

Nano Science, Technology and Industry Scoreboard

## Commercial Production of Gold Nanoparticles Ink for Digital Conductive Printing

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PV Nano Cell Ltd., an innovative provider of inkjet-based conductive digital printing solutions and producer of conductive digital inks, announced that it has launched a new, general-purpose conductive gold ink to be used with inkjet and aerosol printing.

The new gold ink was specially developed to meet requirements made by customers and covers a wide range of applications. PV Nano Cell expects many uses for the ink including with PCB, connectors, switch and relay contacts, soldered joints, plating and wire bonding. The current subtractive and plating technologies of gold are highly expensive and complicated to use. The new ink now enables a simple, digital, additive, mass-production technology. This additive technology guarantees the best manufacturing cost while offering a new level of design flexibility and product time-to-market. This new commercial ink will complement the company's existing product line of silver, copper and dielectric inks.

PV Nano Cell's Chief Executive Officer, Dr. Fernando de la Vega, commented, "For digital printed electronics in mass production to become the mainstream, additional inks and printing solutions need to be developed to address inherent challenges. Such challenges include for example reducing corrosion, enabling soldering and wire bonding, etc. The ability to inkjet or aerosol-print our gold ink is a significant step forward to further enable digital printing to become widely used.

This new product will drive new, high-performance and reliable electronics in the most competitive offering. As gold is used in virtually all advanced electronic devices, the market potential is overwhelming, particularly given the cost-performance bundle our new gold ink offers. We further plan to optimize the ink to our DemonJet Printer that is capable of printing up to 10 inks at the same time. Our end goal is for the printer to support our silver, dialectic, gold and resistor inks to allow customers to print a variety of pioneer products. Our advanced development of printed embedded passive components is now complemented by this new gold ink".

As recently published earlier this month, the company announced that it has signed, under NDA, an agreement with a well-known, world-leading multinational healthcare company to develop a new inkjet printing technology for the fabrication of sensors using resistor and gold inks. This new general-purpose gold ink, differs in performance and optimization from the ink developed for healthcare applications.

PV Nano Cell's Chief of Business Development Officer, Mr. Hanan Markovich commented, "We are being contacted frequently by customers actively looking for high-performance gold ink. Having discussed customers' needs, we learned the market requires gold ink to address significant manufacturing issues. We further realized, current technologies and alternatives are highly expensive, inefficient and hard to implement, suggesting a great business potential. The new gold ink developed by PV Nano Cell solves real problems for customers, in an affordable way. We are now finalizing the preliminary orders and working on expanding the pipeline".

Read the original article on GlobeNewswire.