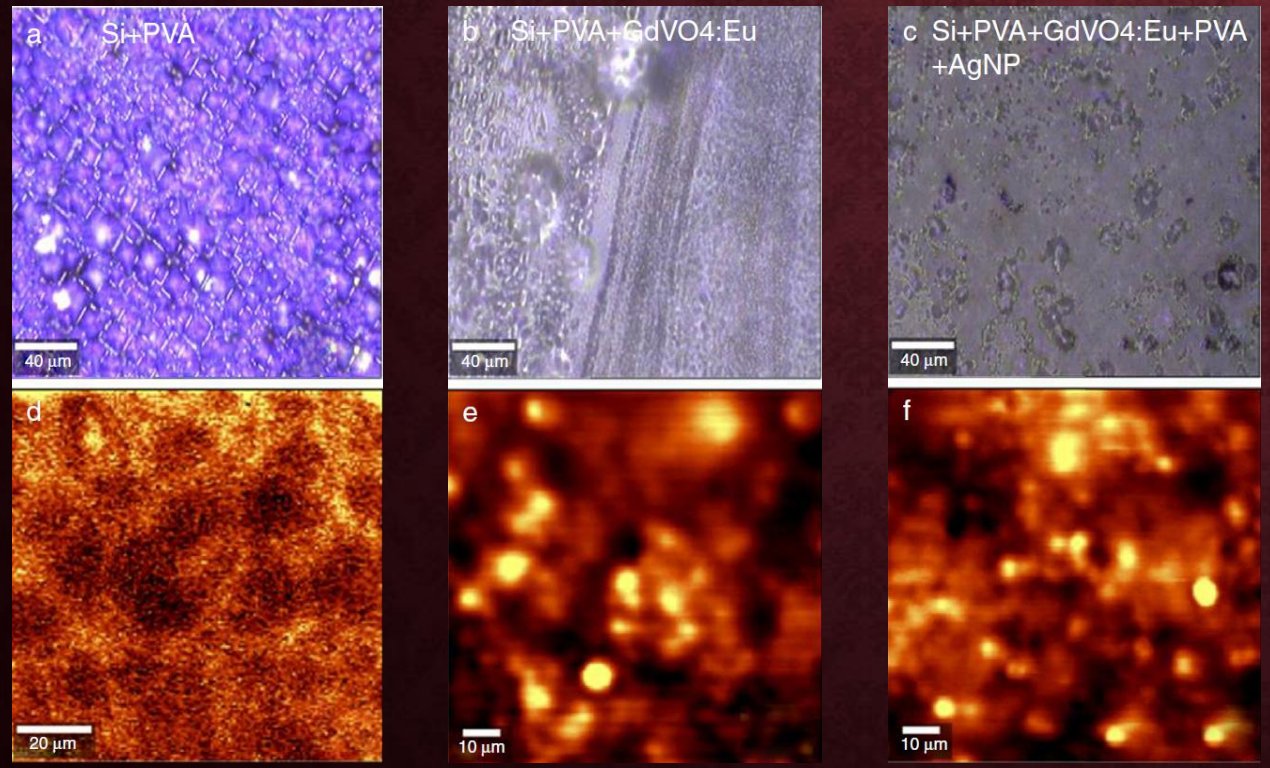
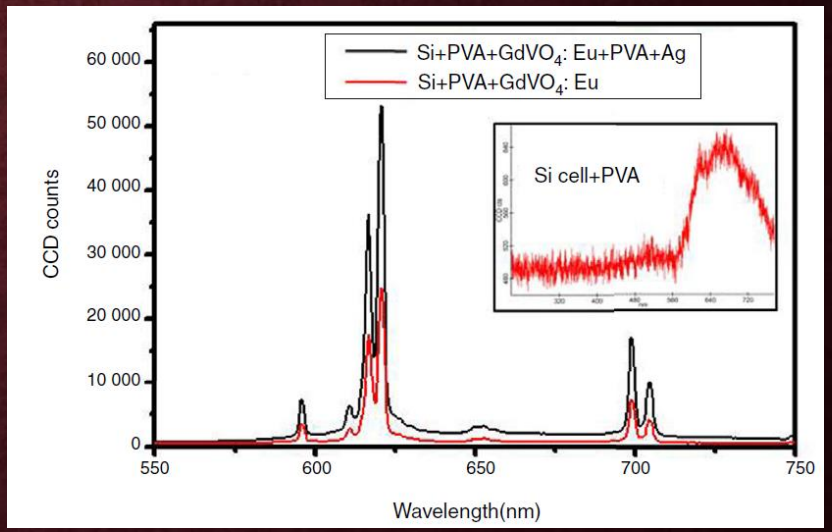
# ENHANCEMENT OF GDVO4:EU3+ RED FLUORESCENCE THROUGH PLASMONIC EFFECT OF SILVER NANOPRISMS ON SI SOLAR CELL SURFACE

- *Conjugation between red phosphor (GdVO4:Eu3+) and silver nanoprism (Ag NP) to enhance commercial single crystal solar cell surface.
- *Confocal mapping of the samples was done under the excitation of a UV diode laser (375 nm).




Optical images and confocal fluorescence map of: (a) and (d), the Si Cell + PVA; (b) and (e), the Si cell + PVA + $GdVO_4$:Eu; (c) and (f), the Si cell + PVA + $GdVO_4$:Eu + PVA + Ag NP; (g), digital image of the bare Si cell (left) PVA + $GdVO_4$:Eu + PVA + Ag NP deposited on the Si cell; (h) corresponding spectra comparing the $Eu^{3+}$ emission intensity with and without Ag NPs suggesting enhancement of fluorescence, the inset shows the emission from the Si cell with the PVA layer under the same experimental conditions.