

## **Nano-Photonics Laboratory Recruiting Postgraduate students (Master, Ph.D)**

### **(The online application deadline: June 17, 2025)**

Advisor (Group Leader): Prof. Heongkyu Ju  
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- Group Homepage: <http://npl.gachon.ac.kr>

*We are recruiting prospective students who will work in the Nanophotonics Laboratory, Gachon University, Korea, for the Ph.D or Master degree. The candidate students will start his/her work, Sep. 1, 2025. The research areas will be including but not limited to:*

- (1) Plasmon-Quantum coupling induced hot carriers based optoelectronic devices such as photodetectors, and photovoltaics.
  - (2) Plasmonic optical devices for biomedical immunoassay of biomarker diseases for POCT devices.
  - (3) Hydrogen based energy harvest using plasmonic catalysts
- Individual members of my group will be guided to conduct research for publication in SCI(E) journals for his/her graduation
  - A list of benefits for a postgraduate student
    - ✓ Full scholarship that covers the tuition fee (5,000 USD per semester for Ph.D or Master course) during whole period of the degree course
    - ✓ Monthly salary during the degree course:
      - 1,000,000 Korean won (746 USD) (plus  $\alpha$  up to 500,000 won) per month for a Ph.D student
      - 800,000 Korean won (600 USD) (plus  $\alpha$  up to 400,000 won) per month for a MS student
    - ✓ Expected starting date of the course: Sep. 1, 2025
    - ✓ Expected duration of the course (minimum of 3 years for Ph.D, 2 years for Master degree)
    - ✓ Incentives (extra-income) will be given depending on a student's progress
    - ✓ A desk, a chair and a personal computer with an internet network will be offered on an individual basis
  - ✓ Please refer to the group website (<http://npl.gachon.ac.kr>) for additional info. of the lab. Equipments, facilities that you can access for your research
  - ✓ Applicants who have background knowledge of physics, material science and chemistry, electrical engineering, electronics are encouraged to apply)
- Online application can be made (application fee of 120,000 Korean won) at <https://bank1.jinhakapply.com/ApplyV8/Wonseo/Yui/Yui100262.aspx?UnivServiceID=100262&GunID=4>
  - The English proficiency test score (TOEFL IBT 71, TOEFL PBT 530, or IELTS 5.5): A candidate unable to submit it within the application period can be admitted on a condition that he/she needs to submit it within one semester of entrance (Feb. 25).
  - A successful candidate will make an online-application until June 17, 2025 and send me the files of application packages until June 19 and send the original copies of the application packages by post to the address given in the above-URL-link until July 12, 2025.
  - For more information about application and research activities, please feel free to contact me to inquire any question by emailing Prof. Heongkyu Ju at [batu@gachon.ac.kr](mailto:batu@gachon.ac.kr)