

Electrovariable Nanoplasmonics and Self-assembling Smart Mirrors (Ramot)

code: 3-2014-808


[Michael Urbakh](#), T.A.U Tel Aviv University, Exact Sciences, School of Chemistry

Nanoparticle Enabled Smart Mirrors - This technology is a methodology whereby the control of the nanoparticle surface coverage is proposed via means of a potential variance across an interface of two immiscible electrolytic solutions (ITIES). Typical ITIES is composed of water and oil forming a flat interface with each other. When ITIES is out between two electrodes in the electrochemical cell, it remains immiscible until the potential bias balances the free energies of transfer, and the ion traffic across the interface becomes possible.

Liquid mirrors have traditionally been mirrors made with reflective liquids or metal liquid-like films (MELLFs). An example of this would be several micron thick colloid films of enriched silver content at a water/organic liquid interface.

Additional information can be provided upon request.

Contact for more information:

Noam Greenspoon ,

Ramot at Tel Aviv University Ltd. P.O. Box 39296, Tel Aviv 61392 ISRAEL

Phone: +972-3-6406608

Fax: +972-3-6406675