



- All optical diagnostics in ITER will rely on first mirrors.
- First Mirror Test has been carried out since 2002 in JET-C and JET-ILW over 90 specimens in the divertor and on the main chamber wall.

Main Results

- ❖ In JET-C reflectivity of all tested mirrors was degraded.
- ❖ In JET-ILW molybdenum mirrors on the main chamber retained reflectivity in the visible and IR range.
- ❖ 30% reflectivity loss of Rh-coated mirrors in the main chamber
- ❖ Divertor mirrors in JET-ILW lost reflectivity by co-deposition of Be, W, C, N with fuel species.

Concluding Remarks and Outlook

- ❖ Refreshing of mirror surfaces on the main chamber wall by periodic evaporation of Mo layer.
- ❖ Need for mirror replacement in the ITER divertor.
- ❖ Mirror test in the ITER-relevant geometry from 2015.

**Mo and
Rh-coated
mirrors**

