

Center for Attosecond Science & Technology Max Planck Center for Attosecond Science POSTECH, Pohang, Korea



Max Planck Attosecond Science Fellowship

Max Planck Center for Attosecond Science is looking for motivated and excellent Ph. D. students

Fundamental processes of chemistry, biology and materials science are triggered or mediated by the motion of electrons inside or between atoms. The atomic-scale motion of electrons typically unfolds within tens to thousands of attoseconds (1 attosecond [as] = 10^{-18} s). *Attosecond science* provides – for the first time – direct access to any microscopic motion occurring outside the atomic core. This is a newly-emerging field in the 21 century, opening up a new horizon of science by observing, controlling and manipulating nature in a new dimension.

To promote this frontier of scinece, Max Planck Society of Germany and Korean Government has established Max Planck Center for Attosecond Science (MPC-AS, <u>http://mpc-as.mpk.or.kr/</u>) as international collaboration. 5 Max Planck Institutes (including Prof. Krausz's group of MPQ), which has played leading roles in the ultrafast science are participating in MPC-AS. The Center for Attosecond Science and Technology(CASTECH, <u>http://Isl.postech.ac.kr/</u>) of POSTECH will play a role of research and development hub in Asia Pacific Rim. To the end, CASTECH is actively pursuing the following research topics: (1) study for the generation of attosecond pulses in new regime and (2) study of ultrafast phenomena, using attosecond pulses both in experiments and theroy.

To carry out these investigations successfully, MPC-AS is recruiting aggressive and excellent students for CASTECH. The recruited students will be enrolled in Ph. D. program of POSTECH.

Benefit : (1) The stipend: ~ 2000 US dollars (2,000,000 to 2,500,000 KRW) per month,

(2) dispatched to Max Planck Institutes for an extended period of time

(6 months – 2 years) for collaborative research.

• Qualification : (1) major : mathematics, physics, chemistry, electrical engineering

top 10 % in his / her class

(2) English : POSTECH's standard requirement

- Number of students to be accepted : less than 5 students
- Selection process: The applicants will be screened by documents in the first round and the selected candidates will be interviewed in English in face to face or via SKYPE.
- For the further information: Prof. Dong Eon Kim (director of CASTECH) at <u>kimd@postech.ac.kr</u>