

Curriculum Vitae

Name: Frank Winde

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Date and place of birth: 31st August 1963 in Quedlinburg (Germany)

Citizenship: German

Academic qualifications

- 07/2003 2nd doctoral degree (Dr. habil.), Faculty of Chemistry and Geosciences (Friedrich Schiller University, Jena, Germany)
- 05/1996 1st doctoral degree (Dr. rer. nat.), Faculty of Mathematic, Natural Sciences and Technology (Martin-Luther-University Halle-Wittenberg, Halle, Germany)
- 06/1993 Diplom-Geographer (equ. MSc.)
- 1988 - 1993 Study of Geography, Geology, Environmental Chemistry and Sociology at the universities of Halle-Wittenberg, Bremen and Karlsruhe (all in Germany)

Professional experience

- 02/2012 Full professor, Head of Department of Geography, North-West University, Vaal Campus, School for Basic Sciences
- 10/2010 Establishes and heads the Mine Water Re-search Group (MWRG)
- 2004 - 2012 Associate professor, North-West University, Potchefstroom Campus, School for Environmental Sciences and Development
- 2002-2005 Manager of the Rewatering Programme of the South African Gold Mining Industry at the Far West Rand Dolomitic Water Association, FWRDWA, South Africa
- 02-10/2002 Research Fellow, Potchefstroom University, School of Environmental Sciences and Development, Potchefstroom (South Africa)
- 1998 – 2002 Scholar of the Excellence Programme of the German Academy of Natural Scientists [Leopoldina](#)¹ (research projects in South Africa, Namibia, Germany and Australia)
- 1996 - 1998 Full-time Research scientist and lecturer (University of Jena, Institute for Geography; Germany)
- 1993 - 1996 Full-time Research scientist and lecturer (University Halle-Wittenberg, Institute for Geography; Germany)

Awards

- Most quoted researcher of the Year, online media, NWU, 2012
- Best Oral Presentation, Intern. Conf. UMH IV, Freiberg 2005

¹ *Est. in 1652 the Academy is the oldest continuously existing scientific society worldwide and has 31 of the currently living Nobel Prize Winners among its 1400 members from 30 countries. In 2008, the Leopoldina was appointed National Academy of Germany and since April 2011 hosts the European Academies' Science Advisory Council (EASAC).*

- 1 year extension of the Excellence scholarship of the Leopoldina
- 2 year scholarship of the Leopoldina Excellence Programme (Germany, Austria, Switzerland), 1998 (rated as highly competitive by the National Health Institute of the USA)
- Postdoctoral fellowship Potchefstroom University (South Africa), 2003
- Philosophy award for thesis on the ‚Nuclear Winter Theory‘, University of Halle-Wittenberg (Germany), 1989
- Lessing Medal in Gold for excellent Matric results (100% distinctions in all subjects), Minister for Education, 1984
- Liebknecht Medal for excellent results in vocational training, Minister for Ore-mining, Metallurgy and Potash-mining, 1984

Recognition of expertise

- Collaborative project on invitation by the International Agency for Research of Cancer (IARC) of the World Health Organisation (WHO) on studying mining-related health effects in South Africa
- Reviewer for the International Mine Water Association, Annual Conference 2013
- Joined Editorial Board of *Journal of Mining*, 2013 on invitation
- C2 rating by the National Research Foundation of South Africa, 2012
- Joined Editorial Board of *Journal of Water & Land use Management*, 2012 on invitation
- appointed at the Vaal Campus of NWU to establish a Department of Geography
- Member of the Steering Committee of the Commission of Water Sustainability of the International Geographical Union (IGU), 2011
- Chair of session at numerous international conferences
- The ‚Winde report‘ on the AMD-related risk to Central Johannesburg generated the largest media coverage of any press release in the history of the NWU, the report was subsequently handed directly to the National Planning Commission
- Member of the scientific board of the luxin (‘green planet’) foundation, Luzern, Switzerland, 2010
- Member of Standing Scientific Advisory Committee of the International Conference series on Uranium Mining and Hydrogeology (UMH) in Freiberg (Germany), 2010
- Nominated for panel of the US National Academy of Science for assessing the re-introduction of uranium mining in Virginia, 2010
- Guest Professorship at the chair for Geo-ecology, University of Halle-Wittenberg (Germany), 2008/9
- Member of the high-level international Specialist Task Team on the remediation of radioactive pollution in the Wonderfontein catchment area
- C3-rating by the National Research Foundation of South Africa (NRF) 2007 (currently only approx. 10% of all South African researchers achieve a rating)
- Appointed as scientific reviewer for the Georgian National Science Foundation, 2007 (now Shota Rustaveli National Science Foundation of Georgia)
- Appointed as scientific reviewer for the Water Research Commission of South Africa, the National Research Foundation and for several international conferences (e.g. Mine Closure 2008, Mine Water 2009)
- Reviewer for international scientific journals (e.g. *Water Research*, *Environmental Pollution*, *Earth System Science*, *British Journal for Applied Science and Technology*, *Water SA*, *Geojournal*, *Environment*, *Development and Sustainability* and others)
- Joined Editorial Board of *Herzynia*, 2006 on invitation

Research interests

- Geo-ecological water research with a focus on fluvial processes and waterborne transport of contaminants, especially heavy metals and radionuclides in urban agglomerations as well as in mining areas in Germany, Australia and Southern Africa
- Impacts of stormwater and wastewater drainage systems on the silting and contamination of urban water courses, dynamics of hydrological extreme events and fluvial sedimentation
- Sources, dynamics, mechanisms and pathways of uranium pollution in mining areas, environmental fate and mobility of dissolved heavy metals; causes, dynamics and consequences of natural hydrochemical fluctuations in surface water, interactions between groundwater and surface water in the hyporheic zone, contamination of channel sediment and floodplain areas
- Hydrological impacts of deep level mining, karst hydrology
- Immobilization and remobilization of uranium in peat, peat hydrology and filter functions
- Health effects of uranium, risk assessments, epidemiological studies, exposure pathways, mitigation of risks,
- Hydro GIS, risk mapping, remote sensing
- Management of post-mine closure processes, acid mine drainage, geotechnical risk assessments, development of sustainable post-mining solutions, remediation of mine legacy sites

Research output

- To date Prof. Winde published a total of 75 full-length research papers in scientific journals, books and proceedings of conferences, including two monographs. He is the first author of over 80% of his publications. Frank presented 62 papers at mainly international conferences and compiled 38 research reports, academic textbooks, study guides
- Frank conducted over 22 research projects on three different continents to the total value of well over ZAR 12 million mostly funded by external sources. His research currently addresses pressing environmental problems in mining areas of South Africa of direct relevance to municipalities, regulating authorities, the private sector and civil society at large.

Professional affiliations

International Geographical Union (IGU): Commission for Water Sustainability (Steering Committee member); Water Institute of South Africa: Mine Water Division (Management Committee); South African Council for Natural Scientific Professions (SACNASP), Freundeskreis Leopoldina e.V. (Germany)



Frank Winde

Vanderbiljpark, September 2013

Full-length research papers published in accredited sc. journals

- Schrader A, Winde F, Erasmus E (in prep.): 'The future of the dolomitic springs after mine closure on the Far West Rand, Gauteng, RSA' (Swart et al. 2003, this journal) – revisited. Part 2: Quantitative assessment of groundwater flow between compartments. *Env Geol*, pp. 19
- Schrader A, Winde F, Erasmus E (in prep.): 'The future of the dolomitic springs after mine closure on the Far West Rand, Gauteng, RSA' (Swart et al. 2003, this journal) – revisited. Part 1: Conceptual evaluation of recharge and inter-compartmental flow. *Env Geol*, pp. 23
- Schrader A, Erasmus E, Winde F (subm. 6/2013): Determining hydraulic parameters of a karst aquifer using unique historical data from large-scale dewatering by deep level mining – a case study from South Africa. *Water SA*, pp. 25
- Winde F, Erasmus E (2011): Peatlands as filters for polluted mine water? – A case study from an uranium-contaminated karst system in South Africa. Part I: Hydrogeological setting and U-fluxes. *Water*, **3**, 291-322, doi:10.3390/w3010291
- Winde F (2011): Peatlands as filters for polluted mine water? – A case study from an uranium-contaminated karst system in South Africa. Part II: International case studies and a conceptual peat filter model for uranium. *Water*, **3**, 323-355; doi:10.3390/w3010323
- Winde F (2011): Peatlands as filters for polluted mine water? – A case study from an uranium-contaminated karst system in South Africa. Part III: The hydraulic filter component. *Water*, **3**, 356-390; doi:10.3390/w3010356
- Winde F (2011): Peatlands as filters for polluted mine water? – A case study from an uranium-contaminated karst system in South Africa. Part IV: The chemical filter component. *Water*, **3**, 391-423; doi:10.3390/w3010391
- Winde F (2010): Uranium pollution of the Wonderfontein spruit: 1997 – 2008. Part I: U-toxicity, regional background and mining-related sources of U-pollution. *Water SA*, **36** (3), 239-256.
- Winde F (2010): Uranium pollution of the Wonderfontein spruit: 1997 – 2008. Part II: U in water – concentrations, loads and associated risks. *Water SA*, **36** (3), 257-278.
- Winde F, Stoch EJ (2010): Threats and opportunities for post-closure development in dolomitic gold mining areas of the West Rand and Far West Rand (South Africa) – an hydraulic view. Part I: Mining legacy and future threats. *Mining Towns in South Africa: Planning and development perspectives*. *Water SA*, **36** (1), 69-74.
- Winde F, Stoch EJ (2010): Threats and opportunities for post-closure development in dolomitic gold mining areas of the West Rand and Far West Rand (South Africa) – an hydraulic view. Part II: Opportunities. *Mining Towns in South Africa: Planning and development perspectives*. *Water SA*, **36** (1), 75-82.
- Stoch EJ, Winde F (2010): Threats and Opportunities for post-mining development in dolomitic gold mining areas of South Africa – an hydraulic approach. Part III: Planning and uncertainty – lessons from history. *Water SA*, **36** (1), 83-88.
- Hoffmann E, Winde F (2010): Generating high resolution Digital Elevation Models for wetland research using Google Earth TM imagery – an example from South Africa. *Water SA*, **36** (1), 53-68.
- Coetzee H, Wade P, Winde F (2006) Understanding environmental geophysical anomalies – an interdisciplinary case study from the West Rand. *South African Journal of Geology*, ISSN (print) 1012-0750, **109**, 13-20.
- Winde F (2006): Challenges for sustainable water use in dolomitic mining regions of South Africa – a case study of uranium pollution, Part I: sources and pathways. *Physical Geography*, ISSN 0272-3646, **27**, 2, 335-346.
- Winde F (2006): Challenges for sustainable water use in dolomitic mining regions of South Africa – a case study of uranium pollution, Part II: Spatial patterns, mechanisms and dynamics. *Physical Geography*, ISSN 0272-3646, **27**, 2, 379-395.
- Winde F, van der Walt IJ (2004): The significance of groundwater-stream interactions and fluctuating stream-chemistry on waterborne uranium contamination of streams – a case study from a gold mining site on South Africa. *Journal of Hydrology*, **287**, 178-196.

- Winde F, Wade P, van der Walt IJ (2004): Gold tailings as a source of waterborne uranium contamination of streams – the Koekemoerspruit (Klerksdorp goldfield, South Africa) as a case study. Part I: Uranium migration along the aqueous pathway. *Water SA*, **30** (2), 219-226.
- Winde F, van der Walt IJ (2004): Gold tailings as a source of waterborne uranium contamination of streams – the Koekemoerspruit (Klerksdorp goldfield, South Africa) as a case study. Part II: Dynamics of groundwater-stream interactions. *Water SA*, **30** (2), 227-232.
- Winde F, Wade P, van der Walt IJ (2004): Gold tailings as a source of waterborne uranium contamination of streams – the Koekemoerspruit (Klerksdorp goldfield, South Africa) as a case study. Part III: Fluctuations of stream chemistry and their impacts on uranium mobility. *Water SA*, **30** (2), 233-240
- Winde F, Sandham LA (2004): Uranium pollution of South African streams – an overview of the situation in gold mining areas of the Witwatersrand. Sustainable Water Management in Africa – Chances and Barriers. Supplement volume, *GeoJournal*, ISSN 0343-2521, **61**, No. 3, 139-149.
- Winde F (1998): Untersuchungen zur Genese, Schwermetallkontamination und hochwasser-gebundenen Verlagerung rezenter Gerinnebettsedimente in Nebenvorflutern der Halleschen Saaleaue (*Investigations into formation, heavy metal contamination and flood-induced relocation of recent stream channel sediments in streams of the River Saale floodplain at Halle*). In: Aurada D, Billwitz K, Lampe E: Late quaternary and recent Earth surface systems in Europe. *Zeitschrift für Geomorphologie*, Supplementband, 12, 105-122.
- Frühauf M, Winde F (1998): Untersuchungen zu den Ursachen und zum Ausmaß der Schwermetallbelastung von Böden und Sedimenten in der Saaleaue bei Halle (*Investigations into causes and extent of heavy metal contamination of soils and sediments in the floodplain of the River Saale near Halle*). *Petermanns Geographische Mitteilungen*, **142**, 393-412.

Comments/ reply to comments

- Winde F (2010): Response to comments of Wendel G on Winde F (2010): Uranium pollution of the Wonderfonteinspruit: 1997 – 2008. Part I: U-toxicity, regional background and mining-related sources of U-pollution. *Water SA*, **36** (3), 239-256, and Part II: U in water – concentrations, loads and associated risks. *Water SA*, **36** (3), 257-278. *Water SA*, **36** (5), 683-684.
- Winde F (2004): Response to comments on: “Gold tailings as a source of waterborne uranium contamination of streams – the Koekemoerspruit as a case study” *Water SA*, 30 (2), 219-240. *Water SA*, **30** (4), 547.

Full-length research papers in other international journals

- Winde F (2006): Impacts of gold and uranium mining on water resources in dolomitic karst areas in South Africa - examples from the Wonderfonteinspruit catchment. *Geo-Öko*, (ISSN 16161 – 0983), **27**, 1-2/2006, 52-76.
- Winde F (2004): Wasser in Südafrika – eine Ressource unter Streß (*Water in South Africa – a stressed resource*). *Marburger Geographische Schriften*, **140**, Marburg, 289-316.
- Winde F (2002): Fluviale Prozesse und Urantransport – Beispiele aus der Wismutregion Ostthüringens und den Goldbergbaugebieten Südafrikas (*Fluvial processes and uranium transport – examples from the Wismut region of East Thuringia and the gold mining areas of South Africa*). In: *Trierer Geographische Studien*, **25**, 47-64.
- Winde F (2002): Uranium contamination of fluvial systems. Mechanisms and processes. Part I: geochemical mobility of uranium along the water path, the Koekemoerspruit (South Africa) a case study. *Cuadernos de investigación geográfica*, ISSN 0211-6820, **28**, 49-58.
- Winde F, van der Walt IJ (2002): Uranium contamination of fluvial systems – mechanisms and processes. Part II: Dynamics of groundwater-stream interaction – a case study from the Koekemoerspruit (South Africa). *Cuadernos de investigación geográfica*, ISSN 0211-6820, **28**, 59-74.
- Winde F (2002): Uranium contamination of fluvial systems. Mechanisms and processes. Part III: diurnal and event-related fluctuations of stream chemistry. Pitfalls from mining affected streams in South Africa, Germany and Australia. *Cuadernos de investigación geográfica*, ISSN 0211-6820, **28**, 75-100.

- Van der Walt, I. J., Winde, F., Nell, B. (2002): Integrated catchment management: The Mooi river (North West Province, South Africa) a case study, *Cuadernos de Investigacion Geografica*, p 109-129.
- Venter I, Winde F (2001): South African mining sector facing radiation challenge. *Mining Weekly*, **7**, 43, 9-15 November 2001, 2-3.
- Winde F, Frühauf M (2001): Sediment- und Schwermetalltransport in städtischen Auengebieten – eine Fallstudie der Saale bei Halle. (*Sediment and heavy metal transport in urban floodplain areas – a case study in the floodplain of the river Saale near the city of Halle.*) In: Rode M, Henle K, Schellenberger A (Ed.) (2001): Erhalt und Regenerierung der Flusslandschaft Saale. *Nova Acta Leopoldina N. F.*, Bd. 84, Nr. **319**, 112-125.
- Winde F (2000): Gelöster Stofftransfer und fluviale Prozeßdynamik in Vorflutern des ostthüringischen Uranbergbaugebiets. *Jenaer Geographische Schriften* 9, 111-127.
- Winde F (1996): Untersuchungen zur Herkunft der Schlammbelastung von Nebenvorflutern in der Halleschen Saale (Investigations into the origin of sludge loads in small water courses of the River Saale floodplain at Halle). *Hallesches Jahrbuch für Geowissenschaften*, Reihe A, 17, 35-53
- Published proceedings of international conferences**
- Winde F (subm. 15.9.2013): Uranium pollution and potential health effects in semi-arid gold mining areas of South Africa – a global perspective. International Conference on Water Sustainability in Arid Regions, Lanzhou, China, 12-14 August, 2013, Session: Water and human health, Proceedings, pp. 14
- Schrader A, Winde F (subm. 15.9. 2013): Using deep-level mining impacts as tool to improve understanding of karst hydrology: a literature review of over 60 years of research in the Far West Rand (South Africa). International Conference on Water Sustainability in Arid Regions, Lanzhou, China, 12-14 August, 2013, Session: Groundwater resources, Proceedings, pp. 11
- Winde (2011): Challenges in Assessing Uranium-related Health risks: Two case studies for the aquatic Exposure pathway from South Africa - Part II: case study Wonderfonteinspruit/ Potchefstroom. In: Merkel B, Schipek M: The new uranium mining boom – challenge and lessons learned. ISBN 978-3-642-22122-4, Springer-Verlag Berlin-Heidelberg, 529-538.
- Winde (2011): Challenges in Assessing Uranium-related Health risks: Two case studies for the aquatic Exposure pathway from South Africa - Part I: Guideline and toxicity issues – Pofadder case study. In: Merkel B, Schipek M: The new uranium mining boom – challenge and lessons learned. ISBN 978-3-642-22122-4, Springer-Verlag Berlin-Heidelberg, 539-546.
- Winde F (2009): Uranium pollution of water resources in mined-out and active goldfields of South Africa - A case study in the Wonderfonteinspruit catchment on extent and sources of U-pollution and associated health risks. International Mine Water Conference, 19-23 October 2009, Pretoria (South Africa), Conference proceedings, CD, ISBN 978-0-9802623-5-3, 772-782.
- Winde F (2008): Peat deposits as natural uranium filters? - First results from a case study in a dolomitic gold mining area of South Africa. In: Merkel BJ, Hasche-Berger A (2008): Uranium, mining and hydrogeology. Springer Verlag, ISBN 978-3-540-87745-5, Berlin - Heidelberg, 499-514.
- Winde F (2005): Technical issues relating to the closure of the Far West Rand gold mines. Extended abstract, Water Institute of South Africa, Mine Water Division; Proceedings of the 2-day conference on mine closure, 6-7 April 2005, Randfontein, South Africa, pp. 5.
- Winde F (2005): Real-time monitoring of hydrological groundwater-stream interactions in a mining-affected stream. Proceedings of the Biennial Ground Water Conference, 7-9 March 2005, CSIR International Conference Centre, Pretoria, CD-ROM, ISBN 0-620-33659-5 pp.15.
- Winde F (2005): Interactions between groundwater and surface water in dolomitic areas affected by deep level gold mining – Examples from the Far West Rand goldfield (South Africa). Proceedings of the Biennial Ground Water Conference, 7-9 March 2005, CSIR International Conference Centre, Pretoria, CD-ROM, ISBN 0-620-33659-5, pp.4.
- Winde F (2005): Long-term impacts of gold and uranium mining on water quality in dolomitic regions – examples from the Wonderfonteinspruit catchment in South Africa. In: Merkel BJ, Hasche-Berger A [eds]: Uranium in the environment - Mining impact and consequences. Springer Verlag, Berlin Heidelberg New York, ISBN 10 3-540-28363-3, 807-816.

- Winde F (2005): The role of groundwater-stream interactions for uranium fluxes in fluvial systems. In: Merkel BJ, Hasche-Berger A [eds]: Uranium in the environment - Mining impact and consequences. Springer Verlag, Berlin Heidelberg New York, ISBN 10 3-540-28363-3, 263-274.
- Stoch EJ, Winde F, Erasmus E (2008): Karst mining and conflict – a historical perspective of consequences of mining on the Far West Rand. In: Fourie AB, Tibbett M, Weiersbye IM, Dye PJ (eds.) (2008): Mine closure 2008. Proceedings of the 3rd International Seminar on Mine Closure, 15th -17th October 2008, Johannesburg, South Africa, Plenary paper, 69-84.
- Winde F (2002): Stream pollution by tailing deposits and fluvial transport of dissolved uranium. Dynamics and mechanisms investigated in mining areas of Germany, Southern Africa and Australia. In: Merkel BJ, Planer-Friedrich B, Wolkersdorfer C [Eds]: Uranium in the Aquatic Environment. Proceedings of the International Conference Uranium Mining and Hydrogeology III and the International Mine Water Association Symposium, Freiberg, Germany, 15-21 September 2002, Springer, Berlin, Heidelberg, New York, 283-292.
- Winde F, de Villiers AB (2002): Uranium contamination of streams by tailings dams – case studies in the Witwatersrand gold mining area (South Africa). In: Merkel BJ, Planer-Friedrich B, Wolkersdorfer C [Eds]: Uranium in the Aquatic Environment. Proceedings of the International Conference Uranium Mining and Hydrogeology III and the International Mine Water Association Symposium, Freiberg, Germany, 15-21 September 2002, Springer, Berlin, Heidelberg, New York, 803-812.
- Winde F, de Villiers AB (2002): The nature and extent of uranium contamination from tailings dams in the Witwatersrand gold mining area (South Africa). In: Merkel BJ, Planer-Friedrich B, Wolkersdorfer C [Eds]: Uranium in the Aquatic Environment. Proceedings of the International Conference Uranium Mining and Hydrogeology III and the International Mine Water Association Symposium, Freiberg, Germany, 15-21 September 2002, Springer, Berlin, Heidelberg, New York, 889-897.
- Coetzee H, Wade P, Winde F (2002): Reliance on existing wetlands for pollution control around the Witwatersrand gold/uranium mines of South Africa – are they sufficient? In: Merkel BJ, Planer-Friedrich B, Wolkersdorfer C [Eds]: Uranium in the Aquatic Environment. Proceedings of the International Conference Uranium Mining and Hydrogeology III and the International Mine Water Association Symposium, Freiberg, Germany, 15-21 September 2002, Springer, Berlin, Heidelberg, New York, 59-65.
- Winde F (2001): Fluvial processes and uranium transport – pitfalls from the Wismut region (Germany) and the Klerksdorp gold field (South Africa). 4th International Conference of the Society of South African Geographers., 2-5 July 2001 in Goudino Spa (South Africa), Conference proceedings (CD), 5pp.
- Zierdt M, Dobler L, Winde F, Schmidt G, Vetter T (1999): Ekologitscheskoje u fisgeografitscheskoje snatschenije sedimentov u wsweschennuich weschestw: metodui ich isutschenija. In: Tschtyrnagzatoe ptenarnoe mesjwuzowskoe koopdinazionnoe soweststshanie po probleme erozionnych, mslowych u stebych prozessow, Ufa, 246-248.
- Winde F (1996): Untersuchungen zur Herkunft und Schwermetallkontamination von Schlämmen in Nebenvorflutern der Halleschen Saale. (*Investigations into the origin and heavy metal contamination of sludge deposits in small water courses of the River Saale floodplain at Halle*); In: Raumentwicklung und Umweltverträglichkeit (*Spatial development and environmental compatibility*); 50. Deutscher Geographentag, Potsdam 1995, Bd. 1, 206-216.
- National conferences**
- Winde F (2001): Slimes dams as source of uranium contamination of streams – the Koekemoer Spruit (Klerksdorp gold field) as a case study. Chamber of Mines of South Africa (ed.): Conference Environmentally Responsible Mining in Southern Africa, 25-28 September 2001, Muldersdrift (South Africa), Papers – Volume 1, pp. 2c1-2c10.
- Coetzee H, Wade P, Winde F (2001): Understanding environmental geophysical anomalies – an interdisciplinary case study from the West Rand. The South African Geophysical Association, Biennial Technical Meeting and Exhibition, 9-12 October 2001, Drakensberg (South Africa), 15pp.
- Winde F (1998): Untersuchungen zum wassergebundenen Stofftransfer im Bereich industrieller Absetzanlagen des ostthüringischen Uranbergbaus. (*Investigations into waterborne transport of matter near uranium mining tailings ponds in East Thuringia*); In: Frühauf M, Hardenbicker U

[Hrsg.]: Beiträge der 3. Tagung zur Geographischen Umweltforschung in Mitteldeutschland (*Contributions to the 3rd. Conference on geographical environmental research in Central Germany*). 6-7 November 1997, Halle/ Saale, 11-30.

Winde F (1995): Der Stoffaustrag aus der städtischen Kanalisation als Ursache für die Schlammbelastung von Nebenarmen der Saale im Halleschen Stadtgebiet. (*The discharge of matter from the municipal waste water drainage system as cause of sludge depositions in side streams of the River Saale within the municipal district of the city of Halle*); In: RAUPE-Arbeitstagung 17 November 1995, Regionale Auenprojekte (RAUPE) in Mitteldeutschland, Halle/Saale, 15-33.

Published books, book chapters

Winde F (2009): Urankontamination von Fließgewässern – Prozessdynamik, Mechanismen und Steuerfaktoren. Untersuchungen zum Transport von gelöstem Uran in bergbaulich gestörten Landschaften unterschiedlicher Klimate. (*Uranium contamination of streams – process dynamics, mechanisms and governing factors. Investigations into the transfer of dissolved uranium in mining-impacted landscapes of different climatic conditions*); ISBN 978-3-86866-087-6, Taunusstein, pp. 657.

Winde F (1997): Schlammablagerungen in urbanen Vorflutern - Ursachen, Schwermetallbelastung und Remobilisierbarkeit - untersucht an Vorflutern der Saale bei Halle. (*Sludge deposits in urban water courses – causes, heavy metal contamination and remobilization potential – investigated in water courses of the River Saale floodplain near Halle*); Edition Wissenschaft, Reihe Geowissenschaften. Bd. 23, Marburg, pp.144.

Winde F (in prep.): Uranium pollution of water – a global perspective. In: Jones JAA, Czech, [eds.]: Routledge Handbook for Water Resources. Chapter

Winde F (2013): Uranium pollution of water – a global perspective on the situation in South Africa. Scientific contribution, series H: Inaugural lecture no. 10/2013, Professor in Geography, School of Basic Sciences, Faculty of Humanities at the Vaal Triangle Campus, North-West University, Vanderbiljpark, 22 February 2013, ISBN 078-1-86822-629-0, Ivyline Technologies, Vanderbiljpark, South Africa, pp. 55

Tempelhoff JWN, Winde F (accepted 2012): The rising tide of public concern over acid mine water drainage in South Africa. International Water Association (IWA), Chapter in book ...

Winde F (2011): Karst, Uranium, Gold and Water – lessons from South Africa for reconciling mining activities and sustainable water use in semi-arid karst areas: a case study. In: Jones JAA [ed.]: Sustaining groundwater resources - a critical element in the global water crisis. International Year of Planet Earth (IYPE) book series, Springer Verlag Dordrecht Heidelberg London New York, ISBN 978-90-481-3425-0, 35-55.

Winde F (2010): Uranium pollution in South Africa. In: Jones JAA: Water Sustainability – a global perspective. Hodder Education, London, ISBN 9780340905791, 69-71.

Winde F (2006): Gold and Uranium mining in the Wonderfontein spruit catchment and environs. In: Coetzee H, Winde F, Wade P: An assessment of sources, pathways, mechanisms and risks of current and potential future pollution of water and sediments in gold mining areas of the Wonderfontein spruit catchment (Gauteng/ North West Province, South Africa). WRC report no. 1214/1/06, ISBN 1-77005-419-7, 2-5, Pretoria.

Winde F (2006): Impacts of gold-mining activities on water availability and quality in the Wonderfontein spruit catchment. In: Coetzee H, Winde F, Wade P: An assessment of sources, pathways, mechanisms and risks of current and potential future pollution of water and sediments in gold mining areas of the Wonderfontein spruit catchment (Gauteng/ North West Province, South Africa). WRC report no. 1214/1/06, ISBN 1-77005-419-7, 13-34, Pretoria.

Winde F (2006): Inventory of uranium sources and transport pathways in the Wonderfontein spruit catchment. In: Coetzee H, Winde F, Wade P: An assessment of sources, pathways, mechanisms and risks of current and potential future pollution of water and sediments in gold mining areas of the Wonderfontein spruit catchment (Gauteng/ North West Province, South Africa). WRC report no. 1214/1/06, ISBN 1-77005-419-7, 35-53, Pretoria.

Winde F, Coetzee H, Ntsume G (2006): Temporal variations in hydrochemistry – results of a continuous monitoring study. In: Coetzee H, Winde F, Wade P: An assessment of sources, pathways, mechanisms and risks of current and potential future pollution of water and sediments in gold mining areas of the Wonderfontein spruit catchment (Gauteng/ North West Province, South Africa).

- WRC report no. 1214/1/06, ISBN 1-77005-419-7, 88-118, Pretoria.
- Wade P, Winde F, Coetzee H (2006): Risk Assessment. In: Coetzee H, Winde F, Wade P: An assessment of sources, pathways, mechanisms and risks of current and potential future pollution of water and sediments in gold mining areas of the Wonderfontein spruit catchment (Gauteng/ North West Province, South Africa). WRC report no. 1214/1/06, ISBN 1-77005-419-7, 119-165, Pretoria.
- Winde F (2002): Uranium contamination of fluvial systems – mechanisms and processes. Part I: Geochemical mobility of uranium along the water-path – the Koekemoerspruit (South Africa) as a case study. In: Garcia-Ruiz JM, Jones JAA, Arnaez J [eds.]: Environmental change and water sustainability. Consejo Superior de Investigaciones Científicas and University of La Rioja Press, Zaragoza, Spain, 251-261
- Winde F (2002): Uranium contamination of fluvial systems – mechanisms and processes. Part III: Diurnal and event-related fluctuations of stream chemistry – pitfalls from mining affected streams in South Africa, Germany and Australia. In: Garcia-Ruiz JM, Jones JAA, Arnaez J [eds.]: Environmental change and water sustainability. Consejo Superior de Investigaciones Científicas and University of La Rioja Press, Zaragoza, Spain, 279-304
- Winde F, van der Walt IJ (2002): Uranium contamination of fluvial systems – mechanisms and processes. Part II: Dynamics of groundwater-stream interaction – a case study from the Koekemoer Spruit (South Africa). In: Garcia-Ruiz JM, Jones JAA, Arnaez J [eds.]: Environmental change and water sustainability. Consejo Superior de Investigaciones Científicas and University of La Rioja Press, Zaragoza, Spain, 263-278
- Walossek W, Winde F, Zinke G (2002): An der Saale hellem Strande? – Ein „Flußschicksal“ in Vergangenheit und Gegenwart. In: Friedrich K, Frühauf M [Hrsg.]: Halle und sein Umland. Geographischer Exkursionsführer. Mitteldeutscher Verlag Halle, 66-82
- Walossek W, Winde F, Zinke G (2002): Die Saaleaue – Nutzungskonflikte und -möglichkeiten zwischen Naturrelikten, Naherholung und Umweltproblemen. In: Friedrich K, Frühauf M [Hrsg.]: Halle und sein Umland. Geographischer Exkursionsführer. Mitteldeutscher Verlag Halle, 145-155
- Van der Walt IJ, Winde F, Nel B (2002): Integrated Catchment Management: The Mooi River (North West Province, South Africa) as a case study. In: Garcia-Ruiz JM, Jones JAA, Arnaez J [eds.] (2002): Environmental change and water sustainability. Consejo Superior de Investigaciones Científicas and University of La Rioja Press, Zaragoza, Spain, 279-304
- Winde F (2000): Der hochwassergebundene Schwermetalltransport als Ursache der Bodenkontamination in der Saaleaue bei Halle. In: Friese K, Witter B, Miehlich G, Rode M [Hrsg.]: Stoffhaushalt von Auenökosystemen. Böden und Hydrologie, Schadstoffe, Bewertungen. Springer Berlin Heidelberg New York, 237-246.
- Winde F (2000): North West Province – Environmental Implementation Plan Report 2000: Contributions to Chapter 10: Sustainability of fresh water supply and quality, 10.1 Surface water – quantity and quality and Chapter 13: Human health and well being; 13.5 Toxicity in the environment (including radiation). Mafikeng (South Africa).
- Winde F (1997): Untersuchungen zu den Ursachen der Schlammbelastung von Nebenvorflutern der Halleschen Saaleaue (*Investigations into the origin of sludge deposits in small water courses of the River Saale floodplain near Halle*). In: Polskie Towarzystwo Geograficzne, Komisja Hydrograficzna Wydział Nauk o Ziemi, Uniwersytet Śląski; Instytut Geografii Fizycznej, Uniwersytet im. Mickiewicza A [Hrsg.]: Dziejowe Przemiany Stosunków Wodnych na Obszarach Zurbanizowanych, Poznań-Sosnowiec, 168-193.
- Winde F (1997): Die Beurteilung der Wohnumfeldqualität in Städten: Ein formales Bewertungsverfahren. (*Quality assessment of living environments in cities: a formal evaluation procedure*); In: Kilchenmann A, Schwarz von Raumer HG [Hrsg.]: GIS in der Stadtentwicklung (*GIS in Town planning*). Springer, 65-99.

Papers presented at international conferences

- Winde F, Hoffmann E, Erasmus E, Stoch EJ (2013): Mapping human exposure to mining-related pollution of uranium and other toxic metals in goldfields of the Witwatersrand. African Organisation for Research and Training in Cancer (AORTIC), 2013 Conference, Durban, 21-24 November, Session: Environment and occupation in cancer, Abstract, 1p.
- Winde F (2013): Uranium pollution and potential health effects in semi-arid gold mining areas of South Africa – a global perspective. International Conference on Water Sustainability in Arid Regions, Lanzhou, China, 12-14 August, 2013, Session: Ground Water resources, Abstract, Abstract volume, 1 p.
- Schrader A, Winde F (2013): Deriving aquifer parameters from the large-scale dewatering of a karst aquifer in a semi-arid climate by applying analytical methods designed for porous media. International Conference on Water Sustainability in Arid Regions, Lanzhou, China, 12-14 August, 2013, Session: Ground Water resources, Abstract, Abstract volume, 1 p.
- Cerenzia I, Bonanno R, Cassardo C, Erasmus E, Winde F (2013): Modeling variations of natural water budget in the Vaal river basin (South Africa) using Land Surface Model UTOPIA. IGU Regional Conference Kyoto, 2-5 August 2013, Commission on Water Sustainability, Session: Climate change and hydrological effects, Abstract for oral presentation, 1p.
- Schrader A, Winde F, Erasmus E (2013): Using a groundwater inrush event and large-scale dewatering in South African gold mining areas to determine hydraulic parameters of karst aquifers. IGU Regional Conference Kyoto, 2-5 August 2013, Commission on Water Sustainability, Session: Groundwater, Abstract for oral presentation, 1p.
- Winde F, Erasmus E, Geipel G, Osman AAA (2013): Assessing health effects of naturally elevated uranium levels in groundwater– a case study from an arid farming area of South Africa. IGU Regional Conference Kyoto, 2-5 August 2013, Commission on Water Sustainability, Session: Water Pollution, Abstract for oral presentation, 1p
- Winde F (2012): Flooding of abandoned deep-level gold mines in South Africa: risks vs. risk perceptions and proposed vs. alternative solutions. IGU Conference Cologne (Germany), 26-30 August 2012, Commission on Water Sustainability, Session: Water and Mining, abstract for oral presentation, pp.1, Chair of session
- Schrader A, Winde F (2012): Predicting hydraulic effects of mine closure on spring flow in dewatered karst aquifers of the Far West Rand goldfield (South Africa. IGU Conference Cologne (Germany), 26-30 August 2012, Commission on Water Sustainability, Session: Water and Mining, abstract for oral presentation, pp.1, Chair of session
- Hoffmann E, Winde F (2012): Generating high resolution DEMs as tool for wetland research – a case study from South Africa using Google Earth data. IGU Conference Cologne (Germany), 26-30 August 2012, Commission on Water Sustainability, Session: Water and Mining, abstract for oral presentation, pp.1, Chair of session
- Hoffmann E, Winde F (2012): Using GIS to visualize complex temporal-spatial dynamics of water quality data – examples from a wetland study in South Africa. . IGU Conference Cologne (Germany), 26-30 August 2012, Commission on Water Sustainability, Session: Water and Mining, abstract for oral presentation, pp.1, Chair of session
- Winde (2011): Assessing Uranium-related Health risks – Examples from South Africa for the drinking water pathway Part I: Guideline and toxicity issues – The Pofadder case study. IGU Regional conference, Santiago de Chile, Chile, November 2011.
- Winde (2011): Assessing Uranium-related Health risks – Examples from South Africa for the drinking water pathway- Part II: case study Wonderfontein/ Potchefstroom. IGU Regional conference, Santiago de Chile, Chile, November 2011.
- Winde (2011): Challenges in Assessing Uranium-related Health risks: Two case studies for the aquatic Exposure pathway from South Africa - Part II: case study Wonderfontein/ Potchefstroom. International Conference on Uranium Mining and Hydrogeology VI, Freiberg, Germany, September 2011, invited speaker.
- Winde (2011): Challenges in Assessing Uranium-related Health risks: Two case studies for the aquatic Exposure pathway from South Africa - Part I: Guideline and toxicity issues – Pofadder case study.

- Abstract for oral presentation, International Conference on Uranium Mining and Hydrogeology VI, Freiberg, Germany, September 2011, invited speaker.
- Winde (2011): The history of Acid Mine Drainage in South Africa – an overview focusing on deep level gold mining. Oral presentation, 180 min.; UNESCO- International Hydrology Education programme (IHE) course at NWU, North-West University, Vaal Triangle Campus, Vanderbijlpark, South Africa, May 2010, invited speaker.
- Winde (2010): Gold mining-related water issues in South Africa - the West Rand and Far West Rand area as a case study - research opportunities. Oral presentation, Swiss Embassy – EAWAG - Fact Finding Mission, Potchefstroom, South Africa, 2. December 2010, invited speaker.
- Winde F (2010): Uranium pollution of surface- and underground water – a case study on mining-related water pollution and associated health risks. Case studies from South Africa with special reference to the situation in Potchefstroom. Mooi River Forum, Potchefstroom, South Africa, 30. November 2010, invited speaker.
- Winde (2010): Uranium pollution of drinking water: sources, extent and associated health risks - case studies from South Africa with special reference to the situation in Potchefstroom. Multidisciplinary perspectives on environmental pollution and its health Impacts, NWU Vaal Triangle, School of Basic Science: Mini-Forum, Vanderbijlpark, South Africa, 26 November 2010, invited speaker.
- Winde (2010): Uranium pollution of water resources in gold mining areas of South Africa – extent, sources and associated health risks. 31st. Annual Meeting of the North America Group of the Society of Environmental Toxicity and Chemistry (SETAC), Session: Radioecology and environmental toxicology associated with uranium mining and nuclear production activities, Portland (Oregon, USA), 7-11 November 2010, invited speaker.
- Winde F (2010): Gold mining-related water issues in the West Rand and Far West Rand goldfields (upper Vaal catchment): state of knowledge, data availability, research needs. International workshop of the South African-German research project on Integrated Water Management (IWM) in gold mining areas of the upper and middle Vaal catchments of South Africa, Potsdam (Germany), GFZ, German Research Centre for Geosciences, 2 June 2010, keynote speaker.
- Winde F (2009): Uranium pollution of water resources in mined-out and active goldfields of South Africa - A case study in the Wonderfontein spruit catchment on extent and sources of U-pollution and associated health risks. International Mine Water Conference, 19-23 October 2009, Pretoria (South Africa), International Mine Water Conference, Document Transformation Technologies cc.
- Winde F (2009): Peatlands as filters for polluted mine water? – A case study from a uranium-contaminated karst system in South Africa: Part I: Hydrogeological setting and U-fluxes. International Geographical Union – Commission on Water Sustainability: International Conference on Managing water in a changing world: Turin (Italy), 27-31 July 2009.
- Winde F (2009): Peatlands as filters for polluted mine water? – A case study from a uranium-contaminated karst system in South Africa: Part II: Pollution patterns and filter efficiency. Abstract for oral presentation; International Geographical Union – Commission on Water Sustainability: International Conference on Managing water in a changing world: Turin (Italy), 27-31 July 2009.
- Stoch EJ, Winde F, Erasmus E (2008): Lessons to be learnt from mining below cavernous karst, with special reference to the Far West Rand, South Africa. 3rd International Seminar on Mine Closure, Johannesburg, South Africa, 15th -17th October 2008, 'Mine Closure 2008', panel members.
- Winde F (2008): Peat deposits as natural uranium filters? - First results from a case study in a dolomitic gold mining area of South Africa. 4th International Conference Uranium Mining and Hydrogeology (UMH V), 14 - 18 September 2008, Freiberg (Germany).
- Winde F (2007): Quasi-continuous in-situ observations of interactions between surface water and groundwater using mining-induced water pollution as tracer – examples from the Lerchenbach stream (Wismut region, Germany). Conference of the International Geographical Union (IGU), Commission for Water Sustainability, Asheville (North Carolina, USA), August 13-17, 2007.
- Winde F (2007): Assessing impacts of peat mining on water flow and quality in a semi-arid Karst area of South Africa – Methodological considerations and first results. International Geographical Union (IGU), Commission for Water Sustainability, Asheville (North Carolina, USA), August 13-17, 2007.

- Winde F (2007): Health risks associated with uranium pollution of water – observations from selected case studies in South Africa. International Geographical Union (IGU), Commission for Water Sustainability, Asheville (North Carolina, USA), August 13-17, 2007.
- Van Eeden E, Winde F, Stoch EJ (2005): Multi-perspectives and perceptions on water quality, and related health issues, as impacted on by the mining activities in the Carletonville catchment (Gauteng Province, South Africa), 1964-2004. 5th Conference of the International Water History Association (IWhA) in Paris (France) Dec. 2005.
- Winde F (2005): Einflüsse des Gold-und Uranbergbaus auf Struktur und Wasserhaushalt dolomitischer Karstlandschaften in Südafrika. Abstract for oral presentation. 55. Deutscher Geographentag, 8-14 October 2005, Trier (Germany), co-chair of session 30.
- Pieterse B, van der Walt IJ, Sandham L, Winde F (2005): Multidissiplinere opleiding en navorsing in Omgewingwetenskappe: unieke geleentehede vir Suid-Afrika. Suid Afrikaanse akademie vir Wetenskap en Kuns, Jaarvergadering en simposium 2005, 23-24 June 2005, Garsfontein, Pretoria.
- Winde F (2005): Long-term impacts of gold and uranium mining on water quality in dolomitic regions – examples from the Wonderfonteinspruit catchment in South Africa. 4th International Conference Uranium Mining and Hydrogeology (UMH IV), 12-16 September 2005, Freiberg (Germany).
- Winde F (2005): The role of groundwater-stream interactions for uranium fluxes in fluvial systems. 4th International Conference Uranium Mining and Hydrogeology (UMH IV), 12-16 September 2005, Freiberg (Germany).
- Winde F (2005): Real-time monitoring of hydrological groundwater-stream interactions in a mining-affected stream. Biennial Ground Water Conference, 7-9 March 2005, CSIR International Conference Centre, Pretoria.
- Winde F (2005): Interactions between groundwater and surface water in dolomitic areas affected by deep level gold mining – Examples from the Far West Rand goldfield (South Africa). Biennial Ground Water Conference, 7-9 March 2005, CSIR International Conference Centre, Pretoria.
- Winde (2004): Uranium fluxes in fluvial systems – the significance of stream-groundwater interactions and hydrochemical oscillations. 30th Congress of the International Geographical Union/ Incorporating Joint International Geomorphology Conference, 15-20 August 2004.
- Winde (2004): Impacts of gold mining on water sustainability – experiences from water-stressed catchments in dolomitic regions of South Africa. 30th Congress of the International Geographical Union/ Incorporating Joint International Geomorphology Conference, 15-20 August 2004, Glasgow.
- Winde (2003): Mining-related impacts on groundwater and streams – pitfalls from uranium mines in Europe, Africa and Australia. 3rd World Water Forum, 17-18 March 2003, Kyoto, Japan.
- Winde F (2002): Stream pollution by tailing deposits and fluvial transport of dissolved uranium. Dynamics and mechanisms investigated in mining areas of Germany, Southern Africa and Australia. International Conference Uranium Mining and Hydrogeology (UMH III), 15-21 September 2002, Freiberg (Germany).
- Winde F (2002): Real time observations of groundwater-stream interactions as a tool for determining hydrodynamics of diffuse stream pollution - Pitfalls from mining-affected streams in Germany and South Africa. Regional Conference of the International Geographical Union (IGU): Geographical Renaissance at the Dawn of the Millennium. 4-7 August 2002, Durban (South Africa).
- Winde F (2002): Uranium pollution of South African streams – an overview over the situation at selected gold-mining sites of the Witwatersrand basin. Regional Conference of the International Geographical Union (IGU): Geographical Renaissance at the Dawn of the Millennium. 4-7 August 2002, Durban (South Africa).
- Winde F, AB de Villiers (2002): Uranium contamination of streams by tailings dams – case studies in the Witwatersrand gold mining area (South Africa). International Conference Uranium Mining and Hydrogeology (UMH III), 15-21 September 2002, Freiberg (Germany).
- Winde F, AB de Villiers (2002): The nature and extent of uranium contamination from tailings dams in the Witwatersrand gold mining area (South Africa). International Conference Uranium Mining and Hydrogeology (UMH III), 15-21 September 2002, Freiberg (Germany).
- Coetzee H, Wade P, Winde F (2002): Reliance on existing wetlands for pollution control around the Witwatersrand gold/uranium mines of South Africa – Are they sufficient? International Conference

Uranium Mining and Hydrogeology (UMH III), 15-21 September 2002, Freiberg (Germany).

- Winde F (2002): Tailingsdeponien als technogene Landschaftselemente und Schadstoffquellen – Beispiele aus Uran- und Goldbergbaugebieten arider, humider und tropischer Klimate. Relief und Mensch. 28. Jahrestagung des Deutschen Arbeitskreises für Geomorphologie e.V. 7-10 October 2002, Köln.
- Winde F, Coetzee H (2002): Tailings deposits as sources of contamination – an overview over potential, extent and pathways in the Witwatersrand basin (South Africa). Relief und Mensch. 28. Jahrestagung des Deutschen Arbeitskreises für Geomorphologie e.V. 7-10 October 2002, Köln, Programm, 114-115.
- Winde F (2001): Impacts of diurnal and event-related fluctuations in stream chemistry on the fluvial uranium transfer – pitfalls from humid, semi-arid and tropical systems 4th Conference of the International Geographical Union Study Group on Water Sustainability. Environmental Change and Water Sustainability in Zaragoza (Spain), 4-7 July 2001.
- Van der Walt IJ, Winde F, Nel B (2001): Integrated Catchment Management: The Mooi River (North West Province, South Africa) as a case study. 4th Conference of the International Geographical Union Study Group on Water Sustainability. Environmental Change and Water Sustainability in Zaragoza (Spain), 4-7 July 2001.
- Winde F (2001): Aqueous transport mechanisms of uranium – the Koekemoer Spruit (South Africa) as a case study. Abstract. Conference on Environmentally Responsible Mining in Southern Africa, Chamber of Mines (South Africa), 25-28 September 2001 in Muldersdrift (Gauteng, South Africa), conference guide, 31.
- Winde F (2001): Hydrochemical behaviour of uranium along the aqueous pathway – pitfalls from mining areas in Germany, Southern Africa and Australia. 4th Conference of the International Geographical Union Study Group on Water Sustainability. Environmental Change and Water Sustainability in Zaragoza (Spain), 4-7 July 2001.
- Winde F, van der Walt IJ (2001): Dynamics of groundwater-stream interactions. The Koekemoerspruit (South Africa) and the Lerchenbach (Germany) as case studies. 4th Conference of the International Geographical Union Study Group on Water Sustainability. Environmental Change and Water Sustainability in Zaragoza (Spain), 4-7 July 2001.
- Winde F (2000): Fluviale Prozesse und Urantransport – Beispiele aus der Wismutregion Ostthüringens und den Goldbergbaugebieten Südafrikas. Abstract for poster presentation. Baumhauer H, Schütt B (Hrsg.): Geomorphologie und Umweltgeschichte. Jahrestagung des Deutschen Arbeitskreises für Geomorphologie in Trier, 4.-8. Oktober 2001, Tagungsband, 41.
- Winde F (1995): Untersuchungen zur Herkunft und Schwermetallkontamination von Schlämmen in Nebenvorflutern der Halleschen Saaleaue. Raumentwicklung und Umweltverträglichkeit. 50. Deutscher Geographentag. Potsdam (Germany).

Posters

- Winde F (2002): Uranium pollution of South African streams – an overview over the situation at selected gold-mining sites of the Witwatersrand basin. Regional Conference of the International Geographical Union (IGU): Geographical Renaissance at the Dawn of the Millennium. 4-7 August 2002, Durban (South Africa), Abstract volume, 207.
- Winde F, Coetzee H (2002): Tailings deposits as sources of contamination – an overview over potential, extent and pathways in the Witwatersrand basin (South Africa). Relief und Mensch. 28. Jahrestagung des Deutschen Arbeitskreises für Geomorphologie e.V. 7-10 October 2002, Köln, Programm, 114-115.
- Winde F, AB de Villiers (2002): The nature and extent of uranium contamination from tailings dams in the Witwatersrand gold mining area (South Africa). International Conference Uranium Mining and Hydrogeology (UMH III), 15-21 September 2002, Freiberg (Germany), 1p.
- Winde F (2000): Fluviale Prozesse und Urantransport – Beispiele aus der Wismutregion Ostthüringens und den Goldbergbaugebieten Südafrikas. Poster presentation. Baumhauer H, Schütt B (Hrsg.): Geomorphologie und Umweltgeschichte. Jahrestagung des Deutschen Arbeitskreises für Geomorphologie in Trier, 4.-8. Oktober 2001, Tagungsband, 41.

National conferences

- Winde F (2012): Acid Mine Drainage: an alternative view on associated risks and proposed solutions – the Central Basin as a case study. Oral presentation at: Sustainable Water Resource Conference & Exhibition, 25-26 July, Sandton (Johannesburg), South Africa, invited speaker
- Winde (2011): The Mine Water Research Group – an introduction. NWU Water colloquium, Potchefstroom, South Africa, 24 November 2011. invited speaker
- Hoffmann E, Winde F (2011): Using GIS as tool in hydrological research. NWU Water colloquium, Potchefstroom, South Africa, 24 November 2011.
- Winde F (2011): Blue vs. true gold - impacts of deep level gold mining on water resources in South Africa – insights from selected case studies. Water Research Commission, 40 Year Celebration Conference, 31 August – 1 September 2011; Emperor's Palace, Kempton Park, Johannesburg (South Africa), invited speaker.
- Winde F (2011): Acid Mine Drainage in South Africa – possible solutions? Some less explored perspectives. Critical Thinker's Forum (NRF/ NSTF), 21 July 2011, Birchwood Conference Centre, Boksburg. invited speaker
- Winde F (2010): Uranium pollution of surface- and underground water – a case study on mining-related water pollution and associated health risks. Biannual research conference of the Cancer Association of South Africa (CANSA), Johannesburg, 8.9.2010, invited speaker.
- Winde F (2008): Peat mining impacts at the Gerhard Minnebron peatland (North-West Province, South Africa) - Part I: Water flow aspects. NATIONAL WETLANDS INDABA, Skukuza, 28 – 31 October 2008.
- Winde F (2008): Peat mining impacts at the Gerhard Minnebron peatland (North-West Province, South Africa): Part II: Water quality aspects. NATIONAL WETLANDS INDABA, Skukuza, 28 – 31 October 2008.
- Erasmus E, Winde F (2008): Peat mining impacts at the Gerhard Minnebron peatland (North-West Province, South Africa): Part III: Geological and hydrogeological aspects. NATIONAL WETLANDS INDABA, Skukuza, 28 – 31 October 2008.
- Hoffman E, Winde F (2008): GIS applications as a tool for wetland research - Part I: Generating high-resolution 3D-elevation models using free satellite imagery. NATIONAL WETLANDS INDABA, Skukuza, 28 – 31 October 2008.
- Hoffman E, Winde F (2008): GIS applications as a tool for wetland research - Part II: Synoptic visualization of dynamic changes in water flow and quality. NATIONAL WETLANDS INDABA, Skukuza, 28 – 31 October 2008.
- Stoch EJ, Winde F (2008): Mining of peat in South Africa – legislative framework and administrative challenges. NATIONAL WETLANDS INDABA, Skukuza, 28 – 31 October 2008.
- Coetzee H, Wade P, Winde F (2001): Understanding environmental geophysical anomalies – an interdisciplinary case study from the West Rand. The South African Geophysical Association, Biennial Technical Meeting and Exhibition, 9-12 October 2001, Drakensberg (South Africa) (awarded best paper).

Invited Talks other than conferences (2011-2013)

- Winde F (2013): Gold, Uran und Wasser: Folgen des südafrikanischen Goldbergbaus für Mensch und Umwelt. Teacher education colloquium, Förderschule Belleben, 2. September 2013, Invited talk, 90 min.
- Winde F (2013): Hochwasser aus der Tiefe - wie gefährdet ist Johannesburg durch aufsteigende Grubenwässer aus gefluteten Goldminen? Invited talk, Verein für Erdkunde, 9. Juli 2013, Geographisches Institut, MLU, Halle (Saale), 60 min.
- Winde F (2013): Overview of data collected on mining-related contamination. *Workshop on cancer in mining-regions of SA. WHO - International Agency for Research on Cancer (Section of Environment and Radiation)*, College of Medicine, Parktown, Johannesburg, South Africa, 13-14 February 2013, 27 slides.

- Winde F (2013): Overview on previous and ongoing work in the field of mining-related uranium pollution and associated health risks. *Workshop on cancer in mining-regions of SA. WHO - International Agency for Research on Cancer (Section of Environment and Radiation)*, College of Medicine, Parktown, Johannesburg, South Africa, 13-14 February 2013, 18 slides
- Winde F (2012): Gold, Uran und Wasser: Folgen des südafrikanischen Goldbergbaus für Mensch und Umwelt – Fallstudien aus dem Central-, West- und Far West Rand. Civilisations Matter Institute Berlin, 1. CM Themenabend, 5. September 2012, 10117 Berlin (Germany) 120 min, invited speaker.
- Winde F (2012): Uranium pollution of water in selected gold mining areas of South Africa - extent, sources and associated health risks. Oral presentation at the colloquium of the Helmholtz Institute Rossendorf, Institute for Resource-ecology, Germany, 30th August 2012, 70 min., invited talk
- Winde F (2012): Acid Mine Drainage in the Central Basin - some less explored perspectives. Aurecon Consultants, AMD workshop, DWA contract to find a long-term solution to the AMD problem, Pretoria, 29 February 2012, invited speaker
- Winde F (2012): Acid Mine Drainage – media hype or real risks? Speak 2 a Scientists series, Invited talk, Sci-Bono, Science Discovery Centre, Newtown, Johannesburg, 22 March 2012, 19:00-21:15, oral presentation, invited speaker, 120 min.
- Winde F (2011): Questions regarding the Scope of Work of the requested study on a methodology for remediation. Remediation Steering Committee for the Remediation of the Wonderfonteinpruit Catchment Area, Meeting at the National Nuclear Regulator, Centurion, Eco Park, 5 August 2011.
- Winde F (2011): Risks associated with flooding of the Central Rand void system and possible solutions – some less explored perspectives. National Council of Provinces (NCOP), Provincial Week conference: Acid Mine Drainage and Environmental Management. 14th September 2011, Gauteng Legislature, Johannesburg, invited key note speaker.
- Winde F (2011): Uranium pollution in the Wonderfonteinpruit and Mooi River system with special reference to the situation in Potchefstroom. Afrikaaner Broederbond, Potchefstroom Branch, 20 June 2011, Kruger Properties, Potchefstroom, invited speaker.
- Winde F (2011): Gold and Water – impacts of deep level gold mining on water resources: examples from South Africa, Mathematics and Technology Education, J. Röscher, Science teacher seminar, 27th August 2011, NWU, Potchefstroom Campus, invited speaker.
- Winde (2011): Mining related uranium pollution of drinking water in South Africa – possibly associated health risks. Oral presentation, 120 min., CARISA – MRC meeting, Johannesburg, South Africa, May 2010, invited speaker.
- Winde (2011): Uranium pollution in the Wonderfonteinpruit and Mooi River system with special reference to the situation in Potchefstroom. Oral presentation, Water Lekothla, Potchefstroom, South Africa, 28 January 2011, invited keynote speaker.

Research reports/ textbooks (32 x)

- Winde F, Erasmus E (2013): Comments on: Proposal for the application of the Mintails Tailings Water Treatment Technology for the mitigation of the acid mine drainage problem in the Western Basin of the Witwatersrand Gold mining complex. Submitted to the Federation for a Sustainable Environment (FSE), 20 June 2013. Randburg, unpublished, pp. 4
- Winde F (2013): Report to NRF on incentive funding in 2012. Online system NRF, pp. 12, unpublished, www.nrf.ac.za
- Winde F (2011): Questions regarding the Scope of Work of the requested study on a methodology for remediation. Remediation Steering Committee (RSC) for the Remediation of the Wonderfonteinpruit Catchment Area, Meeting at the National Nuclear Regulator, Centurion, Eco Park, 5 August 2011. 16 x slides, distributed to members of RSC
- Winde F, Erasmus E, Stoch EJ, Hoffmann E (2011): Desktop assessment of the risk for basement structures of buildings of Standard Bank and ABSA in central Johannesburg to be affected by rising mine water levels in the Central Basin. Final report, Volume I (pp. 267) and Volume I-III, Standard Bank of South Africa (Rosebank Branch), ABSA (CBD Branch), Johannesburg, unpublished, pp. 267 (Vol. I).

- Winde F, Erasmus E, Stoch EJ (2010): *A hydrological study on the Gerhard Minnebron wetland to determine how the wetland system functions and fits into the Wonderfonteinspruit catchment due to licence applications to harvest peat and existing peat harvesting operations (DWAF project no 2006-231)*. Final report (Nov. 2006 – Nov. 2009), DWA, Pretoria, unpublished, 1762 pp. (incl. appendices)
- Winde F (2008): Development of a map ranking sites with known radioactive pollution in the Wonderfonteinspruit catchment according to the urgency of required intervention ('Intervention site map') - Underlying methodology and results. Confidential report to Joint Coordinating Committee of the Department of Water Affairs and Forestry (DWAF) and the National Nuclear Regulator (NNR), DWAF Pretoria, unpublished, pp. 17
- Winde F (2007): A hydrological study on the Gerhard Minnebron wetland to determine how the wetland system functions and fits into the Wonderfonteinspruit catchment due to licence applications to harvest peat and existing peat harvesting operations (DWAF project no 2006-231). Report on reconnaissance phase (1 November 2006 – 30 April 2007), DWAF, Pretoria, unpublished, 52pp.
- Winde F (11/2006): A hydrological study on the Gerhard Minnebron wetland to determine how the wetland system functions and fits into the Wonderfonteinspruit catchment due to licence applications to harvest peat and existing peat harvesting operations (DWAF project no 2006-231). 1st Progress report. PowerPoint presentation to Interdepartmental Technical Working Group, Pretoria, unpublished, 42 slides
- Winde F (02/2007): A hydrological study on the Gerhard Minnebron wetland to determine how the wetland system functions and fits into the Wonderfonteinspruit catchment due to licence applications to harvest peat and existing peat harvesting operations (DWAF project no 2006-231). 2nd Progress report. PowerPoint presentation to Interdepartmental Technical Working Group, Potchefstroom, unpublished, 47 slides
- Winde F (07/2007): A hydrological study on the Gerhard Minnebron wetland to determine how the wetland system functions and fits into the Wonderfonteinspruit catchment due to licence applications to harvest peat and existing peat harvesting operations (DWAF project no 2006-231). 3rd Progress report. PowerPoint presentation to Interdepartmental Technical Working Group, Potchefstroom, unpublished, 47 slides
- Winde F (2007): A hydrological study on the Gerhard Minnebron wetland to determine how the wetland system functions and fits into the Wonderfonteinspruit catchment due to licence applications to harvest peat and existing peat harvesting operations (DWAF project no 2006-231). Report on reconnaissance phase (1 November 2006 – 30 April 2007), DWAF, Pretoria, unpublished, 26pp.
- Winde F, Sandham LA (2007): Evaluation of the quality of the Environmental Impact Assessment Report by Knight Piesold Consulting on the Kayelekera Uranium Project of Paladin (Africa) Limited. Sub-project of Southern African Development Countries (SADAC) project on Corporate Social Responsibility and Sustainable Development in the Mining Sector' in countries of the SADAC region, in cooperation with NWU, Dpt. of Sociology, pp. 21
- Winde F (2006): Identification and quantification of water ingress into mine voids of the West Rand and Far West Rand goldfields (Witwatersrand Basin) with a view to a long-term sustainable reduction thereof. Confidential report to the Council for Geoscience, DME Project 5512, pp. 260, unpublished, Pretoria
- Winde F (2005): Report on the Rewatering Assessment Programme of the Far West Rand Dolomitic Water Association: November 2002-February 2005. pp.188, unpublished
- Winde F (2004): Response to Leuschner AH, 2004: Comments on revised final report - WRC-project 1214 8 (pp. 14), Minutes of second final meeting of the WRC Steering Committee on 15 November 2004 in Pretoria, pp. 42, unpublished.
- Winde F (2003): Comments on the research methodology applied in Dill S, James AR (2003): The assessment of the impact on groundwater quality associated with the backfilling of dolomitic cavities with gold mine tailings. Final report to the WRC, project no. 115-002, January 2003; pp. 12, FWRDWA library, unpublished
- Winde F (2002): *Kompartimentübergreifender Schadstofftransfer in stark hemeroben Fließgewässern. Abschlussbericht (1999-2002)*. Deutsche Akademie der Naturforscher Leopoldina. Halle/Salle, 30pp.

- Winde F (2000): Kompartimentübergreifender Schadstofftransfer in stark hemeroben Fließgewässern. Bericht zur 3. Arbeitsphase (Südafrika), 1.8.1999-31.7.2000. Deutsche Akademie der Naturforscher Leopoldina. Halle/S. (Germany), 15pp.
- Winde F (1999): Kompartimentübergreifender Schadstofftransfer in stark hemeroben Fließgewässern. Bericht zur 2. Arbeitsphase (Deutschland), 1.5.-31.7.1999. Deutsche Akademie der Naturforscher Leopoldina. Halle/S. (Germany), 5pp.
- Winde F (1999): Kompartimentübergreifender Schadstofftransfer in stark hemeroben Fließgewässern. Bericht zur 1. Arbeitsphase (Südafrika), 1.2.-31.4.1999. Deutsche Akademie der Naturforscher Leopoldina. Halle/S. (Germany), 6pp.
- Winde F (1998): Untersuchungen zum wasser gebundenen Schadstofftransfer in der Umgebung von Absetzanlagen des ostthüringischen Uranbergbaus. Abschlussbericht zum Stand der Vorbereitung des Sonderforschungsbereiches Wismut an der Universität Jena. Thüringer Ministerium für Wissenschaft und Bildung. 31pp.
- Winde F (1997): Untersuchungen zum wasser gebundenen Schadstofftransfer in der Umgebung von Absetzanlagen des ostthüringischen Uranbergbaus. Zwischenbericht zum Stand der Vorbereitung des Sonderforschungsbereiches Wismut an der Universität Jena. Thüringer Ministerium für Wissenschaft und Bildung. 23pp.
- Winde F (1996): Abschlußbericht zum Forschungsprojekt: Schadstoffe und Schadstofftransfer im Verbund Wasser - Boden in der Saaleaue des halleischen Stadtgebietes - ein Beitrag zum Boden und Gewässerschutz (*Final report on research project: Contaminants and contaminant transport at the water - soil system of the River Saale floodplain within the municipal district of the city of Halle*). Umweltforschungszentrum (UFZ) Halle-Leipzig, Halle (Germany), 267pp.
- Winde F (1995): 2. Zwischenbericht zum Forschungsprojekt: Schadstoffe und Schadstofftransfer im Verbund Wasser - Boden in der Saaleaue des halleischen Stadtgebietes - ein Beitrag zum Boden und Gewässerschutz. August 1995. Umweltforschungszentrum (UFZ) Halle-Leipzig. 32pp.
- Winde F (1994): 1. Zwischenbericht zum Forschungsprojekt: Schadstoffe und Schadstofftransfer im Verbund Wasser - Boden in der Saaleaue des halleischen Stadtgebietes - ein Beitrag zum Boden und Gewässerschutz. 21pp.

University textbooks, study guides, excursion guides

- Winde F (2011): Study guide: Environmental Hydrology (module code OMSW 623). North-West University, Potchefstroom Campus, Faculty of Natural Sciences, Potchefstroom, pp. 71.
- Tempelhoff J, Schultz B, Hayde LG, Faletti R, Hassan FA, Winde F, Klaver I, Ginster M, Varady R, Juuti P, Otte A, Munnik V, Zeisler-Vralsted DJ, Fort C (2011): World history of water management. Study guide for short course in south Africa: 27 June – 1 July 2011. UNESCO Institute for Water Education,. Pp. 188, North-West University, Vaal Triangle Campus, Vanderbiljpark, unpublished.
- Winde F (2005): Study guide: Development and urbanisation in Africa and the South African City (Urban Geography; GGFN 321). North-West University, Potchefstroom Campus, School for Environmental Sciences and Development, Subject Group Geography and Environmental Studies, pp.12.
- Winde F (2001): Field Methods of Water Quality Analyses. Student guide. Potchefstroom University for CHE. School of Environmental Sciences and Management, Potchefstroom, 30pp.
- Winde F (1994) [Hrsg.]: Exkursionsführer Hawaii/Neuseeland. Institut für Geographie, Universität Halle-Wittenberg, Lehrstuhl Geoökologie, Halle, 39pp.
- Winde F, Dippmann S (1993): Praktikumsanleitung für physisch-geographisches Geländepraktikum: Gewässeranalytik. Institut für Geographie der Universität Halle-Wittenberg. Lehrstuhl Geoökologie, Halle 44pp.