March 3, 2021

Roll-to-Roll Continuous Inkjet Printed Electronics Demonstrated with PV Nano Cell's Sicrys™ Conductive Ink

MIGDAL HA'EMEK, Israel, March 03, 2021 (GLOBE NEWSWIRE) -- PV Nano Cell Ltd. (OTC: PVNNF), (the "Company"), an innovative provider of inkjet-based conductive digital printing solutions and producer of conductive digital inks, today announced that its Sicrys™ conductive ink was successfully used in Roll-to-Roll (R2R) continues inkjet printing of electronics as part of the DigiMan project. PV Nano Cell project partners were: C.P.C Solutions Ltd., Fraunhofer IKTS and Fraunhofer ENAS, Kerafol Keramische Folien GmbH & Co. KG, RIIT Ltd. OSTEC Group, Technical University of Chemnitz and MEPhI.

The DigiMan Project (December 2018 – November 2020) developed innovative sensor platforms for agro-industrial applications by providing a digital manufacturing process based on printing technologies and nano-material inks. Such approach enables to miniaturize the sensors, achieve flexibility in the target sensor properties and to realize these sensors in economically affordable batches. As part of the project, Low-cost temperature and humidity sensors were realized in a roll-to-roll industrial inkjet printing system with nano silver inks on PET substrate, demonstrating the ability to print a large quantity of sensors with high yield. Furthermore, a Bluetooth based wireless communication board with an inkjet-printed silver antenna as well as a printed RFID NFC sensor tag were developed for wireless sensor communication.

Photos accompanying this announcement are available at:
https://www.globenewswire.com/NewsRoom/AttachmentNg/691be4e0-1a5d-4b72-8f82-5171a034fcbe

https://www.globenewswire.com/NewsRoom/AttachmentNg/bd506c2f-2769-4fdc-89a8-495ea336a4ac

PV Nano Cell's Chief Executive Officer, Dr. Fernando de la Vega, commented, "The success of DigiMan project marks yet another valuable advancement of PV Nano Cell in demonstrating the validity of our complete digital conductive printing solutions for mass production applications. Special sensors were developed and printed with our conductive Sicrys™ inks in a roll-2-roll inkjet and sintering system. This achievement proves the complete solution approach of inks, printers and printing process can be utilized in mass-production roll-to-roll systems, a must for some of the high-volume applications".

About PV Nano Cell
PV Nano Cell (PVN) offers the first-ever complete solution for mass-produced inkjet based, printed electronics. The proven solution includes PVN's proprietary Sicrys™, silver-based conductive inks, inkjet production printers and the complete printing process. The process includes ink properties' optimization, printer's parameters setup, printing modifications &

tailored printing instructions per application. In the heart of PVN's value proposition lies its unique and patented conductive silver and coper inks - Sicrys™. Those are the only inks made of Single Nano Crystals – which allows the inks to have the highest stability and throughput required to drive optimal mass-production results for wide range of applications. PVN's solutions are used all over the world in a range of digital printing applications including: photovoltaics, printed circuit boards, flexible printed circuits, antennas, sensors, heaters, touchscreens and other. For more information, please visit http://www.pvnanocell.com/

About Fraunhofer ENAS

The Fraunhofer Institute for Electronic Nano Systems ENAS is the specialist and development partner in the field of Smart Systems and their integration for various applications. Fraunhofer ENAS has specialized on the challenge of combining micro and nano sensors, actuators and electronic components with interfaces for communication and a self-sufficient energy supply to form smart systems, thus supporting the Internet of Things and the ongoing digitalization. Fraunhofer ENAS develops single components, manufacturing technologies and system concepts, system integration technologies and actively supports the technology transfer for and with its customers. Whether Start-up, SME or large enterprise, Fraunhofer ENAS offers innovation consulting and supports customer projects, starting from the idea, via design and technology development or realization based on established technologies up to tested prototypes. If standard components do not meet the requirements, Fraunhofer ENAS provides expert assistance in the realization of innovative and marketable products. For more information, please visit https://www.enas.fraunhofer.de/

About TUC

Chemnitz University of Technology (German: Technische Universität Chemnitz, abbreviated TU Chemnitz) is a public university in Chemnitz, Germany. With over 11,000 students, it is the third largest university in Saxony. With approximately 1,500 employees in science, engineering and management, TU Chemnitz counts among the most important employers in the region. TU Chemnitz has many years of experience in the field of manufacturing smart objects and components in "sheet-to-sheet" and "roll-to-roll" manufacturing processes using various printing technologies: screen, gravure, and inkjet printing. For more information, please visit https://www.tu-chemnitz.de/index.html

About DigiMan Project

DigiMan was a project financed by MANUNET under the European Union's Horizon 2020 research and innovation program. The objective of the DigiMan project was the development of a digital manufacturing process chain based on printing technologies and nanomaterial-based ink formulations for the development of smart sensors and hybrid electronics in different fields of applications. The project developed innovative ceramic- and polymer / paper-based sensor platforms that can be fabricated with environmentally friendly digital additive manufacturing technologies using inkjet or aerosol jet. This makes it possible to miniaturize the sensors, to achieve a flexibility in the target sensor properties and to realize these sensors in economically low cost even for small sensor batch quantities. For more information, please visit https://www.digiman-project.eu/

Forward–looking Statements

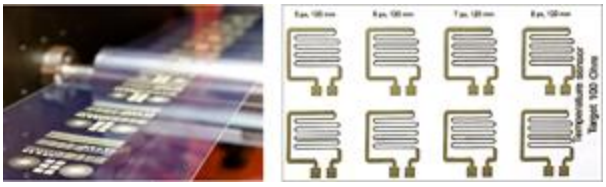
This press release contains forward–looking statements. The words or phrases "would be,"

"will allow," "intends to," "will likely result," "are expected to," "will continue," "is anticipated," "estimate," "project," or similar expressions are intended to identify "forward–looking statements." All information set forth in this news release, except historical and factual information, represents forward–looking statements. This includes all statements about the Company's plans, beliefs, estimates and expectations. These statements are based on current estimates and projections, which involve certain risks and uncertainties that could cause actual results to differ materially from those in the forward–looking statements. These risks and uncertainties include issues related to: rapidly changing technology and evolving standards in the industries in which the Company operates; the ability to obtain sufficient funding to continue operations, maintain adequate cash flow, profitably exploit new business, and sign new agreements. For a more detailed description of the risks and uncertainties affecting PV Nano Cell, reference is made to the Company's latest Annual Report on Form 20-F which is on file with the Securities and Exchange Commission (SEC) and the other risk factors discussed from time to time by the Company in reports filed with, or furnished to, the SEC. Except as otherwise required by law, the Company undertakes no obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

Emerging Markets Consulting, LLC
Mr. James S. Painter III
President
w: 1 (321) 206-6682
m: 1 (407) 340-0226
f: 1 (352) 429-0691
email: jamespainter@emergingmarketsllc.com
website: www.emergingmarketsllc.com

PV Nano Cell Ltd
Dr. Fernando de la Vega
CEO
w: 972 (04) 654-6881
f: 972 (04) 654-6880
email: fernando@pvnanocell.com
website: www.pvnanocell.com

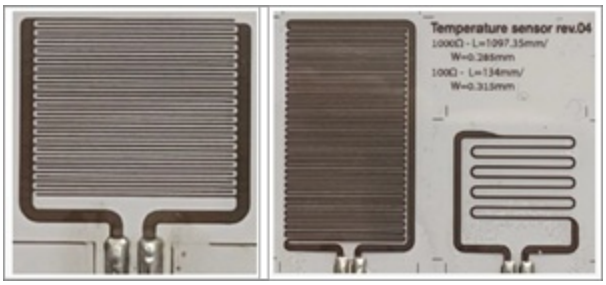
PV Nano Cell



Roll-to-roll printing of temperature sensors using PV Nano Cell Sicrys™ I50TM-119 silver ink on PET

Roll-to-roll printing of temperature sensors using PV Nano Cell Sicrys™ I50TM-119 silver ink on PET substrate, with MicroFlex R2R system (Ricoh MH5421MF). Print width: 54.1 mm.

PV Nano Cell



Inkjet-printed humidity and temperature sensors using PV Nano Cell Sicrys™ I50TM-119 silver ink. Printed by TUC.

Source: PV NANO CELL LTD.