

Second Joint Laureate Applied Research

26th Khwarizmi International Award (KIA)



- **Project Title:** Athermalized Imaging Infrared Seeker set
- **Executive Organization:** Iran Electronics Industries (IEI) Co, Isfahan Optics Industries (IOI)

● **Abstract:**

This System is an Athermalized Imaging Seeker set, with small diameter that is used to detect and track the targets.

This system includes the main subsystem such as camera, window, gyroscope, accurate two degrees of freedom set, image processing and control unit.

Referring to imaging systems, temperature change causes reduction in image quality and miss the image data. Athermalized camera can solve this problem and automatically make proper images from the target in different temperatures. Image processing and control unit do some special processes on images and make proper control commands to track the target and give this commands to torque motors on the seeker.

In order to protect against the environmental conditions (such as moist) a special nose is used to cover the system and completely seal the Unit.

