

## Chemistry

The overarching aim of the Chemistry Curriculum in our school is to provide chemistry-related learning experiences for our students to develop scientific literacy, so that they can thrive in our rapidly changing knowledge-based society, be prepared for further studies or careers in fields related to chemistry, and become lifelong learners in science and technology.

## **Active Learning**

To align with our school's major concerns, we aim at nurturing active learning among our students. There are different strategies assigned for S3 to S5.

S3 to S5 students, are required to do pre-lesson preparation by using online learning platforms (e.g. schoology), where experiment videos, pre-lesson exercises and related information are uploaded. Our students can complete the exercises and submit them directly to the online learning platforms. Besides, they can further study related topics by watching videos uploaded there.

To encourage students to learn on their own initiative to acquire more knowledge, the Chemists Online Self-study Award Scheme is implemented for S4 and S5 students. This scheme aims to encourage students to understand the interconnection among science, technology, society and the environment. Under this scheme, 18 seminars which cover a wide range of chemistry topics, including synthetic polymers, gastronomy, nanomaterials and food chemistry, etc. have been held. All the seminars are presented by experts from local universities. Through this scheme, our students can learn the latest advances in Chemistry.

## E-learning in Classroom

In order to raise students' study interest and help them to grasp abstract ideas more easily, related e-learning tools are adopted in lessons.

Our S3 and S4 students use iPads to have online quiz competitions on particular topics. As observed, our students are very excited and they participate actively in the competitions.

Simulation activities (e.g. molecular structure) by using iPads or mobile phones are arranged for our S4 and S5 students. In these activities, our students can have a 360° view of molecule structures, including lone pair electrons, bonds and molecular shapes.