

## Prof. Chang Hee Nam Gwangju Institute of Science and Technology, Korea

## Relativistic Laser Science Research at CoReLS

Recent advances in ultrashort high-power laser technology have prompted the rapid progress of high-power laser science. High-power femtosecond lasers reaching an output of over 1 PW have been built or being developed in a number of institutes around the world. At Gwangju Institute of Science and Technology (GIST) a PW Ti:Sapphire laser has been developed through the ultrashort quantum beam project, achieving an output of 1.5 PW at 30 fs in 2012. Based on this laser facility, the Center for Relativistic Laser Science has been launched as a part of Institute for Basic Science recently established to support basic science in Korea. The research at CoReLS is focused on experimental and theoretical investigations of relativistic laser-matter interactions including attosecond science. In this talk the recent research results and research program at CoReLS will be presented.

About the Speaker: Chang Hee Nam received his Ph. D. in plasma physics from Princeton University in 1988. After working at Princeton Plasma Physics Laboratory as a staff research physicist until 1989, he joined KAIST as a faculty member and became a full professor in 1998. He launched the Coherent X-ray Research Center in 1999 and has worked on the development of attosecond high-harmonic light sources along with advanced femtosecond laser technology and on attosecond science. More recently he started the Center for Relativistic Laser Science, as a part of the Institute for Relativistic Laser Science established last year to boost basic science in Korea. CoReLS is using the PW laser facility at GIST in Gwangju. The Center is operating two PW laser beamlines with 1 and 1.5 PW at 30 fs, and pursuing superintense laser-matter interactions. He is a fellow of the American Physical Society and of the Optical Society of America.