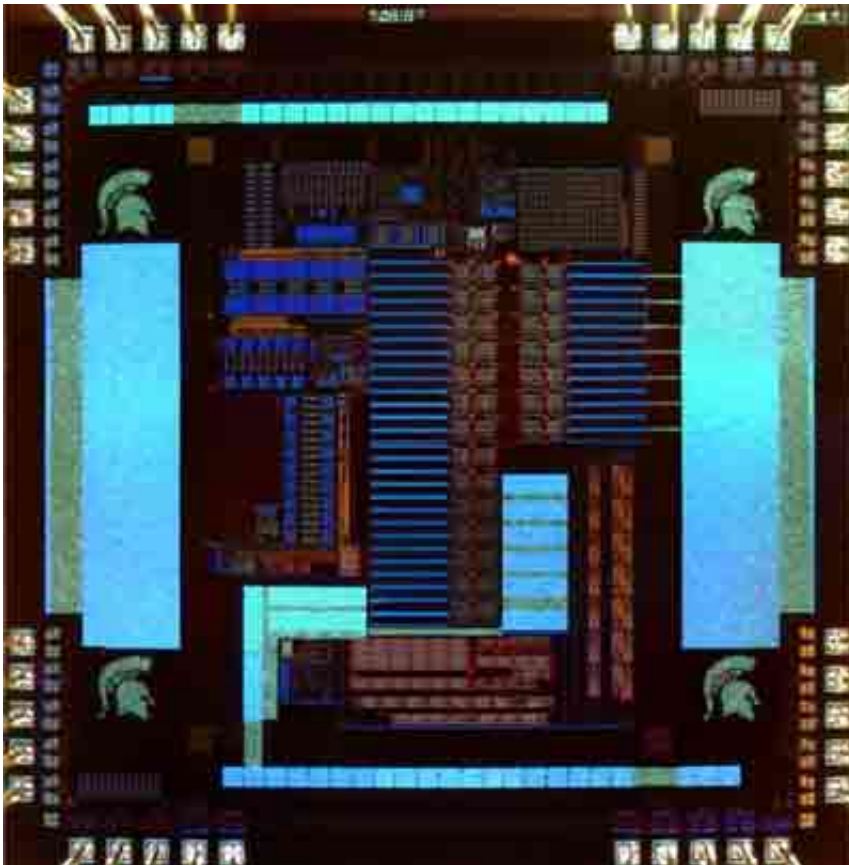


Video: 'Smart implants' dissolve after healing

July 15 2015, by Miles O'brien



Shantanu Chakrabartty, a researcher at Michigan State University, is focused on the fundamental science behind self-powered sensors for health and usage monitoring. He says he is interested in the device's "physics and in exploring new ways to sense and compute on the sensor." Self-powered sensors developed by Chakrabartty and his collaborators may be attached to or embedded inside bridges, pavements, vehicles, rotating parts and biomedical implants. The devices can autonomously sense, compute and store cumulative statistics of strain rates without the aid of batteries. Find out more in this discovery. Credit:

Shantanu Chakrabartty, Michigan State University

We all know that injuries happen and doctors sometimes have to use metal screws or plates to support broken bones while the bones heal. What if that implanted metal just disintegrated on its own after the injury heals?

A team at the NSF Engineering Research Center for Revolutionizing Metallic Biomaterials at North Carolina Agricultural and Technical State University is working to transform current medical and surgical treatments by creating "smart" implants.

The major goal is to revolutionize metallic biomaterials to improve treatments for orthopedic, craniofacial, neural and cardiovascular ailments.

Provided by National Science Foundation

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