

George Miner Inducted 1979, University of Dayton

"I've been to five of these Congresses, and they just keep getting better and better!"

Few people can genuinely say that, and the one that did certainly knows of what he speaks: Dr. George Miner, past President of the physics honor society from 1986-1990, is a long-time supporter of Sigma Pi Sigma. As the second winner of the Sigma Pi Sigma Worth Seagondollar Service Award in 2000, George's contributions to the organization display a depth and breadth rarely seen, from chapter advisor to Council member, from Congress planning to fund-raising. George received degrees in physics from Thomas More College (BA), the University of Notre Dame (MS), and the University of Cincinnati (PhD), and was inducted into Sigma Pi Sigma in 1979 at the University of Dayton.

As a member of the SPS Governing Council from 1980-2000, George was one of the earliest and staunchest advocates for SPS scholarships for physics students. Starting from a single scholarship in 1985, 350 SPS Leadership Scholarships have now been granted. George was also prominent among those who acted to re-establish the tradition of the Sigma Pi Sigma Congresses: he was the local chair of the first modern Congress held in Dayton in 1992, and he served as the planning committee chair of the 1996 Diamond Jubilee Congress in Atlanta in 1996. Now as a member of the Sigma



Ruth and George Miner

Pi Sigma Development Committee, George continues his efforts to provide resources and guidance for physics students and for the society. In addition, George and his late wife Ruth have generously supported Sigma Pi Sigma financially over the years through donations, and through the transfer of stock holdings. Talk about impact!

If you would like more information about contributing to Sigma Pi Sigma through transferring stock, please contact Luke Heselden at lheselde@aip.org.

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May Lee Kettler Inducted 1940, Purdue University

While George chooses to donate stock, Mary Lee Kettler, nee Hickman, chose a different path. Mrs. Kettler completed her BS degree at Purdue in 1940 and was inducted into Sigma Pi Sigma early that year, then finished her MS degree at the University of Michigan in 1941. Eventually the Kettlers moved to Irvington, NY, and after rearing three children, she decided to give back to the physics community in which she thrived by including Sigma Pi Sigma in her will. Mary Lee Kettler passed away on April 19, 2008, but she will be remembered within Sigma Pi Sigma for her generous bequest to the organization. Her gift will provide scholarship money, research funds, and travel support to physics students for many years to come.

If you would like more information about contributing to Sigma Pi Sigma by designating a bequest, please contact Luke Heselden at lheselde@aip.org.

Photo by Phillip Payette



Sigma Pi Sigma President Ann Viano (left) and Student Associate Councilor Representative Jenna Smith (right) look on as Catherine O'Riordan signs the red book.

Catherine O'Riordan Inducted 2009, American Institute of Physics

Sigma Pi Sigma was pleased to welcome Catherine O'Riordan into membership during the annual SPS National Council Meeting in September. Her membership was based on her outstanding professional record, "for a career of leadership in the application of fundamental and computational fluid dynamics to significant problems in biogeochemical processes and the physiology of ingestion and locomotion in sea creatures, for studies of phytoplankton growth and transport in realistic models of the physical environment of rivers and estuaries, for comprehensive studies of the Seine watershed, river, and estuary, as well as portions of the Mediterranean sea, for leadership in public affairs and other programs of the American Geophysical Union." Since July 2008, Catherine has been the Vice President of Physics Resources at the American Institute of Physics (AIP), which oversees SPS and $\Sigma\Pi\Sigma$. Catherine came to AIP from the Consortium for Ocean Leadership in Washington, DC and has a Ph.D. in Environmental Fluid Mechanics from Stanford University.

Gertrude Rempfer Awarded Honorary Membership, 2008

On February 8, 1933, twelve years after the formation of Sigma Pi Sigma, Gertrude Fleming signed the University of Washington Chapter Book as the 57th member. On December 12, 2008, as Gertrude Fleming Rempfer, she became the newest Honorary Member of Sigma Pi Sigma, receiving the society's highest recognition for accomplishment in physics. The arc of time between these two milestones circumscribes a life of honor, Encouragement, Service, and Fellowship, the four dimensions of the mission of Sigma Pi Sigma.

Dr. Rempfer, known to one and all as Gert, received both her bachelor's and doctoral degrees in physics from the University of Washington, a school with a long history of welcoming women in physics. She began her professional career as she continues it today: a leader and pioneer at the cutting edge of theoretical and experimental electron optics and electron microscopy. She went on to teach at Mt. Holyoke and Russell Sage Colleges. In the midst of World War II, she was recruited to work on the Manhattan Project at both the Naval Research Laboratory and Columbia University. After the war, Gert entered industry, publishing several patents and developing prototype electron microscopes.

During the 1950s, Gert returned to academics. At the same time, issues of civil rights were starting to roil on campus. She was and remains a stout advocate of equal rights for all. She paid a price for this: moving from campus to campus. Later, Fisk University, one of the stops on her journey, brought her back for the presentation of a Certificate of Recognition as One Concerned for the Greater Good of Humankind.

Since 1959, Gert has been a key member of the faculty of Portland State University. She established excellent ties to local industry, including Textronix when it was the premier

Photo by Sergei Rouvimov



Gert Rempfer receiving a certificate from Zone Councilor Ajay Narayanan on the occasion of becoming an Honorary Member of Sigma Pi Sigma, as Assistant Director Thomas Olsen looks on.

Portland State University Physics Department Archive



Gert Rempfer in her laboratory, developing the next generation of electron microscopes.

developer and manufacturer of oscilloscopes in the world. To this day, her laboratory is abuzz with undergraduates, graduate students, and postdoctoral fellows, all advancing the field of electron microscopy. After 20 years as a full-time faculty member, she retired only to become even more productive in her research. This led to the development of a new device: the photoemission electron microscope. Always a prolific contributor of articles to scholarly publications, in 2006 she wrote

one article for the *Journal of Vacuum Science and Technology* on new observations and another for the *American Journal of Physics* on the use of a transmission electron microscope for physics lecture demonstrations. Today she still spends three days a week in the laboratory, seeking to overcome all forms of aberration in electron optics.

Gert was designated an Honorary Member of Sigma Pi Sigma by a vote of the National Council of the Society of Physics Students and Sigma Pi Sigma. She was presented with her certificate on the occasion of the installation of a new chapter of Sigma Pi Sigma at Portland State University. She beamed as she displayed, for one and all to see, the Sigma Pi Sigma recognition pin she had received when recognized as an undergraduate. On the reverse side, it bears her member number of 57. The entire society is honored to have Gertrude Fleming Rempfer as a cherished member.