

List of Publications, Jørn A. Jernsletten, Dr.Philos.

Peer-Reviewed Journal Articles, Dissertation, etc.

- Jernsletten, J. A. (2006), Time domain electromagnetics in Mars analog environments: Comparing two field studies, in *Mars Analog Research*, edited by Jonathan D. A. Clarke, pp. 93-105 (AAS 06-256), Vol. 111, Science and Technology Series, American Astronautical Society, San Diego, California.
- Jernsletten, J. A. (2004), A topographic test for the existence of ground ice in the walls of Coprates Chasma, Mars, *J. Geophys. Res.*, 109, E12004, doi: 10.1029/2004JE002272.
- Jernsletten, J. A. (2004), Possible temperature-related slope and surface roughness differences between the north and south walls of Coprates Chasma, Mars, a dissertation for the degree Doctor Philosophiae, 268 pp., Department of Earth Science, Faculty of Mathematics and Natural Sciences, University of Bergen, Bergen, Norway, June 15.

Conference Publications

- Jernsletten, J. A. (2005), North-south components of slope in the global topography of Mars: Evidence for an ice-rich shallow crust?, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract no. P31C-0219, AGU 2005 Fall Meeting, San Francisco, California, December 5 – 9.
- Hirsch, A., C. Snelson, S. Zaragoza, J. Jernsletten, D. McEwan, S. Saldana, and B. McLaurin (2005), Seismic reflection investigation of Hidden Valley: A volcanotectonic regime, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract no. T43B-1412, AGU 2005 Fall Meeting, San Francisco, California, December 5 – 9.
- Zaragoza, S. A., C. M. Snelson, J. A. Jernsletten, S. C. Saldana, A. Hirsch and D. McEwan (2005), High-resolution seismic reflection profiling across the Black Hills fault, Clark County, Nevada: Preliminary results, *Eos Trans. AGU*, 86(52), Fall Meet. Suppl., Abstract no. S22A-04, AGU 2005 Fall Meeting, San Francisco, California, December 5 – 9.
- Jernsletten, J. A. (2005), Using TEM for sounding conductive and deep groundwater in Mars analog environments: Comparing two field studies, Abstract no. 781, SEG International Exposition and 75.th Annual Meeting, Houston, Texas, November 6 – 11.
- Jernsletten, J. A. (2005), Comparing time domain electromagnetics (TEM) and early-time TEM for mapping highly conductive groundwater in Mars analog environments, *Eos Trans. AGU*, 86(18), Jt. Assem. Suppl., Abstract no. P21D-06, AGU 2005 Joint Assembly, New Orleans, Louisiana, May 23 – 27.
- Jernsletten, J. A. (2005), Time domain electromagnetics for mapping mineralized and deep groundwater in Mars analog environments, Abstract no. 1013, 36.th Lunar and Planetary Science Conference, Houston, Texas, March 14 – 18.
- Jernsletten, J. A. (2005), Fast-turnoff transient electromagnetic (TEM) field study at the Mars analog site of Rio Tinto, Spain, Abstract no. 1014, 36.th Lunar and Planetary Science Conference, Houston, Texas, March 14 – 18.
- Jernsletten, J. A., and E. Heggy (2005), Comparing transient electromagnetics and low frequency ground penetrating radar for sounding of subsurface water in Mars analog environments, Abstract no. 6040, Workshop on Radar Investigations of Planetary and Terrestrial Environments, Houston, Texas, February 7 – 10.
- Jernsletten, J. A. (2004), Fast-turnoff transient electro-magnetic (TEM) geophysical survey in the Peña de Hierro (“Berg of Iron”) field area of the Mars Analog Research and Technology Experiment (MARTE), *Eos Trans. AGU*, 85(46), Fall Meet. Suppl., Abstract no. P43A-0904, AGU 2004 Fall Meeting, San Francisco, California, December 13 – 17.
- Jernsletten, J. A. (2004), Using the transient electromagnetic (TEM) method for mapping deep groundwater tables in Mars analog environments: A baseline field study, *Eos Trans. AGU*, 85(17), Jt. Assem. Suppl., Abstract no. P53A-05, AGU 2004 Joint Assembly, Montreal, Canada, May 17 – 21.
- Jernsletten, J. A., and E. Heggy (2004), Sounding of groundwater through conductive media in Mars analog environments using transient electromagnetics and low frequency GPR, *Eos Trans. AGU*, 85(17), Jt. Assem. Suppl., Abstract no. P53A-01, AGU 2004 Joint Assembly, Montreal, Canada, May 17 – 21.

- Jernsletten, J. A. (2004), Power line noise in transient electromagnetic (TEM) data: Identification and removal in a practical field study, *Eos Trans. AGU*, 85(17), Jt. Assem. Suppl., Abstract no. NS43A-07, AGU 2004 Joint Assembly, Montreal, Canada, May 17 – 21.
- Jernsletten, J. A. (2004), Possible temperature-related differences in slope angle between the north and south walls of Coprates Chasma, Mars, Abstract no. 1495, 35.th Lunar and Planetary Science Conference, Houston, Texas, March 15 – 19.
- Jernsletten, J. A., and E. Heggy (2004), Sounding of subsurface water through conductive media in Mars analog environments using transient electromagnetics and low frequency ground penetrating radar, Abstract no. 2089, 35.th Lunar and Planetary Science Conference, Houston, Texas, March 15 – 19.
- Jernsletten, J. A. (2003), Possible temperature-related slope and surface roughness differences between the north and south walls of Coprates Chasma, Mars, *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract no. P11B-1032, AGU 2003 Fall Meeting, San Francisco, California, December 8 – 12.
- Jernsletten, J. A. (2002), The central mesas of Hebes, Ganges, and East Candor Chasmae, Abstract no. 2019, 33.rd Lunar and Planetary Science Conference, Houston, Texas, March 11 – 15.
- Jernsletten, J. A. (2002), Latitude-dependent topographic variations in the near-equatorial canyons of Mars (Valles Marineris region), Abstract no. 1861, 33.rd Lunar and Planetary Science Conference, Houston, Texas, March 11 – 15.
- Jernsletten, J. A. (1998), Ground ice and slope stability in the canyons of Mars, poster presentation, 7.th International Conference on Permafrost, Yellowknife, Canada, June 21 – 27.
- Jernsletten, J. A. (1998), Ground ice and slope failure in the canyons of Mars, oral presentation, AIAA Houston Section Annual Technical Symposium, Houston, Texas, May 28.