

THE FLUX LINE

News of the Geomagnetism and Paleomagnetism Section of AGU

January 2011

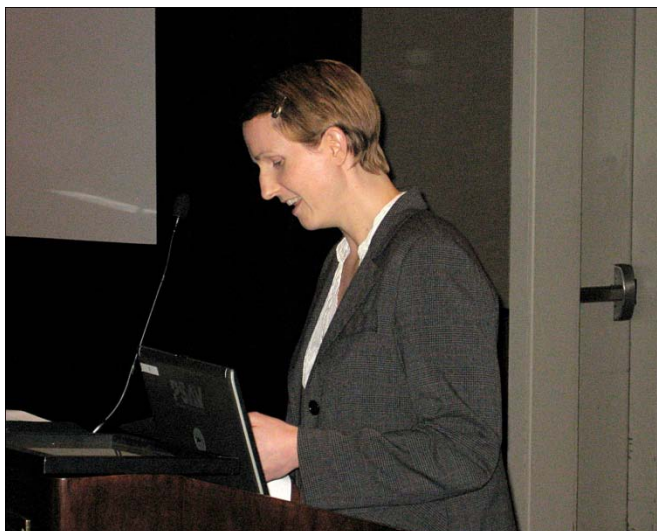
Thanks to GP colleagues for a successful 2010 Fall AGU Meeting

The 2010 Fall AGU Meeting drew roughly 18,400 attendees and 17,400 presentations, the largest Earth science gathering ever. Several of our GP colleagues deserve special recognition for this successful meeting. Catherine Johnson, University of British Columbia, was the Chair of the entire meeting and responsible for all Union sessions. Gary Acton organized our GP oral and poster sessions. Laurie Brown headed a crew of judges to determine the winners of the Outstanding Student Presentation Awards (winners to be announced in the next issue of *The Flux Line*). Julie Bowles oversaw the distribution of AGU travel grants to GP students. Thanks to all for your volunteer support.

And many thanks to our sponsor, 2G Enterprises, for underwriting the cost of our GP Business Meeting and Reception.

Sabine Stanley receives the 2010 Gilbert Award

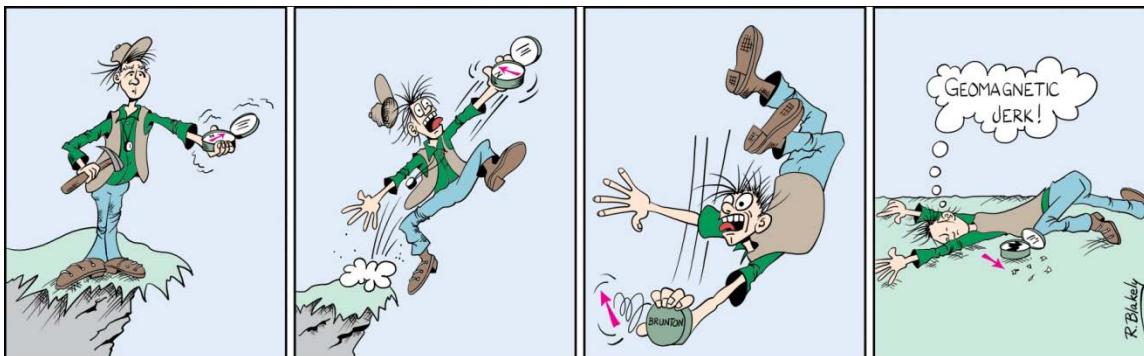
Congratulations to Sabine Stanley, the 2010 recipient of the William Gilbert Award. The Gilbert Award is given annually by the GP Section for outstanding and unselfish work in magnetism of Earth materials and of the Earth and planets. The Gilbert Award is reserved for young scientists in even years, including 2010. Sabine was presented with the award at the GP Business Meeting and Reception in San Francisco, December 14, 2010, with ~200 of her GP colleagues looking on. Sabine is a professor at the University of Toronto and our eighth recipient of the Gilbert Award. Her citation was presented by Benjamin Weiss of MIT.



Sabine Stanley, recipient of the 2010 Gilbert Award.
Photo by Jimmy Diehl.

Hermann Lühr, 2010 AGU Fellow

Hermann Lühr, professor at GFZ Potsdam and a member of the GP Section, was one of 58 AGU geophysicists presented with AGU Fellowship at the 2010 Fall AGU Meeting. Hermann received Fellowship because of his key scientific role in a continuing series of extraordinarily successful satellite magnetic missions which have provided us with a new understanding of the geomagnetic field.



Fleming and Macelwane Medals: Nominations due March 15

AGU has called for 2011 Union Medal and Award nominations. Two are particularly apt for GP members. The Fleming Medal is named in honor of John Adam Fleming for his contributions to the establishment of magnetic standards and measurements. This AGU-wide award is given annually for original research and technical leadership in geomagnetism, atmospheric electricity, aeronomy, space physics, and related sciences. Recent GP recipients have been Robert Parker (2008), Subir Banerjee (2006), David Gubbins (2004), and Ronald Merrill (2002). Information is available at <http://www.agu.org/about/honors/union/fleming>. Nominations are due by March 15, 2011.

The Macelwane Medal, named in honor of James B. Macelwane, is given annually for significant contributions to the geophysical sciences from an outstanding young scientist, less than 36 years of age. Benjamin Weiss, who has GP secondary affiliation, received the Macelwane award in 2009. Information is available at <http://www.agu.org/about/honors/union/macelwane/index.shtml>, and nominations are due by March 15, 2011.

Other deadlines to keep in mind:

- Nominations for the 2011 William Gilbert Award (see article on page 1) are due July 31, 2011. The 2011 Gilbert Award is open to all AGU members regardless of age.
- AGU Fellow nominations traditionally have been required by July 31 of each year, but in 2010, the deadline was delayed until October 1. We expect a definitive call for nominations from AGU soon. Additional information will be available at <http://www.agu.org/about/honors/fellows/nominations>.

Andrew Jackson presents the 2010 Bullard Lecture

The Bullard Lecture is part of the Bowie Lecture Series of the American Geophysical Union and is given annually at the Fall AGU meeting in San Francisco. Andrew Jackson is our 9th Bullard Lecturer. The title of Andy's well-attended presentation was, "Geomagnetic secular variation as a window on the dynamics of Earth's core."

Facebook is coming to the GP website

Our GP Webmaster, Katerina Petronotis, is working with AGU to establish a Facebook page on our GP website. The GP Facebook page will be a place to network with your GP colleagues, share field and laboratory photos, offer links to interesting websites, and find other useful information. Stay tuned to the GP website (<http://www.agu.org/sections/geomag>) and future issues of *The Flux Line* for more information.

New GP projects

The GP Executive Committee is casting about for ways to effectively use donor contributions. GP has long sponsored the William Gilbert Award, Outstanding Student Presentation Awards, and our annual Section-wide Business Meetings and Receptions. Regardless, we need to do more in the way of advancing our science. To this end, we are starting two new projects. First, we are contributing \$1000 to support student travel to the first biennial Summer School of Rock Magnetism, hosted by the Institute for Rock Magnetism (see following article).

Second, we also are exploring with AGU the possibility of hosting a student gathering at the next and following Fall AGU Meetings. We envision a GP-hosted breakfast or lunch, open to all GP students. A select group of GP scientists will be invited to answer student questions about GP science opportunities and experiences. We hope this gathering will foster communication and establish connections between students, as well as encourage their future research activities. We will post information on the GP website and in *The Flux Line* as this project develops.



**Andrew Jackson, at the 2010 presentation of the Bullard lecture, San Francisco.
Photo by Jimmy Diehl.**

Summer School of Rock Magnetism 2011: A Community Based Program for Training the Next Generation of Paleomagnetists

This article was contributed by Bruce Moskowitz. Magnetic geoscience research uses sensitive, nondestructive measurements on natural materials to illuminate geomagnetic field history, tectonic processes, and environmental changes. Learn more about the fundamentals and applications at the first biennial Summer School in Rock Magnetism (SSRM), which will be held from June 6-15, 2011 at the Institute for Rock Magnetism (IRM) in Minneapolis. The 10-day program is targeted at graduate students and advanced undergraduate students in rock magnetism, paleomagnetism, and associated fields. Students will receive intensive instruction in rock magnetic theory and laboratory techniques. A daily schedule of lectures, hands-on laboratory measurements, and data processing will introduce students to the fundamentals of rock magnetism and the practical aspects of collecting and interpreting data responsibly. Instructors for the summer school will be primarily IRM Faculty and staff.

Participant costs will include a \$100 registration fee, housing (~\$20 per night), meals, and travel to and from Minneapolis. For students from outside the Minneapolis-St. Paul area, housing will be available in University of Minnesota dormitories. A limited number of scholarships (\$200-\$250) provided by the GP Section will be available to cover some of the costs for attending the summer program. Applications must be received by the deadline, March 25, 2011.

For more information and details about registration as it becomes available, see the IRM webpage at www.irm.umn.edu.

Post-doc and early-career opportunities

- **AGU Travel Grants to IUGG.** AGU offers a limited number of NSF-funded travel grants for students and early career researchers to attend the IUGG General Assembly in Melbourne, Australia, June 28-July 8, 2011. Applicants must be US citizens or permanent residents, and full-time graduate students or early-career researchers (within 7 years of PhD). Applicants must submit an abstract to IUGG as first author and presenter. Abstract deadline is February 1, 2011; application deadline is January 31, 2011. Additional information is available at www.agu.org.
- **NASA.** The Earth and Space Science Fellowship (NESSF) program of NASA is calling for graduate fellowship proposals. Proposals must be from accredited U.S. universities and written on behalf of individuals pursuing MS or Doctoral degrees in Earth and space sciences or related disciplines. Deadlines are February 1, 2011 (new applications) and March 15, 2011 (renewal applications). Information is available at nspires.nasaprs.com, or contact Ming-Ying Wei (mwei@nasa.gov) or Dolores Holland (hq-nessf-space@nasa.gov).
- **Scripps Institution of Oceanography, LaJolla.** Scripps Institution of Oceanography invites applications for several institution-wide post-graduate positions in any of the major areas of research conducted at Scripps, including physical, chemical, biological, geological, and geophysical studies of the oceans, earth, and atmosphere. Deadline for application is March 1, 2011. More information is available at http://sio.ucsd.edu/Research/Post_Docs/stc_ad.php, or contact Carrie Byrd (cbyrd@ucsd.edu).
- **Université de Nantes, France.** A post-doctoral position is available for study of the Martian remanent magnetic field, the past geodynamo, and its effect on Martian environments. Deadline is open. Contact Professor Benoit Langlais (benoit.langlais@univ-nantes.fr).
- **Institute for Rock Magnetism, Minneapolis.** Support is provided for up to 10-day research visits in three areas: Visiting Research Fellows, U.S. Student Fellows, and researchers whose primary goal is to use the u-channel magnetometer system. Applications are accepted twice per year (April 30, October 30). Contact IRM (internet:irm@tc.umn.edu) or visit the web page at www.irm.umn.edu.
- **University of Tübingen, Germany.** A post-doctoral position is available to investigate the last 5 million years of paleoenvironmental evolution of the northeastern Tibetan Plateau. Deadline is open. Contact Professor Erwin Appel (Erwin.appel@uni-tuebingen.de).

Post docs on the move

We continue the tradition (started last issue) of listing GP post docs (with their permission), providing brief bios and contact information. If you are a GP post doc, please send your information to *The Flux Line*.

- **Nicola Pressling:** PhD from the University of Leeds. Currently a NERC Research Fellow at the University of Southampton working on the structural and magmatic evolution of the ocean crust from reoriented IODP cores. N.J.Pressling@soton.ac.uk.
- **Natalia Bezaeva:** PhDs from M.V. Lomonosov Moscow State University (Russia) and Aix-Marseille III University (France). Currently a Post Doctoral Research Associate at the Imperial College London (Dept. of Earth Science and Engineering) working on the effect of chemical alteration on the fidelity of palaeomagnetic pseudo-single-domain recorders. n.bezaeva@imperial.ac.uk
- **Greig Paterson:** PhD from the National Oceanography Centre, University of Southampton. Currently a Young International Research Fellow at the Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, working on the paleomagnetism (with an emphasis on paleointensity) of the Emeishan large igneous province in SW China. greig.paterson@mail.igcas.ac.cn.
- **Chris Davies:** PhD from the University of Leeds. Currently a Green Scholar at Scripps Institution of Oceanography working on outer core evolution and geodynamo modeling. In April 2011 will begin a NERC Research Fellowship at the University of Leeds. cjdavies@ucsd.edu.
- **Maxwell Brown:** PhD from the University of Liverpool. Previously an NSF-supported research associate at the Institute for Rock Magnetism, University of Minnesota, working on paleointensity methodologies. Maxwell began a post-doc position at GFZ Potsdam in January 2011, where he conducts research on the evolution of the Holocene geomagnetic field. mcbrown@gfz-potsdam.de.

Thanks to John Geissman, *Eos* editor

John Geissman, University of New Mexico, is stepping down as *Eos* solid Earth editor, a position he has held since 2001. John is being replaced by Carol Stein of the University of Illinois at Chicago.

Changes to AGU publication fees

AGU has announced several major changes to AGU publication charges. Color charges will be eliminated in all formats and publications fees will be simplified. The *Journal of Geophysical Research (JGR)*, and *Geochemistry, Geophysics, Geosystems (G³)* will each charge a flat fee of \$1000; *Geophysical Research Letters (GRL)* will have a flat fee of \$500. (Excess pages will add additional fees, however.) These and other changes are described at http://www.agu.org/pubs/pdf/AGU_Publication_fees.pdf.

Upcoming symposium on three-dimensional electromagnetic research

The 5th International Symposium on Three-Dimensional Electromagnetics (3DEM-5) will be held in Sapporo, Japan, in October 2011. The Gerald W. Hohmann Memorial Trust and the Local Organizing Committee invite all EM researchers to this important event. If you are interested in attending, signify your intention by sending email to the Local Organizing Committee (3dem5@segj.org) with subject line "3DEM-5". Deadline is January 31, 2011. Additional information is available at www.segj.org/3dem5



John Geissman (left) and Rob Van der Voo at the GP Business Meeting and Reception, 2010.
Photo by Jimmy Diehl.

New version of ZPLOTIT now available

This article was contributed by Gary Acton. A new version of ZPLOTIT is available at <http://paleomag.ucdavis.edu/software-zplotit.html>. ZPLOTIT is a Unix-based program to produce vector demagnetization diagrams, intensity-decay plots, and stereonet; and compute principal component analysis (PCA) from paleomagnetic data. The new version (ZPLOTIT v2011-01) includes both modified Zijderfeld plots (Z vs. H) used in the previous version of ZPLOTIT, as well as traditional Zijderfeld plots (Z vs. E and Z vs. N). The manual (<http://paleomag.ucdavis.edu/Zplotit/ZPLOTIT-Users-Guide-v2011-01.pdf>) describes the software, gives examples of its use, and provides installation instructions. It is intended to work on any Unix platform. The software uses and includes Fink software packages and the Generic Mapping Tool (GMT). ZPLOTIT and its supporting software are FREE.

Upcoming meetings and abstract deadlines

- EGU General Assembly 2011, Vienna, Austria, April 3-8, 2011. Abstract deadline January 10. http://meetings.copernicus.org/egu2011/information/general_information.html.
- IUGG, Earth on the Edge: Science for a Sustainable Planet, Melbourne, Australia, June 28-July 7. Abstract deadline February 1. <http://www.iugg2011.com>.
- LATINMAG Second Biennial Meeting, Buenos Aires, Argentina, November 23-26, 2011. Abstract deadline May 3, 2011. <http://www.geofisica.unam.mx/LIMNO/LATINMAG>.

Newsletter contributions are welcome.

We welcome news items of general interest to the GP community. Please keep them brief (150 words or less) and send to Rick Blakely (blakely@usgs.gov).

—GP Executive Committee