


Personal Information

Full name	Hong-Young, Chang	
Current position	Professor	
Organization	Department of Physics, Korea Advanced Institute of Science and Technology (KAIST)	
Country	Republic of Korea	

Short Biography**Major Field**

Plasma Physics.

Research Interests

Plasma spectroscopy, Plasma processing, Plasma diagnostics.

Research Status of Prof. Hong-Young Chang**Low temperature plasma**

- Develop new processes and advance the plasma science knowledge base over the range in pressure from below 1mTorr to above 1atm.
- Plasma parameter control.
- Large Area plasma source development.

Plasma Diagnostics.

- Develop new diagnostics, sensors, and control strategies for plasma processing.
- Langmuir probes and interferometer LIF (Laser Induced Fluorescence), OES (Optical Emission Spectroscopy), QMS (Quadrupole Mass Spectrometer).

Advanced Plasma Processing.

- Low dielectric constant($K < 3$) materials required as the interlayer dielectrics for designing high performance integrated circuits.
- To enhance both the knowledge and the technology base for plasma induced gas phase and surface chemistry.
- Understand the influence of plasma parameters on the key material properties.