

# Champions emerged at the International Natural Sciences Tournament

Second-year physics major Mr Kam Mao Quan, Gabriel, shared about his experience at the VII International Natural Sciences Tournament 2016. His team won first place and Gabriel was also one of the best speakers at the tournament.



↑ Celebrating the victorious moment when the first place was clinched (Gabriel is third from the left)

The intramural round of the VII International Natural Sciences Tournament (INST) 2016 was held on 12–16 Oct at Novosibirsk, Russia. INST teaches students to apply their knowledge to solve current practical scientific and industrial problems. Six local and international teams were selected based on their performance from the extramural rounds open to all universities. Our team comprised of four second-year science undergraduates coached by Dr Robert Lieu from the Special Programme in Science (SPS) and Department of Biological Sciences.

Participants were given broad unsolved realistic scientific problems or situations posed by Russian manufacturing or technology companies. Teams had to offer solutions in the form of presentation, debates and had to defend their standpoints during the scientific discussion. Only the top three teams got promoted to the final stage.

We had much research to do to tackle the 12 out of 15 problems we had chosen. Due to the interdisciplinary nature of the tournament, certain questions required expertise from the various disciplines. So we found ourselves having to teach one another concepts from across our individual majors in order to achieve effective brainstorming sessions. We also held mock presentations and Q&A sessions to brace ourselves for the actual presentation and polemics.

I believe our team scored a few winning points right from the start. All of us were trained in scientific communication and presentation skills throughout our course of study as science and SPS students. Compared to a few other teams, our team was multi-disciplinary with chemistry, life science and physics majors who also have some experience and basic knowledge on other disciplines thanks to SPS. This widens our capacity to handle the problems on hand.

Each team had three roles to fulfill—speaker, opponent and reviewer—and I had the opportunity to play all three. My background in physics helped me tackle the problems on lightning (EM) and solar heating (thermodynamics) in completing the theoretical calculations required to establish the soundness of the solution. It also enabled me to contribute to the other interdisciplinary questions from a physics standpoint. In the final round, a few physics problems were brought out, and I was honoured to have given my team an edge over the other two teams that lacked physics majors.

During the tournament, I picked up new scientific knowledge (especially from the other disciplines) while reviewing my own. INST has boosted my interest in interdisciplinary science and helped me appreciate its usefulness. We also got to experience other cultures—there was a cultural exchange time where the different teams shared about their country and culture. A visit to a planetarium and Russian opera topped up my overall INST experience.