2006 and before

**British Geological Survey Medical Geology Papers:**

1988 Aggett, P. J., Mills, C. F., Morrison, A., Callan, M., Plant, J. A., Simpson, P. R., Stevenson, A., Dingwall-Fordyce, I. and Halliday, C. F. A study of environmental geochemistry and health in North East Scotland. In: Thornton, I. (editor) Geochemistry and Health. Proceedings of the Second International Symposium. Science Reviews Ltd., Northwood.

1991 Radovanovic Z and Edmunds W M. Groundwater chemistry and the Balkan endemic nephropathy: Environmental Geochemistry and Health 13(2) p.43-49

1994 Appleton J D and Fordyce F M. Animal Health. Earthworks. Issue 6. 4.

1994 Breward N and Williams T M. Arsenic and mercury pollution in gold mining: IN: Mining Environmental Magazine 1994 p25-27

1994 Edmunds W.M. Groundwater chemistry and development: IN: Groundwater quality edited by H. Nash and G.J.H. McCall; Chapman & Hall; p5-7

1994 Gaus, I. Kinniburgh, D.G. Talbot, J.C. and Webster, R.Geostatistical analysis of arsenic concentration in groundwater in Bangladesh using disjunctive kriging: In: Environmental Geology Vol 44 pt/no 8 p 939-948

1994 Williams, T.M. and Smith, B. Hydrochemical characterisation of acute acid mine drainage at Iron Duke Mine, Mazowe, Zimbabwe: In: Environmental Geology Vol. 39 pt/no 3-4 (2000) p. 272-278

1994 Williams T.M. , Breward N. , Lumb A.J. and Cummins C. Trace element contamination around centres of gold mining : examples from peninsular Malaysia: Environmental Geochemistry and Health 16(2) p90

1995 Edmunds W.M. and Smedley P.L. Minerals, water and health: Mineralogical Society Bulletin no.106 p.3-7

1996 Edmunds, W.M. and Smedley, P.L. Groundwater geochemistry and health: an overview : IN: J.D.Appleton, R.Fuge & G.J.H.McCall (ed), Environmental geochemistry and health: with special reference to developing countries. London: Geological Society of London (Special Publication no.113) p.91-105

1996 Fordyce F M, Masara, D and Appleton J D. Stream sediment, soil and forage chemistry as indicators of cattle mineral status in north-east Zimbabwe. In: Appleton J D, Fuge R and McCall G J H. (eds). Environmental Geochemistry and Health. Geological Society Special Publication No 113. London. 23-37.

1996 Nicholson, R.A. ; Roberts, P.D. ; Baxter, P.J. Preliminary studies of acid and gas contamination at Poas volcano, Costa Rica : IN: J.D.Appleton, R.Fuge & G.J.H.McCall (ed), Environmental geochemistry and health: with special reference to developing countries. London: Geological Society of London (Special Publication no.113) p.239-243

1996 Plant, J.A. ; Baldock, J.W. and Smith, B. The role of geochemistry in environmental and epidemiological studies in developing countries: a review : IN: J.D.Appleton, R.Fuge & G.J.H.McCall (ed), Environmental geochemistry and health: with special reference to developing countries. London: Geological Society of London (Special Publication no.113) p.7-21

1996 Smedley P.L. Arsenic in rural groundwater in Ghana: Journal of African Earth Sciences 22(4) p.459-470

1996 Smedley, P.L. ; Pelig-Ba, K.B. and Edmunds, W.M. Mobility of arsenic in groundwater in the Obuasi gold-mining area of Ghana: some implications for human health : IN: J.D.Appleton, R.Fuge & G.J.H.McCall (ed), 1996, Environmental geochemistry and health: with special reference to developing countries. London: Geological Society of London (Special Publication no.113) p.163-181

1996 Smith, B. ; Breward, N. ; Crawford, M.B. and Reeder, S.The environmental geochemistry of aluminium in tropical terrains and its implication for health : IN: J.D.Appleton, R.Fuge & G.J.H.McCall (ed), Environmental geochemistry and health: with special reference to developing countries. London: Geological Society of London (Special Publication no.113) p.141-151

1996 West, J.M. Smedley P.L. and Paintsil A. Arsenic in drinking waters in the Obuasi area, Ghana - the role of microbiology: IN: International Symposium on the Geochemistry of the Earth's Surface 4th Ilkley, Yorkshire; Proceedings..short papers; University of Leeds 1996; p699-702

1996 Williams T M, Fordyce F M, Paijitprapapon A and Charoenchaisri, P. Arsenic contamination in surface drainage and groundwater in part of the SE Asian tin belt, Nakon Si Thammarat Province, Southern Thailand. Environmental Geology 27. 16-33.

1997 Edmunds W.M. and Gaye C.B. Naturally high nitrate concentrations in groundwaters from the Sahel: Journal of Environmental Quality 26(5) p1231-1239

1997 Fordyce F M and Smith B. The link between geochemistry and health. Earthwise 10. 21.

1998 Appleton, J.D. Williams, T.M. Breward, N. Apostol, A. Miguel. J. Mercury contamination associated with artisanal gold mining on the island of Mindanao, the Philippines: IN: The Science of the Total Environment 228 p95-109

1998 Ge X, Zhang G, Zhang Q, Zhang Z, Luo D, Liu X, Johnson C C, Fordyce F M, Appleton J D, Wang Y and Ji F. Soil selenium species and their availability to plants in Zhangjiakou area. Geology-Geochemistry. Vol. 26. No. 2. 15-

1998 Metcalfe, R. Breward, N. and Klinck, B.A. Minimising the impact of mine waste : strategies to reduce the effect on the environment: In: Earthwise No. 12 p. 14-15

1998 Rawlins, B.G. Ferguson, A.J.Chilton, P.J. Arthurton, R.S. Rees J.G. & Baldock J.W. Review of agricultural pollution in the Caribbean with particular emphasis on small island developing states: In: Marine Pollution Bulletin Vol 36 pt/no 9 p 658-668

1998 Smedley, P.L. Nicolli, H.B. Barros A.J. and Tullio J.O. Origin and mobility of arsenic in groundwater from the Pampean Plain, Argentina: IN: International Symposium on Water-Rock Interaction 9th Taupo; Proceedings; Rotterdam, A.A. Balkema p275-278

1998 Talbot, D.K. Appleton, J.D. Ball T.K. & Strutt M.H. A comparison of field and laboratory analytical methods for radon site investigation: Journal of Geochemical Exploration 65(1) p.79-90

1998 Williams, T.M. Rawlins, B.G. Smith B. & Breward N. In-vitro determination of arsenic bioavailability in contaminated soil and mineral beneficiation waste from Ron Phibun, southern Thailand : a basis for improved human risk assessment: In: Environmental Geochemistry and Health Vol.20 pt/no 4 p 169-177

1998 Zhang G, Ge X, Zhang Q, Luo D, Lui X, Fordyce F M, Mao D and Su H. Selenium geological and geochemical environmental background in Enshi, Hubei Province. Chinese Journal of Endemiology. Vol 19. No 1. 67-

1999 Appleton, J D. Radon potential maps : identification of at-risk areas: In: Earthwise No. 13 p. 14

1999 Appleton J D, Fordyce F M and Johnson C C. Red rice or a red herring? Links between environmental iodine, selenium, diet and goitre in Sri Lanka. Earthworks Issue 6. 3.

1999 Breward N and Rees J G. Coastal pollution : current problems and baseline data for future solutions: In: Earthwise No. 13 p. 26

1999 Fordyce F M, Ferguson A J, Shaw R J and Baldock J W. Urban geochemical mapping. Earthwise 13. 13.

1999 Fordyce F M, Plant J A, Smith B M, Appleton J D, Johnson C C, Smedley P and Williams L A. Environmental Geochemistry and Health - Global Perspectives ICSU-IGU Setting an Agenda on Health and the Environment: Health and Environmental Resources. Web-site http://geog.queensu.ca/h\_and\_e/healthandenvir/workshop2.htm

1999 Johnson C C, Fordyce F M and Stewart A G. Environmental controls on IDD - what do we really know? International Council on IDD Newsletter. November 1999.

1999 MacDonald A M. Sustainable water supplies : the potential for groundwater development in eastern Nigeria: In: Earthwise No. 13 p. 21

1999 Rawlins B. Agricultural pollution : assessing its impact on coastal resources in the Caribbean: In: Earthwise No. 13 p. 25

1999 Rees, J.G. Setiapermana, D.Sharp, V.A Weeks, J.M. and Williams, T.M. Evaluation of the impacts of land-based contaminants on the benthic faunas of Jakarta Bay, Indonesia: In: Oceanologica Acta Vol. 22 pt/no 6 p. 627-640

1999 Smedley, P L. Groundwater geochemistry : the impact of trace elements on community health: In: Earthwise No. 13 p. 22

1999 Smith, B. A diet of dirt : the benefits and dangers of eating soil: In: Earthwise No. 14 p. 27

2000 Appleton, J D. Radon protective measures GIS : guidance for new dwellings: In: Earthwise No. 15 p. 6-7

2000 Cave M R and Wragg J. Measurement of heavy metals : bioavailability and distribution in contaminated soils: In: Earthwise No. 15 (2000) p. 32-33

2000 Fordyce F M. Environmental Geochemistry and Health - Global Perspectives. IUGS COGEOENVIRONMENT Newsletter. No 16. 7 - 10.

2000 Fordyce F M. Geochemistry and Health, Why Geoscience Information is Essential. Geoscience and Development. No. 6. 6-8

2000 Fordyce F M, Zhang G, Green K and Xinping L. Soil, grain and water chemistry in relation to human selenium responsive diseases in Enshi District, China. Applied Geochemistry 15. 117-132.

2000 Fordyce F M, Johnson C C, Navaratne U R B, Appleton J D and Dissanayake C B. Selenium and iodine in soil, rice and drinking water in relation to endemic goitre in Sri Lanka. The Science of the Total Environment. 263/1-3. 127-142

2000 Johnson, C.C. Ge, X. Green, K.A. and Liu X. Selenium distribution in the local environment of selected villages of the Keshan Disease belt, Zhangjiakou District, Hebei Province, People's Republic of China: IN: Applied Geochemistry 15(3) p385-401

2000 Smith, B. Rawlins, B.G. Cordeiro, M.J.A.R. and Hutchins, M.G. The bioaccessibility of essential and potentially toxic trace elements in tropical soils from Mukono District, Uganda: Journal of the Geological Society of London 157(4) p.885-892

2000 Williams T M . Assessment by hair analysis of mercury exposure among mining impacted communities of Mindanao and Palawan, the Philippines: Environmental Geochemistry and Health 22(1) p.19-31

2000 Williams, T.M. Rees, J.G. and Setiapermana, D. Metals and trace organic compounds in sediments and waters of Jakarta Bay and the Pulau Seribu Complex, Indonesia: Marine Pollution Bulletin 40(3) p.277-285

2001 Appleton, J. D. Mercury pollution from artisanal gold mines : a hazard to human health?: In: Earthwise No. 17 p. 12-13

2001 Appleton, J.D. Williams, T.M. Orbea, H. and Carrasco, M. Fluvial contamination associated with artisanal gold mining in the Ponce Enriquez, Portovelo-Zaruma and Nambija areas, Ecuador: IN: Water, Air and Soil Pollution 131 2001 p19-39

2001 Fordyce F M. Medical Geology. Earthwise No 17. 6.

2001 Fordyce F M and Hope B C. Fluoride and Fluorosis in Central Europe. Earthwise No 17. 10 - 11.

2001 Smith, B. Depleted uranium - its hazards and uses: In: Mineralogical Society Bulletin no.132 p.3-5

2001 Smith, B. Depleted uranium : its hazards and uses: In: Earthwise No. 17 p. 28-29

2001 Smith, B. Geophagia : the hazards to health of soil in the diet: In: Earthwise No. 17 p. 24-25

2002 Appleton J.D. & Ball T.K. Geological radon potential mapping: IN: Geoenvironmental mapping, methods, theory and practice. Editor Peter T. Bobrowsky; A.A. Balkema p577-613

2002 Brown, C.J. Chenery, S.R.N. and Smith, B. A sampling and analytical methodology for dental trace element analysis: In: The Analyst 127(2) p.319-323

2002 Fordyce F M and Johnson C C. The Rock Diet - Selenium and Iodine. Planet Earth. Autumn 2002. 18 - 20.

2002 Johnson C C, Fordyce F M and Stewart A. Reducing the risk of iodine deficiency disorders. Earthworks 15. 4 - 5.

2002 Kinniburgh, D.G. and Kosmus, W. Arsenic contamination in groundwater: some analytical considerations: IN: Talanta 58 p165-180

2002 Rawlins, B.G. Lister, T.R. Cave, M.R. Arsenic in UK soils: reassessing the risk: In: Proceedings of the Institution of Civil Engineers Civil Engineering 150(4) p.187-190

2002 Smedley, P. L. Arsenic in groundwater : the hidden threat: In: Earthwise No. 17 p. 8-9

2002 Smedley, P.L. and Edmunds, W.M.A. Review of the source, behaviour and distribution of arsenic in natural waters : In: Applied Geochemistry 17(5) p.517-567

2002 Smedley, P.L. and MacDonald, D.M.J. Hydrogeochemistry of arsenic and other inorganic constituents in groundwaters from La Pampa, Argentina: In: Applied Geochemistry 17(3) p.259-284

2002 Smith, B. Eating soil: In: Planet Earth Autumn p.21-22

2003 Fordyce F M, Johnson C C, Dissanayake C B and Navaratne U R B. Environmental iodine in iodine deficiency disorders with a Sri Lankan example. In: Skinner H C W and Berger A R (eds). Geology and Health: Closing the Gap. Part 1, Chapter 9. Oxford University Press. New York. 61 - 64

2003 Johnson C C and Fordyce F M. Environmental Controls on Iodine Deficiency Disorders. Geoscience and Development No. 8. 24.

2003 Johnson, C C, Fordyce, F M, and Stewart, A G. What do you mean by iodine deficiency? A geochemical perspective. IDD Newsletter, Vol. 19(2), May 2003.

2003 Kinniburgh, D.G. Smedley, P.L. Davies, J. Milne, C.J. Gaus, I. Trafford, J.M. and Burden, S.R.The scale and causes of the groundwater arsenic problem in Bangladesh: In: Arsenic in Ground water p.211-257 edited by Alan H. Welch, Kenneth G. Stollenwerk p.211-257

2003 Smedley, P.L. Arsenic in ground water: South and East Asia: In: Arsenic in ground water p.179-209 edited by Alan H. Welch, Kenneth G. Stollenwerk

2003 Smedley, P. L. Mobilisation of arsenic and other trace elements in fluviolacustrine aquifers of the Huhhot Basin, Inner Mongolia: In: Applied Geochemistry 18(9) p.1453-1477

2004 Appleton, J. D. Geology and radon protection : using maps to target the potential hazard: In: Earthwise No. 21 p 20-21.

2004 Appleton, J. D. Natural radioactivity and health : the risks posed by exposure to ionising radiation: In: Earthwise No. 21 p 16-17

2004 Appleton, J.D. Lister, T. R. Tesha, A.L. Nayopa, J. and Veiga, M.M. Mercury in artisanal gold mining in Geita District, Tanzania: In: Materials and Geoenvironment Vol 51 pt/no 1 p 294-297

2004 Breward, N and Johnson, C. C. Mapping radioactivity : geochemical baselines for radioactive elements from the G-BASE project: In: Earthwise No. 21 p 10-11

2004 Brown, C.J. Chenery, S.R.N. Smith, B. Mason, C.F. Tomkins, A. Roberts, G.J. Sserunjogi, L. and Tiberindwa, J.V. Environmental influences on the trace element content of teeth : implications for disease and nutritional status: In: Archives of Oral Biology Vol 49 pt/no 9 p 705-717

2004 Hough, R. L. Breward, N. Young, S.D. Crout, N. M. J. Tye, A.M. Moir, A. M. and Thornton, I.Assessing potential risk of heavy metal exposure from consumption of home-produced vegetables by urban populations: In: Environmental Health Perspectives Vol. 112 pt/no 2 p. 215-221

2004 Johnson, C.C. Rawlins, B.G. Breward, N. The British Geological Survey's geochemical baseline survey of the environment : arsenic in soil: In: Geochimica et Cosmochimica Acta Vol. 68 pt/no 11S Special supplement p A537

2004 Plant J A, Kinniburgh D, Smedley P, Fordyce F M, and Klinck, B. Chapter 9.02: Arsenic and Selenium. In: Sherwood Lollar, B. (editor) Environmental Geochemistry. Holland H D and Turekain K K. (exec editors) Treatise on Geochemistry Series. Volume 9. Elsevier, Amsterdam. 17 - 66.

2004 Saikat, S. Carter, J.E. Mehra, A. Smith, B. and Stewart, A.G. Goitre and environmental iodine deficiency in the UK : Derbyshire : a review: In: Environmental Geochemistry and Health Vol. 26 pt/no 4 p 395-401

2004 Smith, B. Depleted uranium : origin, uses, releases, concerns: In: Earthwise No. 21 p 22-23

2004 Smith, B. Uranium in groundwater : impacts on health, geochemical exploration and radwaste disposal: In: Earthwise No. 21 p 18-19

2004 Taylor, H. Appleton, J.D. Lister, T.R. Chitamweba, D. Mkumbo, O. Tesha, A.L. Beinhoff, C. and Veiga, M.M. Exposure to environmental mercury in the Rwamagasa artisanal gold mining area, Geita District, Tanzania: In: Materials and Geoenvironment Vol 51 pt/no 1 (2004) p 294-297

2005 Appleton, J. D. Radon in air and water: In: Essentials of Medical Geology : impacts of the natural environment on public health / edited by Olle Selinus. Amsterdam, London : Elsevier, p 227-262

2005 Appleton, J.D. Mercury contamination: In: Earthwise 2005 No. 22 (2005) p. 18-19

2005 Ball, D.F. MacDonald, A.M. and Lilly, A. Agriculture and diffuse pollution : groundwater nitrate vulnerable zones in Scotland: In: Scottish Journal of Geology Vol. 41 pt/no 1 p. 61-68

2005 Edmunds, W.M. and Smedley, P.L. Fluoride in natural waters: In: Essentials of medical geology : impacts of the natural environment on public health edited by Olle Selinus. Amsterdam, London : Elsevier, p 301-329

2005 Fordyce F M. Chapter 15: Selenium Deficiency and Toxicity in the Environment. In: Selinus O. (ed). Essentials of Medical Geology. Academic Press, London. 373-415.

2005 Fordyce F M, Brown S E, Ander E L, Rawlins B G, O'Donnell K E, Lister T R, Breward N and Johnson C C. GSUE: Urban geochemical mapping in Great Britain. Geochemistry: Exploration, Environment, Analysis. Vol. 5(4), 325-336 (12).

2005 MacDonald A M , Davies J, Calow R and Chilton J. Developing groundwater : a guide for rural water supply. Bourton-on-Dunsmore : ITDG Publishing

2005 Miles J C H and Appleton J D. Mapping variation in radon potential both between and within geological units: In: Journal of Radiological Protection Vol.25 p. 257-276

2005 Palumbo-Roe, B. Cave, M.R. Klinck, B.A. Wragg, J. Taylor, H. O'Donnell, K.E. and Shaw, R.A. Bioaccessibility of arsenic in soils developed over Jurassic ironstones in eastern England: In: Environmental Geochemistry and Health Vol. 27 pt/no 2 (2005) p. 121-130

2005 Rawlins, B.G. Lark, R.M. O'Donnell, K.O.Tye, A.M. Lister, T.R. The assessment of point and diffuse metal pollution of soils from an urban geochemical survey of Sheffield, England: In: Soil Use and Management Vol. 21 p. 353-362

2005 Smedley, P.L. Kinniburgh, D.G. MacDonald, D.M.J. Nicolli, H.B.Barros, A.J.Tullio, J.O.Pearce, J.M. and Alonso, M.S. Arsenic associations in sediments from the loess aquifer of La Pampa, Argentina: In: Applied Geochemistry Vol. 20 pt/no 5 p 989-1016

2005 Smedley, P. L. and Kinniburgh, D. G. Arsenic in groundwater and the environment: In: Essentials of medical geology : impacts of the natural environment on public health edited by Olle Selinus. Amsterdam, London : Elsevier, 2005. p 263-299

2005 Taylor, H. Appleton, J.D. Lister, T.R. Smith, B. Chitamweba, D. Mkumbo, O. Machiwa, J.F. Tesha, A.L. and Beinhoff, C. Environmental assessment of mercury contamination from the Rwamagaza artisanal gold mining centre, Geita district, Tanzania: In: Science of the Total Environment Vol 343 pt/no 1-3 p 111-133

2006 Abrahams, P.W. Follansbee, M.H. Hunt, A. Smith, B. and Wragg, J. Iron nutrition and possible lead toxicity : an appraisal of geophagy undertaken by pregnant women of UK Asian communities: In: Applied Geochemistry Vol. 26 p. 98-108

2006 Appleton, J.D., Zhang, Q., Green, K. A., Zhang, G., Ge, X., Liu, X. and Li, J. X. Selenium in soil, grain, human hair and drinking water in relation to oesophageal cancer in the Cixian area, Hebei Province, People's Republic of China. Applied Geochemistry 21(4), 684-700.

2006 Appleton, J.D. Weeks, J.M. Calvez, J.P.S. and Beinhoff, C. Impacts of mercury contaminated mining waste on soil quality, crops, bivalves and fish in the Naboc River area, Mindanao, Philippines: In: Science of the Total Environment Vol. 354 (2006) p. 198-211

2006 Broadley, M.R. White, P.J. Bryson, R.J. Meacham, M.C. Bowen, H.C. Johnson, S.E. Hawkesford, M.J. McGrath, S.P. Zhao, F.J. Breward, N. Harriman, M. and Tucker, M. Biofortification of UK food crops with selenium: In: Proceedings of the Nutrition Society Vol. 65 pt/no 2 p. 169-181

2006 Meharg, A.A. Scrimgeour, C. Hossain, S.A. Fuller, K. Cruickshank, K. Williams, P.N. and Kinniburgh, D.G. Codeposition of organic carbon and arsenic in Bengal delta aquifers: In: Environmental Science and Technology Vol. 40 pt/no 16 p. 4928-4935

2006 Scheib, C. Appleton, J.D. Jones, D.G. and Hodgkinson, E. Airborne uranium data in support of radon potential mapping in Derbyshire, Central England: In: Proceedings of the 8th International Workshop on Geological Aspects of Radon Risk Mapping edited by [Ivan Barnet ... et al]. [Prague : Czech Geological Survey]

**Recent posters by Fiona Fordyce, BGS:**

2005 Broadway A, Farmer J G, Ngwenya B T, Cave M R and Fordyce F M. Assessing the Human Health Risks Posed by Industrially Contaminated Urban Soil: Chromium in Glasgow. 23rd Society for Environmental Geochemistry and Health European Conference, University of Paisley, 4-6 April 2005.

2005 Cave M R, Wragg J, Fordyce F M, Appleton J D and Taylor H. Assessment of the Human Exposure to Arsenic, Cadmium and Selenium in the Enshi District China using Hair Analysis and Soil Bioaccessibility Measurements. Health Protection Agency Conference on Chemical Hazards, Poisons and Sustainable Communities 5-7 December, Cardiff.

2006 Broadway A, Farmer J G, Ngwenya B T, Cave M R, Fordyce F M and Bewley R J F. Bioaccessibility and Human Health Risk: Chromium in Glasgow. Abstracts of the CL:AIRE Conference on Environmental Risk Assessment For Contaminated Land. London 23 February 2006.

2006 Broadway A, Farmer J G, Ngwenya B T, Cave M R, Fordyce F M and Bewley R J F. Solid phase distribution of chromium in industrially contaminated urban soil, Glasgow. Abstracts of the 13th Biennial National Atomic Spectroscopy Symposium, Glasgow Caledonian University, 10 - 12 July 2006.

**Papers by Centeno and Finkelman, USA:**

Selinus, O., Finkelman, Robert B., and Centeno, Jose, A., 2006, Medical problems related to geology and ecosystem interaction. In Geology and Ecosystems, Igor S. Zektser and Brian Marker, eds., Springer, Chapter 16, p.197-218.

Finkelman, Robert B., 2006, Medical Geology: Impacts of the Natural Environment on Human Health (from Trace Elements to Dust). 9th Annual Force Health Protection Conference Agenda. Abstract no. 8017, p. 76.

Finkelman, R. B., Belkin, H. E., and Centeno, J. A., 2006, Health Impacts of Coal: Should we be concerned? Geotimes, Sept. 2006, p. 30-34.

Huang, Xi and Robert B. Finkelman, 2006, Mineral Interactions and Health Impacts of Coal Dust Exposure. Abstracts of the 23rd Annual Meeting of the Society for Organic Petrology, vol. 23, p.95-97.  
  
Huang Xi, Jisen Dai, and Robert B. Finkelman, 2006, Iron, calcite, and oxidative stress in coal dust-induced lung diseases. Abstracts of the 7th International Symposium on Environmental Geochemistry, Chinese Journal of Geochemistry, vol 25 (Suppl.), p.216-217.

Centeno, J. A., Cook, A., Weinstein, P., Mullick, F., Finkelman, R. B., and Selinus, O., 2006, Health effects of natural and mineral dust: The role of trace elements and compounds. XXVI International Congress of the Academy of Pathology.

Centeno, J. A., Tseng, C-H, Van der Voet, G. B., and Finkelman, R. B, 2006, Global impacts of geogenic arsenic – A medical geology research case. AMBIO, The Royal Swedish Academy of Sciences.

Finkelman, R. B., 2006 Health impacts of coal: Facts and fallacies. International Symposium on Medical Geology. The Royal Swedish Academy of Sciences.

Zhai, M, Totolo, O., Modisi, M., and Finkelman, 2006, Heavy metal and arsenic distributions in soils surrounding Palapye, Botswana: An evaluation of environmental impact of coal mining and combustion in a sub-arid region. Abstracts of the 7th International Symposium on Environmental Geochemistry, Chinese Journal of Geochemistry, vol 25 (Suppl.), p.53.

Selinus, O., Finkelman, R. B., and Centeno, J. A., 2006, The medical geology revolution. Abstracts of the 7th International Symposium on Environmental Geochemistry, Chinese Journal of Geochemistry, vol. 25 9Suppl.), p.81.

Zheng, B., Wu, D., Wang, B., Liu, X., Wang, M., Wang, A., Xiao, G., Liu, P. and Finkelman, 2006, Fluorosis caused by indoor coal combustion in China: discovery and progress. Journal of Environmental Geochemistry and Health. P.

Selinus, O., Finkelman, R. B., Centeno, J. A., and Lax, K., 2006, Medical Geology – a new future for Geoscience. European Geologist, p. 27- 30.

Huang, X., Gordon, T., Rom, W. N., and Finkelman, R.B., 2006, Interaction of iron and calcium minerals in coals and their roles in coal dust-induced health and environmental problems. Reviews in Mineralogy & Geochemistry, Vol. 64, p….

**Some papers from Sweden**

Ljung, K. 2006. Metals in urban playground soils – distribution and bioaccessibility. Doctoral thesis, Swedish University of Agricultural Sciences, Department of Soil Sciences, Uppsala, Sweden. ISBN 91-576-7130-3

Ljung, K., Oomen, A., Duits, M., Selinus, O., Berglund, M. Metal bioaccessibility of urban playground soil. Journal of Environmental Science and Health – Part A, special issue on bioaccessibility of soil contaminants, Accepted.

Ljung, K., Selinus, O., Berglund, M., Otabbong, E. 2006. Metal distribution in soil particle sizes relevant to soil ingestion by children. Applied Geochemistry 21, 1613-1624.

Ljung, K., Selinus, O. & Otabbong, E. 2006. Metals in soils of children's urban environments in the small northern European city of Uppsala. Science of the Total Environment 366, 749-759.

Ljung, K., Otabbong, E. & Selinus O. 2006. Natural and anthropogenic trace metal inputs to soils in urban Uppsala, Sweden. Environmental Geochemistry and Health. 28, 353-364.

Madrid, L., Diaz-Barrientos, E., Ruiz-Cortés, E., Reinoso, R., Biasioli, M., Davidson, C.M., Duarte, A.C., Grcman, H., Hossack, I., Hursthouse, A.S., Kralj, T., Ljung, K., Otabbong, E., Rodrigues, S., Urquhart, G.J., Ajmone-Marsan, F. 2006. Variability in concentrations of potentially toxic elements in urban parks from six European cities. Journal of Environmental Monitoring 8, 1158-1165

Ljung, K., Selinus, O., Berglund, M. 2005. Metal distribution in soil particle sizes with regard to bioavailability. Focus on Soils Symposium “Managing Soils for the Future”, Uppsala, Sweden, Sept 14-16, 2005.

**Papers by Weinstein and Cook, Australia**

Cook, A. and Weinstein, P. Volcanic emissions and health risks of metal contaminants in New Zealand. In: Metal contaminants in New Zealand, Moore, T. Black A Centeno J Harding J and Trumm D (eds). University of Canterbury Press, Christchurch, 2005, Ch 23 pp 465-73.

Weinstein P. and Patel A. The Mount Ruapehu eruption 1996: a review of potential health effects. Australian and New Zealand Journal of Public Health 21: 773-8 (1997)

Hickling J., Clements M., Weinstein P. and Woodward A. Acute health effects of the Mt. Ruapehu (New Zealand) volcanic eruption of June 1996. International Journal of Environmental Health Research 9: 97-107 (1999)

Weinstein, P. and Cook, A. Human health impacts of volcanic eruptions. Histopathology 41 (Supp.2) 329-333 (2002).

Durand M, Florkowski C, George P, Walmsley T, Weinstein P and Cole, J. Elevated trace element output in urine following acute volcanic gas exposure. J Volc Getherm Research 134: 139-48 (2004)

Cook, A., Finkelman, R., and Weinstein, P. Geological factors in the emergence of infectious disease. Pathology International 54 (Supp. 1): S131-5 (2004).

Durand M, Florkowski C, George P, Walmsley T and Weinstein P. Effect of volcanic gas exposure on urine, blood, and serum chemistry. New Zealand Medical Journal 118: 1-9 (2005)

Weinstein, P. Palaeopathology by proxy: the case of Egil's bones. Journal of Archaeological Science 32: 1075-1080 (2005)

Cook A, Weinstein P, Centeno J. Health effects of natural dust: the role of trace elements and compounds. Biological Trace Element Research 103: 1-16 (2005)

Lindsay, M., Jardine, A., Johansen, C., Wright, A., Harrington, S, Weinstein, P., 2007. Mosquito (Diptera: Culicidae) fauna in inland areas of southwest Western Australia. Australian Journal of Entomology 46, 60-64.

**Papers from the International Symposium on Medical Geology, organised by the Royal Swedish Academy of Sciences. All these will be published in full in the journal of the Academy, Ambio, in the beginning of 2007:**

Prof. Philip Weinstein, Angus Cook, Epidemiological transitions and the changing face of medical geology  
  
Dr. Chandra Dissanayake, Fluorides and Human Health

Prof. Ron Fuge, Iodine Deficiency, an Ancient Problem in a Modern World

Prof. Edward Derbyshire, Natural Mineral Dust: Sources, Pathways, Toxins and some Health Impacts

Dr. Jose A. Centeno, Global Impacts of Geogenic Arsenic – A Medical Geology Research Case

Prof. Chin-Hsiao Tseng, Blackfoot Disease and Arsenic: A Never-ending Story

Prof. Marie Vahter, Health Effects of Arsenic in Drinking Water

Dr. James Donald Appleton, Radon in Air and Water

Prof. Changsheng Li, Selenium Deficiency and Endemic Heart Failure in China

Dr. Fiona Fordyce, Selenium Geochemistry and Health

Dr. William Orem, Health Effects of Toxic Organic Substances from Coal: Pandemic Nephropathy

Dr. Robert B. Finkelman, Health Impacts of Coal: Facts and Fallacies

Prof. Ulf Lindh, Metal Biology – Aspects of Beneficial Effects

Dr. John Munthe, Mobilisation and Environmental Cycling of Mercury

Dr. Olle Selinus , Medical Geology – An Opportunity for the Future

**Publications by Centeno et al (2005-2006):**

Christian JW, Hopenhayn C\*, Centeno JA, Todorov TI. Distribution of urinary selenium and arsenic among pregnant women exposed to arsenic in drinking water. Environ Res 2006;100:115-122.

Centeno JA\*, Tchounwou PB, Patlolla AK, Mullick FG, Murakata L, Meza E, Todorov TI, Longfellow D, Yedjou CG, 2006. Environmental pathology and health effects of arsenic poisoning – A critical review. In Managing Arsenic in the Environment – From Soil to Human Health, Naidu R, Smith E, Owens G, Bhattacharya P, Nadebaum P (Eds.), CSIRO Publishing, Australia, chapter 17, p. 311-327. ISBN 1-57808-425-3.

Gray MA, Harris A, Centeno JA\*, 2005. The role of cadmium, zinc and selenium in prostate cancer. In Metal Contaminants in New Zealand, Moore TA, Black JA, Centeno JS, Harding JS, Trumm DA (Eds.), resolutionz press, Christchurch, New Zealand, chapter 20, p. 393-414. ISBN 0-476-01619-3.

Centeno JA\* Gray MA, Mullick FG, Tchounwou PB, Tseng CH, 2005. Arsenic in drinking water and health issues. In Metal Contaminants in New Zealand, Moore TA, Black JA, Centeno JS, Harding JS, Trumm DA (Eds.), resolutionz press, Christchurch, New Zealand, chapter 21, p. 415-439. ISBN 0-476-01619-3.

Gray MA, Centeno JA\*, Slaney DP, Ejnik JW, Todorov TI, Nacey JN. Environmental exposure to trace elements and prostate cancer in three New Zealand ethnic groups. Int J Environ Res Public Health 2005;2(3):374-384.

Todorov TI, Ejnik JW, Mullick FG, Centeno JA\*. Arsenic speciation in urine and blood reference materials. Microhim Acta 2005;151:263-268.

Selinus O, Finkelman RB, Centeno JA. Human Health and Ecosystems. In Geology and Ecosystems (Zektser IS, Marker B, Ridgway J, Rogachevskaya L, and Vartanyan G, editors), Springer, ISBN 0-387-29292-6, Part IV, 2006.

Finkelman RB, Centeno JA, Selinus O. Medical Geology – The Emergence of a New Discipline. Terra (2006, in press).

Chin-Hsiao Tseng, Ching-Ping Tseng, Choon-Khim Chong, Tong-Yuan Tai, Jose A. Centeno\* 2006. Arsenic and Peripheral Arterial Disease in Taiwan. In Metal Ions in Biology and Medicine, Vol. 9PthP. (Eds. Alpoim MC, Norais PV, Santos MA, Cristovao AJ, Centeno JA, Collery P. ), John Libbey Eurotext, Paris. 2006 pp 70-74.

Mosley C, Todorov TI, Tseng CH, Centeno JA.\* 2006. Characterization of Arsenic Species by Raman Microspectroscopy. In Metal Ions in Biology and Medicine, Vol 9Pth P. (Eds. Alpoim MC, Norais PV, Santos MA, Cristovao AJ, Centeno JA, Collery P. ), John Libbey Eurotext, Paris. 2006 pp 70-74.

Finkelman RB, Belkin HE, Centeno JA. Health Impacts of Coal – Should we be concerned? Geotimes 2006;30:31-35.

Centeno JA, Tseng CH, van der Voet GB, Finkelman RB. Global Impacts of Geogenic Arsenic – A Medical Geology Research Case. AMBIO, Vol. 1, 2007.

Centeno JA, Mullick FG, et al. Environmental Pathology and Medical Geology – An Overview of Health Effects from Exposure to Toxic Metals. In Essentials of Medical Geology – Impacts of the Natural Environment on Public Health (Olle S, Centeno JA, Finkelman RB, et al., editors), Elsevier-Academic Press, Chapter 23, pp. 563-594;2005.

Centeno JA, Todorov T, Pestaner JP, Mullick FG, and Jonas W. Histochemical and Microprobe Analysis in Medical Geology. Essentials of Medical Geology – Impacts of the Natural Environment on Public Health (Olle S, Centeno JA, Finkelman RB, et al., editors), Elsevier-Academic Press, Chapter 30, pp. 725-736;2005.

Cook AG, Weinstein P, Centeno JA. Health Effects of Dust – Role of Trace Elements and Compounds. Biol Trace Element Research 2005;103:1-15.

Finkelman RB, Centeno JA, Selinus O. The Emerging Medical and Geological Association. Transactions of the American Clinical and Climatological Association 2005;116:155-165.

Centeno JA, Mullick FG, Finkelman RB, Selinus O. Medical Geology – An Emerging Discipline in Support of Environmental and Military Medicine. Mil Med Tech 2005;9(5):7-9.

Centeno. List of Abstracts Presented at Scientific Conferences (2006 only):

Centeno JA, Finkelman RB, Selinus O, Mullick FG. Global Impacts of Geogenic Arsenic – A Medical Geology Research Case. In Book of Abstracts: International Symposium on Medical Geology, Royal Swedish Academy of Sciences, Stockholm, Sweden. May 2006.

Kolker A, Conko K,P PKoslov K, Panov Y, Gibb H, Centeno JA, Korchemagin V, and Gunchenko V. Environmental and Occupational Exposure to Inorganic Mercury in Gorlovka, Ukraine. 8PthP International Conference on Mercury as a Global Pollutant, Madison, WI, August 2006.

Centeno JA. The Emerging Discipline of Medical Geology – Health Risks from Long-Term Mercury Exposure. In Book of Abstracts 9th International Symposium on Metal Ions in Biology and Medicine. Lisbon, Portugal, May 21-24, 2006, pp 35.

Tchounwou PB, Centeno JA, Patlolla A. Arsenic Toxicity and Carcinogenesis: A Health Risk Assessment and Management Approach. In Book of Abstracts 9th International Symposium on Metal Ions in Biology and Medicine. Lisbon, Portugal, May 21-24, 2006, pp 46.

Gray MA, Centeno JA, Todorov TI, Slaney DP, Nacey JN. Environmental Exposure to Cadmium, Zinc and Selenium and Risk of Prostate Cancer. In Book of Abstracts 9th International Symposium on Metal Ions in Biology and Medicine. Lisbon, Portugal, May 21-24, 2006, pp 61.

Mosley C, Centeno JA, Todorov TI. Characterization of Arsenic Species by Raman Microspectroscopy. In Book of Abstracts 9th International Symposium on Metal Ions in Biology and Medicine. Lisbon, Portugal, May 21-24, 2006, pp 139.

Todorov TI, Gray MA, Kadjacsy-Balla A, Mullick FG, Centeno JA. Cadmium, Zinc, Selenium and Arsenic Content in Fresh and Paraffin-Embedded Prostate Tissues. In Book of Abstracts 9th International Symposium on Metal Ions in Biology and Medicine. Lisbon, Portugal, May 21-24, 2006, pp 143.

Centeno JA. Medical Geology – An Introduction and Overview. In Book of Abstracts 9th Annual Force Health Protection Conference. New Mexico, USA, August 6-11, 2006, pp. 73.

Todorov TI, Potter K, Reedy E, Centeno JA. Laser-ablation ICP-MS analyses –elemental and chemical mapping of trace and toxic metals in pathological and forensic specimens. In Book of Abstracts 9th Annual Force Health Protection Conference. New Mexico, USA, August 6-11, 2006, pp. 174.

Centeno JA, Cook A, Weinsteinn, P, Mullick, FG, Finkelman RB, Selinus, O. Health Effects of Natural and Mineral Dust – The Role of Trace Elements and Compounds. In Book of Proceedings XXVI International Academy Congress of the International Academy of Pathology, Symposium on Environmental Pathology – Respiratory Toxicology, Montreal, Canada, September 16-21, 2006; CD media publication.

Selinus O, Finkelman RB, Centeno JA. The Medical Geology Revolution. Chinese J. of Geochemistry 2006;25(S):81.

Centeno JA, Cook A, Weinstein P. Environmental Toxicology and Exposure to Natural Dust – The Role of Trace Elements. Chinese J. of Geochemistry 2006;25(S):222.

Centeno. List of Invited Presentations at Scientific Conferences (2006 only):

Centeno JA (Invited Speaker). Trace Element Speciation in Environmental Medicine – The Examples or Arsenic and Depleted Uranium. 2006 Winter Conference on Plasma Spectrophotometry, Tucson, Arizona, January 9, 2006.

Centeno JA (Invited Speaker). Global Impacts of Geogenic Arsenic – A Medical Geology Research Case. International Symposium on Medical Geology, Royal Swedish Academy of Sciences. Stockholm, Sweden. May 18-19, 2006.

Centeno JA (Plenary Speaker). The Emerging Discipline of Medical Geology – Health Risks from Long-Term Mercury Exposure. 9th International Symposium on Metal Ions in Biology and Medicine, Lisbon, Portugal, May 21-24, 2006.

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Centeno JA (Invited Seminar Speaker). Medical Geology – An Emerging Discipline in Support of Environmental and Military Medicine. US Army Engineer Research and Development Center, Environmental Laboratory, Vicksburg, Mississippi, April 20, 2006.

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Centeno JA (Invited Seminar Speaker). Metals, Metalloids and Human Diseases – Chronic Arsenic Poisoning as a Medical Geology Case Study. Department of Earth and Environmental Sciences, University of Texas at Arlington, November 9, 2006.

**Papers in special issue of Journal of Geochemistry and Health (SEGH) beginning of 2007:**

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**MEDICAL GEOLOGY IN BRAZIL  
EFFECTS OF GEOLOGIC MATERIALS AND FACTORS ON HUMAN HEALTH AND ENVIRONMEN**T

Edited by  
Cassio Roberto da Silva, Bernardino Ribeiro Figueiredo, Eduardo Mello De Capitan, Fernanda Gonçalves da Cunha

This book published in 2006 is arranged in 30 chapters which were presented as research articles at the recent 2005 International Workshop of Medical Geology

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"Interaction of Cadmium with Other Heavy Metals and its Influence on the Soil Biochemical Properties"  
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2007

**Papers by Jose Centeno et al**

• Christian WY, Hopenhayn C, Centeno JA, Todorov TI. Distribution of Urinary Selenium and Arsenic Among Pregnant Women Exposed to Arsenic in Drinking Water. Environmental Research 2006;100:115-122.  
• Selinus O, Finkelman RB, Centeno JA. Human Health and Ecosystems. In Geology and Ecosystems (Zektser IS, Marker B, Ridgway J, Rogachevskaya L, and Vartanyan G, editors), Springer, ISBN 0-387-29292-6, Part IV, 2006.  
• Chin-Hsiao Tseng, Ching-Ping Tseng, Choon-Khim Chong, Tong-Yuan Tai, Jose A. Centeno 2006. Arsenic and Peripheral Arterial Disease in Taiwan. In Metal Ions in Biology and Medicine, Vol. 9th. (Eds. Alpoim MC, Norais PV, Santos MA, Cristovao AJ, Centeno JA, Collery P. ), John Libbey Eurotext, Paris. 2006 pp 70-74.  
• Finkelman RB, Belkin HE, Centeno JA. Health Impacts of Coal – Should we be concerned? Geotimes 2006;30:31-35.  
• Centeno JA, Tchounwou PB, Patlolla AK, Mullick FG, Murakata L, Meza E, Gibb H, Longfellow D, and Yedjou CG. Environmental pathology and health effects of arsenic poisoning: a critical review. In: Naidu R, Smith E, Smith J and Bhattacharya P eds. Managing Arsenic In the Environment: From Soil to Human Health. CSIRO Publishing Corp. Adelaide, Australia. (Book Chapter in Press), 2005.  
• Cook AG, Weinstein P, Centeno JA. Health Effects of Dust – Role of Trace Elements and Compounds. Biol Trace Element Research 2005;103:1-15.  
• Finkelman RB, Centeno JA, Selinus O. The Emerging Medical and Geological Association. Transactions of the American Clinical and Climatological Association 2005;116:155-165.  
• Centeno JA, Gray MA, Mullick FG, Tchounwou PB, 2005. Arsenic in Drinking Water and Health Issues. In Metal Contaminants in New Zealand (Moore TA, Black A, Centeno JA, Harding J, Trumm D, Editors), resolution press, Christchurch, NZ, chapter 21, p. 415-439.  
• Gray MA, Harris A, Centeno JA, 2005. The Role of Cadmium, Zinc, Selenium and Prostate Disease. In Metal Contaminants in New Zealand (Moore TA, Black A, Centeno JA, Harding J, Trumm D, Editors), resolution press, Christchurch, NZ, chapter 20, p. 393-414. 2005).  
• Todorov TI, Ejnik JW, Mullick FG, Centeno JA. Arsenic Speciation in Urine and Blood Reference Materials. Microchimica Acta 2005;1:1-6.  
• Centeno JA, Mullick FG, Finkelman RB, Selinus O. Medical Geology – An Emerging Discipline in Support of Environmental and Military Medicine. Mil Med Tech 2005;9(5):7-9.   
• Gray M, Centeno JA, Slaney DP, Todorov TI, Ejnik JW, Nacey JN. Environmental Exposure to Trace Elements and Prostate Cancer in Three New Zealand Ethnic Groups. Int J Environ Research Public Health 2005;2(3):374-384.  
• Tchounwou PB, Centeno JA and Patlolla AK. Arsenic toxicity, mutagenesis and carcinogenesis - a health risk assessment and management approach. Molecular and Cellular Biochemistry 255: 47-55, 2004.   
• Tchounwou PB, Patlolla AK and Centeno JA. Serum aminotransferases as biomarkers of arsenic-induced hepatotoxicity in Sprague-Dawley Rats. Metal Ions in Biology and Medicine vol 8; 284-288: 2004 (ISBN: 2-7 420-0522-6).  
• Finkelman RB, Centeno JA, Selinus O, Pereira JJ. Medical Geology: An Emerging Discipline. Environmental Health Focus 2004;2(2):21-28.  
• Tchounwou PB, Centeno JA and Patlolla AK. Health risk assessment and management of arsenic toxicity and carcinogenesis. Metal Ions in Biology and Medicine, vol 8; 14-18: 2004 ((ISBN: 2-7 420-0522-6).  
• Centeno JA, Finkelman RB, Olle S. Medical Geology: An Emerging Discipline. Pathology International 2004;54(Suppl.1):S128-S130.

**Papers by Bob Finkelman et al**

Bunnell, J. E., Finkelman, R. B., Centeno, J. A., and Selinus, 2007, Medical Geology: A globally emerging discipline. Geologica Acta, Vol. 5, no. 3, p. 273-281.

Zhang, B., Wang, B., Ding, Z., Zhou, D., Zhou, Y., Zhou, C., Chen, C., and Finkelman, R. B., 2005, Endemic arsenosis caused by indoor combustion of high-As coal in Guizhou Province, P. R. China. Environmental Geochemistry and Health, p. 521-528.

Finkelman, Robert B., 2006, Medical Geology: Impacts of the Natural Environment on Human Health (from Trace Elements to Dust). 9th Annual Force Health Protection Conference Agenda. Abstract no. 8017, p. 76.

Finkelman, R. B., Belkin, H. E., and Centeno, J. A., 2006, Health Impacts of Coal: Should we be concerned? Geotimes, Sept. 2006, p. 30-34.

Huang, Xi and Robert B. Finkelman, 2006, Mineral Interactions and Health Impacts of Coal Dust Exposure. Abstracts of the 23rd Annual Meeting of the Society for Organic Petrology, vol. 23, p.95-97.  
461.   
Huang Xi, Jisen Dai, and Robert B. Finkelman, 2006, Iron, calcite, and oxidative stress in coal dust-induced lung diseases. Abstracts of the 7th International Symposium on Environmental Geochemistry, Chinese Journal of Geochemistry, vol 25 (Suppl.), p.216-217.  
  
Finkelman, R. B., 2006 Health impacts of coal: Facts and fallacies. Ambio, Vol. 36, no. 1, p. 103-106.  
  
Finkelman, R. B., Selinus, O., and Centeno, J., eds., 2007, Vol. 29, Journal of Environmental Geochemistry and Health. Special Volume Introduction, p.81-82.

Zheng, B., Wu, D., Wang, B., Liu, X., Wang, M., Wang, A., Xiao, G., Liu, P. and Finkelman, 2006, Fluorosis caused by indoor coal combustion in China: discovery and progress. Journal of Environmental Geochemistry and Health.

Huang, X., Gordon, T., Rom, W. N., and Finkelman, R.B., 2006, Interaction of iron and calcium minerals in coals and their roles in coal dust-induced health and environmental problems. Reviews in Mineralogy & Geochemistry, Vol. 64, p. 153-178.

Ding, Z-h, Finkelman, R. B., Belkin, H. E., Zheng, B-s, Jin, Z-s, Zhou, Y-s, and Zhou, D-x, 2003, Mineral composition of coals from coal combustion endemic arsenosis areas in Guizhou Province. Coal Geology & Exploration, Vo. 31, No. 1, p. 14-16. (In Chinese).

Finkelman, R. B., 2006, Medical Geology: Tools for improving environmental health. The 4th UNU & GIST Joint Program. International Environmental Research Center, Gwangju Institute of Science and Technology. P. 3-10.

Finkelman, R. B. and Limpitlaw, U., 2006, Health benefits of geologic materials and geologic processes. International Journal of Environmental Research and Public Health, Vol. 3, no. 4, p. 278-283.

Finkelman, R. B., 2007, How can medical geology help address mining industry health issues? Enviornmin 2007 Program and Abstract Book. Abstract O-7, p.26.

Finkelman, R. B., 2005, The emerging medical and geological association. Transactions of the American Clinical and Climatological Association. Vol. 116, p.155-165.

Finkelman, R. B., Centeno, J., and Selinus, O., 2007, Medical Geology: The Future. XI Congresso Brasileiro de Geoquimica. CD-Rom.

Finkelman, Robert B., Centeno, Jose, A., and Selinus, Olle, 2007, Medical Geology: The emergence of a new discipline. Terrae, Vol. 2, No. 1-2, p.3-8.

J. Denis N. Pone, Kim A.A. Hein, Glenn B. Stracher, Robert B. Finkelman, and Harold J. Annegarn, 2007, Potential Environmental and Health Impacts of Burning Coal in Witbank Coalfield, South Africa, ERSEC (Ecological Research for Sustaining the Environment in China) Ecological Book Series – 4.

**Papers by Fiona Fordyce et al**

• 2007 Fordyce F M, Vrana K, Zhovinsky E, Povoroznuk V, Toth G, Hope, B C, Iljinsky U and Baker J. A health risk assessment for fluoride in Central Europe. Environmental Geochemistry and Health. Special Issue Medical Geology in Developing Counties. Vol. 29 (2), 83-102.

• 2007 Fordyce F M. Selenium geochemistry and health. AMBIO A Journal of the Human Environment. Special Volume from the International Medical Geology Symposium, Stockholm 18 - 19 May 2006. Royal Swedish Academy of Sciences. Vol. XXXVI (1). 94-97

• 2007 Fordyce F M. Selenium medical geology. Géosciences et Santé (Geosciences and Health). BRGM Géosciences Vol. 5 (March 2007). 62.

• 2007 Broadway A, Farmer J G, Ngwenya B T, Cave M R, Fordyce F M. Assessing the human health risks posed by chromium-contaminated land in Glasgow and its environs. Abstracts of the 25th Society for Environmental Geochemistry and Health European Conference, John Moore's University, Liverpool, 4-5 June 2007.

**A special volume of AMBIO, the journal of the Royal Swedish Academy of Sciences on medical geology.  
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Preface to Medical Geology Papers  
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Epidemiological Transitions and the Changing Face of Medical Geology  
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Iodine Deficiency: An Ancient Problem in a Modern World  
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Mobilization of Mercury and Methylmercury from Forest Soils after a Severe Storm-Fell Event  
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Wilson Scarpelli

Human and environmental lead contamination in the Upper Ribeira Valley Southeastern Brazil  
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Environmental gamma radiation in municipalities of Eastern of Säo Paulo State, Brazil  
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Articles

2007 Fordyce F M, Vrana K, Zhovinsky E, Povoroznuk V, Toth G, Hope, B C, Iljinsky U and Baker J. A health risk assessment for fluoride in Central Europe. Environmental Geochemistry and Health. Special Issue Medical Geology in Developing Counties. Vol. 29 (2), 83-102.

2007 Appleton, J.D. Radon: sources, health risks and hazard mapping. AMBIO A Journal of the Human Environment. Special Volume from the International Medical Geology Symposium, Stockholm 18 – 19 May 2006. Royal Swedish Academy of Sciences. Vol. XXXVI (1), 85-89

2007 Fordyce F M. Selenium geochemistry and health. AMBIO A Journal of the Human Environment. Special Volume from the International Medical Geology Symposium, Stockholm 18 – 19 May 2006. Royal Swedish Academy of Sciences. Vol. XXXVI (1). 94-97.

2007 Fordyce F M. Selenium medical geology. Géosciences et Santé (Geosciences and Health). BRGM Géosciences Vol. 5 (March 2007). 62.

2007 Cave M R, Taylor H and Wragg J. Estimation of the bioaccessible arsenic fraction in soils using near infrared spectroscopy. Journal of Environmental Science Health, Part A Vol.42, 1293-1301

2007 Palumbo-Roe B and Klinck B A. Bioaccessibility of arsenic in mine waste contaminated soils: A case study from an abandoned arsenic mine in SW England, UK. Journal of Environmental Science and Health Part A Vol. 42, 1251-1261.

2007 Wragg J, Cave M R and Klinck B A. Comparison of five in vitro digestion models to in vivo experimental results: lead bioaccessibility in the human gastrointestinal tract. Journal of Environmental Science and Health, Part A Vol.42, 1203-1211.

2007 Wragg J, Cave, M R and Nathanail P. A study of the relationship between arsenic bioaccessibility and its solid-phase distribution in soils from Wellingborough, UK. Journal of Environmental Science and Health, Part A Vol.42, 1303-1315.

2007 Wragg J and Klinck B A. The bioaccessibility of lead from Welsh mine waste using a respiratory uptake test. Journal of Environmental Science and Health, Part A, Vol. 42, 1223-1231.

2007 Beresford, N., Appleton, J.D., Barnett, C., Bescoby, M.W., Breward, N., Jones, D.G., MacKenzie, A.C., Scheib, C., Thorring, H. and Wood, M.D. Using science to create a better place : assessment of naturally occurring radionuclides in England and Wales. ( Bristol : Environment Agency)

2007 Breward, N. Arsenic and presumed resistate trace element geochemistry of the Lincolnshire (UK) sedimentary ironstones, revealed by a regional geochemical survey using soil, water and stream sediment sampling. Applied Geochemistry Vol. 22 (9), 1970-1993.

2007 Breward, N. and Johnson, C.C. Living with the elements. Earthwise No. 25, 28-29.

2007 Dubbin, W.E. and Ander, E.L. Lead (II) desorption from goethite mediated by hydroxamate ligands. Geochimica et Cosmochimica Acta Vol. 71 (15S), A240.

2007 Gooddy, D.C., Mathias, S.A., Harrison, I., Lapworth, D.J. and Kim, A.W. The significance of colloids in the transport of pesticides through chalk. Science of the Total Environment Vol. 385, 262-271.

2007 Palumbo-Roe B, Klinck B A and Cave M R. Arsenic speciation and mobility in mine wastes from a copper-arsenic mine in Devon, UK: a SEM, XAS, sequential chemical extraction study. In: Bhattacharya, P, Mukherjee, A.B and Zevenhoven, R. (editors) Arsenic in Soil and Groundwater Environment: Biogeochemical Interactions, Health Effects and Remediation. (Amsterdam: Elsevier). 441-471.

2007 Smedley, P.L., Knudsen, J and Maiga, D. Arsenic in groundwater from mineralised Proterozoic basement rocks of Burkina Faso. Applied Geochemistry Vol. 22, 1074-1092.

2007 Stuart, M.E., Chilton, P.J., Kinniburgh, D.G. and Cooper, D.M. Screening for long-term trends in groundwater nitrate monitoring data. Quarterly Journal of Engineering Geology & Hydrogeology Vol. 40 (4), 361-376.

2007 Van der Perk, M., Owens, P.N., Deeks, L.K., Rawlins, B.G. , Haygarth, P.M. and Beven, K.J. Controls on catchment-scale patterns of phosphorus in soil, streambed sediment, and stream water. Journal of Environmental Quality Vol. 36, 694-708.

2008 Di Bonito, M., Breward, N., Crout, N.M.J., Smith, B. and Young, S.D. Overview of selected soil pore water extraction methods for the determination of potentially toxic elements in contaminated soils : operational and technical aspects. In: De Vivo, B., Belkin, H.E. and Lima, A. (editors) Environmental Geochemistry: Site Characterization, Data Analysis and Case Histories. (London: Elsevier), 213-249.

2008 Johnson, C.C. Flight, D.M.A., Ander, E.L., Lister, T.R., Breward, N., Fordyce, F.M and Nice, S.E. The Collection of Drainage Samples for Environmental Analyses from Active Stream Channels. In: De Vivo, B., Belkin, H.E. and Lima, A. (editors) Environmental Geochemistry: Site Characterization, Data Analysis and Case Histories. (London: Elsevier), 59-92.

2008 Trick, J.K., Stuart, M.E. and Reeder, S. Contaminated groundwater sampling and quality control of water analyses. In: De Vivo, B., Belkin, H.E. and Lima, A. (editors) Environmental Geochemistry: Site Characterization, Data Analysis and Case Histories. (London: Elsevier), 29-57.

2008 Appleton, J.D., Rawlins, B.G. and Thornton, I. National-scale estimation of potentially harmful element ambient background concentrations in topsoil using parent material classified soil: stream-sediment relationships. Applied Geochemistry, Vol. 23 (9), 2596-2611.

2008 Johnson C C and Ander E L. Urban geochemical mapping studies: how and why we do them. Environmental Geochemistry and Health, Vol. 30 (6), 511-540.

2008 Schelle, E., Rawlins, B.G., Lark, R.M., Webster, R., Staton, I. and McLeod, C.W. Mapping aerial metal deposition in metropolitan areas from tree bark: a case study in Sheffield, England. Environmental Pollution Vol. 55, 164-173.

2008 Smedley, P.L. Cooper, D.M., Lapworth, D.J. and Ander, E.L. Molybdenum in British drinking water: a review of sources and occurrence and a reconnaissance survey of concentrations. British Geological Survey Open Report OR/08/051.

2008 Watts M.J, Button M, Brewer T S, Jenkin G W T and Harrington C F. Quantitative arsenic speciation in two species of earthworms from a former mine site. Journal of Environmental Monitoring, Vol.10 (6), 753-759.

Abstracts

2007 Broadway A, Farmer J G, Ngwenya B T, Cave M R, Fordyce F M. Assessing the human health risks posed by chromium-contaminated land in Glasgow and its environs. Abstracts of the 25th Society for Environmental Geochemistry and Health European Conference, John Moore’s University, Liverpool, 4-5 June 2007.

2007 Johnson C C, Fordyce F M, Rawlins B G and Smith B. Geochemical mapping of urban areas. Abstracts of the Society for Environmental Geochemistry and Health Urban Geochemistry and Health Conference, New Orleans, 21-24 July 2007.  
2007 Nice S E, Flight D M A, Fordyce F M and Scheib A J. Geochemical characteristics of urban centres within the UK. Abstracts of the Society for Environmental Geochemistry and Health Urban Geochemistry and Health Conference, New Orleans, 21-24 July 2007.

2007 Smith B, Fordyce F M, Kessler H, Price S J and Royse K R. Understanding heterogeneity and structure in urban environments: A tool for the assessment of risk and interpretation of geochemical data. Abstracts of the Society for Environmental Geochemistry and Health Urban Geochemistry and Health Conference, New Orleans, 21-24 July 2007.

2008 Ander, E.L., Johnson, C.C., Fordyce, F.M., Breward, N. and Scheib, A.J. Iodine and selenium in soils from East Anglia, UK. Geophysical Research Abstracts, Vol. 10, European Geoscience Union General Assembly, Vienna, April, 2008.

2008 Johnson, C.C. and Fordyce, F.M. Iodine and selenium in soils: British Geological Survey case studies into trace element deficiencies and human health from around the world. Geophysical Research Abstracts, Vol. 10, European Geoscience Union General Assembly, Vienna, April, 2008.

2008 Ander, E.L., Flight, D.M.A., Nice, S.E., Scheib, A. and Fordyce, F.M. Baseline geochemical characteristics of urban areas - a record of environmental change in the English Midlands. Abstracts of the 26th Society for Environmental Geochemistry and Health European Conference, Hellas, Greece. 31st March - 2nd April 2008

2008 Nice, S.E., Flight, D.M.A., Fordyce, F.M., Lister, T.R. and Ander E.L Natural and anthropogenic soil geochemistry characteristics of Belfast, Glasgow, Cardiff and East London, in the UK. Poster Abstracts of the 26th Society for Environmental Geochemistry and Health European Conference, Hellas, Greece. 31st March - 2nd April 2008

2008 Nice S, Flight D M A, Fordyce F M, Lister T R and Johnson C C. Natural and anthropogenic soil geochemical characteristics of Belfast, Glasgow, Cardiff and east London, in the United Kingdom. Abstracts of the 33rd International Geological Congress, Oslo, Norway – Session EGC-03 Urban Geochemical Mapping, 6 – 14th August 2008.  
  
**Selected Chinese publications**

Fluorosis caused by indoor coal combustion in China: discovery and progress Baoshan Zheng, Daishe Wu, Binbin Wang, Xiaojing Liu, Mingshi Wang, Aimin Wang, Guisen Xiao, Pugao Liu, Robert B. Finkelman. Environmental Geochemistry and Health, (2007) 29: 103-108.  
  
Fluoride in Chilies from southwestern China Bo Li, Shehong Li, Mingguo Wang, Xiaojing Liu and Baoshan Zheng Annals of the New York Academy of Sciences (2008) 114-:315-320.  
  
Iodine in Chinese coals and its geochemistry during coalification Daishe Wu, Haiwen Deng, Baoshan Zheng, Wuyi Wang, Xiuyi Tang, Huayun Xiao Applied Geochemistry (2008) 23:2082–2090.   
  
The biogeochemistry of selenium in Sunan grassland, Gansu, Northwest China, casts doubt on the belief that Marco Polo reported selenosis for the Wrst time in history Shuxun Shao · Baoshan Zheng Environ Geochem Health (2008) 30:307–314.

**Papers by Finkelman and others**

Finkelman, R. B., Selinus, O., and Centeno, J., eds., 2007, Vol. 29, Journal of Environmental Geochemistry and Health. Special Volume.

Finkelman, R. B., Selinus, O., and Centeno, J., eds., 2007, Vol. 29, Journal of Environmental Geochemistry and Health. Special Volume Introduction, p.81-82.

Selinus, O., Finkelman, R. B., and Centeno, J. A., 2007, The medical geology revolution. BRGM, March 2007, p. 108-109.

Centeno, J. A. and Finkelman, R. B., 2007, Global impacts of geogenic arsenic – A medical geology perspective. BRGM March 2007, p.64-65.

Finkelman, R. B., Centeno, J. A., and Selinus, O., 2008, Medical Geology: Threat or Opportunity, The Professional Geologist, Vol. 45, no. 4, p. 46-49.

Finkelman, R. B. and Greb, S., 2008, Chapter 10. Environmental and Health Impacts. Applied Coal Petrology, Academic Press.

Seredin, V. V. and Finkelman, R. B., 2008, Metalliferous coals: A review of the main genetic and geochemical types. International Journal of Coal Geology.

Pone, J. D. N., Hein, K. A. A., Annergarn, H. J., Stracher, G. B., and Finkelman, R. B., 2007, Spontaneous combustion of coal: gases and solids mobilized. International Pittsburgh Coal Conference.

Finkelman, R. B., 2007, How can medical geology help address mining industry health issues? Enviornmin 2007 Program and Abstract Book. Abstract O-7, p.26.

Finkelman, R. B., Centeno, J., and Selinus, O., 2007, Medical Geology: The Future. XI Congresso Brasileiro de Geoquimica. CD-Rom.

Selinus, O., Finkelman, R. B., and J. A. Centeno, 2007, Medical Geology – the beginning. XI Congresso Brasileiro de Geoquimica. CD-Rom.

Centeno, J. A., Selinus, O., and Finkelman, 2007, Medical geology: Milestone and current developments. XI Congresso Brasileiro de Geoquimica. CD-Rom.

Selinus, O., Finkelman, R. B., and Centeno, J. A., 2007, The International Medical Geology Association now and in the near future. XI Congresso Brasileiro de Geoquimica. CD-Rom.

Selinus, O., Finkelman, R. B., and Centeno, J. A., 2007, The medical geology revolution – The evolution of an IUGS initiative. Episodes, Vol. 30, no. 4, p. 305- 309.

Finkelman, Robert B., Centeno, Jose, A., and Selinus, Olle, 2007, Medical Geology: The emergence of a new discipline. Terrae, vol. 2, nos. 1-2, p. 3-8.

Pone, J. D., Hein, K. A. A., Stracher, G. B., Annegarn, H. J., Finkelman, R. B., Blake, D. R., McCormack, J. K., and Schroeder, 2007, The spontanesou combustion of coal and its by-products in the Witbank and Sasolburg coalfields of South Africa. International Journal of Coal Geology.

J. Denis N. Pone, Kim A.A. Hein, Glenn B. Stracher, Robert B. Finkelman, and Harold J. Annegarn, 2007, Potential Environmental and Health Impacts of Burning Coal in Witbank Coalfield, South Africa, ERSEC Ecological Book Series – 4.

Brierley, C. L., Burke, F. P., Cobb, J., C., Finkelman, R. B., Fulkerson, W., Gluskoter, H. J., Karmis, M. E., Lackner, K. S., Mitchell, R. E., Ramani, R. V., Rendu, J.-M. M., Rubin, E. S., and Wolfe, S. A., 2007, Coal: Research and Development to Support National Energy Policy. National Research Council, The National Academies Press, Washington, D. C. 170 p.

Belkin, H. E., Zheng, B., Zhou, D., and Finkelman, R. B, 2008, Chronic arsenic poisoning from domestic combustion of coal in rural China: A case study of the relationship between earth materials and human health. In Environmental Geochemistry: Site Characterization, Data Analysis and Case Histories, edited by

B. de Vivo, H. E. Belkin, and A. Lima. Elsevier. Chapter 17, p. 401- 426.  
Finkelman, R. B., Orem, W. H., Tatu, C. A., Pavlovic, N. M., and Bunnell, J. E., 2008, Natural Organic Pollutants in Groundwater: Potential health implications. IGC.

Finkelman, R. B., 2008, Medical geology: a glance into the future. IGC.

Finkelman, R. B., 2008, Geology and health: A brief look at the past and a glance into the future. GeoHealth I. GSA.

Finkelman, R. B., 2008, Medical geology issues in the South-Central US, Geological Society of America Abstract with Program, Vol. 40, no. 3, p.29.

Finkelman, Robert B., 2008, Health impacts of coal: possible solutions. IGC.  
Selinus, O, Finkelman, R., B., Centeno, J. A., 2008, 2nd Hemispheric Conference on Medical Geology, Episodes, vol.20, no. 1,

Kolker, A., Finkelman, R. B., Belkin, H., Baoshan, Z., 2008, Implications of USGS databases for estimating global mercury emissions. Geological Society of America Annual Meeting, Abstracts with Program, Vol 40, no. 6, p. 495.

Finkelman, R. B., 2008, An overview of medical geology issues in Texas. Geological Society of America Annual Meeting, Abstracts with Program, Vol 40, no. 6, p. 126.

Selinus, O., Finkelman, R. B., and Centeno, J. A., editors, 2008, Environmental Geochemistry and Health, Vol. 30, no. 4. Special Issue: Medical Geology in Developing Countries, Part 2. p. 305-389.

Silva, L. F. O., Oliveira, M. L. S., da Boit, K. M., Finkelman, R. B., 2008, Characterization of Santa Catarina (Brazil) coal with respect to human health and environmental concerns. Environmental Geochemistry and Health. In press.

Stracher, Glenn B., Hower, James C., Hiett, John, Finkelman, Robert B., Prakash, Anupma, Pone, J. Denis N., Mathews, Jonathan, Annegarn, Harold, Hein, Kim A.A., Blake, Donald R., Schroeder, Paul A., Emsbo-Mattingly, Stephen D., O'Keefe, Jennifer M.K., and Mardon, Sarah M., 2008, Coal Fires: Gateway to Environmental Destruction and Human Suffering: Fossil Fuel Foundation of Africa, 2nd Conference on Spontaneous Combustion: Open Cast and Surface Mines, Parkview, South Africa, p. 4-5.

Finkelman, R. B., 2008, Will coal burn brightly in the future? Energize Weekly. Issue 44. Oct. 31, 2008.

Stracher, Glenn B., Hower, James C., Hiett, John, Finkelman, Robert B., Prakash, Anupma, Pone, J. Denis N., Mathews, Jonathan, Annegarn, Harold, Hein, Kim   
A.A., Blake, Donald R., Schroeder, Paul A., Emsbo-Mattingly, Stephen D., O'Keefe, Jennifer M.K., and Mardon, Sarah M., 2008, Coal Fires: Gateway to Environmental Destruction and Human Suffering: Fossil Fuel Foundation of Africa, 2nd Conference on Spontaneous Combustion: Open Cast and Surface Mines, Parkview, South Africa, 13 p.

Pone, J. D. N., Stracher, G. B., Finkelman, R. B., Annegarn, H. J., and Hein, K. A. A., 2008, Potential land contamination associated with solid chemicals mobilized by spontaneous combustion of coal. Proceedings of the Joint Conference of the 6th International Acid Sulfate Soil Conference and the Acid Rock Drainage Symposium, C. Lin, S. Huang, and Y. Li, editors. Guandong Press Group.

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**Papers from Brazil**

ANDRADE, R.P.; FIGUEIREDO, B.R.; DE MELLO, J.W.V.; SANTOS, J.C.Z.; ZANDONADI, L.U. Control of geochemical mobility of arsenic by liming in materials subjected to acid mine drainage. Journal of Soils and Sediments, vol. 8 (2), 2008, p: 123-129.

FIGUEIREDO, B.R. Medical Geology: for safer environment (Book chapter - Geóloga Médica: por um ambiente mais seguro). In: Rômulo Machado (Org.), As Ciências da Terra e sua importância para a Humanidade. Sociedade Brasileira de Geologia, Livros Textos, 2008, 49-59.

ALBA, J.M.F., SOUZA FILHO, C.R., FIGUEIREDO, B.R. Analysis of geochemical signature of soils and stream sediments in the Ribeira Valley, São Paulo, Brazil, and trough GIS. In Portuguese. Revista Brasileira de Geociências,. 38(1): 68-79, 2008.

DI GIULIO, G.M., PEREIRA, N.M., FIGUEIREDO, B.F. Lead contamination, media and risk communication: a case study in the Ribeira Valley, Brazil. In: D.G.E Liverman, C. Pereira & B. Marker (Eds.), Communicating Environmental Geoscience. Geological Society, London, Special Publications, 305: 63-74, 2008.

FIGUEIREDO, B.R.; BORBA, R.P.; ANGÉLICA, R.S. Arsenic occurrence in Brazil and human exposure. Environmental Geochemistry & Health, Springer, Netherlands, vol. 29, 2007, p: 109-118.

SILVA, C.R.; FIGUEIREDO, B.R.; DE CAPITANI, E.M.; CUNHA , F.G. Medical Geology: Effects of materials and geological factors on the environment and human health. Book in Portuguese (Geologia Médica no Brasil – Efeitos dos Materiais e Fatores Geológicos no Ambiente e Saúde Humana) CPRM/SGB-FAPERJ, 2006, 218 p.

**List of Publications on Medical Geology – 2008  
Jose A. Centeno**

1. Centeno JA. Natural disasters and their long-term impacts on the health of communities. J Environ Monit 2008;10;266.

2. Centeno JA. Impacts of the natural environment on human health. Interciencia 2008;33(3)169-171.

3. Tchounwou PB, Centeno JA. Toxicologic Pathology. In Handbook of Preclinical Development – Toxicology (Cox Gad S, editor) 2008; John Wiley & Sons, Inc. Chapter 16th, pp. 551-580. ISBN: 978-0-470-24846-1.

4. Andrey G. Sarafanov AG, Todorov TI, Kajdacsy-Balla A, Gray MA, Virgilia Macia V, Centeno JA. Analysis of iron, zinc, selenium and cadmium in paraffin-embedded prostate tissue specimens using inductively coupled plasma mass-spectrometry. J Trace Elements in Med Biol 2008, doi:10.1016/j.jtemb.2008.03.010.

5. Gibb HJ, Kozlov K, Centeno JA, Poulin J, Jurgenson V, Kolker A, Conko KM, Landa ER, Panov BS, Xu H. Occupational Mercury Exposure at a Mercury Recycling Facility in Ukraine. J Occup Environ Hygiene 2008;5:483-489;DOI:10.1080/15459620802174432.

6. Finkelman RB, Centeno JA, Selinus O. Medical Geology – Threat or Opportunity. AIPG 2008;46-49.

7. van der Voet GB, Centeno JA. Metals. In Side Effects of Drugs, Annual 30 (Aronson JK, editor), Elsevier Science BV, Amsterdam, 2008, p. 262. ISBN: 978-0-444-52767-7.

8. van der Voet GB, Sarafanov A, Todorov TI, Centeno JA, Jonas W, Ives JA, Mullick FG. Clinical and analytical toxicology of dietary supplements: a case study and a review of the literature. Biol Trace Elem Res 2008;DOI:10.1007/s12011-008-8157-0.

9. Centeno JA. Medical Geology – Impacts of the Natural Environment on Human Health. J Environ Monit 2008: DOI:10.1039/b817552g.

II. List of Abstracts Published at National and/or International Conferences – 2008:

1. Chesnick IE, Centeno JA, Todorov TI, Koenig AE, Potter K. Manganese-Enhanced Magnetic Resonance Microscopy of Mineralization Rates. 16th Scientific Meeting of the International Society for Magnetic Resonance in Medicine, Toronto, Canada, 3-9 May 2008.   
2. Van der Voet GB, Olabisi AO, Wagner D, Chapman GD, Mullick FG, Centeno JA. Raman microspectroscopy characterization of tungsten-based alloys: The role of metal-binding speciation. 4th International Symposium on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, May 25-29, 2008, Munich, Germany.

3. Zhang L, Xu H, Todorov TI, Centeno JA. Development of a robust method for the determination of uranium and detection of uranium isotopic rations in human samples. 4th International Symposium on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, May 25-29, 2008, Munich, Germany.

4. Centeno JA. The Emerging Field of Medical Geology and the Role of Trace Element Speciation in Human Health. 4th International Symposium on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences, May 25-29, 2008, Munich, Germany.

5. Centeno JA. Respiratory Toxicology: Health Effects of Bioactive Metals in Natural Dusts. 1st Latin American Forum on Health Disparities in Latino Communities – Obesity, Asthma, and Sexually Transmitted Infections. San Juan, Puerto Rico, February 28-29, 2008.

6. Centeno JA. Metals, Metalloids and Health. 7th Annual Symposium on the Environment and Hormones – Environmental Signaling in Urban Ecosystems. Center for Environmental Research, Tulane/Xavier, April 13-16, 2008.

7. Centeno JA. Arsenic and Medical Geology – The Role of the Earth Scientist in the Assessment and Prevention of Health Risk. 33rd International Geological Congress, Theme of the Day – Water and Health. Oslo, Norway, August 10-14, 2008.

8. Centeno JA, Jonas W, van der Voet G, Todorv T, Ives J. Clinical and Analytical Toxicology of Dietary Supplements: A Case Study. 11th Annual Conference – Force Health Protection, Albuquerque, New Mexico, April 9-15, 2008.

9. Todorov T, Centeno JA, Koenig A, Sarafanov A. Distribution of Cd, Zn, Se, and Fe in Prostate Tissues. 11th Annual Conference – Force Health Protection, Albuquerque, New Mexico, April 9-15, 2008.

10. Fornero E, Centeno JA, Chapman G, van der Voet G, Wagner D. Raman microspectroscopy characterization of tungsten alloys – The role of metal binding speciation. 11th Annual Conference – Force Health Protection, Albuquerque, New Mexico, April 9-15, 2008.

11. Centeno JA, Squibb K, Todorov TI. Blood uranium isotopic analysis as a measure of depleted uranium exposure in U.S. Soldiers. 11th Annual Conference – Force Health Protection, Albuquerque, New Mexico, April 9-15, 2008.

12. Centeno JA. Dust and Human Health – Environmental Toxicology Aspects from Exposure to Nanoparticles. XXV11 International Congress of the International Academy of Pathology, Athens, Greece, October 12-17, 2008.

13. Centeno JA. Health Effects from Geogenic (Natural) Dust. 5th International Symposium on Recent Advances in Environmental Health Research. Jackson State University, Jackson, Mississippi, September 15-17, 2008.  
III. List of Presentations on Medical Geology – 2008:

1. Centeno JA: The Emerging Field of Military Medical Geology. AFIP-WRAMC Tele Video Conference. February 24, 2008.

2. Centeno JA. 1st Latin-American Conference in Health Disparities – Obesity, Asthma, and Sexuality. “Health Effects from Exposure to Natural and Mineral Dust”. February 28, 2008, San Juan, Puerto Rico.

3. Centeno JA. GeoHealth I. Building Bridges across the Geological and Health Sciences. “Integrating Geosciences and Public Health – The Role of the Medical Geologists” , USGS and Geological Society of America, Reston, VA, March 4-6, 2008.

4. Centeno JA. 7th Annual Symposium on the Environment and Hormones, Tulane/Cavier, New Orleans. “Metals, Metalloids and Health” April 13-16, 2008.

5. Centeno JA. 4th International Conference on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences. “The Emerging Field of Medical Geology – The Role of Trace Element Speciation in Human Health”. GSF, National Research Center for Environmental Health, Munich, Germany, May 25-29, 2008.

6. Centeno JA. 33rd International Geological Congress, Oslo, Norway. Arsenic and Medical Geology – The Role of the Earth Scientist in the Assessment and Prevention of Health Risk. Presented at the Theme of the Day, August 11, 2008.

7. Centeno JA. XXVII International Congress of the International Academy of Pathology, Athens, Greece. “Dust and Human Health – Environmental Toxicology Aspects from Exposure to Nanoparticles” October 12-17, 2008.

**Additional papers by Olle Selinus**

Selinus, O, Weinstein, P, 2008. Nature and medicine – a breakthrough of human health. Official publication of IYPE. pp 70-72

Selinus, O, 2008. Medicinsk geologi berör människor. Geologiskt Forum 57, pp 22-24 (In Swedish)

Salminen, Reijo, Kousa, Anne, Ottesen, Rolf Tore, Selinus, Olle, Steinnes, Eiliv, Tarvainen, Timo, and Öhlander, Björn 2008. Environmental Geology (Including Geology and Health in Scandinavia). Episodes Vol 31, No 1. pp 155-163.

Lagerbladet 2007. Sjuk av berget. (In Swedish)

Roads 2007. Geologi och medicin hör ihop. (In Swedish)

Selinus, O., Lax, K., 2006. Medicinsk geologi, olyckans (och lyckans) geologi. YMER, pp 91-108 (In Swedish)

Selinus, O. 2007. Medicinsk Geologi – en framtid för geologer. Geobygg (In Swedish)