

CURRICULUM VITAE

Personal

Name: Srinivasa Rao Atchuta

Designation: Project Scientist 'B'

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International Advanced Research Center for Powder
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Academic Qualifications

2015-Present	Doing PhD under AcSIR in CSIR- NAL
2008-2010	Post graduation in Chemistry Indian Institute of Technology Roorkee, Roorkee, India CGPA: 7.63/10
2004-2007	Graduation in Mathematics, Physics and Chemistry AKRG Degree College, Andhra University, Andhra Pradesh Percentage: 73.3

Professional Experience

Nov 2016 - Present	Working as a Project Scientist 'B' in Centre for Solar Energy Materials, ARCI, Hyderabad
Sep 2012 - Nov 2016	Research Scientist/Assistant Manager in Research Technology and Innovation Centre, Thermax, Pune
Sep2010- Sep 2012	Junior ARCI Fellow in Centre for Solar Energy Materials, ARCI, Hyderabad
May2009-Jul2009	Summer Project student in School of Chemistry, UOH, Hyderabad

Award

- Selected for "**Thermax Scientific Breakthrough Award**" in the FY 2012-13 for the Development of anti-reflective coating on glass tube for Solar Thermal application to reduce the cost of Parabolic Trough

Patents

- S. Sakthivel, **S.R. Atchuta** and M.S. Prasad "*Transition metal-based solar selective absorber coated substrate and method of manufacturing the same*" (Indian patent: 201911019139, date of filling: 14/05/2019).
- S. Sakthivel, R. Easwaramoorthi, C. Narendra and **S.R. Atchuta** "*Ambient condition curable transparent Super-hydrophobic coating for easy to clean applications and method of producing the same*" (Indian patent: 201911009429, date of filling: 11/03/2019).
- S. Sakthivel and **S.R. Atchuta** "*A high thermal stable selective solar absorber layer with low emissive property over a substrate and a process of producing the same*" (Indian patent: 3312/DEL/2012, date of filling: 29/10/2012)
- S. Sakthivel, V.P. Kumar and **S.R. Atchuta** "*An improved solar selective absorber coating with excellent optical absorptance, low thermal emissivity and excellent corrosion resistance property and a process of producing the same*" (Indian patent: 1129/DEL/2013, date of filling:16/04/2013)

Publications

- ✓ **S.R. Atchuta**, S. Sakthivel and Harish C. Barshilia "Nickel doped cobaltite spinel as a solar selective absorber coating for efficient photothermal conversion with a low thermal radiative loss at high operating temperatures" Solar energy materials and Solar Cells 200 (2019) 109917
- ✓ **S.R. Atchuta**, S. Sakthivel and Harish C. Barshilia "Transition metal based $Cu_xNi_yCo_z-x-yO_4$ spinel composite solar selective absorber coatings for concentrated solar thermal applications" Solar energy materials and Solar Cells 189 (2019) 226-232
- ✓ M. Shiva Prasad, K.K. Phani Kumar, **S.R. Atchuta**, B. Sobha and S. Sakthivel "High performance and thermally stable tandem solar selective absorber coating for concentrated solar thermal power (CSP) application" 2018, AIP Conference Proceedings, 1961, 020004

- ✓ M. Shiva Prasad, **S.R. Atchuta** and S Sakthivel, Nanomaterials and Coatings for Concentrated Solar Thermal Power (CSP) and Photovoltaic (PV) Application, Advanced Materials Chemistry at the Interfaces of Energy, Environment and Medicine. 1 (53-57) 2018 ISBN: 978-93-81402-42-9
- ✓ **S R Atchuta**, B. Mallikarjun, and S. Sakthivel, Optically enhanced solar selective and thermally stable absorber coating for concentrated solar thermal application, 6th International Conference on Advances in Energy Research ICAER-2017, Springer Proceedings in Energy (accepted).
- ✓ **A. Srinivasa Rao** and S. Sakthivel “A highly thermally stable Mn–Cu–Fe composite oxide based solar selective absorber layer with low thermal loss at high temperature” Journal of Alloys and Compounds 644 (2015) 906–915

Training and Presentations in National / International Conferences

- K.K. Phani kumar, **S.R. Atchuta**, M. Shiva Prasad and S. Sakthivel “Development of Solar Selective Absorber Coatings by Wet Chemical Process on Different Substrates” International Conference on Renewable Energy, Green Technology & Environmental Science (ICREGTES) held at Pune, India on 27th Jan 2019
- C. Narendra, S. Pendse, **S.R. Atchuta** and S. Sakthivel “Dual functional Nanocoating for Self-Cleaning and Anti-Reflective Applications” 10th Bangalore India Nano – 2018 conference held at Bangalore, India during 5th – 7th Dec 2018
- **S R Atchuta**, B. Mallikarjun, and S. Sakthivel “Optically enhanced solar selective and thermally stable absorber coating for concentrated solar thermal application” 6th International Conference on Advances in Energy Research ICAER-2017 conducted by IIT Bombay during 12th -14th December 2017 (Oral presentation)
- Training on “Designing of Concentrated Solar Thermal & Solar Water Heating Systems” conducted by National Institute of Solar Energy, Gurugram, Haryana MNRE, Govt. of India during 2nd – 6th Mar 2017
- Work Presented in “ICONSAT-2012” – ‘Ag-TiO₂ nano composite selective solar absorber coatings for solar thermal application’ Organised by ARCI, Hyderabad
- Participated in national conference of “NSRNEP-2012” at JNTU Anantapur College of Engineering, Pulivendula, Andhra Pradesh
- Work Presented in “IEEE–2011 conference” – ‘Development of high absorption and low emissivity coatings for solar thermal applications’ Organised by IEEE, Hyderabad