

# Peter A. J. Englert

## Professional Preparation/Education

University of Cologne, Germany	Chemistry	B.S.	1973
University of Cologne, Germany	Chemistry	M.S.	1976
University of Cologne, Germany	Nuclear Chemistry	Ph.D.	1979

## Appointments

2015–present	President & Vice-Chancellor, Quest University Canada
2005–present	Professor, Hawai'i Institute of Geophysics and Planetology; Graduate Faculty, Department of Geology and Geophysics; Faculty, Center for Chinese Studies
2002–2005	Chancellor, University of Hawaii at Mānoa
1998–2002	Pro-Vice Chancellor of Research; Dean of Science, Architecture & Design, Victoria University of Wellington, New Zealand
1995–1998	Division Head, Nuclear Sciences, Institute of Geological and Nuclear Sciences, Lower Hutt, New Zealand
1986–1995	Professor, Department of Chemistry, San Jose State University, CA; Director, Nuclear Science Facility
1982–1985	Assistant Professor, Institute for Nuclear Chemistry, University of Cologne, Germany
1979–1981	Research Fellow, Department of Chemistry, University of California San Diego
1975–1979	Teaching Assistant, Institute for Nuclear Chemistry, University of Cologne, Germany

## Publications

- Bishop J.L., P.A.J. Englert, S. Patel, D. Tirsch, A.J. Roy, C. Koeberl, U. Böttger, F. Hanke & R. Jaumann (2014). Mineralogical Composition of Surface Sediments in the Antarctic Dry Valleys: Coordinated Analyses of Raman Spectra, Reflectance Spectra and Elemental Abundances. *Phil.Trans.R.Soc. A* **372**:20140198.<http://dx.doi.org/10.1098/rsta.2014.0198>
- Brückner J., R. C. Reedy, P. A. J. Englert & D. M. Drake (2011) Experimental simulations of planetary gamma-ray spectroscopy using thick targets irradiated by protons. *Nuclear Instruments and Methods in Physics Research B*, 269, 2630-2640, doi: 10.1016/j.nimb.2011.07.010.
- Englert P. (2011) Planetary gamma ray spectrometry: Remote sensing of elemental abundances. *Proceedings of Radiochimica Acta*, 1, 349–355, doi: 10.1524/rcpr.2011.0062.
- Reedy R.C. & P.A.J. Englert (2010) Lunar gamma ray spectroscopy: Advancing lunar science and orbital remote sensing. In: Z. Oyang, W.H. Ip & Z. Tang (eds.) New Advances in Lunar Exploration. *Proceedings of International Symposium on Lunar Science*, Macao, 25-32.
- Englert P. & W.D. Grossmann (2009) Higher education systems: Technology, education and development. In: W. Kouwenhoven (ed.) Advances in Technology, Education and Development. *Intech Publishers, Wien, Austria, ISBN: 978-953-307-011-7*, 20 p.
- Englert P. (2009) Challenges of leadership: Trends in US higher education. *China Higher Education Research*, 5, 39-43.
- Bateer C. & P. Englert (2008) On the historical development of the universities for nationalities and its organizational characteristics. *Peking University Education Review*, 6, 72-78.
- Shi X.G. & P. Englert (2008) Reform of teacher education in China. *Journal of Education for Teaching*, 34, 347-359.

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- Castaneda C.M., P.A.J. Englert, D.M. Drake, Gearhart, R.M. Gearhart, Z. Hoel, B. Sannii, J.F. Dempsey, J.C. Young & M.B. Chadwick (2007) Gamma ray production cross sections from the bombardment of Mg, Al, Si, Ca, and Fe with medium energy neutrons. *Nuclear Instruments and Methods in Physics Research B*, 260, 508-512.
- Boynton W.V., G. J. Taylor, L.G. Evans, R.C. Reedy, R.D. Starr, D.M. Janes, K.E. Kerry, D.M. Drake, K.J. Kim, R.M.S. Williams, K. Crombie, J.M. Dohm, V. Baker, A.E. Metzger, S. Karunatillake, J. Keller, J.R. Arnold, J. Brückner, P.A.J. Englert, O. Gasnault, A.L. Sprague, S.W. Squyres, J.I. Trombka, C. d'Uston & H. Wänke (2007) Concentration of H, Si, Cl, K, Fe, and Th in the low and mid latitude regions of Mars. *Journal of Geophysical Research*, 112, E12S99, doi: 10.1029/2007JE002887.
- Taylor G.J., J.D. Stopar, W.V. Boynton, S. Karunatillake, J.M. Keller, J. Brückner, H. Wänke, G. Dreibus, K.E. Kerry, R.C. Reedy, L.G. Evans, R.D. Starr, L.M.V. Martel, S.W. Squyres, O. Gasnault, S. Maurice, C. d'Uston, P. Englert, J.M. Dohm, V.R. Baker, D.K. Hamara, D. Janes, A.L. Sprague, K.J. Kim, D.D. Drake, S.M. McLennan & B.C. Hahn (2007) Variations in K/Th on Mars. *Journal of Geophysical Research*, 112; doi: 10.1029/2005JE002676.
- Taylor G.J., W.V. Boynton, J. Brückner, H. Wänke, G. Dreibus, K.E. Kerry, J.M. Keller, R.C. Reedy, L.G. Evans, R.D. Starr, S.W. Squyres, S. Karunatillake, O. Gasnault, S. Maurice, C. d'Uston, P. Englert, J.M. Dohm, V.R. Baker, D.K. Hamara, D.M. Janes, A.L. Sprague, K.J. Kim & D.D. Drake (2007) Bulk composition and early differentiation of Mars. *Journal of Geophysical Research*, 112; doi: 10.1029/2005JE002645.
- Kim K.J., D. Lal, P.A.J. Englert & J. Southon (2007) In situ  $^{14}\text{C}$  depth profile of vein quartz samples from Macraes Flat, New Zealand. *Nuclear Instruments and Methods in Physics Research B*, 259, 632-636.
- Kim K.J. & P.A.J. Englert (2004) In situ cosmogenic nuclide production of  $^{10}\text{Be}$  and  $^{26}\text{Al}$  in marine terraces, Fiordland, New Zealand. *Nuclear Instruments and Methods in Physics Research B*, 223, 632-644.
- Kim K.J. & P.A.J. Englert (2004) Profiles of in situ  $^{10}\text{Be}$  and  $^{26}\text{Al}$  at great depths at the Macraes Flat, East Otago, NZ. *Earth and Planetary Science Letters*, 223, 113-126.
- Boynton W.V., W.C. Feldman, I.G. Mitrofanov, L.G. Evans, R.C. Reedy, S.W. Squyres, R. Starr, J.I. Trombka, C. D'Uston, J.R. Arnold, P.A.J. Englert, A.E. Metzger, H. Waenke, J. Brückner, D.M. Drake, C. Shinohara, C. Fellows, D.K. Hamara, K. Harshman, K. Kerry, C. Turner, M. Ward, H. Barthe, K.R. Fuller, S.A. Storms, G.W. Thornton, J.L. Longmire, M.L. Litvak & A.K. Ton'Chev (2004) The Mars Odyssey gamma-ray instrument suite. *Space Science Reviews*, 110, 37-83.
- Boynton W.V., W.C. Feldman, S.W. Squyres, T.H. Prettyman, J. Brückner, L.G. Evans, R.C. Reedy, R. Starr, J.R. Arnold, D.M. Drake, P.A.J. Englert, A.E. Metzger, Igor Mitrofanov, J.I. Trombka, C. d'Uston, H. Wänke, O. Gasnault, S. Maurice, G.J. Taylor & R. Tokar (2002) Distribution of hydrogen in the near-surface of Mars: Evidence for sub-surface ice deposits. *Science*, 297, 81-85.
- Kim K.J., J.M. Sisterson, P.A.J. Englert, A. Beverding, M.W. Caffee, J. Vincent, C. Castaneda & R.C. Reedy (2002) Experimental proton cross-sections of  $^{10}\text{Be}$  on natural carbon targets from 40.6 to 100 MeV protons. *Nuclear Instruments and Methods in Physics Research B*, 196, 239-244.
- Englert P.A.J. (2001) Discovery of cosmogenic nuclides: Early history and science applications. *Journal of the Korean Physical Society*, 39, 747-754.
- Warnes P.N., W. Orchiston and P.A. Englert (1998) A Reported Tektite Transported from Australia and found at Gabriel's Gully Mining Camp, Central Otago, New Zealand. *Journal of the Royal Society of New Zealand*, 28, 329-331.
- Perone S.P., J. Pesek, C. Stone & P. Englert (1998) Transforming traditional sophomore quant into a course on modern analytical science. *Journal of Chem. Education*, 75, 1444-1452.
- Sisterson J.M., K. Kim, A. Beverding, P.A.J. Englert, M.W. Caffee, J. Vincent, C. Castaneda & R.C. Reedy (1997) Measurement of proton production cross sections of  $^{10}\text{Be}$  and  $^{26}\text{Al}$  from elements found in lunar rocks. *Nuclear Instruments and Methods in Physics Research B*, 123, 324-329.

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- Bishop J.L., C. Koeberl, C. Kralik, H. Fröschl, P.A.J. Englert, D.W. Andersen, C.M. Pieters & R.A. Wharton, Jr. (1996) Reflectance spectroscopy and geochemical analyses of Lake Hoare sediments, Antarctica: Implications for remote sensing of the Earth and Mars. *Geochimica et Cosmochimica Acta*, 60, 765-785.
- Koenen M., J. Brückner, U. Fabian, H. Kruse, H. Wänke, A.N.F. Schroeder, R.D. Starr, L.G. Evans, J.I. Trombka, D.M. Drake, P.A.J. Englert & J. Dempsey (1995) Analysis of radiation damaged HPGe detectors with a new algorithm. *IEEE Trans. Nucl. Sci.* 43, 1570-1575.
- Paul R.L., P.A.J. Englert & R.M. Lindstrom (1995) Mapping of neutron flux gradient at NIST Reactor to optimize neutron activation analysis of  $^{53}\text{Mn}$ . *Journal of Radioanalytical and Nuclear Chemistry Letters*, 200, 457-463.
- Paul R.L., L.J. Harris, P.A.J. Englert, I.D. Goldman, C. Jackson, R.M. Larimer, K.T. Lesko, B. Napier, E.B. Norman & B. Sur (1995) Production of cosmogenic nuclides in thick targets by alpha bombardment. Part I-short-lived radioisotopes. *Nuclear Instruments and Methods in Physics Research B*, 100, 464-470.
- Englert P., R. Sarafin, J. Masarik & R.C. Reedy (1995) Cosmogenic  $^{53}\text{Mn}$  in the main fragment of the Norton County aubrite. *Geochimica et Cosmochimica Acta*, 59, 825-830.
- Reedy R.C., K. Nishiizumi, D. Lal, J.R. Arnold, P.A.J. Englert, J. Klein, R. Middleton, A.J.T. Jull & D.J. Donahue (1994) Simulations of terrestrial and in-situ cosmogenic nuclide production. *Nuclear Instruments and Methods in Physics Research B*, 92, 297-300.
- Sisterson J.M., A.J.T. Jull, A. Beverding, A.M. Koehler, C. Castaneda, J. Vincent, D.J. Donahue, P.A.J. Englert, C. Gans, J. & R.C. Reedy (1994) Proton production cross sections for  $^{14}\text{C}$  from silicon and oxygen: Implications for cosmic-ray studies. *Nuclear Instruments and Methods in Physics Research B*, 92, 510-512.
- Drake D.M., M. Droszg, R.C. Byrd, R.C. Reedy, D.A. Clark, P.A.J. Englert, J.F. Dempsey, S.G. Bobias & L.J. Harris (1994) Experimental and numerical simulation of Martian neutron distributions. *Nucl. Instr. Meth.*, B84, 337-356.
- Englert P.A.J. (1997) Education of environmental scientists: Should we listen to Steinbeck and Rickett's comments. In: S. Beegle et al. (eds.) Steinbeck and the Environment. *Tuscaloosa: University of Alabama Press*, 176-193.
- Ling A.C., P.A.J. Englert & C.A. Stone, (1993) Nuclear Science programs at San Jose State University. *Journal of Radioanalytical and Nuclear Chemistry*, 171, 167-175.
- Castaneda C.M., R. Gerhardt, B. Sani, P.A.J. Englert, D.M. Drake & R.C. Reedy (1992). Gamma-ray production cross sections from energetic neutron inelastic scattering for methodical improvements in planetary gamma-ray spectroscopy. *Journal of Radioanalytical and Nuclear Chemistry*, 160, 387-393.
- Boynton W.V., J.I. Trombka, W.C. Feldman, J.R. Arnold, P.A.J. Englert, A.E. Metzger, R.C. Reedy, S.W. Squyres, H. Wänke, S.H. Bailey, J. Brückner, S. Clapp, J.L. Callas, D.M. Drake, P. Duke, L.G. Evans, E.L. Haines, F.C. McCloskey, H. Mills, C. Shinohara & R. Starr (1992) Science applications of the Mars Observer gamma-ray spectrometer. *Journal of Geophysical Research*, 97, 7681-7698.
- Brückner J., M. Körfer, H. Wänke, A.N.F. Schröder, D. Filges, P. Dragovitsch, P.A.J. Englert, R. Starr, J.I. Trombka, I. Taylor, D.M. Drake & E.R. Shunk, (1991) Proton-induced radiation damage in germanium detectors. *IEEE Transactions of Nuclear Science*, 38, 209-217.
- Drake D.M., S.A. Wender, R.O. Nelson, D.D. Clark, M. Droszg, W. Armian, J. Brückner & P.A.J. Englert (1991). Experimental simulation of Martian neutron leakage spectra. *Nuclear Instruments and Methods in Physics Research A*, 309, 575-580.
- R. Michael, P. Dragovitsch, F. Peiffer, S. Theis, F. Begemann, H. Weber, P. Signer, R. Wieler, D. Filges, P. Cloth, & P. Englert, (1989) Production of stable and radioactive nuclides in thick stony targets (R=15 and 20 cm) irradiated with 600 MeV protons. Simulation of production of cosmogenic nuclides in small meteorites. *Nuclear Instruments and Methods in Physics Research B*, 42, 76-100.
- Englert P., R.C. Reedy & J.R. Arnold (1987) Thick-target bombardments with high-energy charged particles: Experimental improvements and spatial distribution of low energy secondary neutrons. *Nuclear Instr. & Methods in Physics Research A*, 262, 496-502.

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- Fink M. Paul, G. Hollos, S. Theis, P. Englert, S. Vogt, P. Stück & R. Michel, (1987) Measurements of spallogenic  $^{41}\text{Ca}$  by accelerator mass spectrometry. *Nuclear Instruments and Methods in Physics Research B*, 29, 275-280.
- Englert P., U. Herpers, R. Sarafin & St. Vogt (1987) Exposure history of meteorites as deduced by sub-nanogram neutron activation analysis of  $^{53}\text{Mn}$ . *Journal of Radioanalytical and Nuclear Chemistry*, 113, 119-123.
- Englert P., J. Brückner & H. Wänke, (1987) Planetary gamma-ray spectroscopy, a special form of charged particle and prompt neutron activation analysis. *Journal of Radioanalytical and Nuclear Chemistry*, 109, 11-22.
- Theis S. & P. Englert (1986) Application of radiochemical separation techniques to the determination of extremely long-lived radio nuclides in elemental targets. *Journal of Radioanalytical and Nuclear Chemistry*, 100, 203-214.
- Englert P., R. Sarafin, U. Herpers, J.T. Padia & M.N. Rao (1986) Cosmic-ray records in the LL-chondrite Dhurmsala. *Geochimica et Cosmochimica Acta*, 50, 1593-1598.
- Karanatsios I. & P. Englert, (1985) Mass flow studies of a lignite power plant by means of neutron activation analysis. *Fresenius' Zschrft f. Analytische Chemie*, 320, 653-655.
- Michel, P. Dragovitsch, P. Englert, F. Pfeiffer, R. Stück, S. Theis, F. Begemann, H. Weber, P. Signer, R. Wieler R., D. Filges & P. Cloth (1985) On the depth dependence of spallation reactions in a spherical thick diorite target homogeneously irradiated by 600 MeV protons. Simulation of production of cosmogenic nuclides in small meteorites. *Journal of Radioanalytical and Nuclear Chemistry*, 16, 61-82.
- Englert P., S. Theis, R. Michel, C. Tuniz, R.K. Moniot, S. Vajda, T.H. Kruse, D.K. Pal & G.F. Herzog, (1984) Production of  $^7\text{Be}$ ,  $^{22}\text{Na}$  and  $^{10}\text{Be}$  from Al in a  $4\pi$ -irradiated meteorite model. *Nucl. Instruments and Methods in Physics Research B*, 4, 415-419.
- Millard H.T. Jr, P. Englert & U. Herpers (1984) Instrumental neutron activation analysis of small spheres of various origins. In: Instrumentelle Multielementanalyse, B. Sansoni (Ed.), Verlag Chemie, Weinheim, 573-576.
- Heusser G., Z. Ouyang, T. Kirsten, P. Englert & U. Herpers (1984) Conditions of cosmic ray exposure of the Jilin chondrite in the context of its suitability as a gauge meteorite. *Earth and Planetary Science Letters*, 72, 263-272.
- Englert, P. & U. Herpers, (1984) Instrumental neutron activation analysis of carbon-containing microspheres from Jungfrau-Joch glacier ice. *Journal of Radioanalytical and Nuclear Chemistry*, 84, 335-343.
- Herpers. U. & P. Englert (1983)  $^{26}\text{Al}$  production rates and  $^{53}\text{Mn}/^{26}\text{Al}$  production rate ratios in non-Antarctic chondrites and their application to bombardment histories. Proceedings of the 14th Lunar and Planetary Science Conference, *Journal of Geophysical Research*, 88B, 312-318.
- Englert P., U. Herpers, W. Herr, C.M. Nautiyal, J.T. Padia, M.N. Rao & T.R. Venkatesan (1983) Isna, an unusual C3(O) carbonaceous chondrite. *E & P Science Let.*, 65, 1-6.
- Englert P., U. Herpers & W. Herr (1981) Irradiation records of Acapulco and other small meteorites derived from  $^{53}\text{Mn}$  and rare gas measurements. Proceedings of the 12th Lunar and Planetary Science Conference, *Geochimica et Cosmochimica Acta Series*, 12, 1209-1215.
- Englert P. & U. Herpers (1980) Isotopic anomalies of Osmium from different deposits determined by Laser Microprobe Mass Analyzer LAMMA. *Inorganic and Nuclear Chemistry Letters*, 16, 37-43.
- Englert P. & W. Herr (1980) On the depth-dependent production of long-lived spallogenic  $^{53}\text{Mn}$  in the St. Severin chondrite. *Earth and Planetary Science Letters*, 47, 361-369.
- Englert P. & W. Herr (1978) A study on exposure ages of chondrites based on spallogenic  $^{53}\text{Mn}$ . *Geochimica et Cosmochimica Acta*, 42, 1635-1644.
- Bühling, A., C. Carl, P. Englert, U. Herpers, W. Herr, R. Michel, P. Ney, H. Weigel, (1977). Computer-assisted multielement analysis of terrestrial and extra-terrestrial materials and studies of long-lived cosmogenic  $^{53}\text{Mn}$  by neutron activation. *Journal of Radioanalytical and Nuclear Chemistry*, 38, 379-390.

**Conference Proceedings**

- Englert P.A.J. (2009) Internationalization of Higher Education: Concepts and Practice of Student Mobility. *Proceedings of International Conference on Education, Research, and Innovation*, ISBN: 978-84-613-2955-7, 671-681.
- Grossmann W.D. & P.A.J. Englert (2009) Concepts of knowledge development and the challenge to higher education. *Proceedings of International Conference on Education, Research, and Innovation*, ISBN: 978-84-613-2955-7, 644-649.
- Englert P.A.J., W.D. Grossmann & L. Maggaard (2008) Higher education systems in post-industrial society: Education effort and economic relevance. *Proceedings of the 2nd International Multi-Conference on Society, Cybernetics and Informatics*, 1, 123-130.
- Englert P.A.J. & W.D. Grossmann (2008) Higher education systems: Development of higher technical education for innovation and knowledge. *International Technology, Education and Development Conference Proceedings*, ISBN 978-84-612-0190-7, 8p.
- Englert P. A. J. (2007) International postgraduate education through collaborative and joint degree programs. *International Technology, Education and Development Conference Proceedings*, ISBN 978-84 611-4517-1, 8p.
- Englert P. (2006) L'Internationalisation des Universités: Supports et Obstacles à l'Education Mondiale. In: G. Rott & A. Zembyla-Kalli (eds.) Knowledge and Transitions: Challenges for Guidance and Counselling within the Context of Globalization and the Enlarged European Union. *FEDORA-Louvain-la-Neuve*. ISSN 1990-1992, 13 p.
- Arnold J.R., W.V. Boynton, P.A.J. Englert, W.C. Feldman, A.E. Metzger, R.C. Reedy, S.W. Squyres, J.I. Trombka & H. Wänke (1989) Scientific considerations in the design of the Mars-Observer gamma-ray spectrometer. In: A.C. Rester & J.I. Trombka (eds.) High-Energy Radiation Backgrounds in Space. *American Institute of Physics Conference Proceedings*, 186, 453-467.
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- Sisterson J.M., K. Kim, A. Beverding, P.A.J. Englert, M.W. Caffee, J. Vincent, C. Castaneda & R.C. Reedy (1997) Measuring excitation functions needed to interpret cosmogenic nuclide production in lunar rocks. In: J.L. Duggan and I.L. Morgan (eds.), Applications of Accelerators in Research and Industry. *American Institute of Physics Conference Proceedings*, 392, 811-814.
- Sisterson J.M., K. Kim, A. Beverding, P.A.J. Englert, M. Caffee, A.J.T. Jull, D.J. Donahue, L. McHargue, C. Castaneda, J. Vincent & R.C. Reedy (1996) Measurement of proton production cross sections of  $^{10}\text{Be}$  and  $^{26}\text{Al}$  from elements found in lunar rocks. *Radiocarbon*, 38, 112-113.
- Kim K., A. Beverding, P.A.J. Englert, J.M. Sisterson, M.W. Caffee, C. Castaneda, J. Vincent & R.C. Reedy (1996) Determination of radionuclide proton cross sections on thin foil target material – Irradiation details, chemical separation techniques, and AMS Measurements. *Radiocarbon*, 38, 60-61.
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- P. Englert (1985) Depth and size effects on cosmogenic nuclide production in meteorites. (Paper Code SH 7.1-9) *Proceedings of the 19th International Cosmic Ray Conference*, 5, 394-397.
- R. Michel, P. Dragovitsch, P. Englert, D. Filges, and P. Cloth, (1985) Deconvolution of the effects of solar and galactic cosmic rays in meteorites on the basis of improved interaction data. *Proceedings of the International Conference on Nuclear Data for Basic and Applied Science*, 2, 989-992.

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### Other Publications

- Englert P.A.J. & W.D. Grossmann (2007) Higher education systems: Development of postsecondary vocational and technical education in response to growth in knowledge, information potential, and economy. *Journal of Qingdao Technical College*, 20, 24-28.
- Brückner J., A. Patnaik, H. Wänke, P. Cloth, G. Dagge, V. Drüke, D. Filges, R.D. Neef, P.A.J. Englert, D.M. Drake, R.C. Reedy & B. Parlier (1992) Simulation experiments for planetary gamma-ray spectroscopy by means of thick target high-energy proton irradiations. *Annual Report of the Nuclear Research Center, Jülich, Juel-2590*, 77-78.
- Englert P. (1987) Meteorite aus der Antarktis. *Sterne und Weltraum*. 26, 18-23.
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### Books, Reports Edited/Translated

- Oberth H., *The Rocket into Planetary Space* (2014) T.C. Sorensen, J. Kehr, P. Englert (translators); M.L. Ciancone, L. Oliefka, R.W. Sturdevant, J.W. Wilson (reviewers). To be published: R. Oldenbourg Publisher, Munich
- Bateer C. & P. Englert (eds.) (2009) Higher educational studies of indigenous peoples and nationalities in Asia-Pacific. *Publishing House of Central University for Nationalities, Beijing, China*, 400 pp.
- Bateer C. & P. Englert (eds.) (2009) Catcher, self-consciousness, comparison—Educational studies of indigenous peoples and nationalities. *Publishing House of Central University for Nationalities, Beijing, China*, 288 p.

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- Englert P.A.J., R.C. Reedy & R. Michel, eds. (1990) Workshop on Cosmogenic Nuclide Production Rates, *Lunar and Planetary Institute, Technical Report, LPI-TR 90-05*, 124 pp.
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- Englert P., J.L. Bishop, S. Patel, E.K. Gibson, C. Koeberl, D. Tirsch, U. Boettger, R. Jaumann (2014) Sediments and Soil Profiles of Upper Wright Valley, Antarctica. *45th Lunar and Planetary Science Conference, abs. #1707*
- Englert P., J. L. Bishop, E. K. Gibson, C. Koeberl (2013) Subsurface Salts in Antarctic Dry Valley Soils. *44th Lunar and Planetary Science Conference, abs. #1462*
- Dobbs K. E., P.A.J. Englert (2013) Bismuth Germanate Gamma Ray Spectra from a Classical Thick Target Experiment. *44th Lunar and Planetary Science Conference, abs. #1462*
- Englert P. (2012) <sup>53</sup>Mn and Cosmic Ray Track Production Rates: Contributions of Exposure Histories of Djermaia and Lost City. *43rd Lunar and Planetary Sci. Conference, abs. #1729*
- Englert, P., Bishop, J. L., Hunkins, L. D. & Koeberl, C. (2012) Martian soil analogs from Antarctica: Chemical and mineralogical weathering scenarios. *43rd Lunar and Planetary Science Conference, abs. #1743*.
- Englert P., J. L. Bishop, L. D. Hunkins, C. Koeberl (2011) Martian Soil Analogs from Antarctic Dry Valleys: Elemental Abundances and Mineralogy Signal Weathering Processes. *74th Annual Meteoritical Society Meeting, abs. #5396*
- Crites S.T., P. Englert., M.A. Riner, P.G. Lucey (2011) New Estimates of the Global Distribution of Titanium, Rare Earths, Thorium/Samarium Ratio and Mg-Number from Integrating Lunar Prospector Neutron and Gamma Ray Spectrometer and Clementine Mineral Maps. *42nd Lunar and Planetary Science Conference, abs. #1343*
- Brückner J., R.C. Reedy, P.A.J. Englert, & D.M. Drake (2010) Analysis of complex gamma-ray spectra: Simulations for planetary gamma-ray spectroscopy of solar-system bodies. *41st Lunar and Planetary Science Conference, abs. #1608*
- Englert P.A.J., Bishop J.L., Hunkins L.D. & Koeberl C. (2011) Martian soil analogs from Antarctic Dry Valleys: Elemental abundances and mineralogy signal weathering processes. *Meteoritical Society 74th annual meeting, abs. #5396*
- Masarik J., J. Brückner, R.C. Reedy, P. Englert (2003) Gamma-Ray Fluxes from Thick Target Irradiations: Experiments and Monte Carlo Simulations. *66th Annual Meeting of the Meteoritical Society, abs. #5239*
- Boynton W. V., W.C. Feldman, I. Mitrofanov, L.G. Evans, R.C. Reedy, S.W. Squyres, R. Starr, J.I. Trombka, C. d'Uston, J.R. Arnold, P.A.J. Englert, A.E. Metzger, H. Wänke, J. Brückner, D.M. Drake, C. Shinohara, C. Fellows, D.K. Hamara, K. Harshman (2002) Early Results of the Mars Odyssey Gamma-Ray Spectrometer (GRS): Ice and Other Cool Stuff. *66th Annual Meeting of the Meteoritical Society, abs. #5239*
- W. V. Boynton, W.C. Feldman, J.I. Trombka, C. d'Uston, I. Mitrofanov, J.R. Arnold, P.A.J. Englert, A.E. Metzger, R.C. Reedy, S.W. Squyres, H. Wänke, S. H. Bailey, J. Brückner, L.G. Evans, D. Hamara, R. Starr, C.W. Fellows (2000) Scientific Objectives of the Mars Surveyor 2001 Gamma-Ray Spectrometer. *Second International Conference on Mars Polar Science and Exploration, abs. #4106*

**Selected Abstracts contd.**

- Boynton W.V., C. d'Uston, J.R. Arnold, J.I. Trombka, W.C. Feldman, I. Mitrofanov, P.A.J. Englert, A.E. Metzger, R.C. Reedy, S.W. Squyres, H. Wänke, S.H. Bailey, J. Brückner, L.G. Evans, R. Starr & C.W. Fellows (1999) Scientific investigations on the elemental composition of Mars by means of the Mars Surveyor 2001 gamma-ray spectrometer. *30th Lunar and Planetary Science Conference, abs. #1991.*
- Sisterson J.M., R.J. Schneider IV, A. Beverding, C.S. Gans, K. Kim, P.A.J. Englert, C. Castaneda, J. Vincent & R.C. Reedy (1996) Short-Lived Cosmogenic Radionuclide Production in Lunar Rocks: Improved estimates for the solar proton flux in recent solar cycles. *27th Lunar and Planetary Science Conference, abs., 1207-1208.*
- Englert P.A.J., N. Chakravarty, O. Ivanova, E.A. Beck, J. Brückner, S.H. Bailey, F.C. McCloskey & W.V. Boynton, (1994). Gamma ray spectra from the Mars Observer gamma ray spectrometer: Cruise data analysis. *25th Lunar and Planetary Science Conference, abs., 353-354.*
- Bishop J.L., P.A.J. Englert, D. Andersen, C. Kralik, Ch. Koeberl, C.M. Pieters, H. Fröschl & R.A. Wharton, Jr. (1994) Spectroscopic and geochemical analyses of sediments from Lake Hoare, Antarctica and applications to dry valleys on Mars. *25th Lunar and Planetary Science Conference, abs., 119-120.*
- Paul R.L., P.A.J. Englert, L.J. Harris, I. Goldman, C. Jackson, R.M. Lavinier, T. Leska, B. Napier, E.B. Norman & B. Sur (1991) Production of cosmogenic nuclides in thick targets by alpha bombardment. *22nd Lunar and Planetary Science Conference, abs., 1039-1040.*
- Harris L.J., P.A.J. Englert & C. Castaneda, (1991) Simulated experiments of SCR bombardment of titanium in planetary surfaces with 40 to 67.5 MeV Protons. *22nd Lunar and Planetary Science Conference, abs., 521.*
- Englert P.A.J., D.M. Drake, E.R. Shunk, M. Drog, R.C. Reedy & J. Brückner (1990) Simulation of galactic cosmic ray interactions with 'Martian soil': Implication for cosmogenic nuclide studies and planetary gamma ray spectroscopy". *21st Lunar and Planetary Science Conference, abs., 325-326.*
- Vogt S., P.A.J. Englert, J. Klein, D. Fink & R. Middleton (1989) Cosmogenic radionuclides in the Antarctic H5-chondrites LEW 85319 and LEW 85320. *20th Lunar and Planetary Science Conference, abs., 1160-1161*
- Jull A.J.T., P.A.J. Englert, D.J. Donahue, R.C. Reedy & D. Lal, (1989) <sup>14</sup>Carbon from neutron spallation. *20th Lunar and Planetary Science Conference, abs., 490-491.*
- Englert P.A.J., A.J.T. Jull, D.J. Donahue & R.C. Reedy (1988) Cosmogenic nuclide production rates: Depth dependence of <sup>14</sup>C production. *19th Lunar and Planetary Science Conference, abs., 303-304.*
- Klein J., K. Nishiizumi, R.C. Reedy, P. Englert & R. Middleton (1987) Simulation of cosmic-ray production of <sup>26</sup>Al and <sup>10</sup>Be. *19th Lunar and Planetary Science Conference, abs., 609-610.*
- Theis S., P. Englert, R. Michel, D. Aylmer, G.F. Herzog, T.H. Kruse, R.K. Moniot, C. Tuniz, A. Jermakian, J. Klein & R. Middleton (1986) <sup>10</sup>Be and <sup>26</sup>Al production from Mg, Al, Si, and O by 600 MeV protons in granodiorite spheres. *17th Lunar and Planetary Science Conference, abs., 887-888.*
- Englert P. (1985) <sup>53</sup>Mn in a slab of the Lost City meteorite. *16th Lunar and Planetary Science Conference, abs., 215-21*
- Englert P., D.K. Pal, C. Tuniz, R.K. Moniot, W. Savin, T.H. Kruse & G.F. Herzog, (1984) <sup>53</sup>Manganese and <sup>10</sup>Beryllium contents of tektites. *14th Lunar and Planetary Science Conference, abs., 250-251.*
- Englert, P., S. Theis, R.C. Reedy & J.R. Arnold, (1983) On the production of cosmogenic nuclides by high-energy secondary particles: Simulation experiments with beam stop neutrons. *14th Lunar and Planetary Science Conference, abs., 175-176.*
- Englert, P., U. Herpers & W. Herr, (1981). Irradiation records of Acapulco and other meteorites derived from <sup>53</sup>Mn and <sup>26</sup>Al measurements. *12th Lunar and Planetary Science Conference, abs., 257-259.*



## Peter A. J. Englert

### Awards

- 2005 NASA Group Achievement Award: 2001 Mars Odyssey Gamma Ray Spectrometer Team for extraordinary contributions in collecting gamma ray spectroscopy observations at Mars, Providing full planet mapping of elemental abundances during the Odyssey prime mission and disseminating them to the science community.
- 2001 NASA Group Achievement Award: 2001 Mars Odyssey Gamma Ray Spectrometer Team for the detection and mapping of significant quantities of water ice in the near subsurface of the polar regions of Mars.
- 1993 NASA Group Achievement Award: for Mars Observer Payload development in recognition of the design, development, fabrication, calibration, and test of the most complex experiment complement ever to be launched to a planet.
- 1989 Meritorious Performance and Professional Promise Awards (MPPP), San Jose State University, Acknowledging outstanding performance in teaching and research.
- 1988 Meritorious Performance and Professional Promise Awards (MPPP), San Jose State University, Acknowledging outstanding performance in teaching and research.
- 1986 Antarctic Service Medal, Acknowledging participation in the 1985-86 Antarctic Search for Meteorite field expedition for service in very remote areas of Antarctica.

### Guest Professorships & Research Fellowships

- 2014 Guest Investigator, SETI Institute, CA
- 2008–2013 Guest Professor, Higher Education Research, Nankai University, China.
- 2009 Visiting Professor, Peking University, Graduate School of Education, China.
- 2006–2007 Scholar in Residence, Stout Research Ctr., Victoria University of Wellington, NZ.
- 2006–2007 Guest Professor, Zhuhai College, Jilin University, Zhuhai, China.
- 2005–2010 Guest Professor, Higher Education Research, Yunnan University, China.
- 2005–2010 Guest Professor, Yunnan University for Nationalities, Kunming, China.
- 2003–2005 Founding Director, Asia Pacifica Association for International Education.
- 2002–2007 Concurrent Professor of Chemistry, Nanjing University, China.
- 1997–2000 Research Associate, Department of Physics, University of Auckland, NZ.
- 1993 Guest Professor, University of Vienna, Institute Geochemistry, Vienna, Austria.
- 1990 Guest Professor, Dipartimento di Fisica Galileo Galilei, Padua, Italy.
- 1987 Visiting Scientist, Max-Planck-Institute for Chemistry, Mainz, Germany.
- 1986 Visiting Scientist, Lawrence Livermore National Laboratory, Livermore, CA.
- 1983 Research Fellow, California Space Institute, La Jolla, CA.
- 1980–1982 Research Fellow, German Science Foundation & UCSD, CA.

### Administrative Boards, Advisory Boards, and Service

- 2007–2009 Acting Chair, Eichi Education Board, Osaka, Japan.
- 2004–2008 Administrative Board, International Association of Universities.
- 2005 American Council on Education, Commission on International Education.
- 2003–2007 Member, University of Texas at Dallas Research Advisory Board.
- 2002–2005 Director, Western Athletics Conference.
- 2002–2008 Chair, National Isotope Facility Advisory Committee, New Zealand (NZ).
- 2001–2002 Director, Victoria Link, Wellington, New Zealand.
- 2001–2002 New Zealand Vice Chancellors' Research Committee.
- 1999–2002 Executive & Founding Member, University Science Council, Royal Society of NZ.
- 1999–2002 Australian Council of Deans of Science.
- 1999–2002 Advisory Group on Science Education, Royal Society of New Zealand.
- 2000–2002 Chair, Radiation Protection, Advisory Council (RPAC), Ministry of Health, NZ.
- 1999–2000 Chair, Non-Medical Licensing Advisory Committee of RPAC,
- 1995–2002 Radiation Protection Advisory Council, NZ.
- 1992–1995 Member, San Jose State University Public Safety Committee.
- 1989–1995 Member (ex officio), Health Physics Committee, San Jose State University.

## Peter A. J. Englert

### Courses Taught at University of Hawaii at Manoa

GG 105 Voyage through the Solar System, 3 units. (S 11, F 11, F 12, F 13, S 14)  
GG 671 Planetary Remote Sensing, 3 units. (F 11)  
PHIL 725 Comparative Philosophies and Cultures of War and Peace, 3 units. (S 12)  
GG 710 Cosmogenic Nuclides in Earth and Planetary Science, 2 units (S 14)

### Courses Taught at San Jose State University

#### Major Courses – Undergraduate

Chemistry/Art 102: Chemistry and the Arts, 3 units.  
Nuclear Science/Chemistry/Physics 121S: Radiation Safety, 2 units.  
Nuclear Science /Chemistry/Physics 126: Introduction into Nuclear Sciences, 3 units.  
Nuclear Science/Chemistry/Physics 127: Introductory Nuclear Science Laboratory, 3 units.

#### Major Courses – Graduate

Nuclear Science 206: Advanced Nuclear Instrumentation; lecture/laboratory, 3 units.  
Nuclear Science/Chemistry 227L: Synthesis with Radioisotopes; laboratory, 3 units.  
Nuclear Science/Chemistry 255: Advanced Topics in Nuclear Science and Chemistry, 2 units.  
Nuclear Science 285: Nuclear Science Seminar; 1 unit.

#### Minor Courses – Undergraduate

Chemistry 1A/B: Introductory Chemistry Laboratories; 3 units.  
Chemistry 120S: Chemical Safety; 1 unit.  
Chemistry 171: Physical Chemistry Laboratory; 3 units.

#### Minor Courses – Graduate

Chemistry 250: Current Topics in Analytical Chemistry; 3 units.  
Nuclear Science 208B: Applied Radiation Protection; laboratory; 3 units.

### Special Courses Taught at San Jose State University

Summer School in Nuclear Chemistry (a six week intensive course in nuclear and radiochemistry; 121S, 126, 127); American Chemical Society (ACS) and Department of Energy (DOE) (1988-1996)

### Courses Taught at the University of Cologne, Germany

Radiochemical Laboratory; 6 units  
Radiochemical Laboratory Seminar; 1 unit.  
Nuclear-Chemical Problem Sessions; 2 units.  
Special Lecture Series (1 unit each):  
Radiochemical Dating Methods; Nuclear Geo- and Cosmochemistry; Nuclear and Chemical Dating Methods.

### Research Students/Fellows; Advising & Thesis Writing

Undergraduate Research Students SJSU/UHM: 16/2  
Graduate Research Students (MS) SJSU: 27  
High School Teachers and Students SJSU: 5  
Doctoral students UoC, VUW: 3  
Post Doctoral Researchers SJSU: 4

### Research Grants, Teaching Grants and Contracts

NASA, NASA ARC, DOE, NSF, FDA, Keck Foundation.  
Other US, NZ, German and Japanese agencies.

## **Peter A. J. Englert**

### **Organization of Conferences and Workshops**

2009 International Conference on Education, Research and Innovation  
2008 Higher Education of Indigenous People: Asia-Pacific Symposium and Workshop  
2007 The International Forum on Higher Vocational Education  
1998 20<sup>th</sup> Regular Meeting of Regional Co-operative Agreement of IAEA  
1991 54<sup>th</sup> Annual Meeting of the Meteoritical Society  
1989 Workshop on Cosmogenic Nuclide Production Rates  
1986 Workshop on Cosmogenic Nuclides

### **Memberships: Scientific and Professional Organizations**

American Geophysical Union  
Meteoritical Society  
American Education Research Association  
International Isotope Society  
International Association of Universities

### **Development Team Member**

Korean Pathfinder Lunar Mission Gamma-Ray Spectrometer; 2016  
Mars Observer Gamma-Ray Spectrometer; 2001–2006 NASA  
Mars Odyssey Gamma-Ray Spectrometer; 1993 NASA