



## **ANTONIO ACOSTA-VIGIL**

### **Current Appointment**

Research Scientist, School of Geology and Geophysics, University of Oklahoma, 810 Sarkeys Energy Center, 100 East Boyd Street, Norman, Oklahoma 73019; Phone: (405) 325-3253; Fax: (405) 325-3140. Internet: [aacosta@ou.edu](mailto:aacosta@ou.edu).

### **Professional Preparation**

◆ **Major in Geology**, May 1992, Universidad de Granada (Spain), Specialities of Structural Geology and Igneous and Metamorphic Petrology.

◆ **PhD in Geology**, January 1998, Universidad de Granada.

Thesis title: The study of partial melting phenomena and granitoid generation associated with the emplacement of the Ronda peridotites, SE Spain.

Advisor: Prof. F. Bea.

Topics: Field work in high-grade metamorphic and granitic terranes, petrography of igneous and metamorphic rocks, high-temperature geochemistry, experimental petrology of granitic rocks.

◆ **Post-doctoral experience**: Research in experimental petrology of granitic rocks and diffusion in silicate melts, from October 1998 until now, conducted at the University of Oklahoma.

Advisor: Prof. D. London.

### **Appointments**

◆ Visiting Scientist at the University of Oklahoma, October 1998-June 2000.

◆ Research Scientist at the University of Oklahoma, July 2000-December 2003.

### **Publications**

◆ Acosta, A., Menendez, L.G. (1995). Melting and generation of leucogranites associated with the emplacement of Ronda peridotites. US Geological Survey Circular 1129, p.7-8.

◆ Shaw, D., Pereira, M.D., Acosta, A., Bea, F. (1996). Distribution of boron in the serpentinization of Ronda peridotite. Geological Society of America Abstracts with Programs 28, 162.

◆ Acosta, A., Pereira, M.D., Shaw, D.M., Bea, F. (1997). Serpentinización de la peridotita de Ronda (Cordillera Bética) por la interacción con fluidos ricos en volátiles:

comportamiento del boro. *Revista de la Sociedad Geológica de España* 10, 301-308 (In Spanish).

- ◆ Acosta, A., London, D., Dewers, T.A. (1999). Alumina saturation in granitic melts. *Geological Society of America Abstracts with Programs* 31, 162.
  - ◆ Acosta, A., Pereira, M.D. and Shaw, D. (2000). Influence of volatiles in the generation of crustal anatectic melts. *Journal of Geochemical Exploration* 69, 339-342.
  - ◆ Evensen, J., Acosta, A., Dewers, T.A., Morgan, G.B. and London, D. (2000). Towards a model for textural evolution in pegmatites. *GeoCanada 2000/GAC-MAC Conference Volume*.
  - ◆ London, D., Acosta, A., Dewers, T.A. (2000). The aluminum saturation index of S-type granites. *EOS Transactions, American Geophysical Union* 81, 1292.
  - ◆ Acosta, A., Dewers, T.A., London, D. (2000). Multi component diffusion and mineral dissolution in water saturated haplogranitic melts. *EOS Transactions, American Geophysical Union* 81, 1295.
  - ◆ Acosta-Vigil, A., Pereira, M.D., Shaw, D.M., London, D. (2001). Contrasting behaviour of B during crustal anatexis. *Lithos* 56, 15-31.
  - ◆ London, D., Acosta, A., Dewers, T.A., Morgan, G.B. (2001). Anatexis of metapelites: the ASI of S-type granites. 11<sup>th</sup> Annual Goldschmidt Conference Abstract 3363, *Lunar Planetary Institute Contribution* 1088.
  - ◆ Acosta-Vigil, A., London, D., Dewers, T.A., Morgan VI, G.B. (2002). Dissolution of corundum and andalusite in H<sub>2</sub>O-saturated haplogranitic melts at 800°C and 200 MPa: constraints on diffusivities and the generation of peraluminous melts. *Journal of Petrology* 43, 1885-1908.
  - ◆ Acosta, A., London, D., Dewers, T.A., Morgan, G.B. (2002). Dissolution of quartz, albite and K-feldspar into H<sub>2</sub>O saturated haplogranitic melt at 800°C and 200 MPa: diffusive transport properties of granitic melts at crustal anatectic temperatures. *EOS Transactions, American Geophysical Union* 83, 1419.
  - ◆ Acosta-Vigil, A., London, D., Morgan VI, G.B., Dewers, T.A. (2003). Solubility of excess alumina 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*, in press.
  - ◆ Menéndez, L.G., Azor, A. y Acosta, A. (2003). Estudio Petrológico del batolito de Santa Eulalia-Monforte (Alto Alentejo, Portugal). *Geogaceta*, in press (in Spanish).
  - ◆ Pereira, M.D., Shaw, D., Acosta, A. (2004). Trace element and fluid processes in the Ronda peridotite. *Canadian Mineralogist*, in press.
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