

Electrochromism

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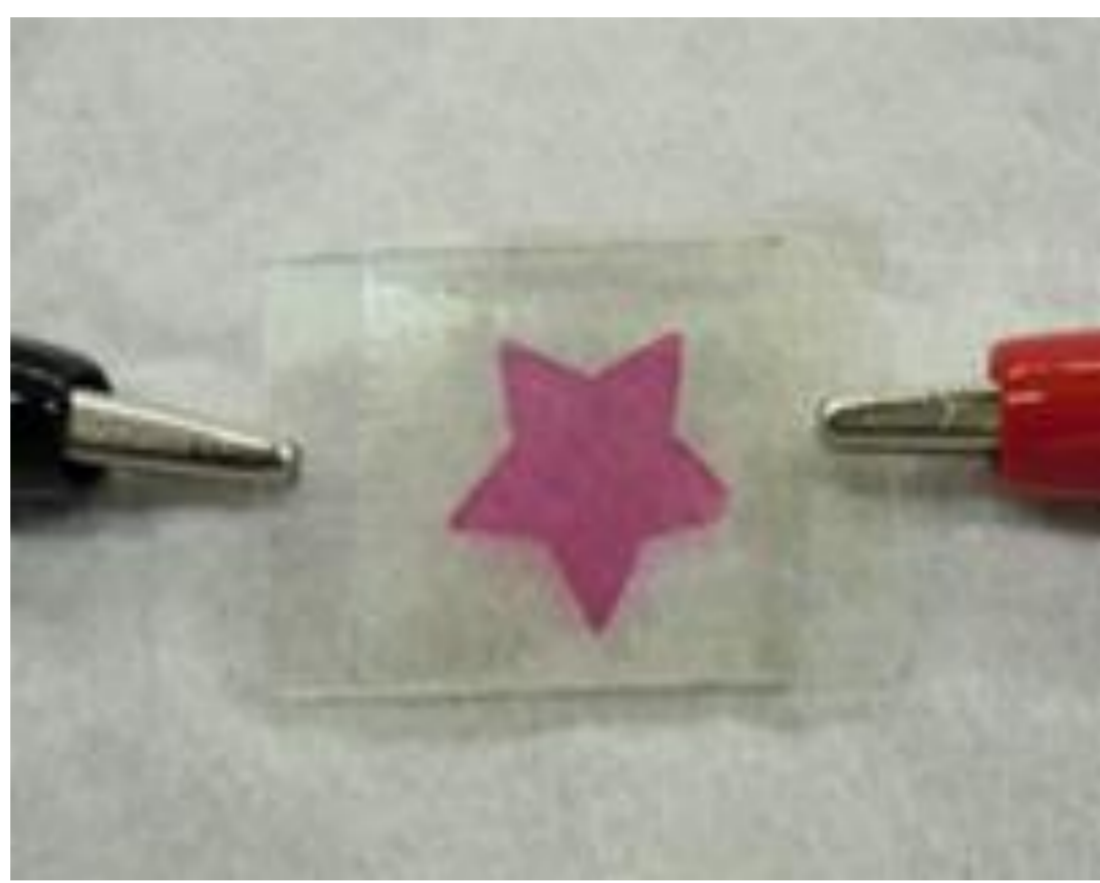
Duration: 25 August-6 September
Place Visited: King Mongkut's University of Technology Thonburi

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Science lesson

Electrochromism

- **Objective**
 - Make the students understood about following three principles of the electrochromism.
 - Color changing of electrochromism is caused by getting and emitting electron of molecular.
 - Subtractive color (cyan, magenta, yellow) can make all color by combining each other.
 - Color changing of Electrochromism has relationship with flowing electron.
- **Content**
 - Introduction of electrochromism.
 - Make one electrochromic device per student and See color changing.
 - Color of device change to three color (cyan, magenta, yellow) and think what we can by using them.
 - Check what happen when we put two pair wire which connecting with cell battery into electrochromic solution and Think about why it happned.



Satriwatrakhang School

- **Realization**
- **Good point**
 - Students showed interests in electrochromism.
 - All students confirmed color changing of electrochromism.
- **Bad point**
 - Students couldn't understand principle of electrochromism smoothly.



Satriwatrakhang School

- **Realization**
- **Good point**
 - Students enjoyed the experiments.
 - Students positively reported the experimental results publicly.
- **Improvement**
 - Explain in detail.
 - Change the words to more easy one.
 - Speak with exaggerated gestures.
 - Teach the experiments while giving hints.



Japanese culture lesson

Kendama

- **Objective**
 - Learn Japanese culture through traditional japanese toy .
- **Realization**
- **Good point**
 - Students could learn how to play Kendama smoothly.
 - Competition how achieve skill.
- **Bad point**
 - Number of Kendama was not enough to play.



Chiang Mai trip

- **Objective**
 - Learn about environmental projects in Chiang Mai.
 - Deepen our understanding of North Thailand culture.
- **Visit**
 - Butterfly farm and Orchid farm
 - Pang Da Royal Project
 - Nong Hoi Royal Project
 - Botanic garden.



Achievements and challenges

- **Achievements**

Through this program, we could

 - Learn the difficulty of making the class.
 - Teach students the fun of science.
 - Have the appropriate communication in any situation.
 - Do cultural exchange.
 - Improve our understanding and skills about Lesson Study, Japanese Culture, and English.
 - Make a lot od smiles of people.
- **Challenges**

In the near future, we want to

 - Spread Japanese technology and culture to other countries in ASEAN
 - Be a scientist to become a bridge between Japan and ASEAN
 - Be a global human resource who can communicate appropriately in different culture and situations
 - Improve communication ability and English skill
 - Deepen our understanding of different culture in ASEAN