

Hiroshi Amano



Presentation title

Group III nitrides as a tool for establishing sustainable smart society

Professor Hiroshi Amano, Doctor of Engineering

Hiroshi Amano received his BE, ME and DE degree in 1983, 1985 and 1989, respectively, from Nagoya University. From 1988 to 1992, he was a research associate at Nagoya University.

In 1992, he moved to Meijo University, where he was an assistant professor, associate professor from 1998 till 2002, and professor from 2002 till 2010. He moved to Nagoya University, where he was a professor of Graduate School of Engineering from 2011 till 2015.

On Oct. 1, 2015, he became a director of Center for Integrated Research of Future Electronics, Institute of Materials and Systems for Sustainability, Nagoya University. He has also been the director of the Akasaki Research Center (Akasaki Institute), Nagoya University since 2011.

During his doctoral program at the Nagoya University Graduate School of Engineering, he was able to realize high-quality epitaxially grown GaN film with metal-organic vapor phase epitaxy (MOVPE), p-type GaN film doped with Mg while conducting research with Professor Akasaki. For the first time in history, he established the technology necessary for the production of blue LEDs, thus performing a great achievement the development of the high-luminosity blue LED.

He is currently developing technologies for the fabrication of high-efficiency power semiconductor development and new energy-saving devices at Nagoya University. He has over 552 publications, and 32 patents. Prof. Amano shared the Nobel Prize in Physics 2014 with Prof. Isamu Akasaki and Prof. Shuji Nakamura "for the invention of efficient blue light-emitting diodes which has enabled bright and energy-saving white light sources"