

# IN MEMORIAM

Professor

## Lasar Shvindlerman

20 September 1935 – 3 March 2018



Professor Lasar Shvindlerman died on March 3, 2018 in the age of 82 in Aachen, Germany. He was of the world-leading scientists in the field 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 of the Academy of Sciences of USSR in Chernogolovka near Moscow and remained its employee till the end of his life.

Professor Lasar Shvindlerman grounded in 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 has been for the first time experimentally demonstrated here how the thermodynamic and kinetic properties of grain boundaries correlate with those structure, especially with features of respective coincidence sites lattices. The theory of interaction of migration 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 the tight 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 invited professor in several institutions in Germany, Israel, Japan, Poland and USA. He acted as a member of 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 awards like Alexander von Humboldt prize, Max Planck award and 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 the nature. His humour, brilliant jokes, exploding ideas, his talent was something completely opposite to the dull, tedious, stodgy Soviet style. For us, the young people, it was a sign that something can change in the future. The changes came at the end of 1980ies. When Lasar came back from his first trip abroad (from iib-conference in Paris), we asked him: “Does Paris really exist?” Lasar was over 50 when he insistently studied English and started to speak fluently. He never needed it before... And the world opened for him.

All of us, we are glad that we had a chance to meet Lasar Shvindlerman in our life, to be together 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 that he left us so early....

*Boris Straumal*