

U R Rao Satellite Centre Indian Space Research Organisation



Thin films Technologies

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed thin films based (Sputtering) Thermal Control coatings for Space applications. These are application specific multilayerd coatings developed on rigid (quartz glass) and flexible (Kapton, Mylar, FEP) substrates for thermal control and allied applications.

Salient Features

These are multilayered thin film based (sputtering) processes to realize thermal control elements such as Rigid Optical Solar Reflector, OSR, Flexible Optical Solar Reflector (FOSR) and application specific coatings.

Four thin film based (Sputtering) processes developed, qualified for space application:

- + Flexible Optical Solar Reflector (FOSR) for LEO missions.
- Rigid Optical Solar Reflector.
- + Transparent Conductive Coating on Flexible Substrates (FEP and Polyimide) on front side with Aluminium coating on rear side.
- + Flexible Optical Solar Reflector (FOSR) for GEO missions.

Technology Transfer

URSC-ISRO offers to transfer these Thin films Technologies developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

