

Mr. Amol Chintaman Badgujar

Project Junior Scientist

Centre for Solar Energy Materials,

ARCI, Hyderabad-500005

Phone (Work): + 91(40)24452 534

Email ID: badgujaramol@project.arci.res.in,

badgujaramol1989@gmail.com



Qualification: M.Tech (Mechanical Engineering)

Pursuing PhD (Metallurgical Engg. and Materials science) at IITB

Experience:

Oct 2013- Till date Project Junior Scientist ARCI Hyderabad

July 2013- Sept 2013 Lecturer MES PIITEMSR, New Panvel

Research Interests:

- Fabrication of CIGS Thin film solar cells
- Flash light post-treatment of semiconductor thin films
- Scribing (Laser and Mechanical) of thin film solar modules
- Sputter deposition of metallic and TCO thin films

Publications and Conferences:

1. **Amol C. Badgujar**, Sanjay R. Dhage, Shrikant V. Joshi, Process parameter impact on properties of sputtered large-area Mo bilayers for CIGS thin film solar cell applications, *Thin Solid Films*, Volume 589, 31,79-84, (2015).
2. **Amol C. Badgujar**, Madhuri Kukkadapu, Sean Garner, Sanjay R Dhage, Shrikant V Joshi, Non-vacuum route for CIGS thin film absorber on flexible glass substrates, *Proceedings of 42nd IEEE PVSC conference, New Orleans, LA (2015)*.

3. **Amol C. Badgujar**, Sanjay R. Dhage, Pulsed nanosecond laser scribing of bilayer Molybdenum back contact for CIGS thin film solar cell applications, presented at *1st International Conference on Application of Lasers in Manufacturing, New Delhi, India (2015)*.
4. **Amol C. Badgujar**, Sanjay R. Dhage, Bilayer Molybdenum Back Contact On 300 X 300 mm² Area For CIGS Thin Film Solar Cell Application, presented at *2nd National conference on materials for energy conversion and storage Pondicherry (2016)*.
5. **Amol C. Badgujar**, Brijesh Singh Yadav, Rajiv O. Dusane, Sanjay R. Dhage, Particulate ink based non vacuum route for CIGS thin film by flash light treatment , presented at *2nd International conference of solar energy photovoltaics Bhuvaneshwar (2016)*.
6. Brijesh Singh, **Amol C. Badgujar**, Sanjay R. Dhage, Effect of surface treatment on adhesion strength between magnetron sputtered bi-layer Molybdenum thin films and soda lime glass substrate. *Solar Energy* 157:507-513 (2017).
7. **Amol C. Badgujar**, Brijesh Singh Yadav, Rajiv O. Dusane, Sanjay R. Dhage, Cu(In,Ga)Se₂ thin film absorber layer by flash light post-treatment, *presented at 17th International conference on thin films at New Delhi (2017)*.
8. **Amol C. Badgujar**, Sanjay R. Dhage, Shrikant V. Joshi, Process parameter impact on selective laser ablation of bilayer Molybdenum thin films for CIGS solar cell application, *Thin Solid Films*, (Under Review).

Affiliation to professional societies:

1. Energy Science society of India
2. International Solar Energy Society
3. IAENG society of Mechanical Engineering