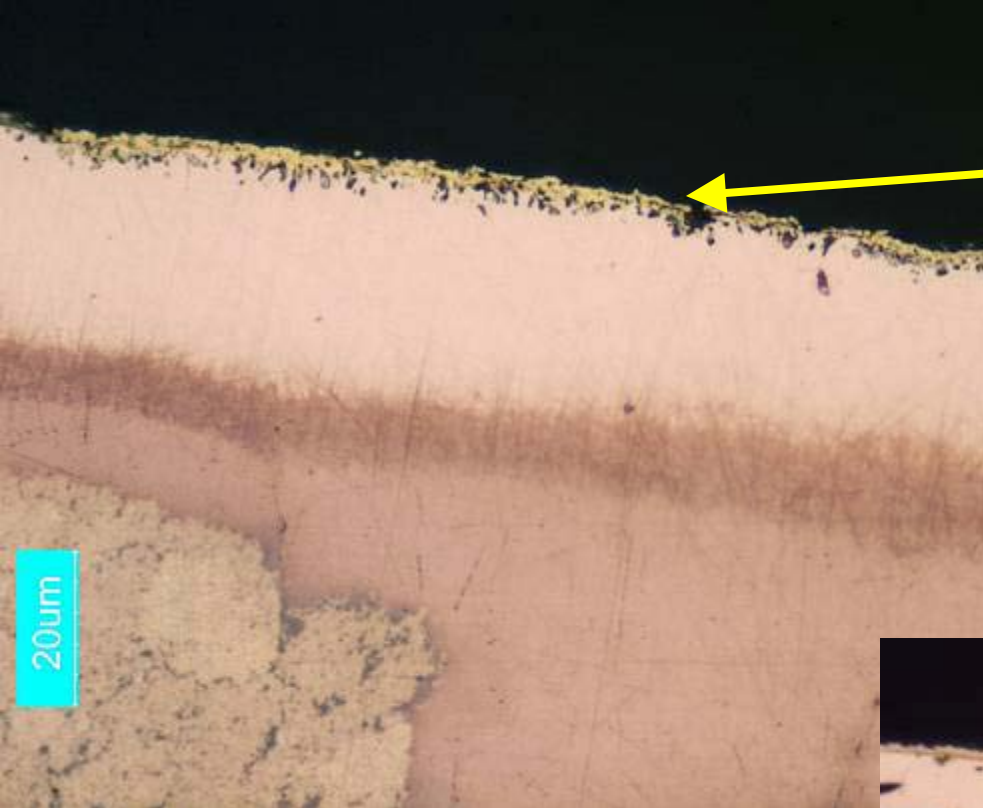
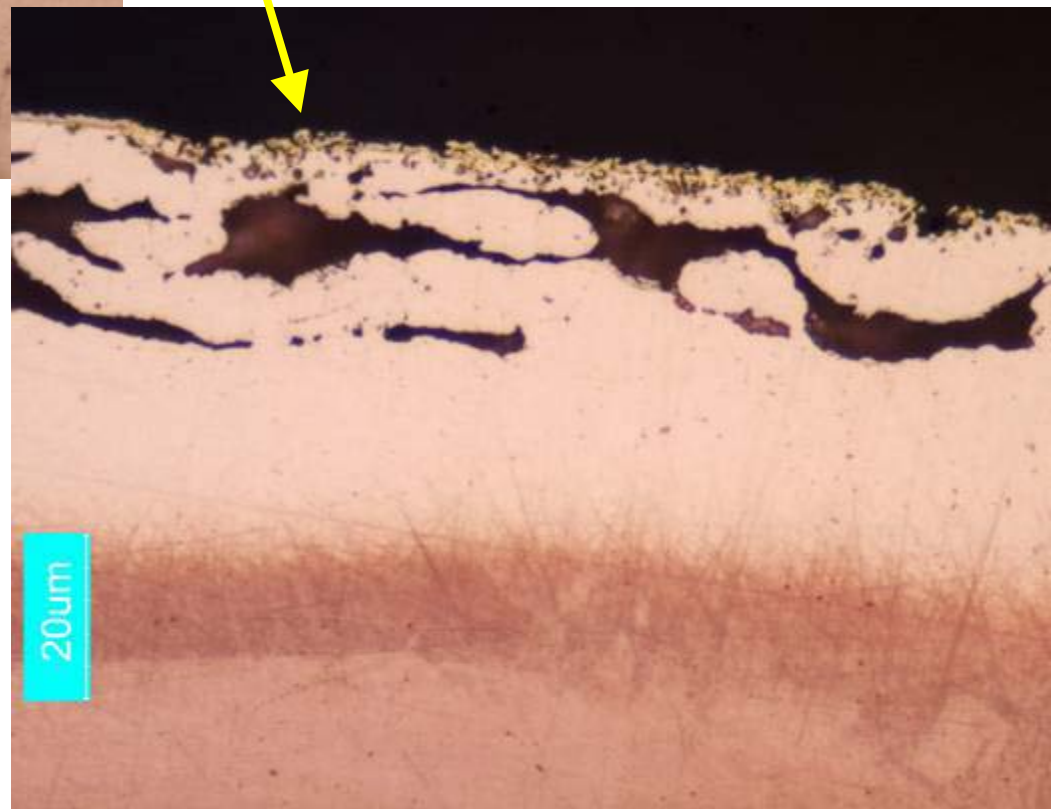


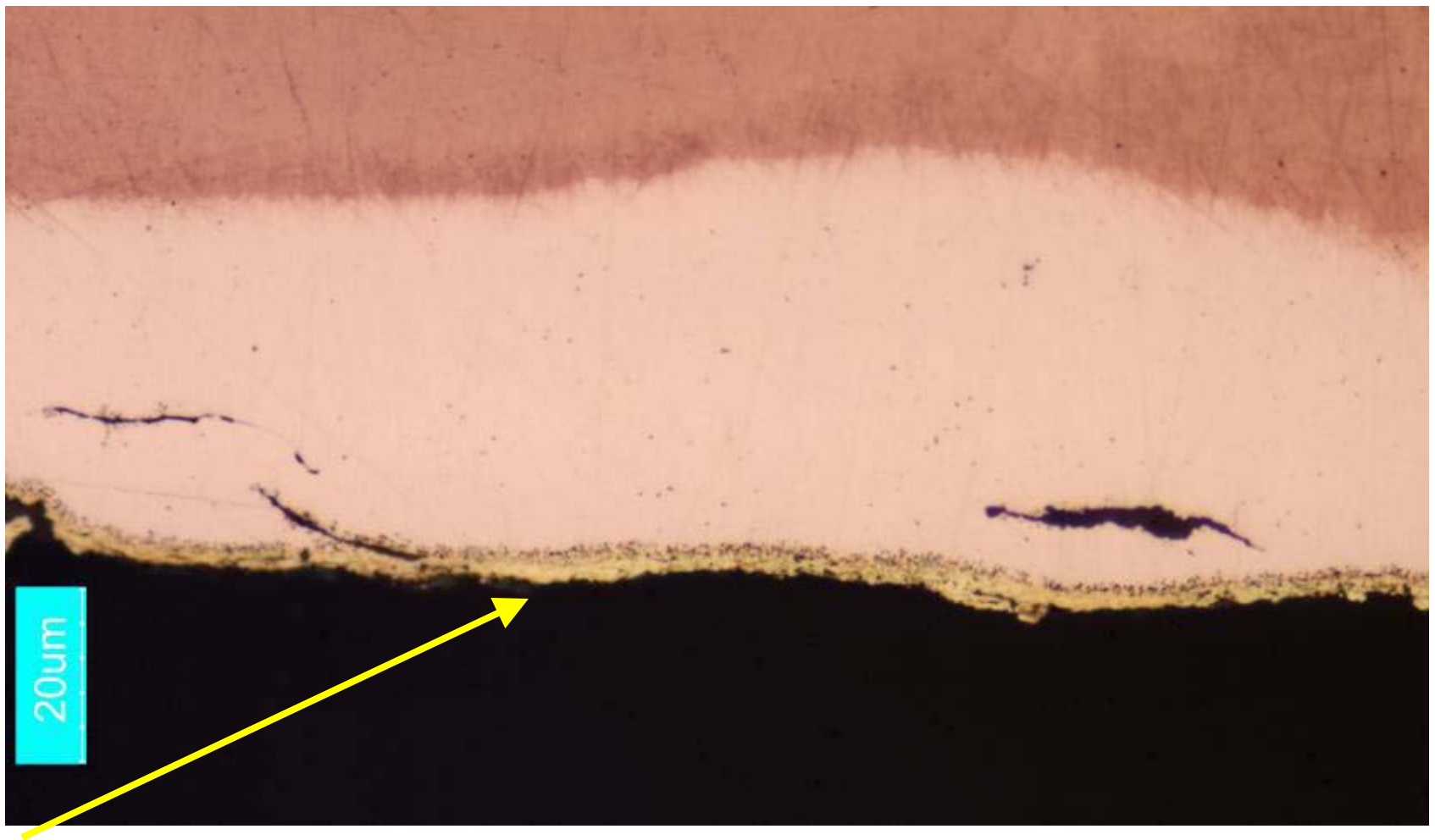


Etched sample (alcoholic ferric chloride) under cross polars showing the complex formation of the structure. The variation in color is due to the changes in chemical composition within the sample which is made up of Gold, Silver and Copper.



This is a close up of the upper edge of the sample showing a very thin ($\sim 2\mu\text{m}$ thick) layer of enriched gold on the surface.





This is an enlarged image of the lower edge of the sample. On this side the enriched gold surface is thicker than the other side ($\sim 5\mu\text{m}$). The traditional method for enriching the surface of a Tumbaga alloy is depletion gilding. In this technique, the surface of the alloy is 'etched' with acid which preferentially eats away at the copper and silver, leaving an enriched surface of gold that can be polished to a high gloss gold surface.