Bernhardt Saini-Eidukat Assistant Professor of Geology Department of Geosciences, Stevens Hall North Dakota State University, Fargo, ND 58105-5517

sainieid@badlands.nodak.edu http://www.ndsu.nodak.edu/geosci/office: 701-231-8785 office fax: 701-231-7149 home: 701-235-4953

Education

Ph.D. 1991. Geology. University of Minnesota. B.S. 1984. Geology. University of Minnesota. B.S. 1984. Geophysics. University of Minnesota.

Employment

1997-present:	Assistant Professor, Dept. of Geosciences, North Dakota State University
1993–1997:	Instructor, Dept. of Geosciences, North Dakota State University
1991–1993:	Research Scientist, Inst. of Geol. Sci., Mining University of Leoben, Austria.
1990-1991:	Fulbright Grantee, Inst. of Geol. Sci., Mining University of Leoben, Austria.
1989-1990:	Geologist, U.S. Bureau of Mines, Twin Cities Research Center, Mpls., Minnesota.
1987-1989:	Research Assistant, Dr. P. Weiblen, Dr. Gust Bitsianes, University of Minnesota.
1988:	Electron Microscopist, The 3M Company, Corporate Research Lab, St. Paul, MN.
	Consulting Geologist, CNA Consulting Engineers, Mpls., Minnesota.
1984–87:	Teaching Assistant, Department of Geology, University of Minnesota.
	Field Assistant, Island Mountain, California.
	Geologist, Minnesota Geological Survey, Silver Bay, Minnesota.
	Research Assistant, Dr. E. Ito, Oxygen Isotope Lab, University of Minnesota.
	Consulting Geologist, Guyana, South America.

5 Relevant Publications

- McClean, P.E., Schwert, D.P., Juell, P., Saini-Eidukat, B., Slator, B.M., and White, A.R. 1999.
 Cooperative Development of Visually-Oriented, Problem-Solving Science Courseware.Proceedings, International Conference on Mathematics/Science Education and Technology, March 1-4, San Antonio, Texas.
- Saini-Eidukat, B., Schwert, D.P., and Slator, B.M., 1999. Designing, Building, and Assessing a Virtual World for Science Education. Proceedings, International Conference on Computers and Their Applications, April 7-9, Cancun, Mexico.
- Saini-Eidukat, B. and Yahin, A. 1999. Web-phreeq: An Instructional Tool for Modeling the Distribution of Chemical Species in Water. Computers & Geosciences, v. 25, no.4, pp. 347-353. (invited)
- Saini-Eidukat, B. 1998. A WWW and spreadsheet based exercise in river flood frequency analysis. Journal of Geoscience Education v. 46, p. 154-156.
- Saini-Eidukat, Bernhardt, Don Schwert and Brian M. Slator. 1998. Text-Based Implementation of the Geology Explorer, a Multi-User Role-Playing Virtual World to Enhance Learning of Geological Problem-Solving. Geological Society of America Abstracts with Programs, Vol. 30, No. 7, October, 29. Toronto.

Up to 5 Other Significant Publications

- Saini-Eidukat, B., Rudashevsky, N.S. and Polozov, A.G. (1998) Evidence for hibbingite-kempite solid solution. Mineralogical Magazine, v. 62(2), pp. 251-255.
- B. Saini-Eidukat, O.A.R. Thalhammer, M.J. İljina and T.T. Alapieti (1997) Siliceous, high-magnesian parental magma compositions of the PGE-rich Early Paleoproterozoic layered intrusion belt of northern Finland. Proceedings, 30th International Geological Congress, v. 9, pp. 177-197.
- Saini-Eidukat, B., and Weiblen, P.W. (1996) A new method of fossil preparation, using high-voltage electric pulses. Curator, 39: 139-144.
- Melcher, F., Raith, J., Prochaska, W., and <u>Saini-Eidukat, B.</u> (1996) The metamorphosed molybdenum-vein type deposit of the Alpeinerscharte, Tyrol (Austria) and its relation to Variscan granitoids. Mineralium Deposita, 31: 277-289.
- Rudashevsky, N.S., Burakov, B.E., Lupal, S.D., Thalhammer, O.A.R., and <u>Saini-Eidukat, B.</u>, 1995, Liberation of accessory minerals from various rock types by electric pulse disintegration method and application: Trans. Inst. Mining Metall., v. 104, p. C25-C29.

Collaborators Not Listed Above

Ernesto Bjerg, Universidad Nacional del Sur, Bahia Blanca, Argentina Daniel Gregori, Universidad Nacional del Sur, Bahia Blanca, Argentina

Graduate Students and Post-Doctoral Scholars

The Department of Geosciences at NDSU does not have a graduate program.

Graduate and Post-Doctoral Advisors

Paul. W. Weiblen, University of Minnesota; Eugen F. Stumpfl, Mining University of Leoben, Austria.

Other Relevant Information

Dr. Bernhardt Saini-Eidukat is Assistant Professor of Geology at North Dakota State University. Saini-Eidukat is a petrologist, mineralogist, and economic geologist who has researched platinum group element (PGE) geochemistry of igneous rocks as related to problems of magma evolution, tectonic setting and hydrothermal transport. He has also investigated manganiferous iron formation from the perspective of applying the *in situ* leaching method for extracting manganese, and has evaluated pulsed power technology as a rock disaggregation method. Current research involves ore genesis of a volcanogenic massive sulfide deposit in Ontario, tectono-magmatic evolution of Northern Patagonia, and the development of interactive computer modeling and teaching software.