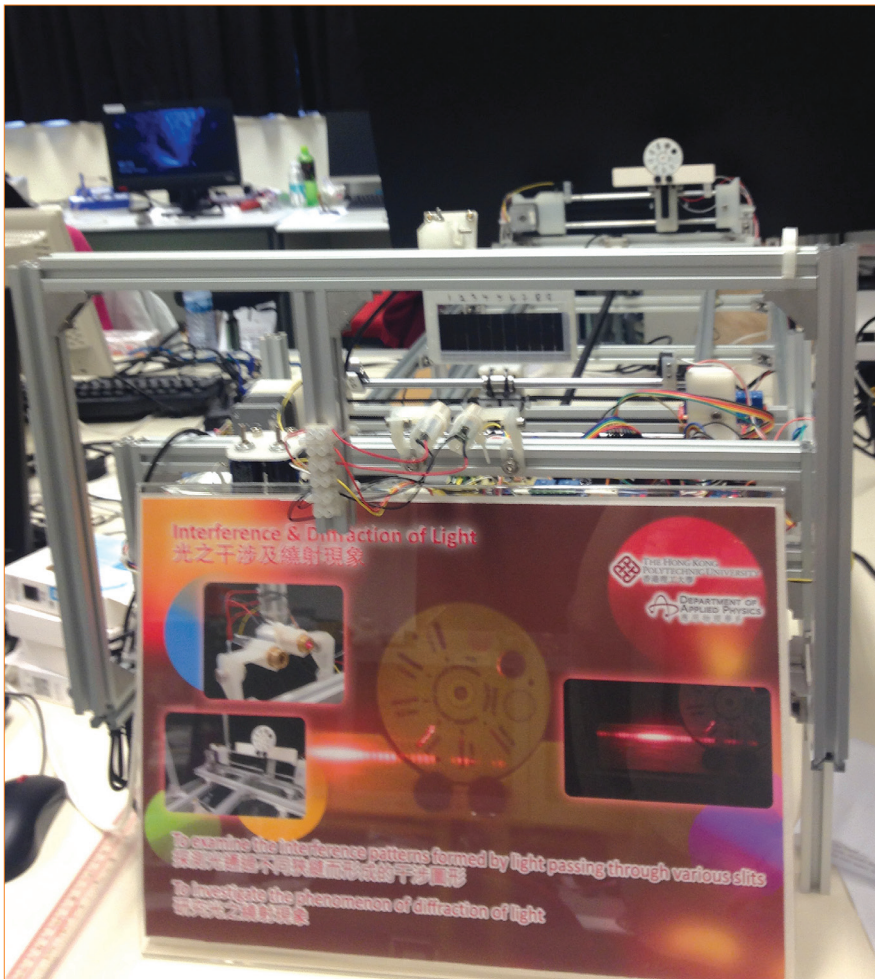


遙距實驗平台 RemoteLab Experiment Platform

隨時隨地能進行實驗的在線實驗平台

Online experiment platform for performing experiments anytime, anywhere

實驗教學是科學教育中不可或缺的部分，但因為成本、空間、安全等原因導致部分學生未能在堂上親身做實驗。因此，理大團隊優化了數個物理實驗，為其建立中央處理系統，即「遙距實驗平台」，讓學生可透過電腦隨時隨地做實驗，亦可進行安全要求較高的實驗（如放射性實驗），以補足一般學校沒有配備的實驗裝置。而自動化的數據收集可讓學生學習如何分析大量高質素數據，並基於分析得出合理的結論。



超聲波成像的實驗設備
Experiment of Ultrasound Imaging

Laboratory teaching is an indispensable part of science education. Ironically, many of the scientific ideas are taught with only very limited support for corresponding experiment sessions due to cost, space and safety concerns. Consequently, PolyU has launched a centralized depository of selected physics experiments, and established the "RemoteLab Experiment Platform" for students to conduct experiments through the computer anytime, anywhere. They can also conduct experiments such as those related to radioactivity, which require equipment that is usually not available in schools. Besides, automated data acquisition provides offers students a chance to learn how to analyze a large amount of good quality data and draw reasonable conclusions based on such analyses.

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特色與優點

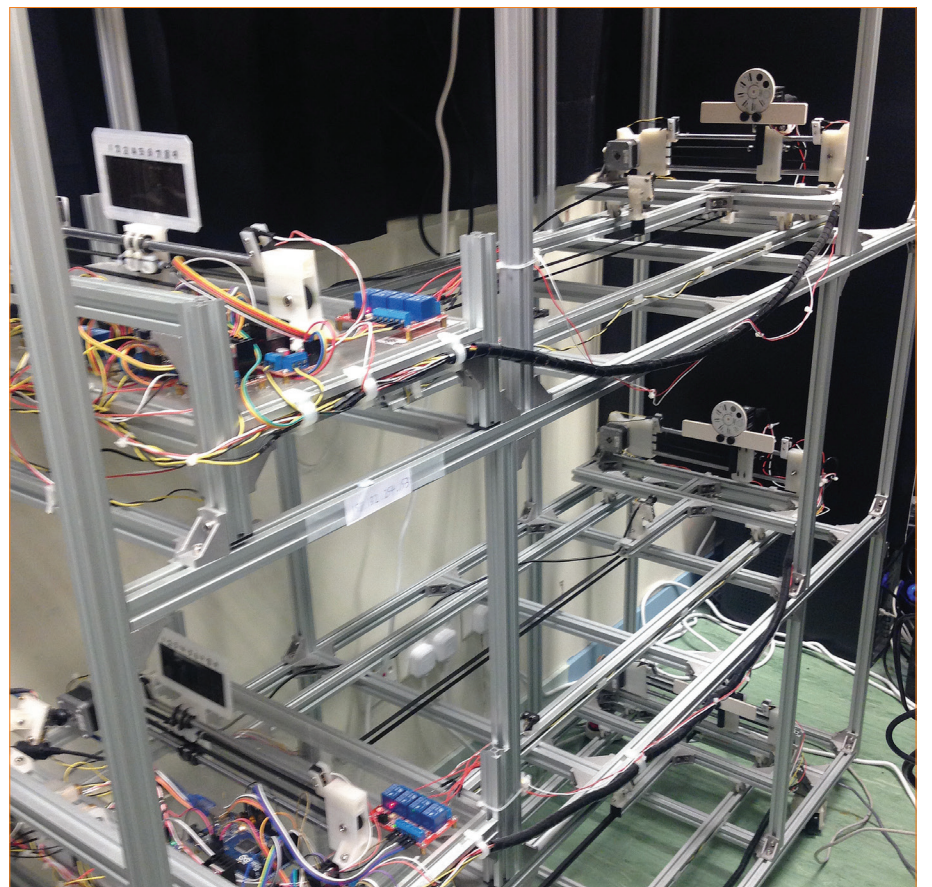
- 以電腦實時遙距控制中央實驗室內儀器，透過網絡攝影機，進行各種測量工作，獲取數據
- 不受時地限制，提供近乎真實的實驗室使用和管理
- 可供導師選擇不同的學習和教學模式（課堂演示、個人/分組研究），度靈活高

應用

物理、化學及生物的實驗

獎項

全球教學創新大獎2016 -亞洲地區組別金獎 (2016年12月)



安裝於理大的多組實驗設備
Few sets of experiments equipment installed at PolyU campus

Special Features and Advantages

- Conduct remote experiments and collect data by controlling equipment, at real time, through a webcam and computer
- Operation in a way similar to running the experiment in school laboratories, at anytime and from anywhere
- Highly flexible for adaptation in different learning and teaching modes (class demonstrations, individual/group assignments), as deemed suitable by instructors

Applications

Experiments of Physic/Chemistry/Biology

Award

Regional Asia Gold Award - Reimagine Education Awards 2016 (Dec 2016)



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