Contribution ID: **497** Type: **Oral**

Drag Force on Cars in Flooded Streets

Monday 21 May 2018 15:00 (15 minutes)

As our part of the KVIS-ISB Student Research Collaboration Program we looked at how the drag force on cars driving in flooded streets depends on velocity and water depth. The relationship between the drag force acting on a car and the depth of the water that the car is driving through was investigated for a range of velocities. A model car was given a quick push along a track through water with depths ranging from 0.0 cm to 4.0 cm and allowed to decelerate on its own. It was shown that, for a given velocity, the drag force increased with increasing depths up to 75% of the wheels' radius. Above that depth, the drag force remained constant. The drag force was found to be proportional to the velocity of the car for all depths. The SRC program exposed us to the rigorous process of designing, conducting, and publishing scientific research and helped develop critical thinking and problem-solving skills as well as creativity and research skills.

NOTE
KVIS-ISB Student Research Collaboration Program Presentation

Kamnoetvidya Science Academy (KVIS) and International School Bangkok (ISB) have established the KVIS-ISB Student Research Collaboration (SRC) Program to develop students' skills in experimental research and the journal review and publishing process. This presentation describes the published work of one group of program participants, along with their perspectives on the KVIS-ISB SRC Program.

Authors: Mr HASUWANNAKIT, Chanon (Kamnoetvidya Science Academy); Mr MILLANA, Nico Angelo (International School Bangkok); Mr YOADSANIT, Seksan (Kamnoetvidya Science Academy)

Presenters: Mr HASUWANNAKIT, Chanon (Kamnoetvidya Science Academy); Mr MILLANA, Nico Angelo (International School Bangkok); Mr YOADSANIT, Seksan (Kamnoetvidya Science Academy)

Session Classification: A2: Phys Ed, Plasma, and Nuclear Fusion

Track Classification: Physics Education