

CURRICULUM VITAE

Judith Wright, Ph.D.

Earth Systems Scientist

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EDUCATION

Ph.D. Geology (1985) University of Oregon, Eugene. Rare Earth Element Distributions in Recent and Fossil Apatite: Implications for Paleooceanography and Stratigraphy. Emphasis on stable isotopes and trace elements. (Education minor)

M.S. Geology (1982) University of Oregon. The Geochemistry of Conodont Apatite: Secular Variations Inferred by Comparison With the Ce-Fe System in the Modern Ocean. Emphasis on carbonates and evaporites.

B.S. Geology (1979) California State University, Northridge. Petrogenesis and Geochemistry of the Rosarito Volcanics, Baja, Calif. (Philosophy minor)

EXPERIENCE

PIMS NW, Inc., President and Owner, Sedimentary Geochemist, December, 2000 to present. PIMS NW develops new applications, tests, markets and sells Apatite II for pollution prevention and remediation of metals, radionuclides and organic compounds in soils, groundwater and other metal-contaminated media for national and international clients and collaborators in government, academia and industry.

Other consulting services include:

- bench-scale proof-of-principle studies and pilot-scale and full-scale demonstrations
- feasibility and treatability studies,
- remedial and pollution prevention design and implementation
- oversight of implementation operations
- develop teaching and training courses and manuals on a variety of scientific subjects for students, professionals and the general public.

UFA Ventures, Inc., President and Owner, Environmental Geologist, April 1999 to present, General Director, 1994 to 1999. UFA Ventures is a full-service geology and soil-testing laboratory with national and international clients and collaborators in government, academia and industry, providing:

- innovative hydrogeology technology, soil and rock testing services,
- environmental remediation,
- feasibility/treatability studies,
- consulting, and sales of UFA instruments
- education and training on a variety of scientific topics through lectures, seminars, classes, field trips and the production of films, videos, websites, textbooks, workbooks and slide presentations.

Washington State University, Richland, WA. Adjunct Professor, 1990 to present, Geology Program and Environmental Science Program .

- develop and teach upper division and graduate lecture, laboratory and field courses for the Environmental Science Program, the Physics Program and the Geology Program
- served on student thesis and dissertation committees/acted as student advisor

Pacific Northwest National Laboratory and Environmental Management Operations, Richland, WA. Staff Scientist and Senior Project Manager, 1987 to 1994.

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- Program Manager, SERDP Phosphate Stabilization of Materials - Phase I, (\$875K)
- Program Manager for the U.S. Air Training Command (ATC) Installation Restoration Program (IRP) at Keesler Air Force Base, Biloxi, MS (\$15,000K).
- Program Manager, CRADA with Beckman Instruments, Inc., (\$2,000K)
- Project Manager, Integrated Demo Program, Arid Site Demo at Hanford. Project management and technical support for applied R&D (\$1,500K)
- PI, DOE Subsurface Science Program, Coordinator/Facilitator of Subprogram Integration, Communication and Interaction (\$500k)
- Project Manager, DOE Salt Repository Program (\$250k)

Arizona State University, Tempe, AZ. Associate Director, Postdoctoral Research Associate, 1986 to 1987. Associate Director and Program Coordinator for the Honors Program.

- Expanded Honors Program in sciences by coordinating seven science and mathematics departments to develop and write a required two-semester course in the sciences.
- Directed and administered Fulbright-Hays, Marshall, Truman, Rhodes, and other fellowship and scholarship programs.
- Conducted scientific research on: 1) crystal structure of biogenic apatite and geochemical mapping of trace elements in biogenic apatite; 2) field and laboratory studies of chemical weathering and origin of etch pits in rock surfaces of southwestern deserts; 3) research on stable isotopic and trace element compositions of fluid inclusions in salt deposits to determine viability of salt deposits as sites for high-level nuclear waste disposal and the theoretical study of fluid inclusions as possible remnants of ancient seawater.

Professional Actor, Chicago, IL and Los Angeles, CA, 1968 to 1979. Actor in theatrical, film and television productions and professional model in print and commercials. Member of Actor's Equity Association (Equity), Screen Actors Guild (SAG) and American Federation of Radio and Television Artists (AFTRA).

Memberships - American Chemical Society; American Geophysical Union; American Society of Mining and Reclamation (Lifetime); Geological Society of America; The Geochemical Society; and the International Mine Water Association

Bibliography

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- Wright, J. and J. L. Conca, 2009. The geopolitics of energy: engaging the public and policymakers *Proceedings of the 2009 Waste Management Symposia*, Phoenix, AZ (in press).
- Conca, J., S. Sage and J. Wright, 2008. "Nuclear Energy and Waste Disposal in the Age of Recycling," *New Mexico Journal of Science*, vol. 45, p. 13-21 <http://www.nmas.org/NMJoS-Volume-45.pdf>.
- Wright, Judith and James Conca, 2007. *The Geopolitics of Energy: Achieving a Just and Sustainable Energy Distribution by 2040*. BookSurge Publ., Charleston, SC. ISBN 1-4196-7588-5, 100pp.
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- Martin, W.A., S.L. Larson, D.R. Felt, J. Wright, C.S. Griggs, M. Thompson, J.L. Conca and C. Nestler, 2007. "The effect of organics on lead sorption onto Apatite II," *Applied Geochemistry*, 23:34-43.
- Conca, James L. and Judith Wright, 2006. "An Apatite II permeable reactive barrier to remediate groundwater containing Zn, Pb and Cd," *Applied Geochemistry*, 21:1288-1300.
- Adams, B., N. Yancey, J. Conca and J. Wright, 2006. "PRB containing processed fish bones sequesters metals from ground water," *Technology News and Trends*, Environmental Protection Agency EPA 542-N-06-002, Issue 23, p. 5-7.

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- Raicevic, S., J. V. Wright, V. Veljkovic and J. L. Conca (2006) "Theoretical stability assessment of uranyl phosphates and apatites: Selection of amendments for in situ remediation of uranium," *Science of the Total Environment*, vol. 355, p. 13-24.
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- Wright, J., 2005. "From conodonts and ancient oceans to fish bones and metal contaminant stabilization." *Goldschmidt Conference, Invited, Geochemical Society of London Abstracts*, Univ. ID, Moscow.
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- Wright, J., J. L. Conca, and A. F. Slater (2005). PIMS with Apatite II: A field scale demonstration on a lead contaminated soil, Chapter 4 in *Stabilisation/Solidification Treatment and Remediation*, A. Al-Tabbaa and J. A. Stegemann, (eds), Taylor and Francis Group, London, ISBN 04 1537 460 X.
- Judith Wright and James L. Conca, 2005. "PIMS™: Remediation of Soil and Groundwater Contaminated With Metals." Environmental Security Technology Certification Program (ESTCP) Cost and Performance Report, (CU-0020), <http://www.estcp.org/>, 50 pp.
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More than 100 work plans, characterization plans, remedial action plans and final reports prepared for CERCLA and RCRA activities at DoD military sites.

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Other Interests - Travel; gourmet cooking; reading philosophy, economics, political science, biographies, science, history, science/ speculative fiction and mysteries; writing; integrative and holistic medicine and healing; birdwatching; hiking; organic gardening; environmental and political activism; music, cinema and theatre; avid ailurophile; and collecting artifacts, books, artisano crafts, mineral and crystal specimens, antiques and art.