

ROBERT WILHELM BUNSEN MEDAL TO RICHEL



The French scientist Pascal Richet has won the prestigious Wilhelm Bunsen Medal of the European Geoscience Union (EGU) for his seminal achievements in advancing our fundamental understanding of geomaterials and for providing conceptual frameworks for the thermodynamic and transport properties of matter within the Earth. The Wilhelm Bunsen Medal was established by the Division of Geochemistry, Mineralogy, Petrology and Volcanology in recognition of the scientific achievements of Robert Wilhelm Bunsen. It is awarded for distinguished research in geochemistry, mineralogy, petrology and volcanology. Pascal Richet works at the Institut de Physique du Globe de Paris. He has been a pioneer in mineral and melt physics for a quarter of

a century. His early work on the thermodynamic and transport properties of silicate melts led to remarkable insights and provided a thermodynamic basis for the calculation of transport properties that is still being analyzed and tested to this day. His groundbreaking studies of pre-melting in crystals have contributed substantially to the understanding of elastic modulus variations in sub-melting temperature solid phases. Finally, his calorimetric studies of silicates have significantly advanced our picture of melt energetics. Without Pascal Richet, our present picture of silicate melts would be much more primitive than it is, full of many of the myths and uncertainties that he has almost single-handedly banished from the literature. Professor Richet accepted his medal and gave his medal lecture 'Volcanic Eruptions and Physics of Lavas' during the EGU General Assembly, in Vienna, Austria, 2-7 April 2006.

EWING RECEIVES DANA MEDAL



Rod Ewing received the Dana Medal of the Mineralogical Society of America (MSA) at the 2006 Joint Assembly of the American Geophysical Union, in Baltimore, May 23-26, 2006. The medal was presented to Rod by MSA president John Valley before his Dana Lecture "Plutonium, Mineralogy and Radiation Effects." The lecture was the inaugural talk of the Dana symposium "Mineral-

ogy and the Nuclear Fuel Cycle," convened by A. Navrotsky and L. Wang and organized by the Mineralogical Society of America. Many colleagues and former students participated in the symposium. Rod particularly appreciated the chance to meet with old friends and discuss the scientific progress that has been made during the past several decades.

Interdisciplinary Graduate Student Research Symposium

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and philosopher of science from California Institute of Technology. To choose the speaker, the organizing committee asked the participating McGill departments for nominations, compiled the names, and sent out the list of nominations for student vote. Dr. Anderson was the top student pick with over 100 votes.

The interdisciplinary graduate student symposium was conceived and organized by a group of graduate students doing science research. As a member of this committee, I can speak on behalf of my teammates when I say that our drive came from the importance of being stimulated by research outside our own discipline and the necessity of good communication and networking.

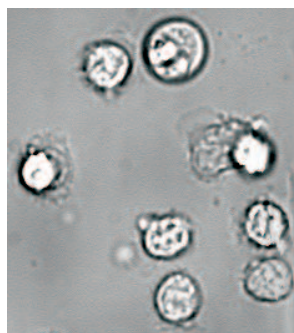
Was the event a success? You decide. Here are a few of my observations. During one question period, a graduate student in the audience offered his lab computer with a high memory capacity to one of his peers to tackle a research question for which the required resources were not available. Questions for the

speakers were from fellow graduate students with different backgrounds, forcing the speakers to think outside the "box." A faculty member, excited about research being done by a graduate student in a different department, offered this student a post-doc position after graduation. Judges from industry gave business cards to students in their last term.

Without the much-needed financial support from the Canadian Society of Petroleum Geologists, the Post Graduate Student Society, the Geological Association of Canada, the Environmental Sciences Research Centre, Falconbridge, Esso, GENEQ Inc., McGill Institute of Advanced Materials, Fisher Scientific, Vancouver Petrographics Ltd., and alumni from the Department of Earth and Planetary Sciences, this student initiative would not have been possible. We would like to acknowledge not just the financial support, but also the continual encouragement from the academic faculty within the different departments and the dean of the Faculty of Science, Dr. Martin Grant.

Cherry-Picking Your Results

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T cells are white blood cells that play important roles in the immune system.

Out of the thousands of cells in the experiment, the cell in the image chosen for the paper is the finest example of what the scientist thinks the cells should be doing. This is like the farmer at the market rolling the peaches over so the bruises don't show. When you read a biology paper, you know that the images in the paper are absolutely the best ones the scientist had, so if the images are sketchy, you know the actual data were far worse.

Live cells and animals are notoriously complex, and therefore biologists may have the greatest opportunities to develop pet theories and claim that their cells or mice are behaving just as they predicted. But I imagine that a geologist

with a sack of ore samples, some of which feel heavier or look more silvery than others, might choose to send off for assay the samples that fit best with his theory (or investment portfolio).

Are we wrong to pick what we think is the best micrograph to go in a paper? It depends. If the "best" sample truly represents the average behavior, that's OK. But if the image in question is an extreme example, then we should be careful. Our theory might be wrong. By choosing to publish data that support our theory, we not only risk misleading others for our own profit, we risk that tomorrow someone else could embarrass us with more honest results—turning our perfect peach over to reveal the moldy underside.