Electroforming of metallic and nano composite micro structures

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**PROJECT DESCRIPTION:**
When the electroforming as an old technology meets the cutting edge micro and nano technology, new opportunities are born to fabricate high precision components at lost cost and high throughput. In this project, the researchers developed micro/nano electroforming process based on UV-Lithography and Nanosphere Lithography. Nickel based micro components and nano patterns were successfully fabricated and characterized. Nanoparticles like alumina and carbon nanotubes were used to enhance mechanical properties of electroformed nickel structures.

![Figure 1](image1.png)
**Figure 1.** Electroformed Nickel Millimetre Wave Microcomponent [1].

![Figure 2](image2.png)
**Figure 2.** Electroformed Nickel Micro Pillars [2].

![Figure 3](image3.png)
**Figure 3.** Electroformed Micro Linkage of Ni/Al2O3 Nanocomposite [3].

![Figure 4](image4.png)
**Figure 4.** Electroformed Micro Linkage of Ni/Al2O3 Nanocomposite [4].
Figure 5. Electroformed Nickel Nanostructures through Self-Assembled PS Nanospheres [5].

References:


