chemical remagnetization: The role of meteoric, hydrocarbon, and basinal fluids. Invited contribution, *EOS Transactions of AGU*, **70**, 310.
68. **London, D.** (1989b) Lithophile rare element concentration in silicic rocks: The alkaline trend in granitic systems. Invited contribution, symposium on "High-Technology Metal Deposits: Metallogeny and Exploration", *Geological & Mineralogical Associations of Canada, Program with Abstracts*, **14**, A21.
69. **London, D.** (1989a) Lithophile rare element concentration in peraluminous silicic systems: Summary of experimental results with Macusani glass. Invited contribution, symposium on "Petrology, Geochemistry, and Mineral Deposits -- The Experimental Approach", *Geological & Mineralogical Associations of Canada, Program with Abstracts*, **14**, A32.
70. Veblen, D.R., Ferrow, E., **London, D.**, and Goodman, K.S. (1988c) Exsolution in muscovite. *Geological Society of America Programs with Abstracts*, **20**, A358.
71. Morgan, G.B., VI and **London, D.** (1988b) Experimental reactions of amphibolite with boron-bearing aqueous fluids at 200 MPa: Tourmaline stability and partial melting in mafic rocks. *Geological Society of America Programs with Abstracts*, **20**, A191.
72. **London, D.** (1988a) Geology of the Moodus Area, Connecticut: Possible relations to modern seismicity. Invited contribution, symposium on Modern Seismicity in New England, *EOS Transactions of AGU*, **69**, 491.
73. **London, D.**, Morgan, G.B., VI, and Hervig, R.L. (1987d) Differentiation of peraluminous, volatile-rich silicic magmas: an experimental study of Macusani glass. Invited, symposium on "Anorogenic Silicic Magmas", *Geological Society of America*, **19**, 749.
74. Morgan, G.B., VI and **London, D.** (1987c) Behavior of boron and tourmaline stability in granitic systems. *Geological Society of America*, **19**, 777-778.
75. **London, D.** (1987b) Phase relations in volatile- and LILE-rich rhyolite melt. Invited, *International Union of Geodesy and Geophysics*, XIX General Assembly, Abstracts Volume **2**, 403.
76. **London, D.**, Morgan, G.B., VI, and Hervig, R.L. (1987a) Element partitioning and fractionation trends in volatile- and LILE-rich rhyolite. *EOS Transactions of AGU*, **68**, 450.
77. **London, D.** and Hervig, R.L. (1986d) Trace element partitioning in the system macusanite- H_2O at 200 MPa(H_2O). *EOS Transactions of AGU*, **67**, 1258.
78. **London, D.**, Weaver, B.L., and Hervig, R.L. (1986c) Liquidus relations of Macusani rhyolite: an analogue for rare-element granite-pegmatite systems. *Geological Society of America*, **18 (6)**, 675.

79. Morgan, G.B., VI, and **London, D.** (1986b) Metasomatism of amphibolitic wall rocks around the Tanco pegmatite, Manitoba. *Geological Society of America*, **18 (6)**, 700.
80. **London, D.** (1986a) Petrogenesis of rare-element pegmatites: evidence from fluid inclusions and phase equilibrium experiments. Invited, 1986 International Mineralogical Association Meeting, Stanford, CA. *Mineralogical Society of America, IMA '86 Abstracts with Programs*, 159.
81. **London, D.** and Morgan, G.B. VI (1985e) Wall rock alteration around the Tanco rare-element pegmatite, Manitoba: relations to pegmatite evolution. *EOS Transactions of AGU*, **66**, 1154.
82. Morgan, G.B., VI and **London, D.** (1985d) Wall rock alteration around the Tanco rare element pegmatite, Manitoba: petrology of alteration halos. *EOS Transactions of AGU*, **66**, 1153-1154.
83. Goodman, K.A. and **London, D.** (1985c) Significance of muscovite in the Lawler Peak granite, Yavapai County, Arizona. *EOS Transactions of AGU*, **66**, 1147.
84. **London, D.** (1985b) Formation of tourmaline-rich gem pockets in miarolitic pegmatites. *EOS Transactions of AGU*, **66**, 396.
85. **London, D.** (1985a) Internal evolution of lithium-rich rare-element pegmatites: the Tanco deposit, Manitoba. *Second International Symposium on Hydrothermal Reactions*, Pennsylvania State University Programs with Abstracts, **2**, 22.
86. **London, D.** (1984c) Holmquistite, tourmaline, and wall-rock alteration around rare-metal pegmatites. *EOS Transactions of AGU*, **65 (45)**, 1124.
87. **London, D.** (1984b) The role of lithium and boron in fluid evolution and ore deposition in rare-metal pegmatites. *Geological Society of America Abstracts with Programs*, **16 (6)**, 578.
88. **London, D.** (1984a) Ductile deformation in the Moodus area, Connecticut: implications for regional structure and stratigraphy. *Geological Society of America Abstracts with Programs*, **16 (1)**, 47.
89. **London, D.** (1983) The magmatic-hydrothermal transition in rare-metal pegmatites: fluid inclusion evidence from the Tanco Mine, Manitoba. *EOS Transactions of AGU*, **65**, 549.
90. **London, D.** (1982b) Fluid-solid inclusions in spodumene from the Tanco pegmatite, Bernic Lake, Manitoba. *Geological Society of America Abstracts with Programs*, **14 (7)**, 549.
91. **London, D.** and Burt, D.M. (1982a) Geology of lithium pegmatites in the White Picacho district, Maricopa and Yavapai Counties, Arizona. *American Mineralogist*, **67**, 188-189.
92. **London, D.** and Burt, D.M. (1980b) Local lowering of silica activity during albitization of spodumene--its relation to the formation of micas and eucryptite. *EOS Transactions of AGU*, **61 (17)**, 404.
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