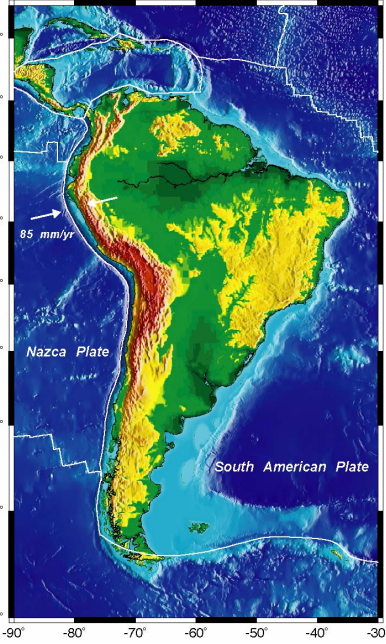


Susan Beck

PhD in Seismology, University of Michigan
Professor, Department of Geosciences,
University of Arizona, Tucson AZ, USA





Name: Barbara Carby

Educational Background: PhD Geology,

Current Appointment: Director Disaster Risk Reduction
Centre, University of the West Indies

Research Interests & Accomplishments:

Climate Change Adaptation and Disaster
Risk Reduction

Measuring resilience (development of
indices)

Educational Interests (optional):

Starting multi-disciplinary research
programme in Disaster Risk Reduction

Other Information about you:

Used to be a geologist – still love pretty
rocks

Fieldwork on Montserrat



Name: Katharine V. Cashman

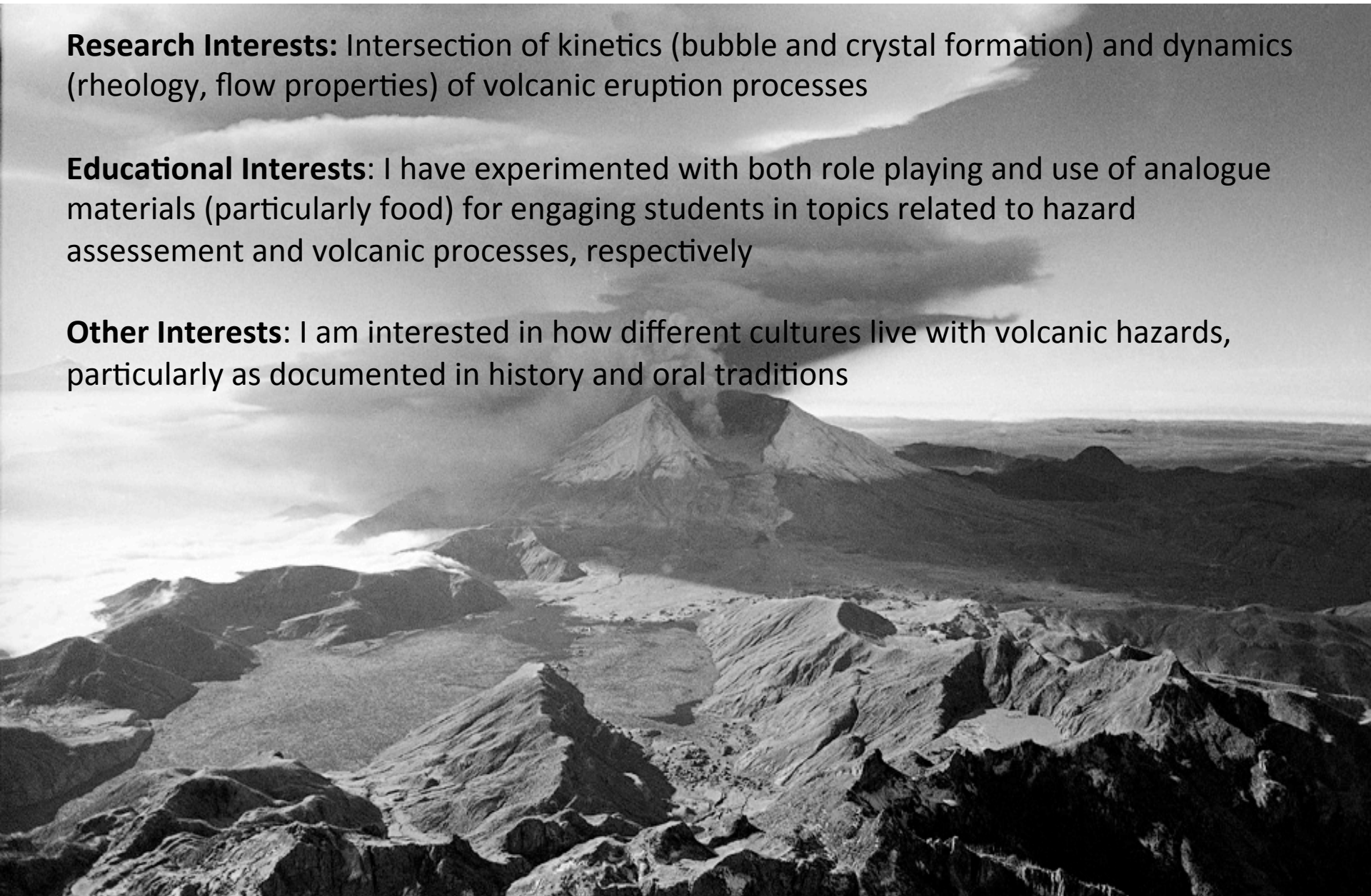
Educational Background: PhD, Johns Hopkins University

Current Appointment: AXA Research Chair in Volcanology, University of Bristol (UK)

Research Interests: Intersection of kinetics (bubble and crystal formation) and dynamics (rheology, flow properties) of volcanic eruption processes

Educational Interests: I have experimented with both role playing and use of analogue materials (particularly food) for engaging students in topics related to hazard assessment and volcanic processes, respectively

Other Interests: I am interested in how different cultures live with volcanic hazards, particularly as documented in history and oral traditions



Name: Diana COMTE

Educational Background: PhD Seismology

Current Appointment: Full Professor AMTC-University of Chile;
Head Graduate School FCFM-University of Chile



Research Interests & Accomplishments: Seismotectonic, Seismic Hazard, Seismic Tomography. Chile has a very high rate of seismicity, this actually represents a great opportunity, this permanent source of energy allow me to understand the processes of sub-soil, which has interesting applications in mineral exploration and geothermal fields.

Educational Interests (optional): Seismic Hazard

Other Information about you: I have participated in the aftershock sequence studies of all the large earthquakes occurred in Chile and Peru during the last 27 years.



Noémi d'Ozouville

M.Sci. Environmental Geosciences; PhD Hydrogeology in a volcanic setting

Post-doc UMR-Sisyphé, UPMC, France; Adjunct scientist Charles Darwin Foundation, Galapagos

Local coordinator Galapagos Islands Integrated Water Studies (GIIWS)



Research Interests & Accomplishments:

Hydrology in the Critical Zone; Integrated applied approaches; Inter-disciplinary research.

Set-up a research program in the Galapagos Islands to study the hydrology and hydrogeology with strong international, national and local involvement, application of innovative methods and integration with social sciences and restoration science.

Interested in looking at water interactions on the volcanically active islands.

Educational Interests:

Interested in sharing the scientific knowledge in Galapagos to the local community to generate more understanding of processes and role each individual can play.

Regularly give talks to institutions, naturalist guides, university students.

Other Information about you:

I aim to get people to work together, share information, collaborate in research, and coordinate efforts. I am especially aware to the importance of this in sensitive areas such as the Galapagos.



Name: Karen Harpp

Educational Background: BSc Dartmouth College (Chemistry); MSc, PhD Colgate University (Chemistry + Geology)

Current Appointment: Assoc. Professor Colgate University

Research Interests & Accomplishments:

My primary interests are applying analytical chemistry methods to explore questions related to magmatic and volcanic processes. I have worked in the Galápagos Islands, mainland Ecuador, Iceland, Japan, Antarctica, and at sea on questions related to mantle processes and reservoirs, melt generation, ocean island evolution, and physical volcanology. I've mentored mostly undergraduates and a few graduate students, and make sure they all as much hands-on field and lab experience as possible.

Educational Interests:

I believe in the integration of teaching and research, to give students the context and motivation to learn fundamental scientific concepts through investigation of research questions. Students learn best when they are having fun and are excited about what they are doing, a philosophy I try to infuse throughout my teaching.

Other Information about you:

I'm Canadian, have hilarious dogs, am a huge nerd, and am not a big fan of talking about myself so that's the best I can do here.



*Sierra Negra,
Galápagos, 2005*

Silvana Hidalgo

Educational Background :

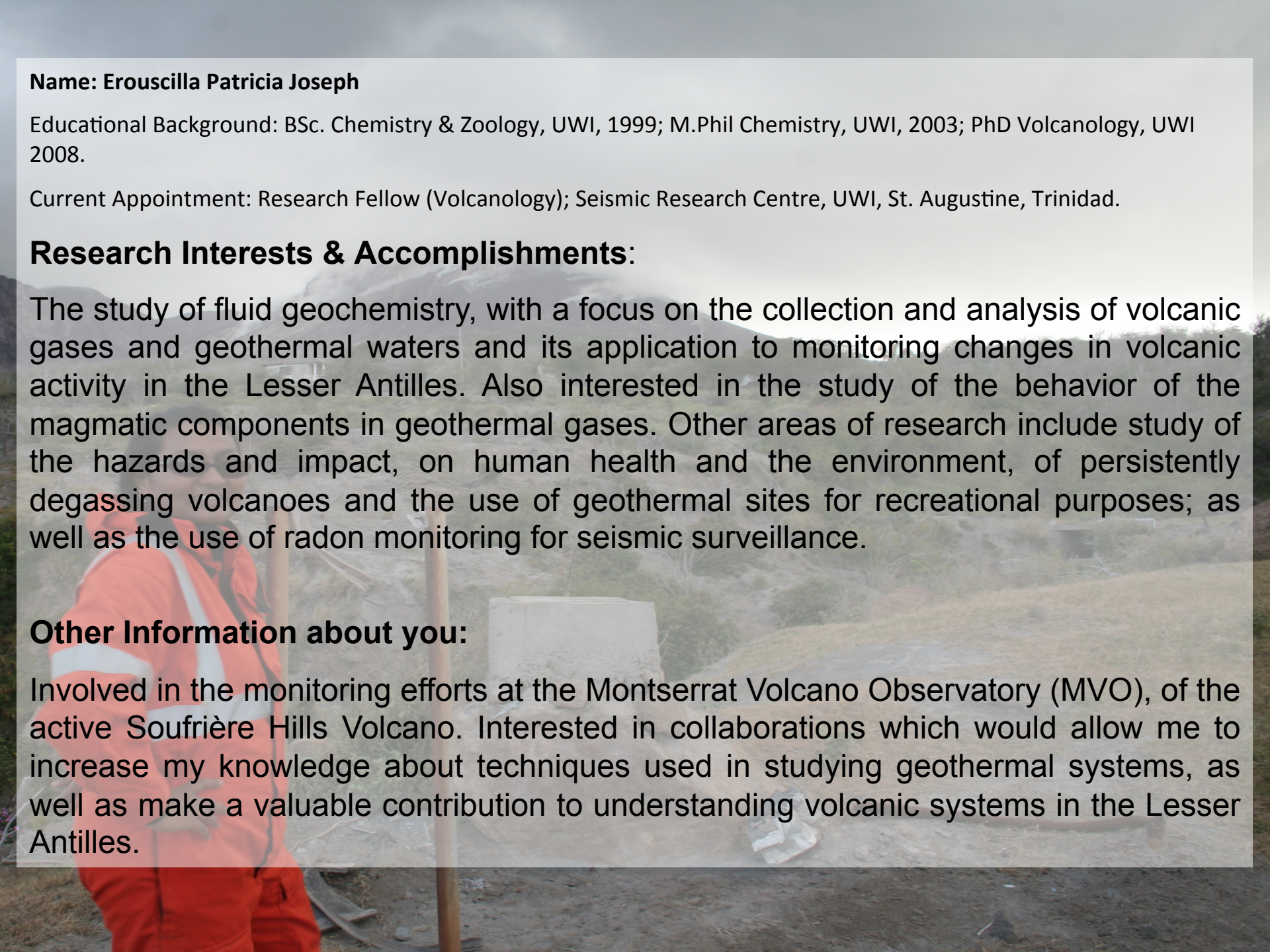
Ph.D. in Geochemistry and Volcanology
MSc. in Magmatic and Metamorphic Processes – Volcanology
Engineer in Geology (2001)

Instituto Geofísico
Escuela Politécnica Nacional
Quito - Ecuador

Research Interests & Accomplishments:

Petrological modelling
Geochemical characterization of volcanic products
 ^{40}Ar - ^{39}Ar dating
Isotopic Geochemistry (Sr-Nd-O)
Monitoring of volcanic fluids and SO_2 emissions (DOAS)
Volcanic Hazard

Educational Interests
Geochemistry
Igneous Petrology



Name: Erouscilla Patricia Joseph

Educational Background: BSc. Chemistry & Zoology, UWI, 1999; M.Phil Chemistry, UWI, 2003; PhD Volcanology, UWI 2008.

Current Appointment: Research Fellow (Volcanology); Seismic Research Centre, UWI, St. Augustine, Trinidad.

Research Interests & Accomplishments:

The study of fluid geochemistry, with a focus on the collection and analysis of volcanic gases and geothermal waters and its application to monitoring changes in volcanic activity in the Lesser Antilles. Also interested in the study of the behavior of the magmatic components in geothermal gases. Other areas of research include study of the hazards and impact, on human health and the environment, of persistently degassing volcanoes and the use of geothermal sites for recreational purposes; as well as the use of radon monitoring for seismic surveillance.

Other Information about you:

Involved in the monitoring efforts at the Montserrat Volcano Observatory (MVO), of the active Soufrière Hills Volcano. Interested in collaborations which would allow me to increase my knowledge about techniques used in studying geothermal systems, as well as make a valuable contribution to understanding volcanic systems in the Lesser Antilles.



Name: Bryan Kevan

Education: Pomona College Class of 2014
Economics major

Background: I grew up in Eugene, Oregon, but am currently a Junior at Pomona College in Claremont, California. In my time outside of the classroom, I enjoy hiking and camping throughout the American southwest.

Research Interests: My primary interest is in empirical economic research, using statistical and econometric methods to draw conclusions from large community survey datasets. I have done empirical work on the relationship between wages and workplace risk in Brazil and on income-related PTSD responses to the 2010 Chilean Earthquake.

Thank you to my mother, Geri Richmond, for presenting me with this opportunity.



Name: Joan L. Latchman

Educational Background: B.Sc. (Hons.) – Maths & Computer Sci.; M.Phil (Seismology); Ph.D (Seismology)
UWI

Current Appointment: Director (Ag.)/Seismologist

Research Interests & Accomplishments: Earthquake forecasting - developing and testing graphical statistical piecewise gradient technique and also investigating radon as a tool; long-range fault and volcano interaction – there appear to be symptoms in the seismogenic system precursory to the largest earthquakes at the global scale

Educational Interests: Developing strategies for effective communication of information on geological hazards with decision makers and general public

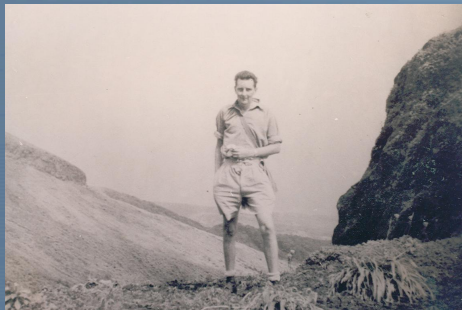
Other Information about you:

Dr. Patrick Willmore
atop Soufrière, St.
Vincent

1954 Mb 6.3 earthquake
damage in our area

Visit by Pres. Robinson
following 1997 Mt=6.1
Tobago earthquake

2011 pilot study in Eastern
Caribbean to test radon
concentration as earthquake
precursor.



Jan Lindsay

MSc in Geology (University of Auckland) (1995)

PhD in Geoscience (University of Giessen and GFZ-Potsdam, Germany) (1996 - 1999)

Research Fellowship at University of the West Indies, Trinidad (2000 – 2003)

Currently: Senior Lecturer, School of Environment, University of Auckland

Research Interests: Geochemistry, volcanology, volcanic hazard and risk assessment and mitigation

Accomplishments:

- Leader of multi-institutional research projects DEVORA (Determining Volcanic Risk in Auckland) and VORISA (Volcanic Risk in Saudi Arabia)
- President of the Geoscience Society of New Zealand (2010 – 2011)
- Member of NZ Volcanic Advisory Panel and Auckland Volcanic Scientific Advisory Group

*Soufriere Volcanic
Centre, Saint Lucia*



Auckland Volcanic Field, New Zealand



*Ngauruhoe,
New Zealand*



*Al Madinah Volcanic Field,
Saudi Arabia*



Heather Macdonald

Chancellor Professor of Geology
College of William & Mary, USA

Geoscience education, sedimentology

- On the Cutting Edge
 - Website, workshops, webinars, for geoscience faculty
 - 4500+ pages, 1600+ teaching activities contributed by the community
- Building Strong Geoscience Departments
- Geoscience in Two-year Colleges

Courses:

- The Sedimentary Record, College Science Teaching, Reading the Earth, Physical Geology, Marine Geology



On the Cutting Edge
An NAGT Professional Development Program for Geoscience Faculty

Managing Your Career

- [Preparing for an Academic Career](#)
- [Early Career Faculty](#)
- [Career Development](#)

Enhancing Your Teaching

- [Affective Domain](#)
- [Assessment of Learning](#)
- [Classroom Observation Project](#)
- [Course Design](#)
- [Data, Simulations and Models](#)
- [Introductory Courses](#)
- [Metacognition](#)
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- [Service Learning](#)
- [Teaching in the Field](#)
- [Teaching Methods](#)
- [Undergraduate Research](#)
- [Urban Students and Urban Issues](#)
- [Using Online Games and Environments](#)
- [Visualizations](#)
- [Web Design](#)

Geoscience Topics and Themes

- [Biocomplexity](#)
- [Climate Change](#)
- [Complex Systems](#)
- [Deep Earth](#)
- [Discoveries from Mars](#)

Search the Site
Classroom activities, syllabi, images, animations and more.

Workshop Schedule

For STEM Educators
A guide to those *On the Cutting Edge* resources that apply beyond the geosciences

Email List and Discussion Board Site Guide
Find the places in Cutting Edge and beyond where the community is talking.

Dardzha Peninsula
Turkmenistan
Landsat-7

serc.carleton.edu/NAGTWorkshops



Geoscience Departments:
Developing Pathways to Strong Programs for the Future

serc.carleton.edu/geodepts

Name: Estela Minaya R.
Educational Background Msc.
Current Appointment Director OSC

Research Interests & Accomplishments:

Seismic Hazard, Improvement Network of Bolivia, Attenuation problems in local network.

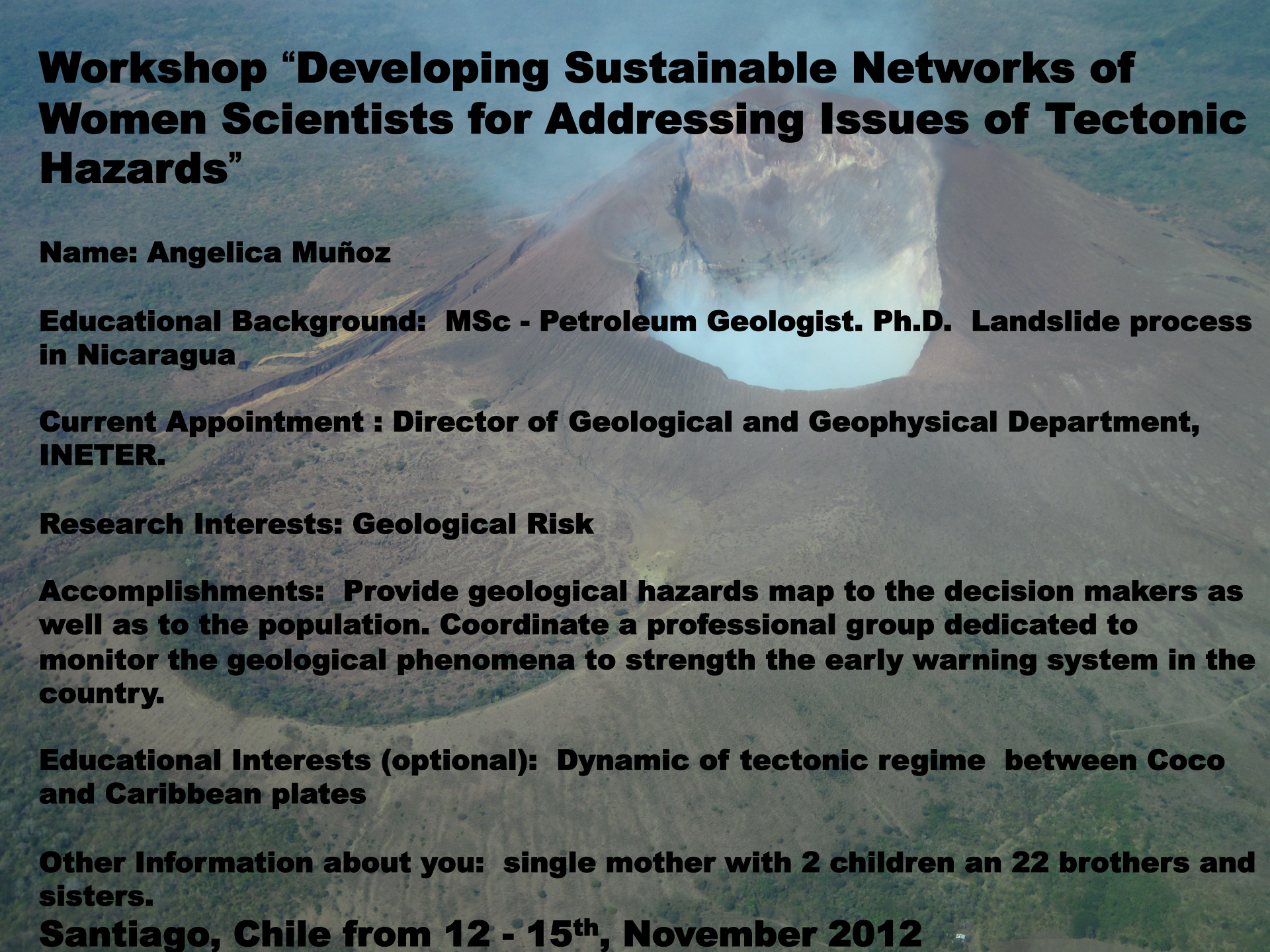
Educational Interests (optional):

Other Information about you:

I would like to share this picture I call “stairs to heaven”,
near to an old landslide.

Can it be saved?



An aerial photograph of a large, conical volcano with a prominent central crater. The volcano's slopes are covered in dark, rocky material, and the crater floor is a lighter, sandy or ashy color. The surrounding landscape is hilly and covered in green vegetation.

Workshop “Developing Sustainable Networks of Women Scientists for Addressing Issues of Tectonic Hazards”

Name: Angelica Muñoz

Educational Background: MSc - Petroleum Geologist. Ph.D. Landslide process in Nicaragua

Current Appointment : Director of Geological and Geophysical Department, INETER.

Research Interests: Geological Risk

Accomplishments: Provide geological hazards map to the decision makers as well as to the population. Coordinate a professional group dedicated to monitor the geological phenomena to strength the early warning system in the country.

Educational Interests (optional): Dynamic of tectonic regime between Coco and Caribbean plates

Other Information about you: single mother with 2 children an 22 brothers and sisters.

Santiago, Chile from 12 - 15th, November 2012

Name: Carol Prentice
 Educational Background: Ph.D. Caltech, 1989
 Current Appointment: Senior Research Geologist, US Geological Survey

Research Interests & Accomplishments: The geologic study of active faults (aka paleoseismology) in northern California and in the Caribbean. In the Caribbean we have identified and studied active faults in Haiti, Dominican Republic, Trinidad, Jamaica, and Puerto Rico.

Septentrional Fault, Dom. Rep.



Enriquillo-Plantain Garden Fault, Jamaica



Ancient earthquake,
 Septentrional Fault, Dom. Rep.

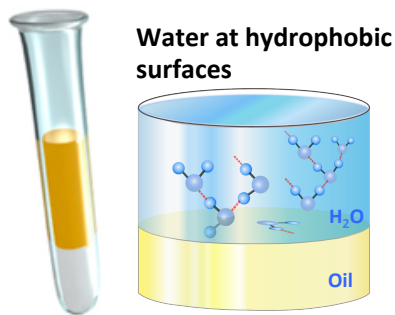


South Lajas Fault, Puerto Rico

Scarp → ←

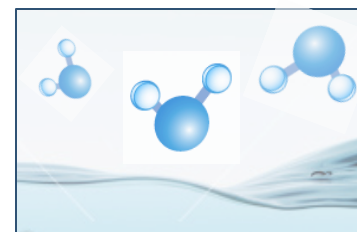


Haiti

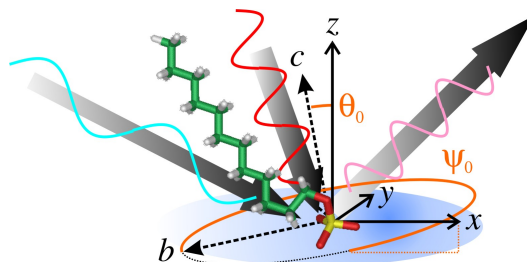
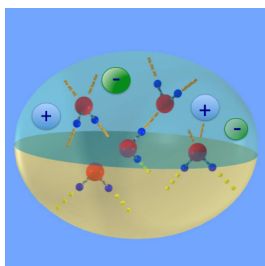


Geri Richmond
Professor of Chemistry, Univ. of Oregon
Ph.D: Physical Chemistry
BS: Chemistry

H-bonding and structure at vapor-water interfaces

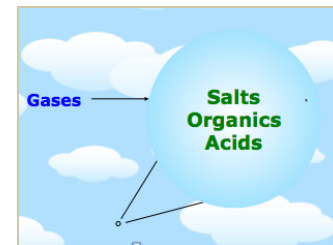


Ion adsorption and transport at organic/aqueous interfaces



Experimental and theoretical studies of:

Structure and chemistry of model aerosol surfaces



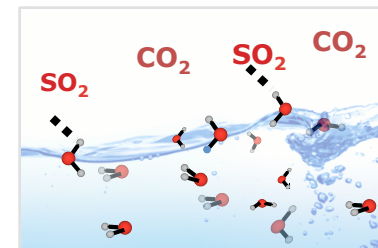
Polyelectrolyte assembly at oil/water interfaces

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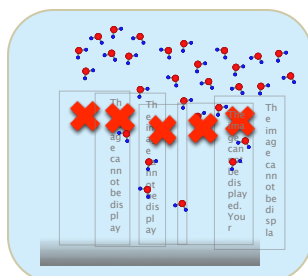
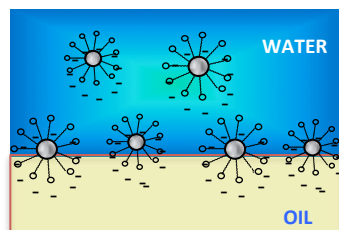
Photocarrier dynamics of solar active materials



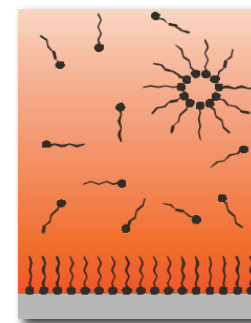
Gaseous adsorption and reactivity at water surfaces



Nanoparticle assembly



Thin film growth on semiconductor and mineral surfaces



Structure and dynamics of surfactant and phospholipid adsorption

Surface chemistry of strong acid solutions

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HNO₃
H₂SO₄
HCl

Lizzette A. Rodríguez Iglesias

University of PR-Mayagüez – Geology – B.S. (1997) and M.S. (2001)

Michigan Technological University – Geology – Ph.D. (2007)

Director and Assistant Professor, Geology Dept., Univ. of Puerto Rico, Mayagüez, PR
Adjunct Assistant Professor, Geol & Mining Eng & Sci, Michigan Tech University, Houghton, MI

Research Interests: Volcanic Hazards, Volcano Monitoring, Volcano-Atmosphere Interactions

Educational Interests: Volcanology courses (Undergraduate and Graduate)

Outreach: Resource for AFAMAC (Alianza para el Fortalecimiento del Aprendizaje de las Matemáticas y Ciencias) program – giving workshops for elementary, intermediate, and high school teachers.



“Developing Sustainable Networks of Women Scientists for Addressing Issues of Tectonic Hazards”

VOLCANIC HAZARDS IN ARGENTINA (PUZZLING OUT)

Elizabeth Ivonne Rovere, Dr. Geology

(Buenos Aires University) – Project Manager in SEGEMAR Argentina – coordination of the Network Volcanoes, Environment and Society GEVAS – Scientific Research in Projects of the Ministry of Science and Technology



Acknowledgments: COACH Coordination Committee - University of Oregon, El Agora Association, Geraldine Richmond, Priscilla Lewis, Peter Baxter, Fernanda Hadad, Paloma Martinez, Daniela Torrisi, Silvia Uber, Roberto Violante....

Lascar and Puna
Volcanoes (periodical
activity)

Vn. Quizapu – Descabezado 1932

Vn. Llaima 2008

Vn. Chaitén 2008
..2000

Vn Puyehue Cordón Caulle 2011

Vn. Hudson 1991



Research Interests: Andean Active Volcanism:
Impact in the Society, Environment and Economies
of Argentina.

Accomplishments: Geological Mapping,
Petrography, Tephrology (Tephra: volcanic ash),
Field Work, GEVAS coordination, meetings, social
internet network, Facebook and Blogspot.

2 TARGETS

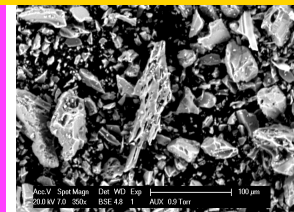
1) Min. Target: Instal Dust (Ash) monitors in
strategical sites for a Health Preventive Plan (++)
children and aged people). Create a Volcanic Ash
Center

2) Max. Target: Concentrate Scientific Database, a
planned volcano monitoring instrumental system
for determined volcanoes and create the Volcano
Observatory of Argentina linked with the OVDAS,
VAAC, WOVO, USGS, IAVCEI,

Educational Interests: 1) University programs for
Master and PhD Degrees in Volcanology and
Volcanic Monitoring. 2) Programs on Volcanic and
Tectonic Hazards for Primary, Intermediate and
High Schools in Argentina.



Electronic Microscope
and Dust Track measures
PM 5 – 10.



Next ?

Jean Stockard, Professor Emerita, University of Oregon

- Education: BA (Mathematics and Sociology), MA (Sociology), PhD (Sociology)

Research: Sociology of gender, including evaluation of COACH projects; social networks; environmental sociology; sociology of education, health, and leisure

Taught in planning and public policy department - social planning, international issues, disaster management.

- Granddaughter, Ava Mae.



Mary Lou Zoback

B.S., 1974, PhD. 1978, both in Geophysics, both Stanford University
currently:

Consulting Professor, Geophysics Department, Stanford University

Appointed Member, U. S. Nuclear Waste Technical Review Board



Research Interests & Accomplishments:

- ❖ Relationship between active faulting, deformation and state of stress in earth's crust
Led World Stress Map project to determine modern stress state within plates globally
- ❖ Quantifying earthquake likelihood
Part of team that developed earthquake forecasts for the San Francisco Bay Area
- ❖ Reducing natural hazard risk and increasing resilience
Analyzed the role of insurance and other risk reduction measures

Educational Interests (optional):

- ❖ Risk communication with both the public and policy makers

Other Information about you:

Love to travel—
just about anywhere!

