

David G. Coles
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Coles Environmental Consulting, Inc.
Principal

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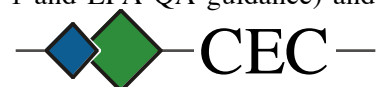
Technical Expertise

Environmental contamination investigations; evaluating and understanding the fate and transport of hazardous, toxic, and nuclear materials in groundwater, surface water, soil, and air; investigating a wide variety of contaminated sites; evaluating and interpreting site investigation data and data from subsequent remedial investigations; various preliminary assessment (PA), site investigation (SI), remedial investigation/feasibility study (RI/FS) experience (state and EPA). Extensive RCRA experience. Risk assessment experience (with formal training). Brownfields experience. Solid waste (landfill) experience, including closure. Used-oil facility experience. NEPA experience. Project management experience for both government funded and industrially funded projects. Proposal and complex report preparation experience. Regulator negotiation experience (EPA and various state agencies). Specialty experience in the fate and transport of metals/metalloids, organic contaminants (including petroleum products, pesticides, and solvents), wood preserving chemicals, and radioactive contamination. Additional experience with environmental compliance auditing and ISO 14000 standards; remediation and restoration oversight, and QA/QC support. Technical peer review and oversight for government agencies and industrial clients. Expert witness experience.

Experience Summary

Mr. Coles has conducted, managed, and contributed to a wide variety of environmental projects over the past 40+ years in both the R&D laboratory and in the field covering the disciplines of environmental chemistry and geochemistry. Projects have had an extensive geographic range--from the South Pole to the Marshall Islands and throughout the U.S.

His consulting experience has emphasized the assessment of contaminated sites for industrial clients including key contributions to Superfund RI/FSs for two large wood-treating sites (MT), several oil refining facilities including an ongoing State RI/FS (OR), and numerous smaller sites. He has conducted investigation, remediation planning, and remediation oversight for many projects including the cleanup of sites for two Northwest ports. He managed the environmental work for the Oregon Department of Correction's Coffee Creek Correctional Facility construction project (including recent facility expansion work) in Wilsonville, Oregon (1999-2005). Other experience includes projects covered through his former role as program manager for a large task-order program that involved both the investigation and remediation of sites at military bases, DOE facilities, and USFS land. He has extensive experience investigating the behavior of hazardous wastes (toxic chemical, nuclear, and mixed wastes) in typical disposal environments (soil and groundwater). He has experience with air pollution investigations. Most project experience has been conducted under quality assurance protocols (NQA-1 and EPA QA guidance) and



environmental regulations (RCRA, CERCLA, state environmental laws, etc.). Key to project success has been his ability to negotiate technical issues with regulators on behalf of clients and to build effective teams with a variety of technical experts needed to solve complex environmental issues.

A three-year project he lead provided the EPA with technical support for its review of the DOE's then planned Waste Isolation Pilot Plant (1995-1997). This site in SE New Mexico is presently in use for the disposal of defense transuranic wastes. He also provided nuclear chemistry and geochemistry support to Nye County, Nevada for their oversight of DOE's planned nuclear waste repository in Yucca Mountain, Nevada (2000-2001). He previously assisted in the development of a risk assessment group for California EPA by providing expertise in fate and transport geochemistry. He assisted another firm in conducting the Nevada Well-Head Protection program in southern Nevada (1995). During June, 1997, he assisted Bioremediation Services, Inc. with the development of a chemical process to convert over a million pounds of nitrocellulose (gun powder) into fertilizer at the Badger Army Ammunition Plant, Baraboo, WI. This included field work at the Plant to get the system operating.

Mr. Coles completed a multiyear effort to clean a site on Port of Vancouver, Washington property contaminated with kerosene at one location and diesel at another location. This project has included site investigation, dual remediation planning and oversight (15,000 cubic yards of impacted soil was successfully bioremediated on site), a groundwater investigation, and thorough documentation. He has provided support to a consulting team assisting a large international energy company with environmental support for a planned 620 MW gas turbine power plant in Western Oregon.

Mr. Coles investigated the site, planned and organized the cleanup, and provided oversight for a large site remediation in McMinnville, OR where contamination from an old asphalt plant contaminated over two acres of an adjacent property. This involved excavation and management of an estimated 50,000 cubic yards of which less than three percent had to be disposed of.

Mr. Coles is presently providing consulting services for 15 used-oil re-refining facilities and collection sites in the states of WA, OR, ID, WY, MT, and UT. One of the sites has been listed on the NPL. He is also working on a Brownfield site for Yamhill County, Oregon funded through an EPA grant; a pesticide investigation and cleanup project for the Port of Hood River's airport; two TCE-contaminated sites in Vancouver, Washington which the Department of Ecology has ranked both as a "2" on their hazardous sites ranking list (second from highest). One of these sites was recently granted a no-further-action determination by the Department of Ecology.

Credentials

- Registered Geologist in Oregon (#2009); Licensed Geologist in Washington (#2264) with qualification as a hydrogeologist.
- M.S., Chemistry - Oregon State University (1973), trace-element geochemistry thesis (neutron activation analysis was the analytical tool utilized)
- B.S., Chemistry - Oregon State University (1970)
- Additional studies in geology, California State University-Hayward (1974-1977) and Portland State University (2002) and environmental toxicology and risk assessment from The Oregon Graduate Institute (2002).



Member of:

The American Chemical Society
• Geochemical Division
• Nuclear Chemistry Division
The Geological Society of America
Northwest Environmental Business Council--Cascade Chapter
• was the longest standing member of the NEBC Board of Directors
The Meteoritical Society
The Antarctic Society

Employment History

5/94-Present, Coles Environmental Consulting, Inc., Principal Scientist, West Linn, OR.

7/93-5/94, Harding Lawson Associates, Principal Geochemist, Portland, OR office.

2/92-7/93, Chester Environmental (formerly Keystone/NEA), Senior Scientist, Tigard, OR.

12/91-2/92, self-employed environmental consultant.

10/89-12/91, The Earth Technology Corporation, Portland, OR office; Office Manager and Program Manager for the Battelle EMO contract.

6/88-10/89, Beak Consultants Incorporated, Portland, OR; Director, Contaminant Assessment.

10/86-6/88, Battelle Pacific Northwest Laboratories (PNL), Richland, WA; Section Manager.

3/81-10/86, Battelle Pacific Northwest Laboratories (PNL), Richland, WA; Senior Research Scientist, Group Leader, and Project Manager.

10/72-3/81, Lawrence Livermore National Laboratory (LLNL), Livermore, CA; Staff Research Chemist and Project Manager.

Awards and Honors

Elected to Honor Society of Phi Kappa Phi, 1972.

Elected to Theta Delta Phi National Scholastic Men's Honorary Fraternity, 1967.

American Nuclear Society's Nuclear Fuel Cycle Division's Best Paper Award at the Annual Meeting, Las Vegas, NV, June, 1980.

Professional Highlights

As part of a joint atmospheric chemistry research project between LLNL and the Univ. of Maryland, collected and studied air samples at the South Pole, November- December, 1973.

Participated in a two week radiological survey of Bikini Atoll, Marshall Islands, summer, 1975.

Published an article in **Science** magazine entitled "Migration of Ruthenium-106 in a Nevada Test Site Aquifer: Discrepancy Between Field and Laboratory Results", D. G. Coles and L. D. Ramspott, *Science*, Vol. 214, pp. 1235-1237, March 5, 1982.

Convener of a GSA Penrose Conference on "Geochemistry of the Environment Near a High-Level Nuclear Waste Repository" held at Rippling River Resort, Welches, OR, September 9-14, 1984.

Recently (2006) completed a week-long short course at the University of Alberta, Edmonton, titled *Introduction to Applied Environmental Geochemistry and Geochemical Modeling*, which emphasized the use of the sophisticated, state-of-the-art, thermodynamic-speciation modeling program PHREEQC developed and maintained by the USGS.

Publications

Mr. Coles has an extensive list of publications (23 open literature papers, 26 institutional papers, 9 abstracts and summaries of formal professional presentations not published elsewhere as full papers) covering primarily environmental topics and emphasizing geochemistry of contaminants in the environment. He has also authored hundreds of client reports prepared during his 18 years as an environmental consultant. These reports are well known for their thoroughness, clarity, depth of data interpretation, and supporting graphics.

Publication List:

David G. Coles

(note: this list does not include numerous client reports generated between 1/88 and 2/13)

Reviewed Papers:

"ISO 14000 Environmental Management Standards", D. G. Coles, Oregon Insider, Issue #145, 1 February 1996, pp. 6-7.

"The Used-Oil Regulations: Are They Working?", D. G. Coles, Oregon Insider, Issue #141, 1 December 1995, pp. 1-3.

"Development and Evaluation of a Tracer-Injection Hydrothermal Technique for Studies of Waste Package Interactions", T. E. Jones, D. G. Coles, and J. R. Burnell, in Scientific Basis for Nuclear Waste Management, X, Apter and , editors, 1985, pp. 323-332.

"Initial Hydrothermal Waste Package Release Experiments Using Spent Fuel with Waste Package Components", J. R. Burnell, D. G. Coles, and L. E. Thomas, in Clark, D.E., White, W.B., Machiels, A.J. (eds.) Advances in Ceramics, Vol. 20: Nuclear Waste Management II, American Ceramics Society, 1986, pp. 361-371.

"Investigation of the Hydrothermal Interaction of Tc-99 Doped Glass and Basalt Repository Nuclear Waste-Package Components", D. G. Coles, S. A. Simonson, L. E. Thomas, J. A. Schramke, and S. G. McKinley, in Materials Research Society Symposia Proceedings, Volume 44, Scientific Basis for Nuclear Waste Management, VIII, Jantzen, Stone, and Ewing, editors, 1985, pp. 323-332.

"Np-237 and Pu-239 Solution Behavior During Hydrothermal Testing of Simulated Nuclear Waste Glass with Basalt and Steel", J. A. Schramke, S. A. Simonson, and D. G. Coles, in Materials Research Society Symposia Proceedings, Volume 44, Scientific Basis for Nuclear Waste Management, VIII, Jantzen, Stone, and Ewing, editors, 1985, pp. 343-350.

"The Behavior of Tc-99 in Doped-Glass/Basalt Hydrothermal Interaction Tests", D. G. Coles and M. J. Apter, in Materials Research Society Symposia Proceedings, Volume 26, Scientific Basis for Nuclear Waste Management, VII, G. L. McVay, editor, 1984, pp.129-136.

"XPS Valence State Determination of Np and Pu in Multicomponent Borosilicate Glass and Application to Leached 76-68 Waste Glass Surfaces", D. P. Karim, D. J. Lam, H. D. Diamond, A. M. Friedman, D. G. Coles, F. Bazan, and G. L. McVay, in Materials Research Society Symposia, Volume 6, Scientific Basis for Nuclear Waste Management, S. V. Topp, editor, pp. 67-73, 1982.

"Migration of Ruthenium-106 in a Nevada Test Site Aquifer: Discrepancy Between Field and Laboratory Results", D. G. Coles and L. D. Ramsdott, Science, Vol. 214, pp.1235-1237, March 5, 1982.

"Continuous-Flow Leaching Studies of Crushed and Cored SYNROC", D. G. Coles and F. Bazan, Nuclear Technology, Vol. 56, pp. 226-237, February, 1982.

"A Continuous-Flow Leach Testing Method for Various Nuclear Waste Forms", D. G. Coles, Nuclear and Chemical Waste Management, Vol. 2, Number 4, pp. 245-252, 1981.

"Phase Equilibria, Leaching Characteristics, and Ceramic Processing of SYNROC D Formulations for U.S. Defense Wastes", H. Newkirk, F. Ryerson, D. G. Coles, C. Hoenig, R. Rozsa, C. Rossington, F. Bazan, and J. D. Tewhey, in Materials Research Society Symposia Proceedings, Volume 3, Scientific Basis for Nuclear Waste Management, J. G. Moore, editor, 1981, pp. 165-172.



"Use of Immobile Trace Elements to Determine Original Tectonic Setting of Eruption of Metabasalts, Northern Sierra Nevada, California", E. R. Brooks and D. G. Coles, Geological Society of America Bulletin, Vol. 91, Part I, pp. 665-671, November 1980.

"Leaching Characteristics of Actinides from Simulated Reactor Waste, Part 2", H. C. Weed, D. G. Coles, D. J. Bradley, R. W. Mensing, J. S. Schweiger, and J. H. Rego, in Materials Research Society Symposia Proceedings, Volume 2, Scientific Basis for Nuclear Waste Management, C. J. M. Northrup, Jr., editor, 1979, pp.167-173.

"Leaching Characteristics of Actinides from Simulated Reactor Waste", H. C. Weed, D. G. Coles, D. J. Bradley, R. W. Mensing, and J. S. Schweiger, in Proceedings of Materials Research Society Symposium on Science Underlying Radioactive Waste Management, Volume 1, G. J. McCarthy, editor, 1979, pp.141-147.

"Single-Pass Leaching of Nuclear Melt Glass by Groundwater, Part I", D. G. Coles, H. C. Weed, D. D. Jackson, and J. S. Schweiger, in Radioactive Waste in Geologic Storage, Sherman Fried, editor, American Chemical Society Symposium Series No. 100, pp. 93-114, 1979.

"Radionuclides in the South Pole Atmosphere", W. Maenhaut, W. H. Zoller, and D. G. Coles, Journal of Geophysical Research, Vol. 84, No. C6, pp. 3131-3138, June 20, 1979.

"Radionuclide Release from Non-Nuclear Energy Production: A Sensitive Technique for the Measurement of Pb-210 on Air Filters", D. G. Coles and J. W. T. Meadows, in Environmental Chemistry and Cycling Processes, P. C. Adriano and I. L. Brisbin, Jr., editors, DOE Symposium Series 45, CONF-760429, pp. 290-299. August 1978.

"Chemical Studies of Stack Fly Ash from a Coal-Fired Power Plant", D. G. Coles, R. C. Ragaini, J. M. Ondov, G. L. Fisher, D. Silberman, and B. A. Prentice, Environmental Science and Technology, Vol. 13, No. 4, pp. 455-459, April, 1979.

"The Behavior of the Natural Radionuclides in Western Coal-Fired Power Plants", D. G. Coles, R. C. Ragaini, and J. M. Ondov, Environmental Science and Technology, Vol. 12, No. 4, pp. 442-446, April, 1978.

"The Direct Measurement of ppm Levels of Uranium in Soils Using High-Resolution Ge(Li) Gamma-Ray Spectroscopy", D. G. Coles, J. W. T. Meadows, and C. L. Lindeken, The Science of the Total Environment, Vol. 5, pp. 171-179, 1976.

"Ge(Li) Spectrometric Measurements of Isotopic Uranium Ratios in Soils Treated with Apatite-Derived Fertilizers", C. L. Lindeken, D. G. Coles, and J. W. T. Meadows, in the Proceedings of the IAEA Symposium on Isotope Ratios as Pollutant Source and Behavior Indicators, (Vienna), IAEA-SM-191-13, pp. 255-265, 1975.

"Red Sea Basalts", R. G. Coleman, M. Tatsumoto, D. G. Coles, C. E. Hedge, and R. E. Mays, EOS (Transactions of the American Geophysical Union), Vol. 54, No. 11, pp. 1001-1002, 1973.

Institutional Papers:

"Results from Hydrothermal Studies of Spent-Fuel and Basalt Repository Waste-Package Components: 1. The Initial Eleven Experiments", D. G. Coles, J. J. Mahoney, and J. A. Schramke, Rockwell Hanford Operations, Basalt Waste Isolation Project Report SD-BWI-TI-300, May, 1986. Report in BWIP review.

"Summary Report on the Use of Computer Technology in Gold Exploration", T. L. Tewksbury, D. E. Pride, and D. G. Coles, Battelle Development Corporation Report, February, 1986.

"Scale-Up Considerations Relevant to Experimental Studies of Nuclear Waste-Package Behavior: Final Report on FY85 Exploratory Research Activities", compiled by D. G. Coles and R. D. Peters, Pacific Northwest Laboratory Report PNL-5823, April, 1986.

"A Report on the Status of Hydrothermal Testing of Fully Radioactive Waste Forms and Basalt Repository Waste Package Components", J. A. Schramke, S. A. Simonson, and D. G. Coles, Rockwell Hanford Operations, Basalt Waste Isolation Project Report SD-BWI-TI-253, November, 1984.

"A Report on Hydrothermal Testing of Np-237 and Pu-239 Doped Glass Waste Form and Basalt-Repository Waste Package Components, J. A. Schramke, S. A. Simonson, S. G. McKinley, D. G. Coles, and L. E. Thomas, Rockwell Hanford Operations, Basalt Waste Isolation Project Report SD-BWI-TI-240, August 1984. In clearance.

"A Final Report on the Hydrothermal Testing of Tc-99 Doped Glass Waste Form and Waste Package Components", J. A. Schramke, L. E. Thomas, S. G. McKinley, S. A. Simonson, and D. G. Coles, Rockwell Hanford Operations, Basalt Waste Isolation Project Report SD-BWI-TI-229, July, 1984.

"Computerized Mineral Exploration Using the NURE Database and ALDS Computer Program", D. G. Coles, J. J. Thomas, and R. J. Littlefield, Pacific Northwest Laboratory Report PNL-SA-11247, April, 1984.

"The Effect of Basalt on the Release of Tc-99, Np-237, and Pu-239 from Borosilicate Glass under Hydrothermal Conditions", D. G. Coles, Rockwell Hanford Operations, Basalt Waste Isolation Project Report SD-BWI-TI-190, February, 1984.

"Leaching Studies Using PNL 76-68 Glass Beads and UO₂ Rods with Umtanum Basalt and Nugget Sandstone", F. Bazan, J. H. Rego, R. A. Failor, and D. G. Coles, Lawrence Livermore National Laboratory Report UCID-20013, February 1, 1984.

"Description of the Experimental Approach and Procedures Used by the Basalt Waste Isolation Project in Conducting Hydrothermal Tests on Tc-99 Doped Borosilicate Glass", D. G. Coles and M. J. Apted, Rockwell Hanford Operations, Basalt Waste Isolation Project Report SD-BWI-TI-127, 1983.

"A Waste Form/Rock Interaction Leaching Study Using PNL 76-68 Glass Beads and Umtanum Basalt, Part 1", F. Bazan, J. H. Rego, R. A. Failor, and D. G. Coles, Lawrence Livermore National Laboratory Report UCID-19764, March, 1983.

"Nuclear Waste Package Materials Testing Report: Basaltic and Tuffaceous Environments", D. J. Bradley, D. G. Coles, F. N. Hodges, G. L. McVay, and R. E. Westerman, Pacific Northwest Laboratory Report PNL-4452, March, 1983.

"A Leaching Study of Nuclear Melt Glass: Part 1", R. A. Failor, D. G. Coles, and J. H. Rego, Lawrence Livermore National Laboratory Report UCID-19729, February, 1983.

"A Leaching Study of PNL 76-68 Glass Beads Using the LLNL Continuous-Flow Method and the PNL Modified IAEA Method: A Final Report", D. G. Coles, R. W. Mensing, J. H. Rego, H. C. Weed, and R. W. Buddemeier, Lawrence Livermore National Laboratory Report UCID-19492, Rev. 1, October, 1982.

"Single-Pass Continuous-Flow Leach Test of PNL 76-68 Glass: Some Selected Bead Leach I Results", D. G. Coles, Lawrence Livermore National Laboratory Report UCRL-85405, Rev. 1, August, 1981.



"Chemical, Physical, and Mineralogical Characterization of Fifteen Sandstones for Radionuclide Sorption Studies", S. G. Schultz-McKinley, J. Garrison, S. MacLean, and D. G. Coles, Lawrence Livermore National Laboratory Report UCID-19034, April, 1981.

"The Application of SYNROC to High-Level Defense Wastes", J. D. Tewhey, C. L. Hoenig, H. W. Newkirk, R. B. Rozsa, D. G. Coles, and F. J. Ryerson, Lawrence Livermore National Laboratory Report UCRL-85032, 1980.

"Leach Test Methodology for the Waste/Rock Interactions Technology Program", D. J. Bradley, G. L. McVay, and D. G. Coles, Pacific Northwest Laboratory Report PNL-3326, May, 1980.

"Geochemical Studies of Sorption and Transport of Radionuclides in Rock Media", D. G. Coles, H. C. Weed, and J. D. Tewhey, Lawrence Livermore National Laboratory Report UCRL-52929, March, 1980.

"FY 78 Annual Technical Report of Lawrence Livermore Laboratory's Participation in the DOE-NV Project: Radionuclide Migration in the Ground", L. D. Ramspott, J. D. Tewhey, D. G. Coles, H. C. Weed, J. S. Schweiger, and R. Stone, Lawrence Livermore National Laboratory Report UCID-18259-78, August, 1979.

"Leaching Studies of Radioactive Glass", D. G. Coles, in Energy and Technology Review, UCRL-52000-79-6, June, 1979.

"Technical Comments on the Radiological Impact of Airborne Effluents of Coal and Nuclear Plants", J. M. Ondov, D. G. Coles, A. H. Biermann, and R. C. Ragani, Lawrence Livermore National Laboratory Report UCRL-82286, January, 1979.

"The Measurement of Sorption Ratios for Selected Radionuclides on Various Geologic Media", S. C. McLean, D. G. Coles, and H. C. Weed, Lawrence Livermore National Laboratory Report UCID-17928, September, 1978.

"Uranium Transport in a Basin and Range Environment", D. G. Coles, in the Annual Report of the Chief Scientist of the National Park Service, CY 1975, U.S. Dept. of the Interior, p. 80, August, 1976.

"Sampling Natural Waters: Are Filtered Samples True Solutions?", J. W. T. Meadows, C. F. Smith, D. G. Coles, L. Maynard, J. Dellis, Lawrence Livermore National Laboratory Report UCRL-77872, April, 1976.

"Evaluation of the Use of Sludge Containing Plutonium as a Soil Conditioner for Food Crops", D. S. Meyers, W. J. Silver, D. G. Coles, K. C. Lamson, D. R. McIntyre, and B. Mendoza, Lawrence Livermore National Laboratory Report UCRL-77318, 1975. (note: paper presented by Meyers at the International Symposium on Transuranium Nuclides in the Environment, November, 1975).

Abstracts and Summaries of Formal Presentations not Published Elsewhere as Full Papers:

"Intergration of Various Field Observation and Analysis Technologies to Pre-Screen Soil Samples at a Former Wood Treating Plant", D. G. Coles and S. A. Anderson, presented at the 1994 PNWIS/AWMA Annual Meeting, Eugene, OR, 17 November 1994.

"Radionuclide Injection Experiments for Testing the Reducing Capacity of Basalt in Nuclear Waste Repository Studies", J. R. Burnell, T. E. Jones, and D. G. Coles, Submitted for presentation at the Geological Society of America National Annual Meeting, San Antonio, Tx, November 10-13, 1986.

"Examination of Spent Fuel Reactions under Hydrothermal Conditions", J. J. Mahoney and D. G. Coles, Pacific Northwest Laboratory abstract PNL-SA-(in clearance). Submitted for presentation at the Materials Research Society's 1986 Fall Meeting, Symposium on the Scientific Basis for Nuclear Waste Management, December 1-6, 1986.

"Observations of Selected Actinide and Fission Product Chemistry during Basalt-Repository Waste-Package Hydrothermal Experiments Containing Spent Fuel", D. G. Coles, J. J. Mahoney, and J. R. Burnell, Pacific Northwest Laboratory abstract PNL-SA-13860 A, March, 1986. Presented at the 41st Northwest Regional Meeting of the American Chemical Society, Symposium on Radioactive Waste Disposal, Portland, OR., June 16-28, 1986. **Was also a session chairman at this Symposium.**

"An Experimental Study of the Interaction of Nuclear Waste with Potential Waste Package Components From Hanford Site, WA.", J. R. Burnell, J. Myers, and D. G. Coles, Rockwell Hanford Operations Abstract RHO-BW-SA-474A. Presented at the Geological Society of America Annual Meeting, Orlando, Fl., October 28-31, 1985.

"Preliminary Results of a Combined Leaching and Rock-Column Sorption Study Conducted under Flow Conditions", D. G. Coles, F. Bazan, J. Rego, and R. Koszykowski, Pacific Northwest Laboratory Summary PNL-SA-10161. Presented at the Workshop on Evaluation of Systems Variables in Long-Term Performance of Nuclear Waste Solids, University of Florida, Gainesville, February 3-5, 1982.

"Lead Encapsulation of Nuclear Waste: A Risk Assessment", J. J. Cohen, D. G. Coles, and L. D. Ramspott, Lawrence Livermore National Laboratory Summary UCRL-83799. Presented at the American Nuclear Society Annual Meeting, Las Vegas, Nevada, June 9-13, 1980. **This paper was selected for the Nuclear Fuel Cycle Division's Best Paper Award.**

"Hydrothermal Leaching Studies at Elevated Pressures and Temperatures and Low Temperature Continuous-Flow Leaching Studies for SYNROC Waste Forms", D. G. Coles, L. Page, F. Bazan, and A. Piwinski, Lawrence Livermore National Laboratory Summary UCRL-83565. Presented at the 82nd Annual Meeting of the American Ceramics Society, Chicago, Illinois, April 27-30. Summary published in the American Ceramics Society Bulletin, Vol. 59, Number 3, pp. 394, March, 1980.

"Single-Pass Leaching of Nuclear Melt Glass by Groundwater, Part II", D. G. Coles, H. C. Weed, and J. S. Schweiger, Lawrence Livermore National Laboratory Summary UCRL-81617 Abs. Part II, April, 1979. For presentation at the American Chemical Society meeting, Honolulu, Hawaii, April 4-5, 1979. Note: Unable to make the presentation due to a United Airlines strike.

"Paleotectonic Setting of Metavolcanic Rocks, Northern Sierra Nevada, CA", E. R. Brooks and D. G. Coles, Lawrence Livermore National Laboratory Summary UCRL-81828, March, 1979. Presented at the Geological Society of America meeting, Cordilleran Section, 75th Annual Meeting, San Jose, CA., March 9-11, 1979.

