

★ Centre For Green Chemistry And Applied Chemistry

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## **Description of projects:**

There are various types of thin films have been prepared by electrodeposition method and chemical bath deposition technique in the presence of complexing agent. The properties of thin films were investigated using various tools such as scanning electron microscopy, x-ray diffraction, energy dispersive X-ray and UV-Visible spectrophotometer. The results indicated that the films were good quality thin films from an electrolyte that containing complexing agent. Photovoltaic parameters showed that these films could be used in solar cell applications.



## **Research Collaborators:**

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- [II] DR NG SHA SHIONG
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## **Research Grant:**

- [1] RESEARCH GRANT (SEED) FOR 2012: INT-FHLS-03-01-2012
- [2] RESEARCH GRANT 2014(2): INT-FOSTEM-05-02-2014
- [3] INTI RESEARCH GRANT 2015(2): INT-FOSTEM-01-02-2015
- [4] INTI IU RESEARCH OPEN GRANT 2016: INTI-FITMS-03-05-2016
- [5] INTI-CAE-01-01-2018

## **Selected Publications:**

[1] Ho Soon Min, Sai fed Din Fertahi, Tarik Bouhal, Ng Shu Naa, MAC Munaaim (2019) Solar Energy development: case study in Malaysia and Morocco. International Journal of Emerging Technologies, 10(1), 106-113. [2] Ho Soon Min, Emmanuel Ajenifuja (2019) A short review of recent advances in copper oxide nanostructured thin films. Research Journal of Chemistry and Environment. 23(6), 138-145.

[3] Ho Soon Min, Saif Ed Din Fertahi, Tarik Bouhal, Ng Shu Naa, MAC Munaaim (2019) Solar energy development: case study in Malaysia and Morocco. International Journal on Emerging Technologies, 10(1): 106-113.

[4] Ho Soon Min, Muhammad Bilal Tahil, SN Das, MR Das (2019) Preparation of thin films by SILAR and Spin coating method. Eurasian Journal of Analytical Chemistry, 14 (1), 165-172.

[5] Ho Soon Min (2019) Raman Investigations of metal chalcogenide thin films (a short review). Oriental Journal of Chemistry, 35 (Special Issue 1), 1-7.

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[7] Ho Soon Min, Sreekanth M, Ramkumar C, Archana M, Deepa KG, Mohammad ASB. (2019) Preparation of CuInSe2 thin films by using various methods (a short review). Oriental Journal of Chemistry, 35 (1). 1-13.

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[9] Ho SM, Mahadik MA, Jang JS, Singh VN (2019) Metal oxide based chalcogenides hetero structure thin film photo anodes for photo electro chemical solar hydrogen generation. Asian Journal of Chemistry, 31 (1), 18-24. [10] Ho SM, Vanalakar SA, Ahmed G, Vidya NS (2019) A review of nanostructured thin films for gas sensing and corrosion protection. Mediterranean Journal of Chemistry, 7(6), 433-451.

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