

# Resume

## **Dr. ARUN KUMAR MACHARLA**

Research Scientist

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## Education

- ❖ **Ph. D. Chemistry (January 2009 - June 2014)**  
Indian Institute of Chemical Technology (IICT), Hyderabad, Telangana, India.  
Research topic: “*Oxidative Halogenations and Cyclizations Using Eco-friendly Reagents and Zeolite Catalysts*”
- ❖ **M. Sc. Organic Chemistry (June 2005 - May 2007)**  
Osmania University, Hyderabad, Telangana, India.
- ❖ **B. Sc. (Chemistry, Physics and Mathematics) (June 2002 - May 2005)**  
Kakatiya University, Warangal, Telangana, India.

## Career

- ❖ **Research Scientist (January 2024 – Present)**  
*CRO/ API intermediates*  
Alder Research Chemicals Pvt Ltd, Cherlapalli, Hyderabad, Telangana, India
- ❖ **Project Scientist (July 2020 – Feb 2023)**  
*Explosives & Intermediates*  
DRDO Industry Academia (ACRHEM), University of Hyderabad, Hyderabad, Telangana, India
- ❖ **Research Associate (September 2017 - June 2020)**  
*Explosives & Intermediates*  
DRDO Industry Academia (ACRHEM), University of Hyderabad, Hyderabad, Telangana, India
- ❖ **Post-Doctoral Researcher (October 2014 - December 2016)**  
*Dehalogenations using eco-friendly reagents & catalysts*  
Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Republic of Korea

## Honors and Awards

- ❖ Appreciation Award (June 2022)  
Awarded by ACRHEM, University of Hyderabad,
- ❖ Senior Research Fellowship (CSIR-SRF) (2011)  
Awarded by Council of Scientific and Industrial Research (CSIR) New Delhi, India.
- ❖ Junior Research Fellowship (CSIR-JRF) (2009)  
Awarded by Council of Scientific and Industrial Research (CSIR), New Delhi, India.

## Publications and Citations Report

<b>Publications</b>	29*
<b>Patents</b>	1
<b>Citations</b>	919
<b>h-index</b>	18
<b>i10-index</b>	23

\* Corresponding Author = 02, First Author = 12, Co-Author = 15

### Google Scholar Citations

<https://scholar.google.co.kr/citations?user=AsASQSsAAAAJ&hl=en>

## Professional Competence

- ❖ Experience in multistep synthesis from milligram to kilogram scale.
- ❖ Identifying & selecting the feasible route of synthesis with respect to cost reduction & safety.
- ❖ 9 years of R&D experience in total synthesis of various molecules.
- ❖ Independently handled many projects and managed a team of 5 members.
- ❖ Experience in handling of liquid phase, vapor phase and high-pressure reactions.
- ❖ Profound efficiency in handling of hygroscopic, air/ moisture sensitive reagents, materials, & reactions.
- ❖ Experience with Palladium cross coupling reactions, Grignard reactions, Friedel craft reactions, Mitsunobu reactions, Wittig reactions, Sandmeyer reactions, and etc.
- ❖ Acquired with various chromatographic techniques (TLC, Column, GC [FID, TCD and ECD], GC-MS, UPLC-HRMS, Ion chromatograph and HPLC).
- ❖ Interpretation of the structure of organic compounds using <sup>1</sup>HNMR, <sup>13</sup>CNMR, Mass, & FTIR.
- ❖ Experience in purification techniques like, column chromatography, prep TLC, combi flash, recrystallization, fractional distillation, & Triturations.
- ❖ Expertise in utilizing software tools like Reaxy, SciFinder, Mestrec, Chemdraw, & Origin.

## Personal Data

Date of Birth: 10<sup>th</sup> June, 1985

Present Address: Flat No. A106, Vista Homes, Kushaiguda, Hyderabad.

Permanent Address: H No. 11-23-2391/5-1, Navayuga Colony, Desaipet Road,  
Warangal, Telangana

Languages Known: English, Hindi & Telugu

## References

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