# **CURRICULUM VITAE**



# PERSONAL DETAILS - Dr. RAJKUMAR BODDHULA

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Nationality: INDIAN

Google Scholar Citations: 22

Google scholar link: rajkumar boddhula - Google Scholar

# **CAREER OBJECTIVE**

To be associated with a progressive organization that gives scope to acquire knowledge and skills and to be part of a team that dynamically works towards the growth of the organization.

# **EDUCATION HISTORY**

Aug 2014 – Oct 2021	National Institute of Technology, Rourkela; CGPA: 8.54/10  Doctor of Philosophy on "synthesis and characterization TM-MG cluster for study their potential in nanoparticle synthesis and its catalytic applications"
June 2008 – June 2010	Andhra University, Visakhapatnam; CGPA: 7.34/10  Master of Science in Organic Chemistry
Aug 2005 – May 2008	Kakatiya University, Warangal; Percentage: 69.9% Bachelor of Science in Biology and Chemistry
June 2003 – May 2005	Government Junior College, Telangana; Percentage: 67.2% Intermediate Certificate examination in Biology, Physics, and Chemistry
June 2002 – May 2003	ZPSS High School, Telangana; Percentage: 81.1% Secondary School Certificate examination

# WORK EXPERIENCE (Research/Teaching)

2014 – 2020	NIT Rourkela, Odisha Project Assistant. JRF, SRF and Teaching Assistant – <i>Full Time</i> Responsibilities and/or achievements:  Research on Organometallic Ccompounds and its Catalytic Applications
2021 – 2022	Uquifa India Pvt. Ltd., Hyderabad Assistant Manager in Chemical R&D (API)– Full time Responsibilities and/or achievements:  • Develop the synthetic methodology, Group Discussion, managing the R&D team

2022 – Till Now	Sai Life Science Pvt. Ltd., Hyderabad Associate Research Scientist in Medicinal chemistry (CRO)– Full time Responsibilities and/or achievements:  • Develop the synthetic methodology, Group Discussion, managing the R&D team.
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### RECOGNISED ACHIEVEMENTS

2014	Qualified CSIR-UGC (NET-LS)-2014.
2015	Qualified <b>TS-SET</b> -2014.

# **PhD Project**

**Title:** Synthesis and Characterization of Transition Metal Main Group Cluster for their Potential in nanoparticle synthesis and catalytic applications.

# **Guided to M.Sc. Projects**

Name	Project Title
1. <b>Mrs.</b> M. Kharou (2019 – 2020)	Synthesis and Characterization of transition metal chalcogenide cluster with trialkyl arsine
2. <b>Mr.</b> S. Kumar (2018 – 2019)	Synthesis and Characterization of Iron Dichalcogenides nanoparticle from Single Source Precursor and Study their Photocatalytic and GasSensing Applications.
3. <b>Mrs</b> . P. Subhasmita (2017 – 2018)	Synthesis of Organometallic Cluster and Study of its Properties.
4. <b>Mrs.</b> R. Dipannita (2016 – 2017)	Synthesis of metal chalcogenide nanoparticle from their Single Source precursor.

## Research Interests and Skills

- Fabrication of Low cost electrode, Solar cell device materials for electrochemical study.
- Synthesis of various novel Transition Metal Main Group (TM-MG) compounds and study its structuralFeature and their potential in nanoparticle synthesis and its properties study.
- Synthesis of novel chiral organometallic catalyst and study its potential in catalysis.
- Preparation of novel Transition metal chalcogenide nanomaterials which are showed excellent activity in field of electro & Photocatalysis.

#### Area of Proven Performance in Academic area

- Wet Chemistry & Separation Technique (TLC, Column, HPLC, LCMS etc.)
- FTIR, NMR, PXRD, TGA-DSC, DLS, UV-Vis, SEM, FESEM, TEM etc.
- Laboratory Instrumentation like UV chamber, Rotavapour, lyophilizer, Sonicater, P<sup>H</sup> meter, Potentiometer etc.
- Excellent Written and Verbal Communications.

### **Computer Skills:**

• Chem-draw, Biovia, Avogadro, ASIQwin, X-pert Highscore, TopSpin3.6.0, CHI6003E Electrochemicalanalyser, Origin, Spectrum Quanta, Image-J, Gaussian (g09w), Sci-finder, Sci-Hub.

# Language Skills:

Telugu, English, Hindi

### Area of Proven Performance in Industrial area

- Responsible for performing organic synthesis (mg to gram scale).
- Independently support the scientific team with instrumentation and equipment operation and maintenance.
- Able to understand & interpretation of various instruments data such as NMR, IR, Mass, HPLC, GC, LC-MS, ICP-MS etc.
- Instrument purification like Combi flash, big columns, column packing. Quickly-estimate the mobile phasefor purification.
- Independently handling all types of glassware assembly arrangement, reaction reagent charging, maintaining temperature, nitrogen, etc.
- Should be able to understand the written instruction from the scientist including patents, Journals and reprints where procedures are highlighted by scientists.
- To train and support the team members.
- Meticulous Documentation & proper data management.
- To maintain the record book of the work done like purification or reaction.

#### CONFERENCE /WORKSHOPS

- National Seminar on **The Promise of Nano science** (2009), Department of Chemistry, P.B. Siddhartha College of Arts and Science-Vijayawada, March 6-7, 2009, Vijayawada.
- Workshop on **How to Write and Publish Scientific Articles and Manuscripts (2018)**, Biju Patnaik Central Library, National Institute of Technology-Rourkela, March 7th 2018, Rourkela
- Research Scholars Week (RSW-2018), Department of Chemistry, National Institute of Technology-Rourkela, April 21-22, 2018.
- National Conference on Advanced Materials for Energy and Environmental Applications (AMEEA-2018), Department of Chemistry, National Institute of Technology-Rourkela, December 12-14, 2018, Rourkela.
- Workshop on **Functional Materials and their Applications** (**FMA-2019**), Department of Chemistry, National Institute of Technology-Rourkela, January 11-12, 2019, Rourkela.
- Workshop on **Thesis and Manuscript Writing Boot Camp (2019)** National Institute of Technology-Rourkela, July 16-20, 2019, Rourkela.

- National conference on **Recent Development in Applied Science and their Biological and Industrial Relevance (RDABIR 2020)**, Department of Chemistry, Midnapore city college ,7-8, January, 2020.
- International webinar on Chemistry **Recent development in chemistry**, Department of Chemistry, Midnapore City College, 29<sup>th</sup>, September, 2020.
- Webinar on **Frontier in Organic Electronics** (**FOE-2020**) 29<sup>th</sup> June 3<sup>rd</sup> July 2020, Organized by Department of Chemistry, National Institute of Technology, Rourkela.

## **PUBLICATIONS**

- 1. V. Tirkey, **R. Boddhula**, S. Mishra, S. M. Mobin, S. Chatterjee. "Synthesis, structure and antibacterial activity of ferrocenyl diphopshine chelated iron-telluride cluster". **J. Organomet. Chem.**, **794** (2015) 88-95.
- 2. **R. Boddhula**, A. Ghosh, C. Wolper, S. M. Mobin, S. Chatterjee "Synthesis and structure of open and closed type iron telluride-stibine cluster compound". **J. Organomet. Chem.**, 851 (2017) 22-29.
- 3. S. Karmakar, **R. Boddhula**, D. Behera "Electrochemical performance of heterogeneous, mesopores and non-centrosymmetric Core@ shell NiCo<sub>2</sub>O<sub>4</sub>@ MnO<sub>2</sub> nanocomposites and its MWCNT blended complex for supercapacitor applications". **J. Solid State Chem.**, 280 (2019) 121013.
- 4. N. Maity, A. Sahoo, **R. Boddhula**, S. Chatterjee "Fly Ash Supported Pd-Ag Bimetallic Nanoparticles Exhibiting Synergistic Catalytic Effect for the Reduction of Nitrophenol". **Dalton Trans.**, 49 (2020) 11019.
- 5. **R. Boddhula** and S. Chatterjee "Method for the preparation of iron-di-telluride nanoparticles using a single source precursor and the use of the product in electrocatalytic hydrogen evolution reaction". **Patent filed (202031055017),** 2020.

### **REFEREES**

> Prof. Saurav Chatterjee

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