

US Nobel winner sees 'dream of LED lighting' become reality

October 7 2014

US-based researcher Shuji Nakamura, one of three scientists [to win the Nobel Prize Tuesday for Physics](#), said he was delighted to see his "dream of LED lighting" become a reality.

The three researchers invented the LED lamp when they produced bright blue beams from semiconductors in the early 1990s, triggering a transformation in lighting technology.

Nakamura, a Japanese-born US national, won the award alongside Japanese scientists Isamu Akasaki and Hiroshi Amano.

"I am very honored to receive the Nobel Prize," said Nakamura, a professor of materials and electrical and computer engineering at the University of California, Santa Barbara.

"I hope that energy-efficient LED light bulbs will help reduce energy use and lower the cost of lighting worldwide," he added.

Nakamura is the sixth UCSB faculty member to have won a Nobel Prize since 1998.

"By making it possible to bring affordable, energy-efficient LED lighting to developing countries, Professor Nakamura has also made a tremendous humanitarian contribution to our world," UCSB Chancellor Henry Yang said.

LED lamps emit a bright white light, last for tens of thousands of hours and use just a fraction of energy of the incandescent lightbulb pioneered by Thomas Edison in the 19th century.

"It is very satisfying to see that my dream of LED lighting has become a reality," Nakamura said.

The most advanced LED lamps now consume nearly 20 times less electricity than regular light bulbs and their performance is improving.

Red and green diodes have been around for a long time—but without blue light, white lamps were impossible.

"Their inventions were revolutionary," the jury said. "Incandescent [light bulbs](#) lit the 20th century. The 21st century will be lit by LED lamps."

Unusually for a recipient of the Nobel Prize, Nakamura was employed at Nichia Chemicals, a small Japanese company, when carrying out the research that was rewarded on Tuesday in Stockholm.

Akasaki worked together with Amano at the University of Nagoya, when conducting their part of the path-breaking research.

Nakamura, known for his work with semiconducting gallium nitrides, joined the UCSB faculty in 2000, where he still works with the materials.

Born in 1954 in Ehime, Japan, Nakamura is a graduate of the University of Tokushima where he received his bachelor's, master's and doctoral degrees.

The winners will share the [prize](#) sum of eight million Swedish kronor (\$1.1 million, 883,000 euros).

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Citation: US Nobel winner sees 'dream of LED lighting' become reality (2014, October 7)
retrieved 25 April 2024 from <https://phys.org/news/2014-10-nobel-winner-reality.html>

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