

In memory of Pyotr Nikolaevich Lebedev



PYOTR NIKOLAEVICH LEBEDEV
8 March 1866–14 March 1912

A hundred years ago, on 14 March 1912, Russia lost its most illustrious physicist, the founder of the first Russian school of physics — Pyotr Nikolaevich Lebedev. He was the first in the world to measure the pressure of light on solids, and his subtle experiments provided irrefutable proof of Maxwell's theory. The great Lord Kelvin best expressed the profound impression made by these wonderful experiments on contemporaries. On meeting Kliment Timiryazev, he said (his words were reproduced in the article in Uspekhi Fizicheskikh Nauk (vol. XVII, issue 4, 1937) by P P Lazarev, Lebedev's pupil and successor who continued Lebedev's work after his death): "Perhaps you know that all my life I have been fighting Maxwell, refusing to recognize his light pressure, and now your Lebedev has forced me to surrender in the face of his experiments!" And ten years later (having overcome numerous experimental hurdles which seemed insurmountable to many a brilliant physicist of that time), Lebedev successfully performed even more complex experiments on measuring the pressure of light on gases. This outstanding result was published in 1910 and was a real triumph: Lebedev's experimental wizardry was applauded both in Russia and abroad, which led the Royal Society of Great Britain to elect Lebedev to an honorary fellowship, the first Russian physicist to receive the honor. Lebedev was not only an outstanding experimentalist, but also a brilliant science supervisor. Having learnt a very great deal in Germany in his youth under the tutelage of the prominent German physicists Kundt and Helmholtz, Lebedev tried to reproduce in Moscow the best aspects of the German scientific school and, in turn, pass this tradition on to his pupils. Lebedev wrote: "The key to the strength of science lies in the continuity of knowledge [from generation to generation]." Despite Lebedev's untimely death (he was only 46 years of age!), his students (P P Lazarev first of all) managed to sustain these traditions and carry them through the terrifying years of wars and revolutions and to hand them down to subsequent generations of physicists in our country. Many outstanding achievements of physics in our country are born of the traditions and experience of Lebedev's scientific school. We fully recognize the marvelous contributions of P N Lebedev and his school to many aspects of our modern life and gratefully revere his precious memory.

*Editorial board and editorial team
of the Uspekhi Fizicheskikh Nauk (Physics–Uspekhi) journal*