

504 SENIOR HIGHS' CHEMISTRY CONTEST: CHANG-HUA WINS GOLD PRIZE,
TAIPEI FIRST GIRL SILVER

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On March 18, Department of Chemistry hosted the 2nd high-school "Chung-ling Chemistry Innovation Contest" 504 students, doubling the number of 225 last year, from 60 senior high schools nationwide, including Taipei First Girl High School and Cheng-kung High School, formed 169 teams to participate the event. Gold prize went to Chang-hua Senior High silver, Taipei First Girl bronze, Kaohsiung senior High.

With the intimacy to daily life and stimulation of creativity as its central concepts, the contest was divided into two sections: first, an exam on students' basic chemical knowledge second, the problem-solving experiment with the provided apparatuses and materials and within the time limitation. Grouping was not limited by age and school. Students who passed the first section were qualified to enter the second. Lin Yo-shih, Taipei First Girls' third grader who won the prize of excellence in the first section, indicated with confidence, "Topics of exam are easier than those of the recommendation exam. I did not make full preparations, but I am able to handle them properly." Chen Yi-yang, a first grader from Taichung Senior High who won the same prize as Lin, commented that topics were easy enough to be finished within 30 minutes.

32 groups were qualified in the first section to enter the second. Participants put on laboratory outfits and glasses to conduct the experiment on "the amount of phospho-acid in oxygenated water and the density of calcium ion in water-processing." Wu Chun-hung (assistant professor of Department of Chemistry), one of the designers of the exam, explained that the addition of calcium ion to water can reduce the phenomenon of oxygenization, but too much calcium ion may lead to the stiffening of water, and the resultant sediments will decrease energy

efficiency and, worse, engender explosion. This experiment adopted the method of “drop-fixing” that controls the density of phospho-acid and calcium ion and calculates the proper amount of calcium ion required to process the quality of oxygenated water.

Ranking was decided by judges according to various groups’ creativity and skills: gold prize of 30,000, silver 15,000, bronze 10,000, and prize of good work 1,000. All participants were given certificates of participation. Yeh Jing-yuan, Huang Chun-yao and Fan Kung-wei, third graders of Chung-hua Senior High, could not resist their excitement when the result of the contest was announced. Yeh said, “The objective of experiment is to estimate the density of phospho-acid and calcium ion. Perhaps, we win because of our accurate estimation and creative method.”

Two speeches by Chien Su-fang (professor of Dept. of Chemistry) and Deng Jin-pei (assistant professor of Dept. of Chemistry) on currently popular bio-technology and material chemistry. Chair of Dept. of Chemistry, Wang Po-cheng, said that he was glad to see so many distinguished senior high students in this contest. More similar activities will be held to stimulate students’ interest in chemistry and cultivate their chemical knowledge. (~Han-yu Huang)

