

Future Recommendations

- The monolithic integration using LASER will be carried out using 532 and 330 nm laser for the P2 and P3 process to enhance CIGS module efficiency.
- Alternative buffer and TCO layer will be studied to enhance the efficiency of CIGS solar cells.
- An effort towards the fabrication of CIGS solar cell on a flexible substrate with a thin (about less than 100 nm) CIGS absorber layer will be taken up next.
- Integration of vacuum system for in-line in-situ fabrication process without breaking vacuum to enhance device performance and total fabrication time of CIGS solar cell/module.
- First time ever, a tiny module of 0.3 x 50 mm will be designed and fabricate to generate power from the light of lamps and bulbs.
- Perovskite/CIGS tandem solar cell module will be fabricated and optimized for better performance.
- Life-time Reliability measurement setup for CIGS solar cell module will be integrated.