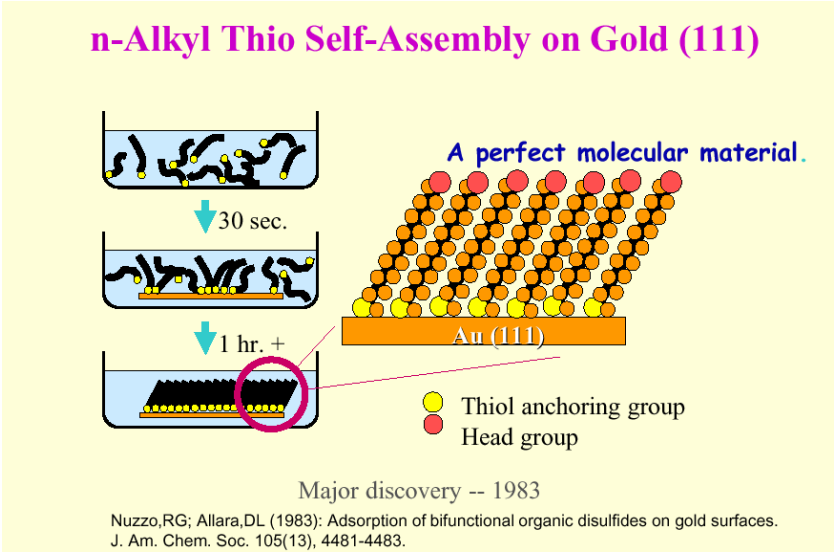
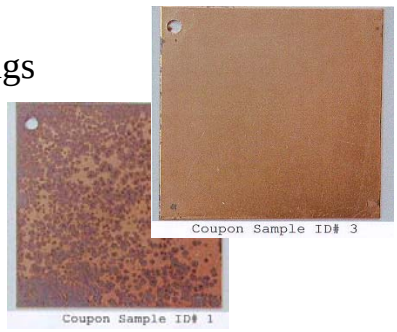
SAM's Technology (Self Assembled Molecules)

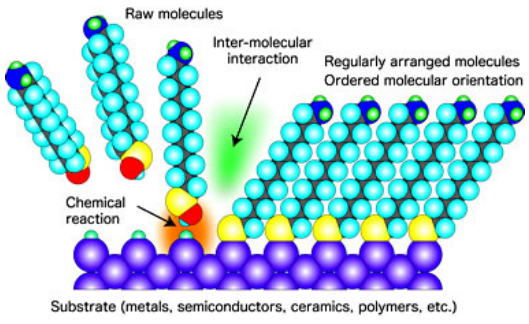
Electro-Spec's innovative methods for plating include a technological advancement known as "SAM's". This process employs Bi-Functional or multi-functional molecules that offer two . . . or more . . . termination groups with different functionality. Typically one end is attached to a specific surface while the other end provides a specific functionality. These molecules can be attached to metals (alloys), glass, ceramics, plastics, etc. In this manner, it is possible to impart or enhance the intended performance of a surface or enable completely different properties and applications over a plated surface.

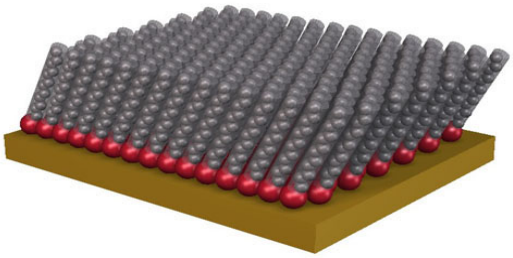


So what is Electro-Spec's SAM's Process and Purpose?

- A surface treatment (Post Plate) that forms a protective layer of "Self Assembled Molecules" on Gold, Silver and other plated surfaces.
- Precious metal thickness reduction and significant cost savings through enhanced corrosion, diffusion and wear resistance for electronic applications.
- Diffusion Barrier to intragranular and transgranular metallic contamination and modification (Cu Migration)
- Better Solderability
- Thickness Reduction
    - 35% to 75% precious metal cost reduction with reduced thickness . . . . produces equal or better performance







Value Through Innovation . . . .