



Chemistry, as a scientific discipline, focuses on experimentation in teaching. A range of school-based experiments are designed to increase the learning effectiveness from textbooks, for instance, "Purifying Aspirin Tablets by Liquid-Liquid Extraction" and "Performing Handwriting Identification by Paper Chromatography". Students studying Chemistry are required to understand the abstract microscopic world, our department produces school-based images and videos to concretely present the microscopic with the adequate aid of information technology software.

In order to help S3 students gain a better understanding in Chemistry and prepare for the subject selection in senior form, we have intentionally introduced the school-based curriculum and teaching materials for them which incorporate some DSE theoretical topics including "Atomic Structure", "Chemical Bond", etc., also include the topics "Introduction to Experiment Skills in Chemistry" relating to experimental operation skills, and "Making of Diamond, Graphite Model" experiments involving material structures as well.

To nurture students' self-directed learning ability, students were encouraged to participate in the Chemists Online Self-study Award Scheme, which enables students to attend quality online courses offered by the tertiary institutions in Hong Kong at home, thus enhancing their self-directed learning ability and broadening extracurricular knowledge. In addition, different kinds of field studies have been organized for students, including a visit to the Science Museum for S3 students, and a visit to the beach for S4 students to test the quality of sea water, etc., for the development of students' knowledge and interest in the subject.

化學科作為一門科學學科，強調以實驗作為教學基礎。科組設計多項校本實驗以加強課本學習的效果，例如「藉液層分離技術提純亞士匹靈藥片」、「以色層分析法鑑定筆跡真偽」。化學科要求學生理解抽象的微觀世界，科組善用資訊科技軟件，製作校本的圖像和錄像把微觀的世界具體地呈現出來。

在中三級，為了讓學生加深對化學的了解，以幫助他們在高中選科上有充分了解，科組特設校本課程和教材，整合部分 DSE 課題於中三級教授，當中包括「原子結構」、「化學鍵」等理論性題目，亦有涉及實驗操作技巧的「化學實驗技巧簡介」及涉及物質結構的「製作金剛石、石墨模型」實驗。

為同學培養自學能力，科組鼓勵同學參加「化學家在線」自學獎勵計劃，讓同學能在家中參與由香港高等院校提供的優質網上課程，從而提高學生的自學能力和擴闊學生課程外的知識層面；另外，科組亦會舉辦不同的學科考察活動，例如中三級到科學館考察、中四級到海灘測試水質等，以增加同學對學科的知識和興趣。



S3 students preparing solution with a volumetric flask  
中三級同學利用容量瓶製作溶液



S5 students performing chemical cells experiment  
中五級同學行化學電池實驗



S6 students conducting experiment to identify the substances in a solution  
中六級同學進行實驗以辨別溶液內含有的物質



S4 students in the experiment of burning magnesium ribbon  
中四級進行燃燒鎂條實驗



S4 students in the metal-related experiment  
中四級進行與金屬相關實驗



S3 students visiting the Science Museum on the Subjects Field Trip Day for enhancing the subject knowledge  
中三同學科考日到學館考察，增加化學科相關知識