

Scientist/Officers Biodata

Name: Naveen Manhar Chavan

Qualification: B.Tech (Metallurgy & Materials Technology, MGIT, JNTU, Hyderabad)

PhD (Ongoing, MEMS, IIT Bombay, Powai, Mumbai)

Designation: Scientist C

Contact information : Centre for Engineered Coatings, 04024452325, 0402442699,
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Experience: 8 years

Research Areas of Interest: Surface Engineering (Cold Gas Dynamic Spray, D-Gun), Mechanical Behaviour of Metals, Structure-Property correlation, Corrosion and Process Diagnostics.



Awards/Distinctions/ Scientific and Scholastic Achievements

1. Nominated as a young scientist by the ARCI-DST to attend the International Youth Forum "INTERRA-2011" held in September 2011 in Novosibirsk, Siberia, Russia.
2. University Gold Medalist in Engineering (2002-2006)
3. All India Rank of 119 and 35 in GATE 2006 and 2008 respectively
4. Institute topper in intermediate (plus two-2002)
5. School Topper in Matriculation (2000)
6. Presented papers in National Level contests viz., COGNIZANCE-2006 at IIT Roorkee, Srujana JNTU Hyderabad.
7. Actively participated as an organizing committee member of "Frontiers of Metallurgy and Materials Technology- A National Convention" held in 2003 at MGIT Hyderabad.

8. Played an important role in organizing the "2 day Thermal Spray Course" at ARCI, Hyderabad from 22nd -23rd November 2014.

9. Played a pivotal role in organizing the 6th Asian Thermal Spray Conference (ATSC 2014) held in Hotel Novotel Airport Hyderabad, Hyderabad during 24-26th November 2014.

List of Journal Publications:

1. "Influence of Grit blasting on the roughness and bond strength of Detonation sprayed coatings", Volume 19(4), June 2010, p806, Journal of Thermal Spray Technology
2. "Evaluation of Parameters for Assessment of Inter-Splat Bond Strength in Cold-Sprayed Coatings", Volume 19(6) December 2010, p1255, Journal of Thermal Spray Technology
3. "The influence of powder particle velocity and microstructure on properties of Cold sprayed Copper coatings", Volume 20(5) September 2011, p1009, Journal of Thermal Spray Technology
4. "The influence of Process parameters and heat treatments on properties of Cold sprayed Silver coatings" Surface Coatings and Technology, Surface & Coatings Technology, 205, 2011, p4798
5. "The Corrosion Behaviour of Cold Sprayed Zinc coatings on Mild Steel Substrate", Volume 22(4), April 2013, p463, Journal of Thermal Spray Technology
6. "The The Elastic Modulus of Cold Spray Coatings : Influence of Inter-splat Boundary Cracking", Volume 22(8), December 2013, p1348, Journal of Thermal Spray Technology
7. Study of mechanical properties and high temperature oxidation behavior of a novel cold-spray Ni-20Cr coating on boiler steels, Applied Surface Science 328 (2015) 13–25
8. Development of nano-crystalline cold sprayed Ni–20Cr coatings for high temperature oxidation resistance, Surface & Coatings Technology 266 (2015) 122–133
9. Development of Erosion-Corrosion-Resistant Cold-Spray Nanostructured Ni-20Cr Coating

for Coal-Fired Boiler Applications, May 2015 (Published Online), Journal of Thermal Spray Technology

Conference proceedings:

1. "Effect of heat treatment on properties of thick thermal spray coatings", International Conference on Metallurgical Coatings & Thin Films, April- May 2008, San Diego, USA.
2. "Effect of Process Parameters and Heat treatments on the properties of cold sprayed silver coatings", Proceedings of the Asian Thermal Spray Conference, November 2008, Nanyang Technological University, Singapore. (Oral Presentation)
3. "Corrosion behavior of Cold sprayed Zinc coatings", 14th National Congress on Corrosion Control in India, September 2008, Hyderabad, India
4. "Development of Erosion-Corrosion-Resistant Cold-Spray Nanostructured Ni-20Cr Coating for Coal-Fired Boiler Applications", 6th Asian Thermal Spray Conference (ATSC 2014), Hyderabad, India

Affiliation to Professional societies:

- Life member, Indian Institute of Metals (IIM).
- Life member, Materials Research Society of India (MRSI).