CURRICULUM VITAE

DINESH JAYAVANT AHIRRAO

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Phone: 07977127574 / 07588737980.

CARRIER OBJECTIVE

"Seeking a position where I can efficiently contribute my knowledge, skills, and abilities for the growth of the organization and build my professional career with dedication and hard work".

CURRENT STATUS

Pursuing Ph.D. (Tech) in Nanotechnology degree (Colloquium and synopsis completed) at Department of Physics, Institute of Chemical Technology, Mumbai.

Ph.D. thesis title: "Carbon nanocomposites for energy storage supercapacitor and water desalination applications".

Research supervisor: Dr. Neetu Jha, Asst. professor, Dept. of physics, ICT, Mumbai.

RESEARCH EXPERTISE

- To synthesize the carbon nanomaterials, metal oxides, conducting polymers and their nanocomposites.
- To fabricate the different types of electrodes for supercapacitor, flexible supercapacitor, and capacitive deionization application.
- To investigate the supercapacitve behavior of each material using various electrochemical techniques.
- To Fabrication of a flow-through electrode CDI cell for water desalination studies.

EDUCATIONAL QUALIFICATION

2013	**M.Tech (Nanotechnology)**
	CGPA: 7.02; North Maharashtra University, Jalgaon.
2011	**M.Sc (Physics)**
	Percentage: 69.65%; North Maharashtra University, Jalgaon.
2009	**B.Sc (Physics)**
	Percentage: 68.5%; North Maharashtra University, Jalgaon.
2006	**HSC**
	Percentage: 61%; Nashik board.
2004	**SSC**
	Percentage: 69.6 %; Nashik board.

PROJECT UNDERTAKEN IN M.SC

Project title: "Gas Sensing Properties of pure TiO_2 and Ruthenium doped TiO_2 thin films prepared by Spray Pyrolysis techniques".

Guide: Dr. L.A Patil, Pratap College, Amalner.

PROJECT UNDERTAKEN IN M.TECH

Project title: "Design & Synthesis of Hydrogel Based Scaffolds for Biomedical Sensor".

Guide: Dr. Neetu Singh, Senior Scientist, CSIR-NCL, Pune.

RESEARCH PUBLICATIONS

1) V_2O_5 nanowires-graphene composite as an outstanding electrode material for high electrochemical performance and long-cycle-life supercapacitor.

Dinesh J Ahirrao, K Mohanapriya, N Jha; **Materials Research Bulletin** 108, 73-82.

2) Sweet-Lime-Peels-Derived Activated-Carbon-Based Electrode for Highly Efficient Supercapacitor and Flow-Through Water Desalination.

Dinesh J Ahirrao, S Tambat, AB Pandit, N Jha; **Chemistry Select** 4 (9), 2610-2625.

3) TiO_2-nanoflowers as flexible electrodes for high-performance supercapacitor.

Dinesh J. Ahirrao, Higgins MW, and Neetu Jha; **Applied surface science** 491, 765-778.

4) Comparative Study on the Electrosorption Properties of Carbon Fabric, Functionalized Multiwall Carbon Nanotubes and Solar Reduced Graphene Oxide for Flow through Electrode-based Desalination Studies.

Dinesh J. Ahirrao and Neetu Jha**; Carbon (DOI: org/10.1016/j.carbon.2019.06.078).**

5) Synthesis of Aqueous Dispersible Reduced Graphene Oxide by the Reduction of Graphene Oxide in Presence of Carbonic Acid.

PH Wadekar, **Dinesh J Ahirrao**, RV Khose, DA Pethsangave, N Jha, S Some; **Chemistry Select** 3 (20), 5630-5638.

6) Recent progress in nanostructured magnetic framework composites (MFCs): Synthesis and applications.

SS Nadar, N Varadan, S Suresh, P Rao, **Dinesh J Ahirrao**, S Adsare; **Journal of the Taiwan Institute of Chemical Engineers** 91, 653-677.

PUBLISHED IN CONFERENCE PROCEEDINGS

1) Polyaniline-Manganese dioxide nanorods nanocomposite as an electrode material for supercapacitors.

Dinesh J Ahirrao, N Jha; AIP Conference Proceedings 1832 (1), 050168.

2) Bulk to nanostructured vanadium pentaoxide-nanowires (V_2O_5-NWs) for high energy density supercapacitors.

Dinesh J Ahirrao, N Jha; AIP Conference Proceedings 1942 (1), 140066.

3) Highly crumpled solar reduced graphene oxide electrode for supercapacitor application

K Mohanapriya, **Dinesh J Ahirrao**, N Jha; American Institute of Physics Conference Series 1942 (5).

CONFERENCE ATTENDED

1) Presented a poster on “Polyaniline-Manganese dioxide nanorods nanocomposite as an electrode material for supercapacitors” at 61st DAE Solid state physics symposium held at **KIIT University, Bhubaneswar** during 26 to 30 December 2016.

2) Presented a poster on "Sweet Lime Derived Activated Carbon for Highly Stable Supercapacitor with Excellent Storage Capacity" at the 8th international conference on advanced material development and performance (AMDP 2017) Held at Department of physics, **Savitribai Phule Pune University, Pune**. During 11 to 15 July 2017.

3) Presented a poster on “Bulk to nanostructured vanadium pentaoxide-nanowires (V2O5-NWs) for high energy density supercapacitors” at 62nd DAE Solid state physics symposium held at **BARC, Mumbai** during 26 to 30 December 2017.

4) Presented a poster on “TiO_2-nanoflowers as flexible electrodes for high-performance supercapacitor" at the 5th international conference on nanoscience and nanotechnology (ICONN 2019) held at Department of physics**, SRM Institute of science and technology, Chennai** during 28 to 30 January 2019.

AWARD RECEIVED

1) Received “Shri G.M. Abhyankar students travel assistance award” on 24 October 2018 at ICT, Mumbai.

REFERENCES

1) Dr. Neetu Jha

Assistant professor, Dept of physics, ICT Mumbai.

Mo. No.: 09867000941

Email Id: nr.jha@ictmumbai.edu.in

2) Dr. Neetu Singh

Assistant professor, Dept. of biomedical engineering, IIT Delhi.

Mo. No.: 09923419142

Email Id: Neetu.singh@ncl.res.in

EXTRACURRICULAR ACTIVITIES

1) Position: General mess secretary (GMS) to C-Mess, ICT campus.

Mess capacity: 400 students and 20 staff member.

Tenure: 1 Year

Description: Headed the mess committee, handled the mess policies, and finances with a yearly budget of more than 1.25 Crore.

2) Position: Event head (Yuvam fest- 2018)

Description: Organized the grand fest event for more than 1500 students and faculties with a total budget of 30 Lac.

PERSONAL INFORMATION

Father Name: Jayavant Vasantrao Ahirrao

Mothers Name: Kalpana Jayavant Ahirrao

Date of Birth: 15 July 1989

Nationality: Indian

Marital Status: Unmarried

Languages Known: Marathi, Hindi, and English.

ADDRESS FOR CORRESPONDENCE

Room no. 604, Hostel no. 5, ICT campus
King's circle, Nathalal parekh marg,
Matunga east, Mumbai
400019 (MH), India.

PERMANENT ADDRESS

Plot no.: 11/B, Mahatma fule colony, Satana road,
Pimpalner, Tal: Sakri, Dist: Dhule,
424306 (MH), India.

DECLARATION

I hereby declare that all the information mentioned above is true to the best of my knowledge.

Thanking you.

Dinesh J. Ahirrao