



J. GEORG BEDNORZ

NOBELOVA NAGRADA ZA FIZIKU

NOBEL PRIZE IN PHYSICS

J. Georg Bednorz rođen je u Neuerkirchenu u Njemačkoj. Diplomirao je kristalografiju na Sveučilištu u Münsteru, a doktorirao na švicarskom Federalnom institutu za tehnologiju.

1987. godine dodijeljena mu je Nobelova nagrada za fiziku s Alexom Müllerom za otkriće supravodljivosti u keramičkim materijalima. 1986. su postigli supravodljivost u lantan-barij-bakrovom oksidu (LBCO) na temperaturi od 35 Kelvina (-238°C), što je 12 Kelvina više od najviše temperature na kojoj je

do tog trenutka postignuta supravodljivost na nekoj tvari. Otkriće je uzrokovalo veliki interes za visokotemperaturnu supravodljivost, što je dovelo do dalnjih istraživanja na materijalima od bakra sa strukturama sličnim LBCO-u zato što su se prije njihovog otkrića keramički materijali smatrali isključivo izolatorima, ne i supravodičima.

Unatoč tome što je danas umirovljen i više nije aktivan u istraživanjima, i dalje pomaže tvrtkama pronaći načine primjene visokotemperaturnih supravodiča.

Georg Bednorz was born in Neuerkirchen, Germany. He majored in crystallography at the University of Münster in Germany and obtained his doctorate at the Swiss Federal Institute of Technology in Switzerland.

He was awarded the 1987 Nobel Prize in Physics together with Alex Müller for their important break-through in the discovery of superconductivity in ceramic materials. In 1986 they succeeded in achieving superconductivity in a barium-lanthanum-copper oxide (LBCO) at a temperature of 35 Kelvins (-238°C), which is

12 Kelvins higher than the highest temperature at which superconductivity had previously been achieved in any substance. The discovery generated a great deal of interest in high-temperature superconductivity, leading to a lot of additional research on cuprate materials with structures similar to LBCO, for before their discovery ceramics were considered only insulators, not superconductors.

Despite his retirement, Bednorz is still helping firms to find applications of high-temperature superconductors.



NOBEL DAYS

Split, Croatia

nobeldays.com