



**Marcelo Assumpção (University of São Paulo)**

**(a) Professional Preparation**

- B.Sc., University of São Paulo (Brazil), Physics, 1970-1973.
- Ph.D., University of Edinburgh (UK), Geophysics, 1974-1978.
- PosDoc (sabbatical), Lamont-Doherty Earth Obs.(US), Seismology, 1984-85; 1991-92.

**(b) Appointments**

- Professor of Geophysics, University of São Paulo, 1988-present (full professor since 2001).
- Associate Prof., University of Brasilia, 1982-1988.
- Lecturer, University of São Paulo, 1974-1982.

**(c) Publications**

(i) 5 publications most closely related to the proposed project, i.e., resulting from international cooperation with deployment of seismic stations from foreign partners:

- VanDecar, J.C., D.E. James & M. **Assumpção**, 1995. Seismic evidence for a fossil mantle plume beneath South America and implications for plate driving forces. *Nature*, 378, 25-31.
- **Assumpção**, M., D. James & A. Snoke, 2002. Crustal thicknesses in SE Brazilian shield by receiver function analysis: implications for isostatic compensation. *J. Geophys. Res.*, 107(B1), ESE2-1—ESE2-14, 2006, doi:10.1029/2001JB000422.
- **Assumpção**, M., M. Heintz, A. Vauchez and M.Egydio-Silva, 2006. Upper mantle anisotropy in SE and Central Brazil from SKS splitting: Evidence of asthenospheric flow around a cratonic keel. *Earth Planet. Sci. Lett.*, 250, 224-240, doi: 10.1016/j.epsl.2006.07.038.
- Feng, M., S. Van der Lee and M. **Assumpção**, 2007. Upper mantle structure of South America from joint inversion of waveforms and fundamental-mode group velocities of Rayleigh waves. *J. Geophys. Res.*, 112, B04312, doi:10.1029/2006JB004449.

- James, D.E. & M. **Assumpção**, 1996. Tectonic implications of S-wave anisotropy beneath SE Brazil. *Geophys.J.Int.*,126, 1-10.

(ii) 5 other significant publications:

- **Assumpção**, M., 1998. Seismicity and stresses in the Brazilian passive margin. *Bull. Seism. Soc. Am.*, 88(1), 160-169.

- **Assumpção**, M., 1998. Focal mechanisms of small earthquakes in SE Brazilian shield: a test of stress models of the South American plate. *Geophys. J. Int.*, 133, 490-498.

- **Assumpção**, M., V. Mârza, L. Barros, C. Chimpliganond, J.E. Soares, J. Carvalho, D. Caixeta, A. Amorim & E. Cabral, 2002. Reservoir induced seismicity in Brazil, *Pure Appl. Geophys.*, 159, 597-617.

- Schimmel, M., M. **Assumpção** & J. VanDecar, 2003. Upper mantle seismic velocity structure beneath SE Brazil from P- and S-wave travel time inversions. *J. Geophys. Res.*, 108(B4), 2191, doi:10.1029/2001JB000187.

- **Assumpção**, M., M. Schimmel, C. Escalante, M. Rocha, J.R. Barbosa & L.V. Barros, 2004. Intraplate seismicity in SE Brazil: Stress concentration in lithospheric thin spots. *Geophysical J. Int.*, 159, 390-399.

#### **(d) Synergistic Activities**

- cooperation in establishing the Seismology group of the Federal University of Rio Grande do Norte, through a) training and supervision of graduate students, b) helping organize their seismology research program.

- organization of Summer Courses (training in Seismology) at the University of São Paulo, and hosting the 2006 IRIS training course on Metadata and Waveform Data.

August 31, 2007.