Antimicrobial Water Storage Containers 'AqCure'

BASED on inherent antimicrobial properties of copper, IIT Delhi-incubated startup Nanosafe Solutions has developed a range of antimicrobial (antiviral, antibacterial and antifungal) water storage containers and launched it as "AqCure" which is a patented technology. In AqCure active nano-copper is released from a polymer framework. The delivered copper makes the external and internal surface of the compartment antimicrobial, lessening transmission of microorganisms upon direct contact, and making the stored water microbiologically protected.

Source: https://home.iitd.ac.in/press-antim.php

A Laser Steering Device

ROBOTIC engineers at Harvard University's Wyss Institute for Biologically Inspired Engineering and John A. Paulson School for Engineering and Applied Science (SEAS) have developed a laser-steering microrobot for robot-assisted surgeries. The developed device is in a miniaturized 6×16 millimetre package that operates with high speed and precision and can be integrated with existing endoscopic tools. Their approach, reported in Science Robotics, could help significantly enhance the capabilities of numerous minimally invasive surgeries.

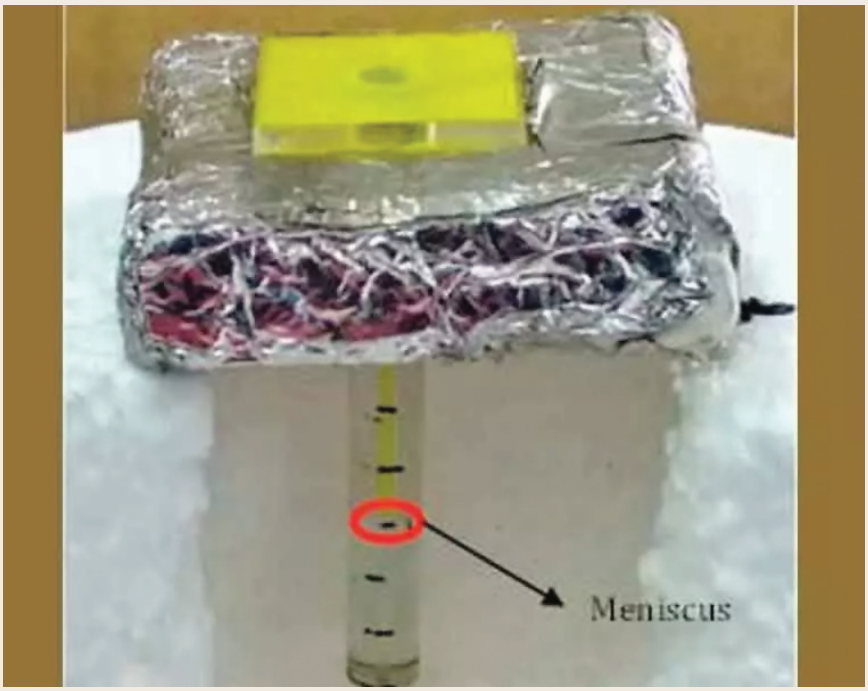
Source: Press Release Wyss Institute

A New Device to Measure Evaporation

A team of scientists from the Indian Institute of Science (IISc), Bengaluru, has developed a new device that could measure the rate of evaporation of a local area within a couple of minutes. The device is a more efficient and inexpensive way to measure evaporation when compared with existing methods.

"Our method allows you to get a much more realistic measure of transpiration from plants and evaporation from soils," says Jaywant H Arakeri, Professor in the Department of Mechanical Engineering, IISc, and senior author of the study recently published in the *Journal of Hydrology*.

Source: Press Release, IISc

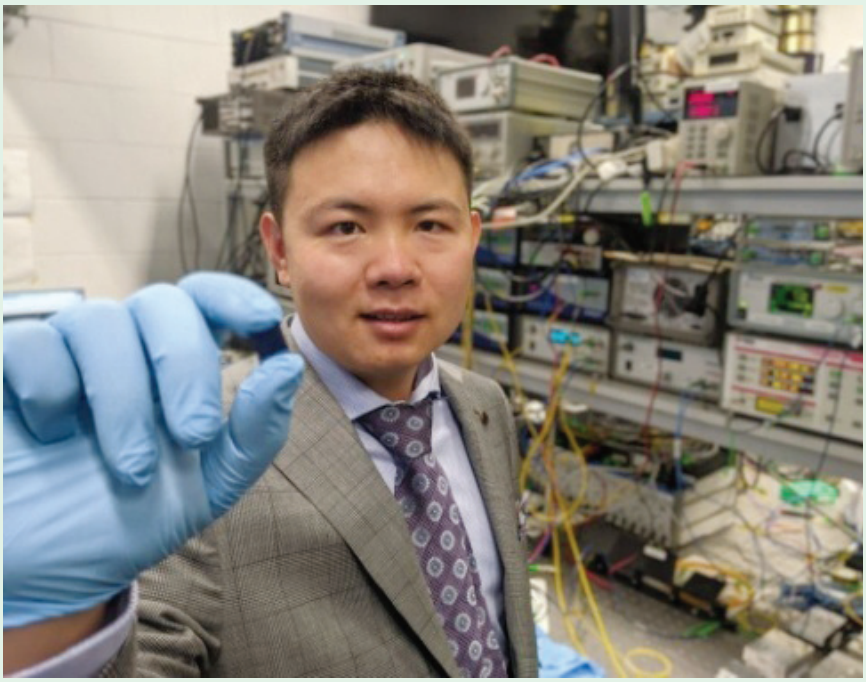


Evaporimeter tested in the lab (*Credits: Aditya, Arjun, Anush, and Navneet*)

World's Fastest Optical Neuromorphic Processor

A team of researchers led by Swinburne University of Technology, Australia, has demonstrated the world's fastest and most powerful optical neuromorphic processor for Artificial Intelligence (AI). The neuromorphic processor operates faster than 10 trillion operations per second (TeraOPs/s) and is capable of processing ultra-large-scale data. The study was published in the journal Nature.

Source: www.swinburne.edu.au



Dr Xingyuan (Mike) Xu with the integrated optical micro comb chip, which forms the core part of the optical neuromorphic processor