



EGU

Media Tips

24 April 2005

EGU General Assembly 2005

What:

New Olivine-free magma source beneath Hawaii volcanoes

Where:

Wednesday, 27/4, 17:30-19:00 – Poster Area: Foyer A

Who:

Igor Nikogosian

Nikogosian and co-workers have found a hitherto unknown magma source. The mineral olivine appears to be rare in the upper mantle source rock of the Hawaii volcanoes. Olivine is the main constituent of the upper mantle which magmas usually originate from.

Their discovery is an important contribution to the unraveling of processes in the Earth's mantle. These relate to plate tectonics, the origin of hot spot volcanism and the recycling of oceanic crust by subduction.

Chemical analyses of lava samples by Nikogosian and co-workers revealed the origin of magma beneath Hawaii archipelago. Hawaii is a so-called hot spot, the site of the largest terrestrial volcano. For the first time, this study found indications of recycled crustal material in hot spot magmas.

POSTER [EGU05-A-09389](#); VGP12-1WE5P-0154;

Nikogosian, I.K.; van Bergen, M.J. ; Vroon, P.Z.; Mason, P.R.D

Perspectives on magma source variations in Central-Southern Italy from mineral chemistry

Contact:

Dick van der Wateren

EGU Press Officer

egu.press@copernicus.org

+31-20-4632559

Peter Vlam

assistant press officer

+31 (0)20 4632647