

EDMOND MATHEZ
EMPLOYMENT CURATOR AND PROFESSOR
DEPARTMENT OF EARTH AND PLANETARY SCIENCES

HIGHEST DEGREE EARNED

Ph. D.

AREA OF SPECIALIZATION

Geochemistry of the volatile elements in mafic and ultramafic systems, the evolution of layered intrusions, thermodynamics of sulfide systems, geochemistry of the platinum group elements, mantle petrology, the geochemistry of carbon, surface chemistry, physical properties of rocks, submarine hydrothermal sulfide deposits.

EDUCATIONAL EXPERIENCE

Ph.D. (Geology) University of Washington, Seattle, WA, 1981

M.S. (Geology) University of Arizona, Tucson, AZ, 1971

B.A. (Geology) Franklin and Marshall College, Lancaster, PA, 1968

EXPERIENCE IN DOCTORAL EDUCATION

FACULTY APPOINTMENTS

Adjunct Research and Adjunct Senior Research Scientist, Lamont Doherty Earth Observatory, Columbia University (1989-present)

Adjunct Professor, City University of New York

Visiting Professor, Geologic Museum, University of Copenhagen (2000-01)

Chercheur Associe (1986-1987), Labo. des Isotopes Stables, Universite de Paris VI et VII.

Research Assistant Professor (1983-1987), Department of Geological Sciences, University of Washington.

GRADUATE STUDENTS AND POSTDOCS

D. Nicholson

C. Peach

R. Hutchinson

R. Fogel

R. Kinzler

J. Arnason,

G. Grecco

J. Mey

S. Mondal

A. Merlini

J. VanTongeren

S. Fowler

PUBLICATIONS (2003-2008)

- Mathez, E.A., J.J. Roberts, A.G. Duba, A.K. Kronenberg, and S.L. Karner, 2008, Carbon deposition during brittle rock deformation: Changes in electrical properties of fault zones and potential geoelectric phenomena during earthquakes. *J. Geophys. Res.* (in press).
- Li, C., E.M. Ripley, Y. Tal, and E.A. Mathez, 2008, Cr-spinel/olivine and Cr-spinel nickel partition coefficients from natural samples. *Geochimica Cosmochimica Acta* **72**, 1678-1684.
- Mathez, E.A., and A.J.R. Kent, 2007, Variable initial Pb isotopic compositions of rocks associated with the UG2 chromitite, eastern Bushveld Complex. *Geochim. Cosmochim. Acta* **71**, 5514-5527.
- Mondal, S.K., and E.A. Mathez, 2007, Origin of the UG2 chromitite layer, Bushveld Complex. *Journal of Petrology* **48**, 495-510.
- Mathez, E.A., and J.L. Mey, 2005, Character of the UG2 chromitite and host rocks and petrogenesis of its pegmatoidal footwall, northeastern Bushveld Complex. *Economic Geology* **100**, 1617-1630.
- Mathez, E.A., 2005, Cold fire. *Natural History*, **114** (6), 26-31.
- Mathez, E.A., and J.D. Webster, 2005, Partitioning behavior of chlorine and fluorine in the system apatite—silicate melt—fluid. *Geochimica et Cosmochimica Acta* **69**, 1275-1286.
- Grieco G, A. Ferrario, and E.A. Mathez, 2004, The effect of metasomatism on the Cr-PGE mineralization in the Finero Complex, Ivrea-Verbano Zone, Southern Alps. *Ore Geology Reviews* **24**, 299-314.
- Mathez, E.A., 2004, A birthstone for Earth. *Natural History*, **113** (4), 40-45.
- Mathez, E.A., and J.D. Webster, 2004, *The Earth Machine: The Science of a Dynamic Planet*. New York: Columbia University Press, 335p.
- Chusi Li, E. M. Ripley, and E. A. Mathez, 2003, Nickel partitioning between olivine and submarine basalt glass: Implications for partitioning behavior in S-bearing systems. *Chemical Geology* **201**, 295-306.
- Mathez, E.A. and T.E. Waight, 2003, Lead isotopic disequilibrium between sulfide and plagioclase in the Bushveld Complex and the chemical evolution of large layered intrusions. *Geochim. Cosmochim. Acta* **67**, 1875-1888.

SPECIAL RECOGNITION/AWARDS

Fellow, MSA (elected 1996)

AGU Excellence in Geophysical Education Award, 2002 (co-recipient)