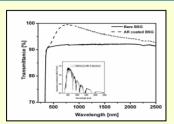


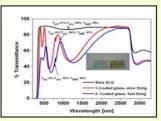
INTERNATIONAL ADVANCED RESEARCH CENTRE FOR POWDER METALLURGY AND NEW MATERIALS (ARCI)

(An autonomous R&D Centre of Department of Science and Technology, Govt. of India)

CENTRE FOR SOL-GEL COATINGS (CSOL)

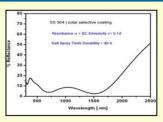


Transmittance spectrum of single layered antireflective coating on BSG

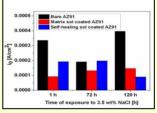


Transmittance spectra of fully dielectric solar control coating





UV-Vis-NIR reflectance spectrum of solar selective coatings on SS



Comparison of corrosion currents for bare and coated **AZ91** substrates

- Developing Innovative Sol Compositions for Technology Oriented Product Development
- Sol Synthesis, Coating, Characterization and Testing
- **Prototype Development**
- **Technology Transfer**

PROCESS FACILITIES

10 I, 20 I and 100 I reactors

CLEANING AND PRETREATMENT OF SUBSTRATES

- **Ultrasonic cleaning**
- Flat glass cleaner
- Plasma treatment

COATING DEPOSITION

- **Automated spray coating** facilities (1 m x 1 m size)
- Dip coaters
- Spin coaters
- Screen printer
- Pad printer



Pilot Plant



Abrasion Resistant Coatings



Coloured coatings on glass

Plasma

treatment



Flame Retardant Coating





Hard Coatings on Plastics



Bare & AR Coated Glass Anti-corrosion Coatings



Scratch resistant coating

Dip Coater



Solar selective coating



Flat spray unit





Batch furnace

CURING & DENSIFICATION

- > UV, IR and LED curing
- Batch, belt furnaces
- **Drying ovens**

CHARACTERIZATION & TESTING

- Contact angle measurement
- Weathering resistance
- Haze meter
- Spectroscopic **Ellipsometer**
- Taber abraser
- **Electrochemical** workstation
- Viscometer
- Thickness gauge



Taber abraser