

# Curriculum Vitae

**Name:** Tsuneya ANDO  
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**Date of Birth:** December 20, 1945  
**Birth Place:** Yamagata, Japan

## Education

Mar. 1968: Bachelor of Science, Department of Physics, University of Tokyo  
Mar. 1970: Master of Science, Department of Physics, University of Tokyo  
Mar. 1973: Doctor of Science, Department of Physics, University of Tokyo

## Work Experience

Apr. 1973 – Jan. 1979: Research Associate, Department of Physics, University of Tokyo  
Feb. 1975 – Dec. 1975: Visiting Researcher, Physik-Department, Technische Universität München  
Jan. 1976 – Dec. 1976: Research Fellow of Alexander von Humboldt Foundation, Physik-Department, Technische Universität München  
Oct. 1977 – Sep. 1978: Visiting Scientist, IBM Thomas J. Watson Research Center  
Jan. 1979 – June 1983: Associate Professor, Institute of Applied Physics, University of Tsukuba  
July 1983 – Dec. 1989: Associate Professor, Institute for Solid State Physics, University of Tokyo  
Jan. 1990 – Mar. 2002: Professor, Institute for Solid State Physics, University of Tokyo  
Apr. 2002 – Mar. 2011: Professor, Department of Physics, Tokyo Institute of Technology  
Apr. 2011 – Mar. 2016: Institute Professor, Department of Physics, Tokyo Institute of Technology  
Apr. 2016 – Present : Department of Physics, Tokyo Institute of Technology  
Aug. 2017 – Present : Honorary Director, SKKU Advanced Institute of Nano Technology, Suwon, Korea  
Apr. 2018 – Present : Visiting Fellow, Toyota Physical and Chemical Research Institute, Nagakute, Aichi  
Apr. 2012 – Mar. 2015: Editor-In-Chief of Journal of the Physical Society of Japan  
June 2006: Emeritus Professor, University of Tokyo  
April 2011: Emeritus Professor, Tokyo Institute of Technology  
July 2011: Honorary Professor, Tokyo Institute of Technology

## Membership

Member, Physical Society of Japan  
Member, American Physical Society (Fellow)  
Member, Japan Society of Applied Physics

## Awards

- 1982 Nishina Memorial Prize (Theoretical Study of Two-Dimensional Systems in MOS Inversion Layers)
- 1983 Japan Academy Prize (Theory of Quantum Transport in MOS Inversion Layers in Strong Magnetic Fields)
- 1985 Elected as a Fellow of American Physical Society
- 1995 Honorary Degree, Universität Würzburg – Hundred Years since Discovery of X-Ray (Semiconductor Physics — Theory of Two Dimensional Systems in High Magnetic Fields)
- 1999 Outstanding Paper Award of the Physical Society of Japan [Electronic states of carbon nanotubes, H. Ajiki and T. Ando, *J. Phys. Soc. Jpn.* **62**, 1255–1266 (1993)]
- 2000 ISI World’s Most Cited and Influential Scientific Authors in Physics (ISI Web of Science)
- 2006 Leo Esaki Prize (Theoretical Study of Electronic Properties of Quantum Nanostructures)
- 2008 Outstanding Referee (American Physical Society)
- 2010 Paper of Editors’ Choice, Journal of Physical Society of Japan [A. Toyoda and T. Ando, Theory of electron scattering by lattice defects in monolayer graphene, *J. Phys. Soc. Jpn.* **79**, 094708-1–9 (2010)]
- 2011 Outstanding Paper Award of the Physical Society of Japan [Screening effect and impurity scattering in monolayer graphene, T. Ando, *J. Phys. Soc. Jpn.* **75**, 074716-1–7 (2006)]
- 2015 Paper of Editors’ Choice, Journal of Physical Society of Japan [T. Ando, Theory of valley Hall conductivity in graphene with gap, *J. Phys. Soc. Jpn.* **84**, 114705-1–12 (2015)]
- 2019 Paper of Editors’ Choice, Journal of Physical Society of Japan [T. Ando, Formula of weak-field magnetoresistance in graphene, *J. Phys. Soc. Jpn.* **88**, 114704-1–12 (2019)]

## Research Field

The main subject is the theoretical study of quantum transport phenomena such as quantum Hall effect in two dimensional systems in high magnetic fields and electron localization in disordered system. Another is the theoretical study of electronic properties of low dimensional systems, in particular, quantum wells, superlattices, quantum wires, and dots. Some of the current topics includes ballistic conduction across quantum point contacts in magnetic fields, conductance fluctuations and localization in quantum wires, cross over of the quantum Hall effect from two to one dimensions, phonons and electron-phonon interactions in superlattices, high-electric-field transport in high magnetic fields, and electronic, optical, and transport properties of carbon nanotubes and graphene.