

# Effective Integration of Practical Activities to Enhance Learning, Teaching and Assessment of Chemistry

20 May 2013

# The Microelectrolysis of Copper(II) Chloride Solution

<http://www.youtube.com/watch?v=KvW-g1FQV9E&list=UU2ZRkBjqUw5-CW7vB-g0Xcw&index=38>

# Why use practical work in class

- Motivational and fun
- Clarification and consolidation of the knowledge/concepts
- Enable students to apply and extend their knowledge and understanding of chemistry in novel situations

# Experimental techniques for the Chemistry curriculum (Appendix 2, C&A Guide)

## Examples

- Preparing and isolating soluble salt (Topic IV)
  - Filtration; crystallisation; use of volumetric apparatus
- Investigating factors affecting preferential discharge of ions in electrolysis (Topic VII)
  - Handling of simple electrical devices; collection of gases

# Chemistry Experimental Technique 化學實驗技巧

<http://minisite.proj.hkedcity.net/chemtech/eng/index.html>

- Flame test
- Filtration
- Preparation of standard solution
- Titration
- Crystallization/  
recrystallization
- Determination of melting  
point/boiling point
- Use of pH meter
- Use of electronic balance
- Use of colorimeter
- Sublimation
- Paper chromatography and TLC
- Liquid-liquid extraction
- Reflux
- Distillation
- Column chromatography
- Qualitative analysis of common  
anions and cations
- Test for carbonyl compounds
- Generation and collection of gases

## Programme:

	Event	Speaker
1.	Introduction	Ms Sophia SL CHENG
2.	Talk: <ul style="list-style-type: none"><li>- Practical works in Teaching and Learning of Chemistry</li><li>- Enriching the SBA Assessments</li></ul>	Dr Kendrew KW MAK (Department of Chemistry, CUHK)
3.	Experience Sharing (1)	Ms Victoria KL WONG (Marymount Secondary School)
	Break	
4.	Experience Sharing (2)	Mr Anthony KB NG (Fukien Secondary School (Siu Sai Wan))
5.	Discussion: <ul style="list-style-type: none"><li>- Integrating practical activities in learning, teaching &amp; assessment</li></ul>	Dr Raymond WH FONG