

**Fig. 6 : Applications of Gamma ray imaging**

- a. Space captured through Gamma telescope
- b. Compton Camera image
- c. Tumour detected as bright white spot in PET
- d. a ground-based gamma-ray observatory located in Arizona



**Fig. 7 : Applications of X- ray imaging**

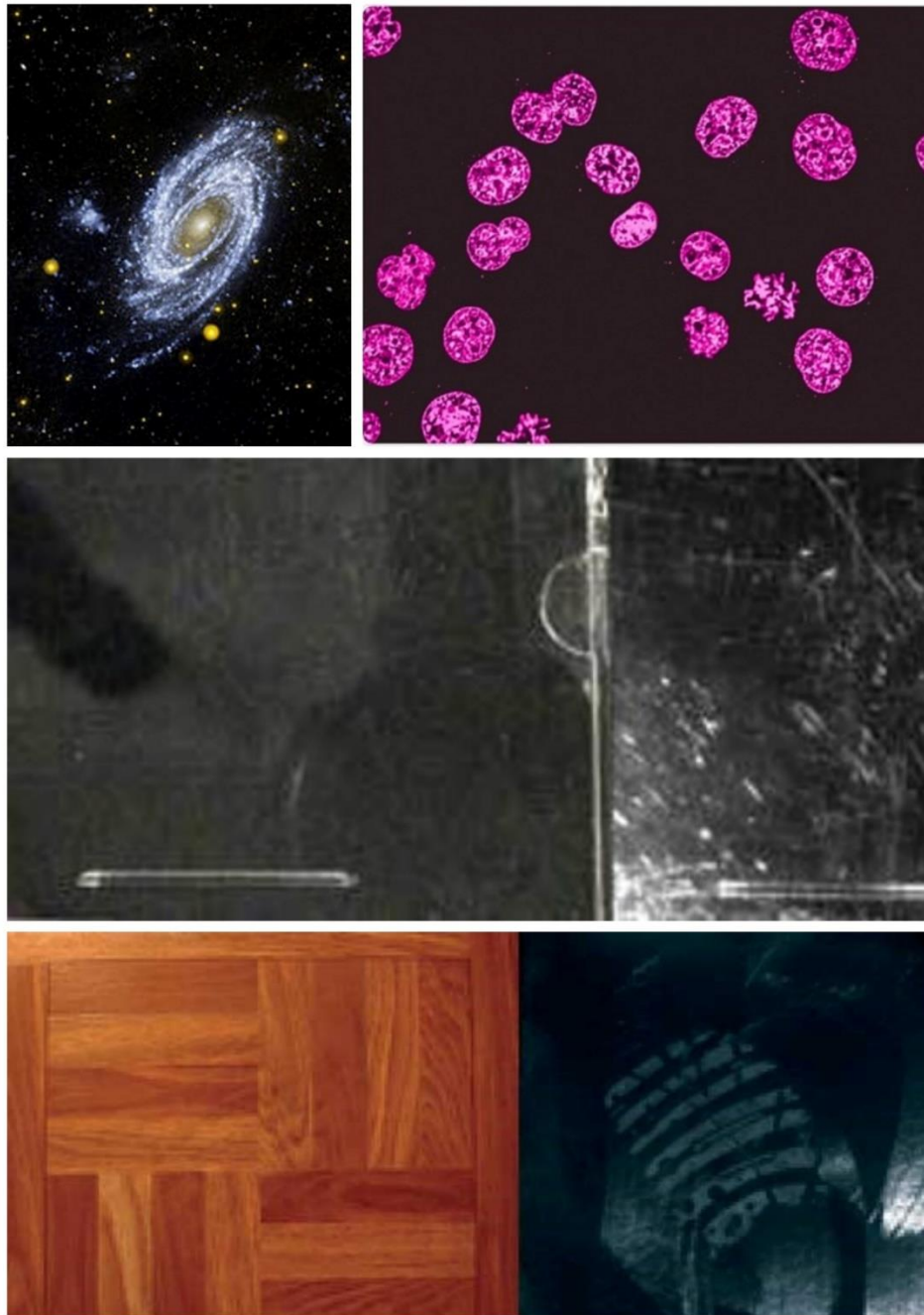
- a. X-ray of bulbs for quality control
- b. Chest x-ray
- c. X-ray based discrimination between Authentic and counterfeit Chip



**Fig. 8 : Applications of X- ray imaging in astronomy**

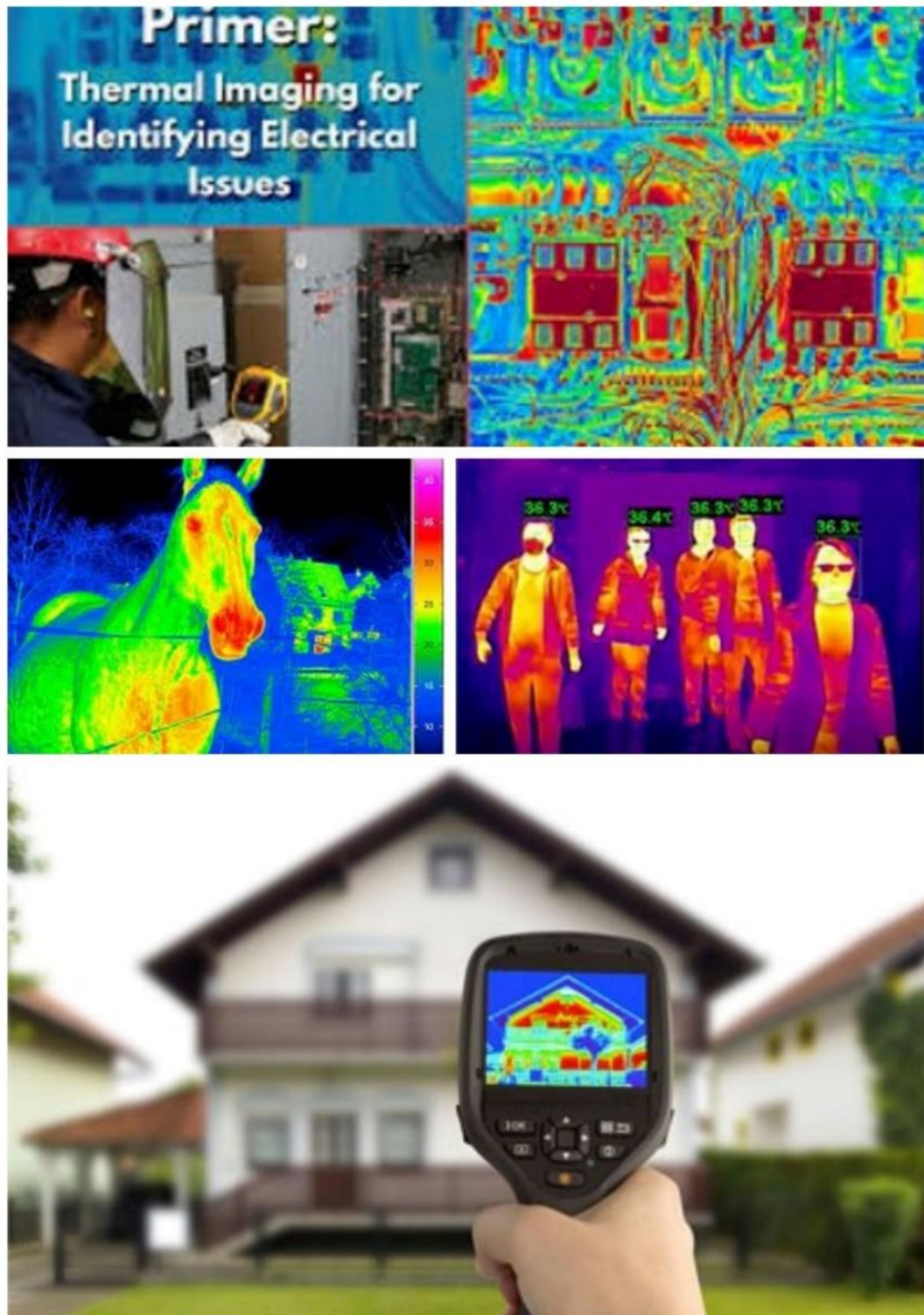
- a. The Sun in x-rays, as seen by the NuSTAR observatory. Active regions are the brightest in x-rays.
- b. A Chandra image of M51 contains nearly a million seconds of observing time. X-ray





**Fig. 9 : Applications of UV imaging**

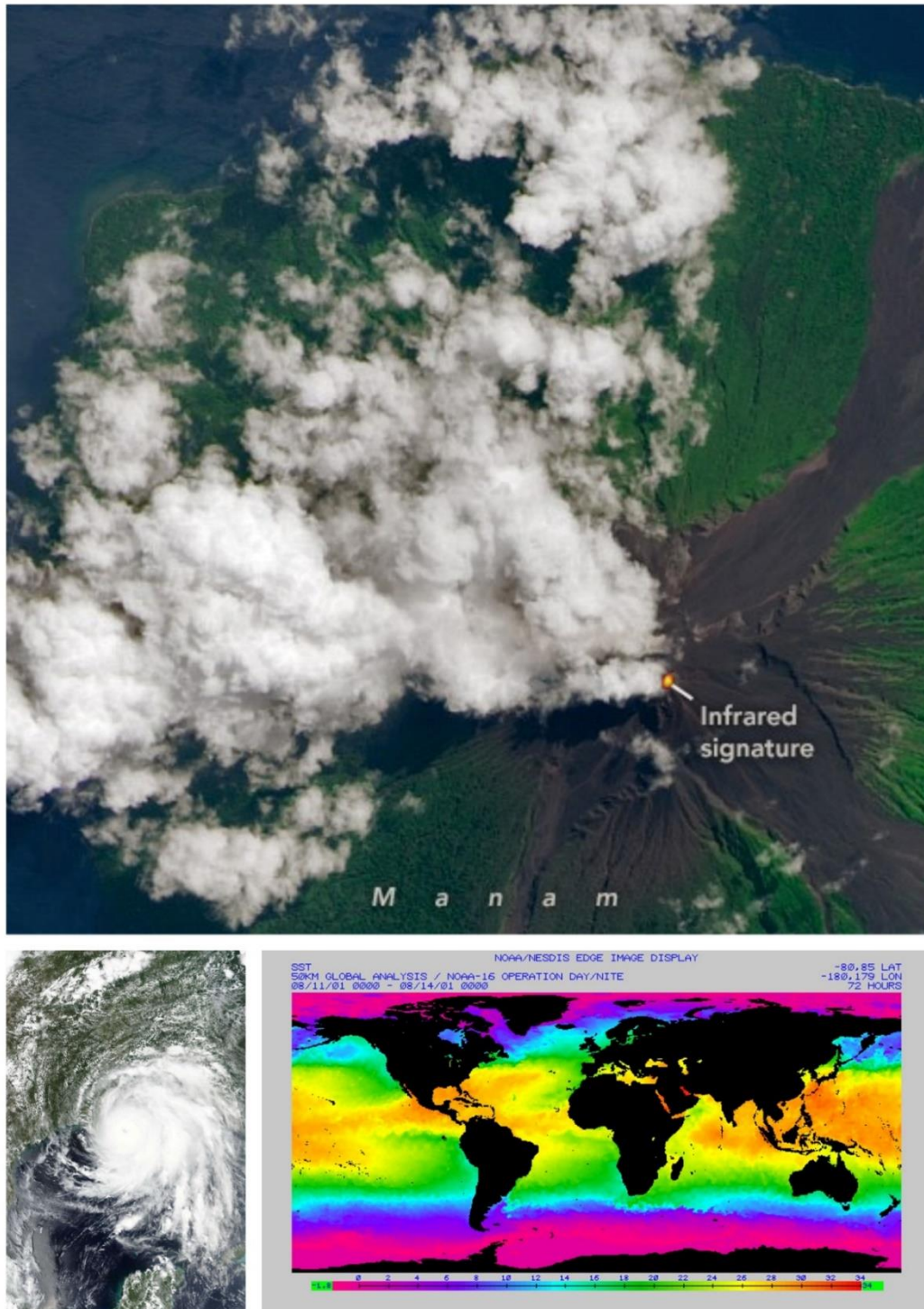
- a. Galaxy M81 under UV telescope
- b. Sample under UV-fluorescence imaging
- c. CD jewel case is imaged in both visible (left) and UV lighting (right). Scratches are not apparent in the visible image but are clear in the UV image.
- d. Floor is imaged in both visible (left) and UV lighting (right) UV image on the right clearly



**Fig. 10 : Applications of IR imaging**

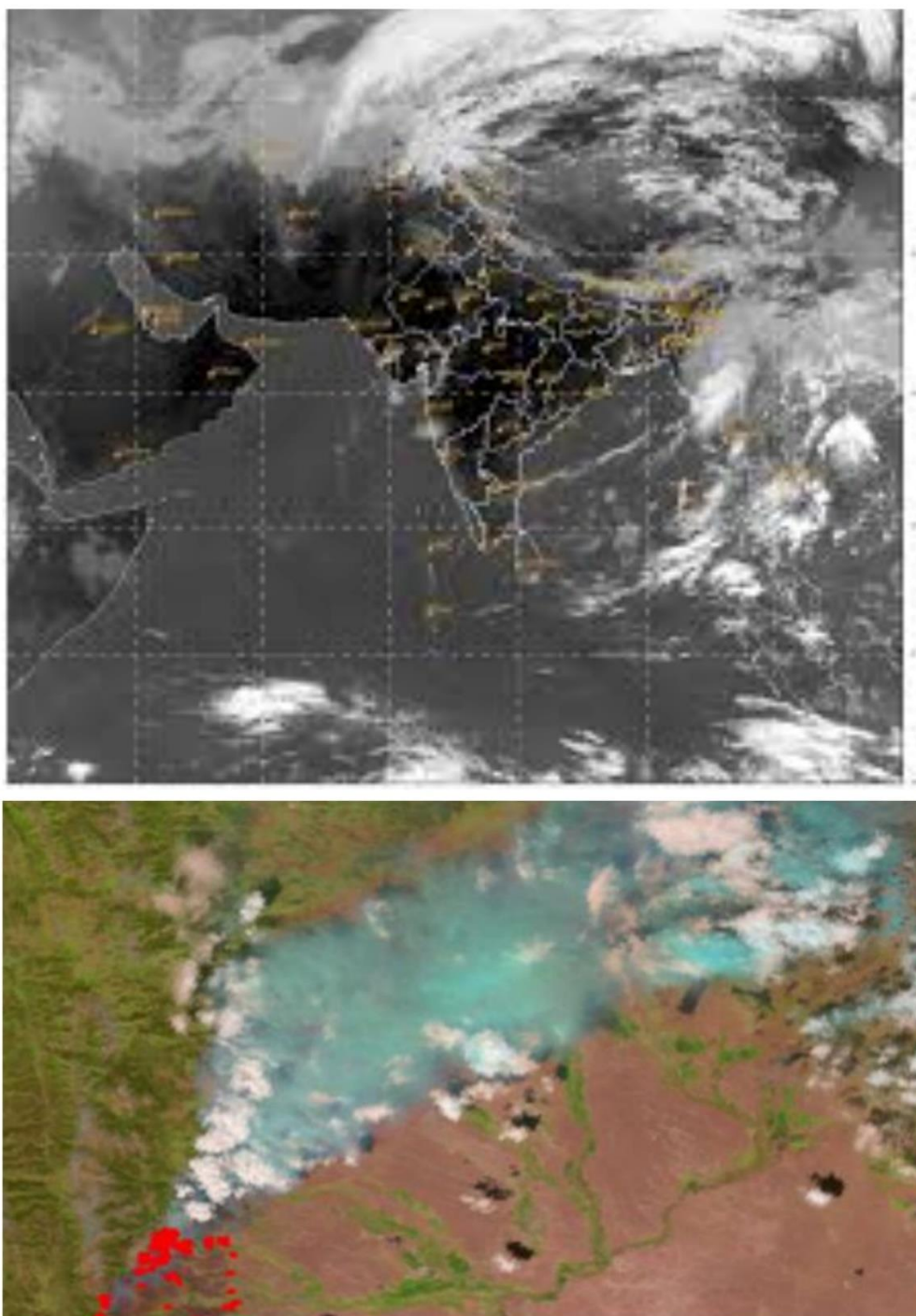
- a. Image taken through IR to identify electrical issues
- b. Night Vision
- c. Body temperature measurement
- d. Measuring heat radiations of a building





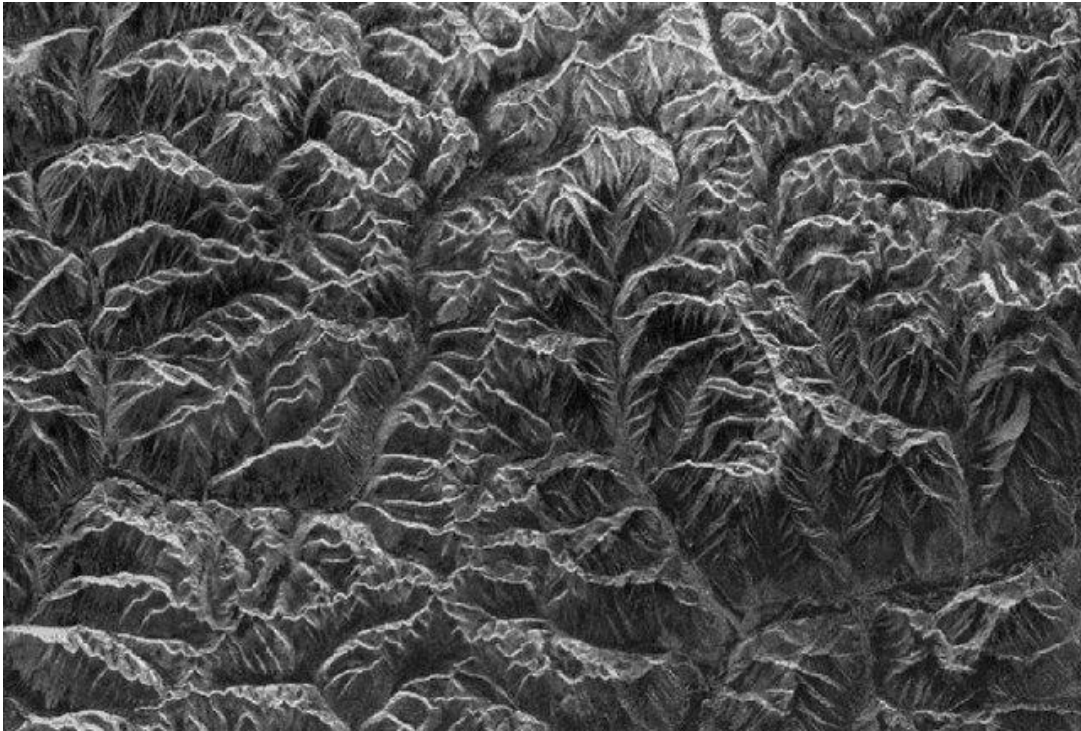
**Fig. 11 : Applications of remote sensing of Earth using IR sensors**

- On May 22, 2022, the Operational Land Imager (OLI) on Landsat 8 observed an infrared signature, indicating heat in Manam's island indicating active volcano
- Lansat image of hurricane Ida
- Sea surface temperature mapping using LANDSAT-8



**Fig. 12: Applications of remote sensing of Earth using visible light**

- a. INSAT-1B satellite image for weather forecasting
- b. Forest fire detection using satellite image



**Fig. 13: Applications of remote sensing of Earth using visible light**

Radar image of the Tibetan Himalayas acquired by the Spaceborne Imaging Radar-  
on April 10, 1994, on board the space shuttle Endeavour



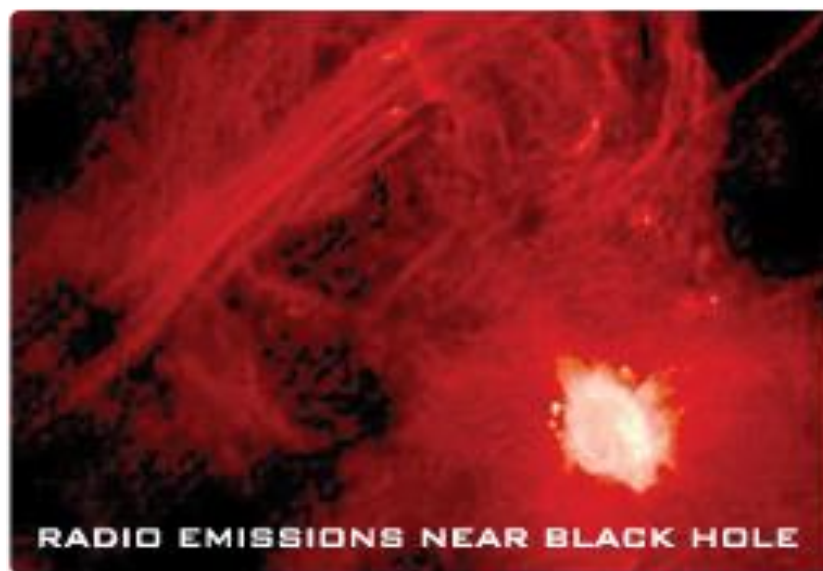
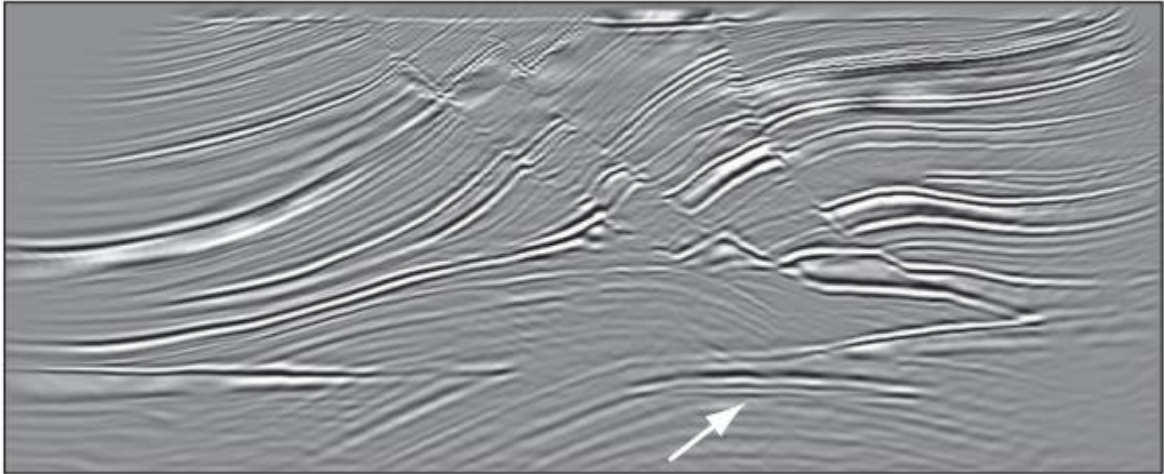


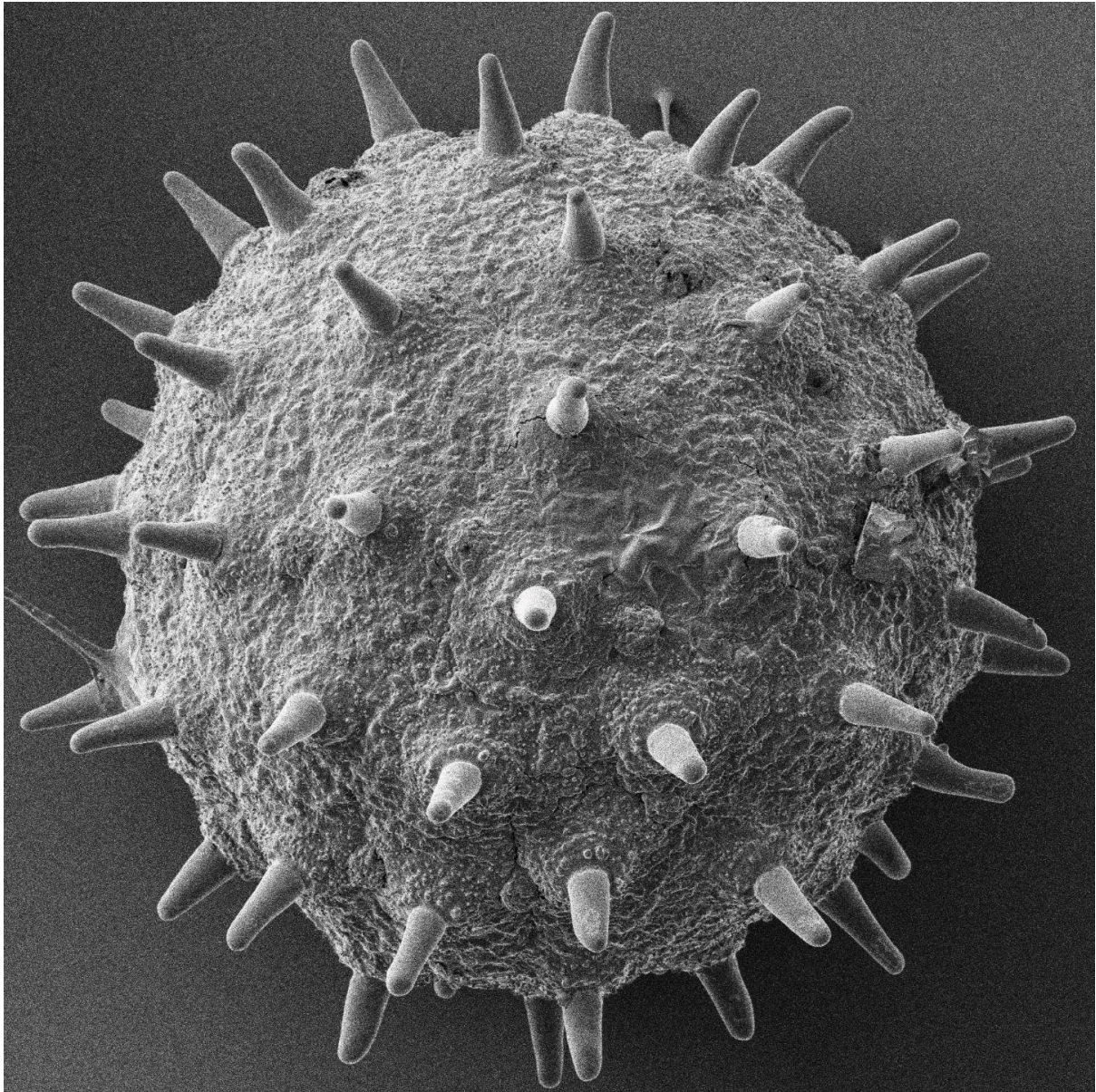
Fig. 14: Applications of imaging using Radio waves



**Fig. 15: Applications of imaging using sound waves**

- a. Mineral source found using acoustic imaging
- b. Image of foetus through USG imaging





**Fig. 16: Applications of imaging using electrical energy**

High magnification image showing pollen inside the locule (cavity where the pollen cavity is located in hibiscus flower using electron microscope