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In memoriam: Prof. Lasar Shvindlerman



Professor Lasar Shvindlerman died on March 3, 2018 in the age of 82 in Aachen, Germany. He was one of the world-leading scientists in the fields of materials science, thermodynamics and kinetics of phase transformations as well as physics and chemistry of interfaces in solids. Lasar Shvindlerman was born in 1935 in Gitomir, Ukraine (former USSR). The World War II forced him together with his mother and grandmother to flee to Tashkent, Uzbekistan, while his father Simkha was fighting with Nazis as military pilot. After the war the family came back to Kiev, where Lasar Shvindlerman finished the middle school and then studied at Kiev Polytechnical Institute (nowadays Technical University of Ukraine). After the university, he performed his PhD work at Moscow Institute of Steel and Alloys (nowadays National University of Science and Technology MISiS). In 1967 Lasar Shvindlerman started to work at the Institute of Solid State Physics (ISSP) of the Academy of Sciences of the USSR in Chernogolovka near Moscow and remained its employee until the end of his life.

Professor Lasar Shvindlerman established at ISSP the Laboratory of interfaces in metals. Here he and his students and co-workers performed the seminal experiments on individual grain boundaries (GBs) in metallic bi-crystals. It was for the first time experimentally demonstrated here how the thermodynamic and kinetic properties of grain boundaries correlate with the structure, especially with features of respective coincidence sites lattices. The theory of interaction of migrating GB with the atmosphere of impurities was also created there. In the same time he was lecturer and then

professor at MISiS, Moscow. After 1990 Lasar Shvindlerman started a close collaboration with RWTH Aachen, Germany and stayed most of his time there. This period of his life was extremely fruitful. Together with Professor Günter Gottstein he developed the theory of behaviour of grain boundaries, GB triple and quadruple junctions in nanograined materials. Lasar Shvindlerman was an invited professor in several institutions in Germany, Israel, Japan, Poland and USA. He acted as a member of the Editorial Board in *Materials Letters*, member of International Scientific Boards of multiple conferences. Lasar Shvindlerman wrote multiple seminal monographs and more than 300 scientific papers. He obtained multiple prestigious awards such as the Alexander von Humboldt prize, Max Planck award and the G.V. Kurdjumov medal.

For the colleagues of his generation Lasar was a good and trusty friend. For the younger people he was the brilliant teacher, inspired by the science and miracles of nature. His humour, brilliant jokes, exploding ideas, his talent was something completely opposite to the dull, tedious, stodgy Soviet style. For us, the younger students and colleagues, it was a sign that something would change in the future. The changes came at the end of 1980s. When Lasar came back from his first trip abroad (from the iib-conference in Paris), we asked him: "Does Paris really exist?" Lasar was over 50 when he insistently studied English and started to speak it fluently. He never needed it before... And the world opened for him.

All of us, we are glad that we had the chance to meet Lasar Shvindlerman in our life, to share so many years, to observe his smile, to laugh at his jokes, to hear his famous table speeches, to work and debate with him. And it is extremely bitter and sad that he left us so early.

On behalf of all editors of *Materials Letters*, we recognize the impressive contributions of Prof. Lasar Shvindlerman as a most valuable member of our team, who supported the journal enormously with his scientific knowledge and dedication over the years. We will honor his memory.

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