HIGH-SPEED IR VISUALIZATION LAB

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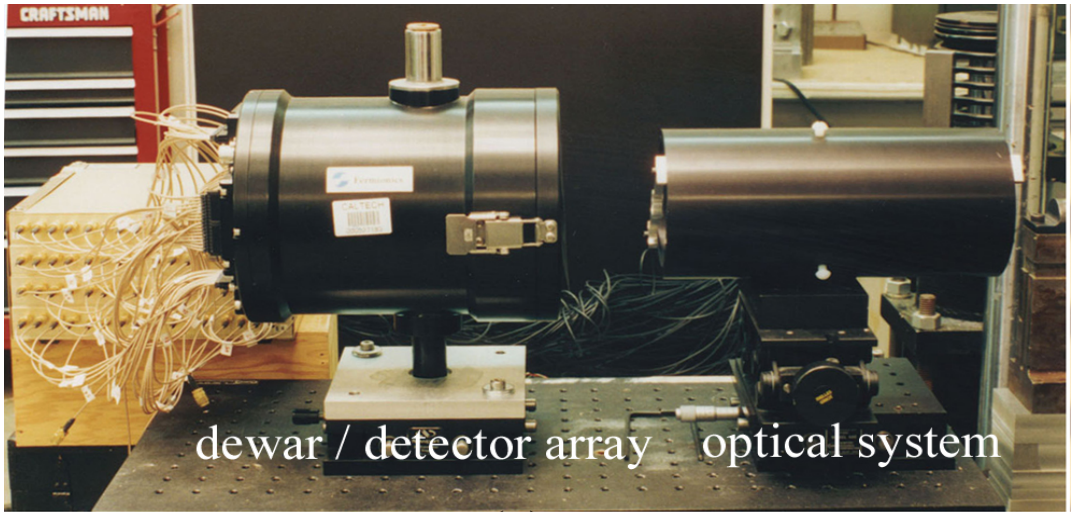
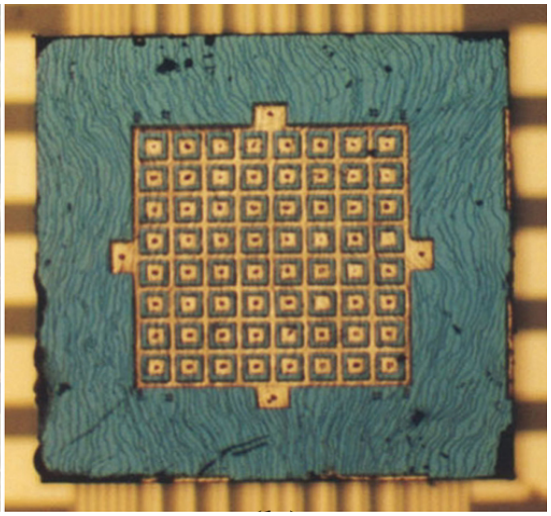
- High-speed IR detector systems are used for the determination of transient temperature response of materials subjected to dynamic loading.



High-speed IR Camera System



Detail of detector array

- **High-speed IR camera**
  - *8 x 8 square array of HgCdTe elements (1.1 mm square)*
  - *Telescopic optical systems for 0.5 to 3 times magnification*
  - *Multi-plexing data acquisition system*
  - *1 million frames per second*
  - *Highest sensitivity to temperature changes from 275 to 500 K*

- **Linear detector array**
  - *16 InSb elements*
  - *80 μm elements, spaced 100 μm apart*
  - *Highest sensitivity to temperature changes from 400 to 1500 K*
- **Single detector**
  - *HgCdTe element*
  - *Used with Hopkinson bar*