

1. SOLAR HYDROGEN GENERATION TECHNOLOGY:

The photocatalytic systems made up of inexpensive materials for solar hydrogen generation with improved efficiency and stability have been developed.

CURRENT STATUS:

- A hetero-structured photocatalyst based system has been developed which show the the photocurrent density 7 mA cm^{-2} (many folds higher than that of reported in literature for any niobate photocatalyst) and $12,000 \text{ } \mu\text{mol g}^{-1} \text{ h}^{-1}$ H_2 generation rate. (TRL LEVEL-4/5)
- An inexpensive carbon based photocatalyst system has been developed which show the H_2 generation rate of the order of $21,000 \text{ } \mu\text{mol g}^{-1} \text{ h}^{-1}$. (TRL LEVEL-4)

