

Name

Mr. Balaji Padya

**Designation**

Scientist ' C'

Qualification

Bachelor of Technology (Mechanical Engineering)

Experience

2006 – 2010 Scientist-B, ARCI, Hyderabad.

2010 – Till date Scientist-C, ARCI, Hyderabad.

Research areas of interest

Synthesis, characterization and applications of nanostructured-carbon materials (carbon nanotubes, carbon onions, graphene oxide and graphene), conducting polymers, structural composites, nanofluids, field emission, thermoelectric and energy storage materials

List of journal publications

1. Synthesis of vertically aligned carbon nanotube arrays by injection method in CVD
Balaji Padya, K.V.P.Prabhakar, P.K.Jain
International Journal of Nanoscience and Nanotechnology:10 (8), 4960-4966, (2010).
2. Purification of multi-walled carbon nanotubes synthesized by arc discharge set-up
Y.Malathi, *Balaji Padya, K.V.P Prabhakar, P.K. Jain*
Carbon Letter: 11 (3), 184-191 (2010).
3. Mechanical properties of multi-walled carbon nanotubes reinforced polymer nanocomposites
G. Venkata Ramana, *Balaji Padya, R. Naresh Kumar, K.V.P. Prabhakar, P.K. Jain*
Indian Journal of Advanced Engineering and Materials Sciences: 17, 331-337, (2010).

4. Production of hydrogen and carbon nanofibers through the decomposition of methane over activated carbon supported Pd catalysts.
J. Sarada Prasad, Vivek Dhand, V. Himabindu, Y. Anjaneyulu, Pawan Kumar Jain, *Balaji Padya*.
International Journal of Hydrogen Energy: 35, 10977-10983, (2010).
5. Thermal and mechanical properties of multiscale carbon nanotubes and carbon fiber reinforcement in epoxy hybrid nanocomposites
P.K. Jain, *Balaji Padya*, P.S. Rao, K Mohana Krishna Chowdary, B. Ashwani Kumar, G.Anusha
Journal of Nanostructured Polymer and Nanocomposites: 7/3, 81-86, (2011).
6. Electrically conductive carbon nanopipe-graphite nanosheet/polyaniline composites
G. Venkata Ramana, *Balaji Padya*, Vadali V.S.S. Srikanth , P.K. Jain,
G. Padmanabham, G. Sundararajan
Carbon 49 ,5239 –5245, (2011).
7. Self-organized growth of bamboo like carbon nanotube arrays for the field emission properties
Balaji Padya, Dipankar Kalita, P.K. Jain, G.Padmanabham, M.Ravi, K.S. Bhat
Applied Nanoscience: 2, 253–259, (2012).
8. Nitrogen incorporated highly aligned carbon nanotube arrays thin film grown from single feedstock for field Emission
Balaji Padya, Dipankar Kalita, P.K. Jain, G.Padmanabham, M.Ravi, K.S. Bhat,
Journal of Nanoelectronics and Optoelectronics. 8 (2), 177-181, (2013).
9. Characterization of intermediates in the synthesis of reduced graphene-oxide through sequential de-oxygenation
A.K. Mishra, C. Srinath, P.K. Jain, B. Padya, M. Chopkar
Nano Trends: A Journal of Nanotechnology and Its Applications: 14(2), 1-9, 2013.

10. Electrically conductive SWNTs/polyaniline nanofibers composite thin film
G. Venkata Ramana, *Balaji Padya*, V.V.S.S Srikanth, P.K. Jain.
Bulletin of material science (accepted)

Conference proceedings

1. Dispersion and rheological aspects of multiwall carbon nanotubes in polymer matrix
Y.Malathi, G.Raj Kiran, *Balaji Padya*, K.V.P. Prabhakar, P.K. Jain
Proceedings of MEMS, NEMS & Nanoengineering organized by GMRIT, Rajam during
August 8-9, pp. 114-117, 2008. (TS-205).
2. Surface Modification Effect on the Thermal and Mechanical Properties of Multi-Walled
Carbon Nanotubes / Epoxy Nanocomposites
G.Venkata Ramana, *Balaji Padya*, P.K.Jain
IEEE proceedings, 978-1-4673-0074-2/11, 110-113, 2011.
3. Highly ordered nitrogen doped carbon nanotube novel structures of aligned carpet for
enhanced field emission properties
Balaji Padya, P.K. Jain, G.Padmanabham, M Ravi, K.S.Bhat
AIP Conf. Proc. 1538, 196-199 (2013).
4. Role of buffer gas pressure on the synthesis of carbon nanotubes by arc discharge
method
Manikantan Kota, *Balaji Padya*, G. Venkata Ramana, P.K. Jain, G. Padmanabham
AIP Conf. Proc. 1538, 200-204 (2013).
5. Thermal properties of Multi-walled carbon nanotube-graphite nanosheets/epoxy
Nanocomposites.
G. Venkata Ramana, *Balaji Padya*, Vadali V.S.S. Srikanth, P.K. Jain.
AIP Conf. Proc. 1538, 205-208 (2013).

Affiliation to Professional Societies

- Life member of Indian Carbon Society

Contact information

Centre for Carbon Materials

Email: balaji@arci.res.in

Phone: 040 – 2445 2438

Fax : 040 – 2444 2699