In Memory of Paul Ageron

Paul Ageron died on February 10, 1998. He has been an outstanding figure in the domain of reactor physics. All of his working life was devoted to improving the quality and the intensity of the neutron flux delivered to scientific instruments. Having graduated from the French Ecole Polytechnique, he took his first steps at the Commissariat à l’Énergie Atomique in Grenoble where he worked on the first two reactors—Mélusine and Siloe.

In 1964 Ageron presented a paper at the IAEA international conference on peaceful uses of atomic energy. This paper, entitled “Un Réacteur à Haut Flux et Faisceaux Sortis” (“A High Flux Reactor with External Beams”), was published in 1965. It gave most of the parameters of the present ILL high flux reactor and helped trigger a long diplomatic operation in which Germany and France decided to build ILL in Grenoble. Meanwhile, Ageron was leading experiments at the CEA which allowed the conception and the definition of the vertical cold source of the HFR.

Later, after the commissioning of the reactor, Ageron proposed the idea of a cavity in the source to improve the flux of the cold neutrons. This was implemented in 1985, together with the ultra cold source, which started in 1987. He was also generous with his expert advice in the development of other neutron sources and worked on many other ideas, for example, a hot source operated at a higher temperature than the present one.

Ageron was always solving everyday problems on neutron flux, spectrum or background aspects. Until recently he was working on flux calculations for a new beam tube for the triple axis spectrometer IN 8 and for the radioactive beam facility PIAFE. He had enormous experience and a unfailing good judgment. He could often, by a simple calculation on the back of an envelope, give with good approximation what long computer calculations would later only confirm.

Ageron was a respected personality in the scientific world and he was loved by all who lived and worked with him. “He did everything to create that friendly atmosphere which has been the source of our international success. I think of him with all my gratitude,” said Heinz Maier-Leibnitz, the first director of the ILL. “Although I never had the honor of working directly with Paul, I have lost a friend and an inspiration. Many of the ideas incorporated in our cold source originated with him. All of us who use neutrons in any way are forever in his debt,” said J.M. Rowe, director of the NIST Center for Neutron Research.

“Many years ago he gave us sagacious advice for realizing a cold source at SINQ, which is now operating with excellent performance. Paul Ageron’s death is a great loss for the neutron community and we will sadly miss his profound professional understanding, inventiveness and enthusiasm,” said Albert Furrer, director of the Laboratory for Neutron Scattering, ETH Zurich & PSI. “The mixture of intellectual genius and of personal modesty made him highly esteemed among his colleagues and friends,” said R. Haensel, former director of the ILL. “Paul Ageron was not only a genius, but a very lovable genius. Although few could understand his ideas or his explanations of them, his presentations of them carried such weight and authority that they were believed, and invariably proved right. He had an instinctive understanding for the behavior of neutrons which was unparalleled,” said P. Schofield, former assistant director of the ILL.

In 1996 Ageron wrote an article for a meeting on nuclear reactors at the CEA. Neutron News will publish a reprint of this article entitled, “Neutrons in the Exploration of Matter—Reactors with External Beams,” in a forthcoming issue.

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