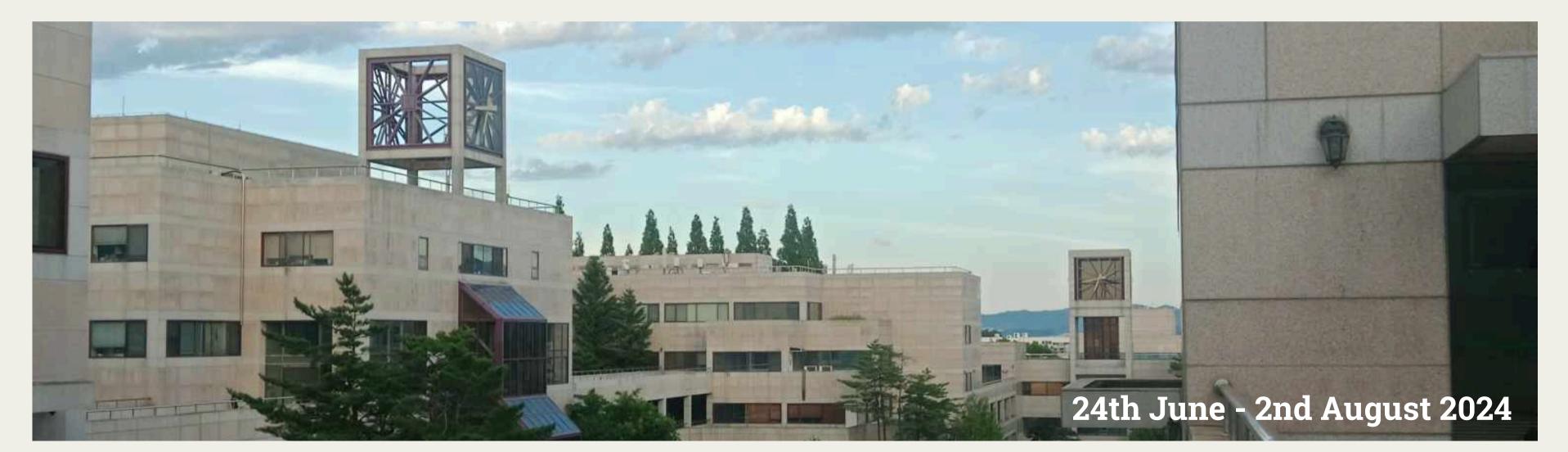
# POSTECH SUMMER PRPGRAM 2024

# AMARAPORN SORRANANUPAB

ATTENDED LAB:
P4 LABORATORY
FOR HIGH ENERGY
PLASMA

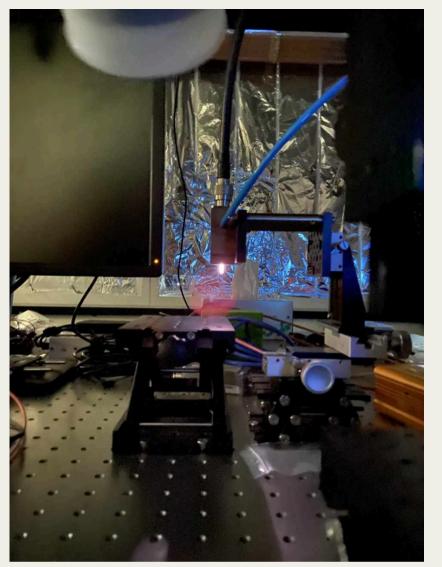
POHANG UNIVERSITY
OF SCIENCE AND TECHNOLOGY,
SOUTH KOREA

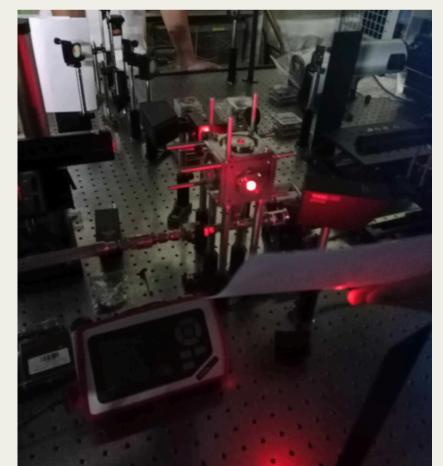


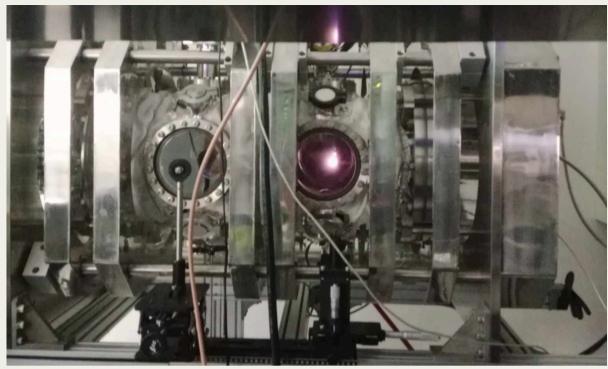


### RESEARCH EXPERIENCE:

I attended the P4 Laboratory for High Energy Plasma under Professor Gunsu Yun in the Department of Physics. During the first week of the program, I learned about many experiments in the lab. Starting from the second week, I needed to choose a research topic in my area of interest. I decided to study supercritical fluids and was assigned Lee Juho, a current PhD student, as my lab mentor. Both my supervisor and mentor were supportive and very kind. I felt incredibly lucky to learn from them.











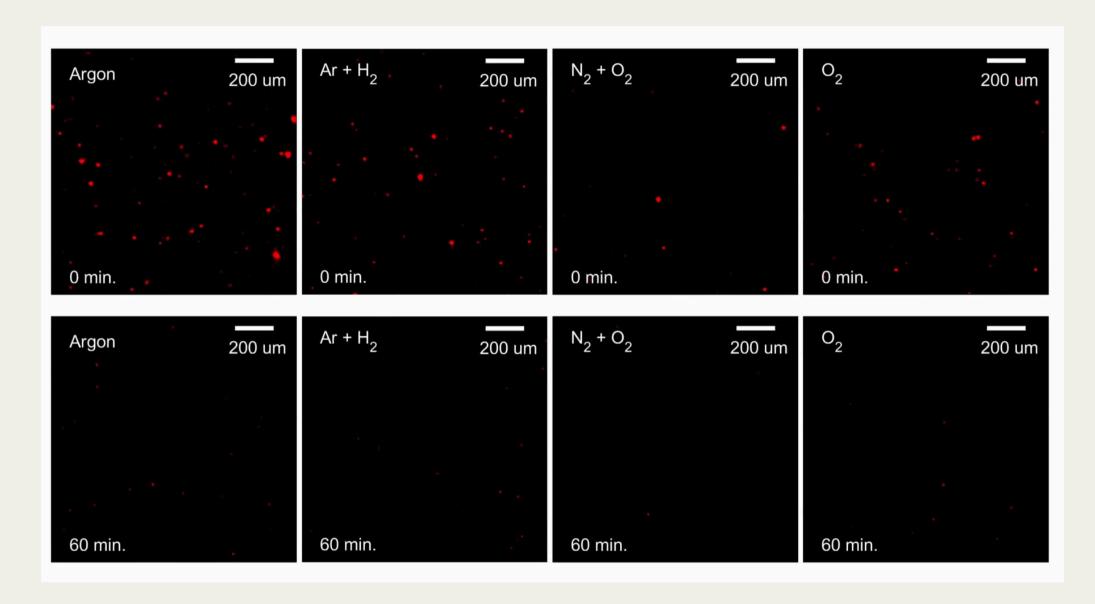




### MY EXPERIMENT:

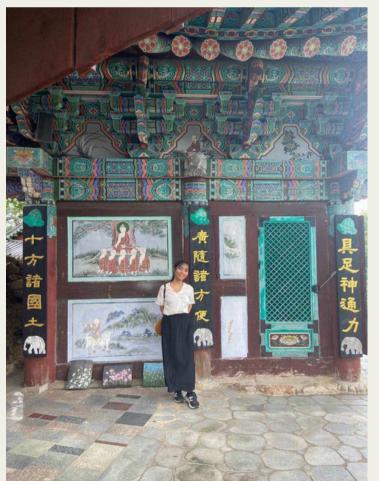
# THE RELATION OF LIQUID-LIKE SUBMICRON-SIZED DROPLETS AND NANOMETER-SCALED CLUSTER IN BETWEEN PURE GASES AND GAS MIXTURES UNDER SUPERCRITICAL PHASE

Supercritical fluids are generally considered homogeneous. However, recent studies have shown that inhomogeneous supercritical fluids can be produced through cooling expansion during the compression process under subcritical conditions. From my experiment, the results indicated that in pure gases, argon and oxygen, there were more liquid-like particles compared to gas mixtures, argon with 10% hydrogen and air respectively.











During the program, I met many incredible friends from around the world (Singaporean, Portuguese, Indian, etc.). I traveled with friends to many places. On the first weekend, I went to Jukdo Market with several new friends. Even though we had just met, I had so much fun spending time with them. I also visited Oeosa Temple with my roommate. It was far and took more than an hour to get there, but it was worth it.

Also, I went to Gyeongju with my lab mates. From what I remember, it was raining all day. However, it was so much fun spending time with them. We went to many places in Gyeongju, walking in the rain and getting dirty. We also went to the market and ate Indonesian food. The scenery was truly amazing. It was one of the best days of my life.









Another weekend, I went to Gyeongju again, this time with more people! We went to an amusement park, Gyeongju World, where we tried many scary rides. We laughed and had an amazing time together. Unfortunately, one of my friends got sick from the rides. I remember every moment and wish to experience it again.

I went to Yeongildae Beach with my lab mates to have our last dinner together. We ate tteokbokki at a restaurant by the beach. After that, we went to a nearby café. We watched the view of the beach from the rooftop of the café, then walked along the beach and enjoyed the night view. I had so much fun with these people.











Saying goodbye to these people was truly hard. We took a final picture together to keep the memories. Everyone flew back to their countries—Singapore, India, China, Portugal, and others. Some returned to continue their bachelor's degrees, while others went back for their master's degrees. We hugged, shook hands, and exchanged gifts and letters, all hoping to meet each other again somewhere in the world.

## THANK YOU

