Post-Graduate with Professional Experience Applying to Graduate School

John Sample

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OBJECTIVE

To earn a Master of Science degree in Mineral Economics, specializing in financial economics and tradable pollution rights and policy.

EDUCATION

Bachelor of Science in Mineral Economics, Penn State University, December, 2005

WORK EXPERIENCE

ICF Consulting Group, Inc.

Research Assistant

January 2006-present
Fairfax, VA

- Performed research and data collection in various subjects (pollution control equipment cost and performance, EPA rule-making activities, electric sector emissions data, etc.) using the internet, print resources, and various human resources.
- Proofread and edited numerous reports and marketing materials.
- Maintained price indices for tradable pollution permits for SO₂ and NO_{x.}
- Acquired an understanding of the regulatory environment for NO_x, SO₂, and HG created by CAAA 90 and subsequent executive branch actions.
- Researched, prepared, and implemented economic and technical assumptions into ICF's Integrated Planning Model (IPM) and Wholesale Integrated Planning Model (WIPM) for use in private-sector and EPA analyses.
- Confirmed IPM and WIPM results for accuracy and provided analysis of the economic implications of said results for EPA and private-sector-client studies.
- Presented a company workshop on advanced internet search techniques.

The Ramsay Corporation *Office Assistant*May 2002-January 2005, seasonally Pittsburgh, PA

- Prepared and maintained a 5000-record test-question database using *Dbase IV*+.
- Programmed SPSS for statistical analysis of continuously gathered test question data.
- Authored operating procedures packet for company-customized applications.
- Trained office staff (6 people) in proper use of SPSS procedures.
- Programmed, maintained, and operated a *Scantron* answer-sheet scanner.

SKILLS

- Regularly work with Win 95, 98, Vista, and Mac OS 6.5 to 8.0
- Experienced user of all classes of computer software (statistical packages, spreadsheet, database, business graphics, word processing, network applications).
- Possess a constantly growing knowledge of Microsoft Excel and Microsoft Access.
- Experience in programming with C, FORTRAN, HTML, Turbo Pascal, and BASIC.

Conventional Graduate Student Resume—Two Pages

JANE SAMPLE

1104 East Foster Avenue, #2124 State College, PA 16801 (817) 987-5004 jsample99@psu.edu

OBJECTIVE

A position involving research and development of improved or novel biomaterials or bioceramics for use in orthopedic applications.

EDUCATION

Master of Science, Materials Science and Engineering
January 2006-present
The Pennsylvania State University, University Park, PA 16802

THESIS: "Infiltration of Continuous Fiber-Reinforced Composites."

Bachelor of Science, Materials Science and Engineering, Ceramics Option August 2001-May 2005

The Pennsylvania State University, University Park, PA 16802

THESIS: "Sol-Gel Derived Alumina."

PROFESSIONAL EXPERIENCE

The Pennsylvania State University January 2005-present <u>Graduate Assistant</u> — University Park, PA

Responsible for conducting research on thesis project, teaching undergraduate labs, and grading exams. Current thesis research involves investigating a novel approach to the fabrication of composites via nitrate melt infiltration of multi-fiber tows.

The Pennsylvania State University May 2005-December 2005 Researcher — University Park, PA

Investigated particulates in membranes associated with aseptic loosening of hip prosthesis. Characterized collagen, gelatin, and hydroxyapatite with Raman spectroscopy, electrophoresis, electronic measurements, and SEM.

PROFESSIONAL EXPERIENCE (continued)

The Pennsylvania State University August 2004-May 2005

<u>Systems Operator, Materials Sciences Computer Center</u> — University Park, PA Renovated existing facilities. Acquired and installed new computers and software. Taught classes in Microsoft Word, Powerpoint, and Excel.

Howmet Corporation

June 2004-August 2004

Summer Engineering Intern — Whitehall, MI

Investigated quality control and mechanical property effects of excess sodium on Al_2O_3 -based investment casting molds with various testing methods, including physical testing (hot/cold MOR, compression, XRD) and chemical analysis.

Alcoa Technical Center

July 2003-August 2003

Summer Engineering Intern — Alcoa Center, PA

Performed electrical resistivity and optical measurements on Al₂O₃ substrates.

The Pennsylvania State University

January 2002-May 2003

Research Assistant — University Park, PA

Prepared sol-gel samples, tested samples using tensile and compressive techniques, assembled and tested strain gage rosettes.

PAPERS

"The System Al₂O₃-N₂O₅-H₂O at Various Temperatures," presented at the annual meeting of the Materials Research Society, Minneapolis, 2007.

"The System MgO- P_2O_5 - H_2O at 25 °C," submitted to the *Journal of the American Ceramic Society*.

ACTIVITIES

Member of the Society for Biomaterials (2005-present).

Member of Keramos (2007-present).

Recipient of the Ellen Steidle Award for Outstanding Service, College of Earth and Mineral Sciences, Penn State (2005).

Member, American Ceramic Society, Penn State Student Chapter (2001-present).

Member of the Society of Women Engineers (2001-2005);

Executive Board Member (2003-2004).

Guides for the College of Earth and Mineral Sciences (2002-2005).

Earth and Mineral Sciences Student Council Secretary (2003-2004).

Graduate Student Stressing Qualifications and Research—Two Pages

JOHN SAMPLE

Work: 503 Walker Building University Park, PA 16802 (814) 863-1036 Home: 924 Waupelani Drive State College, PA 16801 (814) 823-7409

Fax: (814) 865-3693

Email: johnsample@essc.psu.edu Web: http://www.johnsample.com/

Qualifications Summary

Interdisciplinary research experience in global climate change and the atmospheric sciences from work with several professional institutions. Knowledge in programming languages and applications for both scientific programming and web page design obtained through both academic and extracurricular pursuits. Background in teaching rudimentary concepts gained through graduate assistantship and summer activities.

Research Experience

Research Assistant, May 2008 to present.

The Pennsylvania State University, University Park, PA

Performed research under Dr. Raymond Najjar on the response of Chesapeake Bay turbidity to possible climate variability. The research was funded by an EPA grant in conjunction with the Mid-Atlantic Regional Assessment (MARA).

Summer Research Intern, May 2008 to August 2008.

Science Applications International Corporation, Hampton, VA

Performed contract research with the NASA Langley Research Center, supporting the Earth Radiation Budget Experiment (ERBE) mission, in an attempt to determine the source of inconsistencies between the measurements of several satellite-borne instruments.

Undergraduate Researcher, September 2007 to April 2008.

The Pennsylvania State University, University Park, PA

Analyzed data from the Atmospheric Radiation Measurement (ARM) program in an effort to find a relationship between the total amount of incoming solar radiation and the amount of incoming UV-B radiation.

Summer Research Intern, June 2007 to August 2007.

NASA Goddard Space Flight Center, Greenbelt, MD

Interned with the NASA Summer Institute for Atmospheric and Hydrospheric Sciences by performing research to create a realistic river flow speed grid for the Total Runoff Integrating Pathways (TRIP) river routing model.

Computer Experience

Programming Languages – C, Perl, Matlab Script, FORTRAN, HTML Scientific Applications – Matlab, GrADS Other Applications – MS Office, Photoshop, Illustrator, GoLive Operating Systems – UNIX, Linux, VAX/ALPHA, MS Windows

Education

The Pennsylvania State University, University Park, PA

Master of Science in Meteorology; anticipated graduation August 2009

Thesis: "Modeling The Effects of Potential Climate Change on Turbidity in Chesapeake Bay"

The Pennsylvania State University, University Park, PA Bachelor of Science in Meteorology, Earth Systems Minor; graduated May 2007

Other Experience

Day Camp Instructor, July 2008.

4-H Aerospace Day Camp, Hershey, PA

Spent three days teaching 8- to 12-year old children the basics of meteorology through a combination of interesting demonstrations and projects designed to reinforce key points.

Teaching Assistant, August 2007 to May 2008.

The Pennsylvania State University, University Park, PA

Taught one semester of Meteorology 200, an online introductory meteorology class designed to allow students at remote campus locations to learn basic meteorological concepts. Duties included updating web page content, creating quizzes and tests, and answering questions remotely.

Weather Observer and Archivist, May 2005 to May 2007.

<u>The Pennsylvania State University Weather Station</u>, University Park, PA Responsible for observing and recording daily weather conditions. Compiled and archived meteorological data weekly.

Activities

Penn State Chapter of the American Meteorological Society, 2002 to present.

• As President for two years, helped to create a program consisting of several guest speakers each semester for meteorology undergraduates.

Penn State Jazz Club, 2003 to present.

• Dealt with agents, musicians, and others to organize, promote, and manage jazz concerts.

WKPS – Penn State Student Radio, 2003 to present.

• Announced a daily jazz radio show once each week, for several hours at a time. Earth and Mineral Sciences Interest House, 2003 to 2007.

Penn State Campus Weather Service, 2003 to 2006.

 Created a weekly weather forecast for dissemination throughout central Pennsylvania.

Outward Bound, May 2003 and March 2006.

Curriculum Vitae (c.v.) by Master's Student—Two Pages

Jane Sample curriculum vitae

421 Pollock Road University Park, PA 16802 (817) 845-3089 jsample99@psu.edu

EDUCATION:

Master of Science, Meteorology (projected May 2010)
The Pennsylvania State University, University Park, PA 16802

THESIS: "Statistical Comparison of Chemistry Data From Two Precipitation Collection Sites in Central PA"

Bachelor of Science, Chemistry (May 2008) Fairfield University, Fairfield, CT 06430

THESIS: "HMOs and Fullerines: A Stable Combination?"

TEACHING EXPERIENCE SUMMARY:

<u>Instructor</u>, The Pennsylvania State University, *January 2009-present*

Instructor for Meteorology 441, a senior-level laboratory class supplementing Atmospheric Physics I. The laboratory provides undergraduates with an introduction to presenting scientific results derived from applications of Radiative Transfer principles. Data acquisition for this class required extensive use of Microsoft Excel, and classroom presentations involved the regular use of multimedia software.

<u>Teaching Assistant</u>, The Pennsylvania State University, *August 2007-December 2008*

On a semester-by-semester basis, my responsibilities included grading problem sets and holding office hours to assist students in the completion of assignments. I performed these duties for the following classes, ranging from introductory-level to upper-level:

Atmospheric Physics I and II (Radiative Transfer and Cloud Physics)
Synoptic Meteorology
Atmospheric Dynamics
Atmospheric Physics I Laboratory
Tropical Meteorology
Organic Chemistry Laboratory

RESEARCH EXPERIENCE SUMMARY:

The Pennsylvania State University in collaboration with Sacred Heart University

Since May 2007, two projects have been undertaken and the resulting findings prepared for publication. Research for the first project was completed in November 2008 and a joint paper is currently being revised for future submission to a refereed ornithological journal. Thesis research began in December 2007 and will be completed in May 2010. In each study, the emphasis is on statistical analysis of data and pattern recognition.

Through research and other academic tasks, I have developed a wide variety of computer experience, mostly on Windows-based systems. For data analysis and presentation, I have employed extensive use of Microsoft Excel, Word, PowerPoint, and Microcal Origin. Additionally, I have introductory experience with UNIX and MS-DOS operating systems.

PUBLICATIONS:

"Weather and Migration, an Exploration of Two Research Technologies" (in preparation)

Utilizing differences in the echo patterns between RADAR images of precipitation and bird migrations, a statistical model was developed for learning the preferred conditions for migration. Hence, a scheme was derived to forecast bird migration patterns in a manner correlative to that used to forecast weather patterns.

"Statistical Analysis of Chemistry Data From Two Precipitation Collection Sites in Central Pennsylvania" (*Master's thesis to be completed May 2010*)

Through the use of several parametric and nonparametric statistical methods—most notably interquartile ranges, median relative differences, and discriminant analyses—it is hypothesized that the differences in the precipitation depths and chemistry are due to prominent seasonal precipitation regimes.

SELECTED UNIVERSITY SERVICE AND AWARDS:

Chi Epsilon Pi National Honor Society in Meteorology, Penn State (2009) Sacred Heart University Chemistry Department Certificate of Excellence (2007) Delta Epsilon Sigma National Honor Society, Sacred Heart University (2006)

Curriculum Vitae (c.v.) by Doctoral Student—Three Pages

Jane Sample

Department of Geography, The Pennsylvania State University, University Park, PA 16802, 814-865-3433 jsample@psu.edu; http://www.personal.psu.edu/js778

EDUCATION

A.B.D. in Geography

The Pennsylvania State University, University Park, PA 16802

2005 - present Dissertation: Colleges, veterans, and communities: the changing

place of U.S. higher education after World War II

Doctoral committee: Roger M. Downs (advisor and chair), Rodney A. Erickson,

Irwin Feller (Economics)

M.S. in Geography The Pennsylvania State University, University Park, PA 16802

2005 Thesis: Defended territories: geographies of military bases and

their surrounding communities

Master's committee: Roger M. Downs (advisor), Rodney A. Erickson

B.A., summa cum laude The University of Colorado, Boulder, CO 80309

2000 Double major: Geography and Sociology

TEACHING

The Pennsylvania State University, Department of Geography

Instructor Economic Geography

Fall 2009; Fall 2008 Taught an intermediate-level course about the location of

economic activity at both macro- and micro-regional levels.

Integrated technology into classroom via lectures, case studies,

presentations, and web-based assignments. (Average enrollment=60)

Instructor Introduction to Human Geography

Summer 2009; Spring 2009; Taught an introductory course in the processes, methods, and

Summer 2007 theories of human geography. Integrated technology into

classroom via lectures, presentations, and web-based assignments. Developed and maintained a course web site.

(Average enrollment=115, Spring; 14, Summer)

Teaching Assistant Economic Geography

Spring 2008; Fall 2007 (Assisted in teaching-related activities. Graded student

Spring 2007; Fall 2006 assignments, met with students, and maintained a course web site.

(Average enrollment=84)

Teaching Assistant Introduction to Human Geography

Spring 2005 Taught a recitation section, graded papers, and met with students.

(Enrollment=30)

Jane Sample, p. 1 of 3

RESEARCH

The Pennsylvania State University, Department of Geography

Research Assistant Fall 2008; Summer 2008 Spring 2007; Fall 2007 Responsible for creating a database, coding data, and entering data about hate crimes in Pennsylvania. Data base consists of hate crimes at the county level in Pennsylvania between 1994 and 2006.

Undated an existing data base of hate crimes in Georgia.

Research Assistant Spring 2003; Fall 2005 Assisted in research-related activities for the Appalachian Regional Commission and for advisor's academic research.

Responsibilities included conducting industry searches, providing library assistance, conducting a survey and assessment of faculty development and human resources programs at Big Ten Universities, providing French text translations, and performing other research-related activities.

PROFESSIONAL WORK

Consultant The Appalachian Regional Commission, Washington, DC

Fall 2003 Prepared briefing book for the Appalachian Regional Commission

on the implications of new welfare reform legislation on rural areas. Annotated articles and identified policy and academic professionals researching issues pertaining to welfare and welfare reform.

Project Coordinator 2/2000 - 8/2002 Institute of Behavioral Science, The University of Colorado, Boulder, CO Coordinated data collection, correspondence, and administration of a longitudinal research project on domestic violence in the Navy, which

was funded by the National Institutes of Health.

FELLOWSHIPS AND AWARDS

National Science Foundation Graduate Research Fellowship (2003-2005)

E. Willard Miller Award for best doctoral paper, Penn State, Department of Geography (2005)
First place, Master's Thesis Award, Urban Geography Specialty Group of the Association of American Geographers (2005)

Dean's Scholar, University of Colorado (2000)

Academic Achievement Award, Texas Christian University (1997-1998)

HONOR SOCIETIES

Phi Beta Kappa Mortar Board Gamma Theta Upsilon, Geography Honor Society Alpha Kappa Delta, Sociology Honor Society Golden Key National Honor Society

Jane Sample, p. 2 of 3

REFEREED CONFERENCE PRESENTATIONS

November 2008. *The G.I. Bill and the changing place of U.S. higher education after World War II.* Association for the Study of Higher Education (ASHE) annual meeting, Sacramento.

CONFERENCE PRESENTATIONS

February 2008. The G.I. Bill and the spatial diffusion of American higher education. Association of American Geographers annual meeting, New York City.

April 2008. *Colleges, veterans, and communities: the role of the G.I. Bill in shaping U.S. higher education.* Association of American Geographers annual meeting, Pittsburgh.

March 2006. Educating places: geographies of urban universities and colleges. Association of American Geographers annual meeting, Boston.

April 2005. The 2000 Presidential election—regional and national perspectives. Association of American Geographers annual meeting, Fort Worth, TX.

April 2004. Defended territory: geographies of military bases and their surrounding communities. Association of American Geographers annual meeting, Charlotte, NC.

October 2003. *Geography, the federal government, and prison siting.* Association of American Geographers Middle States Division meeting, Canadaigua, NY.

UNIVERSITY SERVICE

The Pennsylvania State University, Department of Geography

Committee member, Glenda Laws memorial lecture series (2006-2007)

Graduate Student Representative (2004-2005)

Assisted in facilitating a Professional Development Seminar Series (Fall 2003)

Assisted in planning and overseeing the Departmental 50th Anniversary celebration (Fall 2002)

The University of Colorado, Department of Geography
Undergraduate Student Representative (1999-2000)

PROFESSIONAL MEMBERSHIPS

Association of American Geographers (AAG), member since 2003 National Council for Geographic Education (NCGE), member since 2004 The American Educational Research Association (AERA), member since 2008 The Association for the Study of Higher Education (ASHE), member since 2008

REFERENCES

Available upon request

Jane Sample, p. 3 of 3

One-Page Summary of Curriculum Vitae (c.v.) by Doctoral Student

JANE SAMPLE

jsample99@psu.edu (summary of curriculum vitae)

EDUCATION

A.B.D. in Geography
The Pennsylvania State University, University Park, PA 16802
2005 - present
Dissertation: Colleges, veterans, and communities: the changing

place of U.S. higher education after World War II

M.S. in Geography
The Pennsylvania State University, University Park, PA 16802
Thesis: Defended territories: geographies of military bases and

their surrounding communities

B.A., summa cum laude The University of Colorado, Boulder, CO 80309, 2000

TEACHING

The Pennsylvania State University, Department of Geography

Instructor Economic Geography, Fall 2009; Fall 2008

Instructor Introduction to Human Geography, Summer 2009; Spring 2009; Summer 2007

Teaching Assistant Economic Geography, Spring 2008; Fall 2007, Spring 2007; Fall 2006

RESEARCH

The Pennsylvania State University, Department of Geography

Research Assistant Fall 2008; Summer 2008, Spring 2007; Fall 2007

Research Assistant Spring 2003; Fall 2005

PROFESSIONAL WORK

Consultant The Appalachian Regional Commission, Washington, DC, Fall 2003

Project Coordinator Institute of Behavioral Science, The University of Colorado, Boulder, CO 2/00-8/02

SELECT FELLOWSHIPS AND AWARDS

National Science Foundation Graduate Research Fellowship (2003-2005)

E. Willard Miller Award for best doctoral paper, Penn State, Department of Geography (2003)

SELECT HONOR SOCIETIES AND PROFESSIONAL MEMBERSHIPS

Gamma Theta Upsilon, Geography Honor Society

National Council for Geographic Education (NCGE), member since 2004

The Association for the Study of Higher Education (ASHE), member since 2008

SELECT CONFERENCE PRESENTATIONS

November 2008. *The G.I. Bill and the changing place of U.S. higher education after World War II.* Association for the Study of Higher Education (ASHE) annual meeting, Sacramento.

February 2008. *The G.I. Bill and the spatial diffusion of American higher education*. Association of American Geographers annual meeting, New York City.

March 2006. Educating places: geographies of urban universities and colleges. Association of American Geographers annual meeting, Boston.

SELECT SERVICE

The Pennsylvania State University, Department of Geography

Committee member, Glenda Laws memorial lecture series (2006-2007)

Post-Graduate Stressing Qualifications and Years of Experience—Two Pages

JOHN SAMPLE

568 Circleville Drive State College, PA 16803 814.239.2409 johnsample@sheffield.envr.grp

QUALIFICATIONS SUMMARY

Experienced CQA Site Manager for environmental construction projects, with extensive field experience in monitoring and documenting for compliance with PA DEP and site specifications. Managed the Geosynthetic Department of an independent quality control testing facility. Performed and supervised QC testing for compliance with ASTM Standards. Over seven years experience in experimental research.

WORK EXPERIENCE

Sheffield Environmental Group, Pleasant Gap, PA CQA Site Manager for Environmental Construction Projects

April 2007-Present

- Oversaw the construction of numerous landfill cells and provided documentation for the client and PA DEP.
- Oversaw construction and verified compliance with environmental/construction specifications.
- Communicated with contractors, evaluated progress, and helped plan future construction.
- Coordinated projects with several different contractors.
- Served as liaison between client and contractor to ensure maximum efficiency.
- Provided documentation and analysis of field data.
- Consolidated field data and prepared reports for submittal to the PA Department of Environmental Protection.

Environmental / Construction Inspector

- Accrued extensive field experience (60-95 hrs/wk) in Quality Assurance area.
- Gained experience in geosynthetic deployment of CQA.
- Monitored and documented pipe installation for leachate collection and detection zone.

Jeff Zell Consultants, Coraopolis, PA

April-November 2004

Construction Inspector

- Provided construction quality assurance for compliance with site specifications.
- Oversaw various construction projects for the state and private industry.
- Performed on-site concrete testing and tested asphalt for compaction.
- Tested soil for compaction/moisture content with a Troxler Nuclear gage.
- Documented all field testing for consolidation into finished reports.

WORK EXPERIENCE (continued)

J & L Testing, Canonsburg, PA

August 2003-April 2004

Manager / Technician of Geosynthetics Department

- Performed extensive Quality Control conformance testing on geosynthetics (list of relevant ASTM numbers available upon request).
- Oversaw QC testing for compliance with ASTM standards.
- Consolidated data into finished reports.

Sharon Tube Company, Sharon, PA

August 2002-June 2003

QC Laboratory Technician

- Performed tensile and hardness testing for compliance with ASTM standards.
- Performed chemical titrations and analysis of acid and phosphate tanks.
- Wrote certification reports to be shipped with the analyzed products.

Steel Mill Worker

• Worked on the furnace crew in the Mill and Zinc Galvanize Department.

The Pennsylvania State University, University Park, PA 1995-2001, 2006 Research Assistant in Physics and Chemistry

- Co-authored several scientific papers on hydrogen production using photovoltaic cells.
- Operated a scanning electron microscope.
- Prepared ceramic powders with various dopants for use in semiconductors.
- Prepared sintered ceramic superconductors and semiconductors.
- Performed extensive experimental testing of ceramic electrodes in a solar cell simulator.
- Recorded and analyzed experimental data.
- Made decisions to alter chemical compositions of ceramics based on analytical data.

EDUCATION

The Pennsylvania State University, University Park, Pa.

- B.S. in Petroleum and Natural Gas Engineering, May 2002.
- 40-hour OSHA Health and Safety training (via Access America), Winter 2003.
- 16-hour Environmental Field Sampling Course (via Access America), Winter 2003.
- 8-hour Nuclear Safety Training, Spring 2004.

REFERENCES

Furnished upon request.