

data should be stored in a single, archive-friendly format.

• Metadata should be collected prior to, during, and after an experiment. To improve metadata collection, researchers need user-

friendly tools to record metadata while in the field.

—MARK A. PARSONS, National Snow and Ice Data Center, University of Colorado, Boulder;

E-mail: parsonsm@nsidc.org; AND BRUCE E. WILSON, Oak Ridge National Laboratory, Oak Ridge, Tenn.; E-mail: wilsonbe@ornl.gov

## ABOUT AGU

### Cashman Receives 2006 N. L. Bowen Award

*Katharine Cashman received the N. L. Bowen Award at the 2006 AGU Fall Meeting. The award recognizes outstanding contributions to volcanology, geochemistry, or petrology.*

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#### Citation

It is a privilege and an honor to present the N. L. Bowen citation for Kathy Cashman. She is richly deserving of this recognition owing to her unique and original contributions to the field of volcanology.

Kathy is best known for her quantitative characterization of volcanic rock textures using measurements of the size, size distribution, and shape of both bubbles and crystals. It is a real joy to sit next to Kathy and stare at a pile of SEM photographs of a volcanic rock, and then to watch her pull them apart crystal by crystal, spotting textural nuances that most of us would never have noticed, let alone had the temerity to interpret. As Ian Carmichael wrote in his nominating letter for Kathy, "It is with great chagrin that I realize that the textural features that I have observed but overlooked for long, can be used to reveal such important constraints on the cooling and ascent of magma."

A second area of Kathy's research deals with basaltic lava flows, and how to employ their surface characteristics to infer the dynamics of their emplacement. In collaboration with Ross Griffiths, she has pursued a variety of laboratory-based fluid mechanics studies that have collectively led to a much better understanding of the factors that control lava flow emplacement, with major implications for volcanic hazards.

Finally, Kathy's research addresses degassing-induced crystallization of magmas as they ascend through conduits to the surface. She has shown how the interplay of gas loss and crystallization leads to a highly nonlinear eruptive behavior, with rapid transitions between effusive and explosive regimes. This is best demonstrated in her work on Mount St. Helens, which spans more than 25 years. Moreover, she has written up this research with a clarity and logic that is enviable. As Michael Manga put it in his nominating letter

for Kathy, "She is one of a small number of people for whom I read everything they publish: The writing and reasoning are so clear that I always learn something."

Kathy's academic success lies with three of her most characteristic traits: insatiable curiosity, artistic creativity, and considerable generosity of spirit. These have also made her an outstanding mentor to students at every stage of their careers. I speak for many in our profession when I say that Kathy Cashman is a most cherished friend and inspiring colleague.

—REBECCA LANGE, University of Michigan, Ann Arbor.

#### Response

I am humbled to receive an award that bears the name of Norman L. Bowen, whose legacy I have come to revere over the years. Acceptance speeches are, fundamentally, autobiographical and laden with thanks; mine is no exception, as I accept this award on behalf of the family, colleagues, students, and friends who have supported me through my career.

I became a geologist at Middlebury College, thanks to the plate tectonics excitement of Peter Coney. After Middlebury, I worked in New Zealand and Antarctica, where I succumbed to the 'red rock fever' that plagues most volcanologists. My return to the United States brought me, circuitously, back to volcanoes in the guise of the public information scientist at Mount St. Helens, where I confirmed my passion for volcanology and decided, with the encouragement of senior U.S. Geological Survey scientists, to return to graduate school. At Johns Hopkins University, my advisors Bruce Marsh and John Ferry helped me to transform this passion into the knowledge and self-confidence needed to tackle scientific problems.

My academic career started at Princeton University, where I initiated research themes



Katharine Cashman

that have sustained me through the years. Studies of submarine pumice with Dick Fiske (Smithsonian) and my first graduate student, Caroline Klug, and of basaltic tephra with Maggie Mangan (USGS), introduced me to the dynamics of explosive volcanism and the enchantment of Hawaiian lava flows, where my primary guide has been Jim Kauahikaua, a dear friend and gentle tutor. Lava flow distributaries have led me (1) to the North Atlantic and notorious ODP Leg 163, (2) to Canberra Australia, for experimental work with Ross Griffiths and Ross Kerr, (3) to Mount Etna, Italy, with Sonia Calvari and Harry Pinkerton, and (4) back home to the Cascades, where my students and I have abandoned rock hammers for the shovels required to explore the myriad products of explosive volcanism.

From a broader perspective, I see that turning points in my career have arisen primarily through serendipity: Jon Blundy's (Bristol) visit to Oregon in 1998; a single e-mail from Mauro Rosi (Pisa) in 2001. I am grateful to both of them for sharing their scientific work and their friendship, as well as to my students, my UO colleagues Michael Manga and Paul Wallace, and my department head Dana Johnston. Last but not least, I'd like to thank my extended family, in which I include Becky Lange, who have provided unconditional support for all my endeavors.

—KATHARINE CASHMAN, University of Oregon, Eugene.