

# Curriculum Vitae

**Haldhi Rehana Anjum**

Mobile No: +91-9000786644

e-mail: [hra714@gmail.com](mailto:hra714@gmail.com)



## Objective

Intend to build a good career in a reputed organization where i can effectively contribute to the growth of the organization with my innate skills.

## Academic Qualification

| Course              | University/Board                                      | Subject                              | Duration  | Percentage (%) |
|---------------------|---|--------------------------------------|-----------|----------------|
| <b>M. Tech</b>      | Sri Venkateswara University, Tirupathi.               | Chemical Engineering                 | 2013-2016 | 62             |
| <b>B. Tech</b>      | Jawaharlal Nehru Technological University, Anantapur. | Chemical Engineering                 | 2009–2013 | 67             |
| <b>Intermediate</b> | Board of Intermediate Education                       | Mathematics, Chemistry, Physics      | 2007–2009 | 76.6           |
| <b>S. S. C</b>      | Board of Secondary Education                          | Mathematics, General Science, Social | 2006–2007 | 71.6           |

## M. Tech Project Work

**Title:** Process Development of Novel Carbazole based Polymers as Hole Transport Materials for Solar Cell Applications.

**Organization:** CSIR-IICT.

**Guides:** Dr. A. V. Sesha Sainath, Senior Scientist, CSIR-IICT, Hyderabad. &  
Dr. G. Prabhakar, Professor, HOD, SV University, Tirupathi.

**Duration:** 1 year.

## B. Tech Project Work

**Title:** “Studies on Biosorption of copper using Macro Green Algae for Removal of a Heavy Metal”.

**Organization:** Andhra University.

**Guides:** Prof. Ch. V. R. Murthy, Principal, AU College of Engineering, Visakhapatnam.  
Prof. A. V. N. Swamy, Professor, Chemical Engineering, JNTU, Anantapur.

**Duration:** 6 months.

## Technical Skills

- ❖ **Laboratory Techniques:** FT-IR Spectroscopy, UV-VIS Spectroscopy, Water analysis, Inoculation of microbial cultures and Bacteriological analysis of industrial effluents.
- ❖ **Software** : Chemdraw and MS Office.

## Experience

1. Present working as ASSISTANT PROFESSOR (AD-HOC), Department of Chemical Engineering, JNTUACEA Anantapur.

Duration: 9/12/2019 till now.

### Present Work Description:

- Teaching UG & PG (NT/EE) subjects.
  - Laboratory handling Mass Transfer Operations, Environmental Pollution Monitoring Laboratory, Process Dynamics & Control Lab And MATLAB.
2. Worked as a **Project Assistant** in “**Membrane Separation Lab**” under the guidance of **Dr. S. Sridhar**, Principal Scientist, Chemical Engineering Division, CSIR-Indian Institute of Chemical Technology, Hyderabad, Telangana (State), India  
Duration: May 2016 to May 2019.

### Project Work Description:

- Performance of Aerobic Membrane bioreactor using microbial culture such as curd culture to control the pollution from food waste to recycle for flashing and gardening.
- Production of biogas from kitchen waste by Anaerobic Membrane Bioreactor technology using methanogenic bacteria culture.

- The Green Engineering through Anaerobic Membrane Bioreactor Technology.
- Microalgae: Sustainable Approach for Treatment of Domestic Waste Water and Industrial Effluents.
- Processing of coffee and dairy industrial effluent by a novel Membrane – based hybrid process.
- Pre-treatment and post-treatment methodology for efficiency performance of Membrane processes.
- Method for safe disposal of reject (wastewater) stream coming from RO plant.
- Low-cost coagulation methods for treatment of storm drain water from landfill.
- Preparation of flat sheet membrane using different type of polymers

## Skills & Expertise

- ✓ Maintenance and troubleshooting of Compact water purification systems.
- ✓ Protecting the environment from industrial effluents by using Membrane Bioreactor.
- ✓ Design and synthesis of polymers using classical and living radical polymerizations.
- ✓ Polymer structural characterization by using NMR and FT-IR spectroscopic techniques.
- ✓ Knowledge in microbiology growing, algal growing and their production.
- ✓ To perform lab scale & pilot plant experiments and collect relevant data.
- ✓ Good in manuscript writing, communication and presentation skills.

## Awards & Achievements

- Director's Special Appreciation Award for “**SWACHH BHARAT SERVICES**” for providing drinking water facilities in both urban & rural areas. (5<sup>th</sup> August 2017)

## Publications

### Paper

- ❖ **H. Rehana Anjum**, et. “*Synthesized Tio<sub>2</sub> nanoparticles for the application of photocatalytic degradation of synthetic toxic dye acridine orange*” Department of Chemical Engineering, JNTUA, Anantapur, Andhra Pradesh 515001, India. April & 2022.  
DOI: <https://doi.org/10.1016/j.matpr.2022.04.278>

### Book Chapter

- ❖ Siddhartha Moulik, **H. Rehana Anjum**, S. Sridhar, “*Design of membrane systems through Computational Fluid Dynamics (CFD) and molecular modeling*”, Membrane Separations Group, Chemical Engineering Division: Academy of Scientific and Innovative Research (AcSIR), CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad, India – 500007.

## Conferences/Seminars

### International/ National Conference

- **H. Rehana Anjum**, “*Indo -EU Workshop on Microbial Electrochemical Technologies for Sustainability: Fuels, Chemical and Remediation*”- “*metSUS-2017*”. International Conference on Bioengineering and environmental Sciences lab, EEFF Department (28<sup>th</sup> Feb, 2017) at CSIR-IICT, HYD.
- **H. Rehana Anjum**, U. Sirisha, Nivedita Sahu, S. Sridhar “*Processing of coffee industrial effluent by a novel Membrane – based hybrid process*”, International Conference on Biotechnology and Bioengineering- Trends, (23<sup>rd</sup> – 25<sup>th</sup> March, 2017) at Jawaharlal Nehru Technological University, Hyderabad.
- J. Gopinath, **H. Rehana Anjum**, B. Bala Raju, A. V. Sesha Sainath,” *Synthesis, characterization of novel polythiophene based di-/tri-block polycarbazole copolymers as hole transport materials*”, Proceedings of 18<sup>th</sup> International Workshop on Physics of Semiconductor Devices, JN Tata Auditorium. Indian Institute of Science, Bangalore-560012, Karnataka, India.
- **H. Rehana Anjum**, two days Online Conference on “**Novel Trends in Chemical Sciences (NTCS-2021)**”, conducted by the Govt. Digvijay Auto. P. G. College, Rajnandgaon (C.G). (20-21 October, 2021).
- **H. Rehana Anjum**, two days Online Conference on “**Emerging Fields in Chemistry: Advances and Applications**”, conducted by the Govt. Kamla Devi Rathi Girls P. G. College, Rajnandgaon, C.G, INDIA. (10-11 August, 2021).
- **H. Rehana Anjum**, Five Day online FDF on “**Domains of Academia: Research and Teaching-Learning**”, conducted by Department of Chemical Engineering, Marwadi University. (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> & 5<sup>th</sup> March 2022).
- **H. Rehana Anjum**, two days Online Seminar on “**Exploration of Insight in Innovative Research of Chemical Sciences in Modern Epoch**”, conducted by Krishna Chandra College, west Bengal.
- **H. Rehana Anjum**, one day Webinar on “**NAAC: Its New Framework and Quality Enhancement Techniques**”, *Internal Quality Assurance Cell (IQAC), Udala college, Udala.* (08.01.2021).
- **H. Rehana Anjum**, one day Lecture Series on “diagnostic testing in a post-covid world

enabled by microfluidic technologies". (3<sup>rd</sup> June, 2022).

- **H. Rehana Anjum**, Five Day online FDP on ***“Laboratory and Workshop learning skills on conducting online classes”***, online FDP conducted by the Dept. of Chemical Engineering & JNTUA. (20<sup>th</sup> -25<sup>th</sup> Feb, 2021).
- **H. Rehana Anjum**, Two Week FDP on ***“Mathematical Modeling and Simulation for Scientists & Engineers”*** organized by chemical engineering department, JNTUA, ATP (24<sup>th</sup> Feb to 7<sup>th</sup> March 2020).
- **H. Rehana Anjum**, Two Day Workshop on ***“Development of MOOCs and Production Techniques”***, organized by EEE department, JNTUA, ATP under TEQIP III (17<sup>th</sup> and 18<sup>th</sup> Jan, 2020).
- **H. Rehana Anjum**, One Day Workshop on ***“Recent trends in chemical and Biotechnology Engineering”*** organized by chemical engineering department, JNTUA, ATP under TEQIP III (30<sup>th</sup> Dec, 2019).
- **H. Rehana Anjum**, Two Day Workshop on ***“Materials for Energy Conversion and Storage Devices”*** organized by chemical engineering department, JNTUA, ATP under TEQIP III (27<sup>th</sup> to 28<sup>th</sup> Dec, 2019).
- **H. Rehana Anjum**, S. S. Chandrasekhar, Nivedita Sahu, S. Sridhar, ***“Microalgae: Sustainable Approach for Treatment of Domestic Waste Water and Industrial Effluents”***, National Conference on Indo-EU Workshop on Microbial Electrochemical Technologies for Sustainability: Fuels, Chemicals and Remediation, ‘metSUS-2017’, (28<sup>th</sup> February, 2017) at CSIR-IICT, Hyderabad.
- **H. Rehana Anjum**, ***“Process designing and simulation”***, Aspen Workshop, ‘ChemClave 2012’, (9<sup>th</sup> – 11<sup>th</sup> March, 2012) at IIT Madras, Chennai.
- **H. Rehana Anjum**, K. G. Souwya, D. Subba Rao, ***“Application of Nanotechnology in Robotic”***, A National Techno- Cultural Symposium, ‘Techno Smania’ 12, (29<sup>th</sup> -31<sup>st</sup> March, 2012) at Osmania University, Hyderabad.
- **H. Rehana Anjum**, D. Subba Rao, ***“Conversion of Rate Equation sin Chemical Reaction Engineering”***, A National Techno- Cultural Symposium, ‘Techno Smania’ 12, (29<sup>th</sup> -31<sup>st</sup> March, 2012) at Osmania University, Hyderabad.
- **H. Rehana Anjum**, A National Level Students’ symposium, ‘Fusion-2K11’, (17<sup>th</sup> September, 2011) at Jawaharlal Nehru Technological University, Anantapur.

## Personal Profile

**Full Name** : Haldhi Rehana Anjum  
**Father's Name** : Haldi Hussain Basha  
**Mother's Name** : Haldi Zareen Taj  
**Husband's Name** : B Md Arif Basha  
**Date of Birth** : 03/04/1991  
**Sex** : Female  
**Nationality** : Indian  
**Marital Status** : Married  
**Address** : Door No- 203, KM Towers, KM Colony, Opp JNTU road  
Anantapur, Andhra Pradesh, India- 515001.  
**Phone No** : +91 9000786644  
**E-mail ID** : [hra714@gmail.com](mailto:hra714@gmail.com).

## Extra-Curricular Activities

- ❖ Photo collection, Video Recording & Report Writing on Lecture Series (IChE -HRC) on diagnostic testing in a post-covid world enabled by microfluidic technologies. On 3<sup>rd</sup> June, 2022.
- ❖ Assigned as NAAC Departmental coordinator, 2022
- ❖ Assigned as NBA Criteria 9 & 10 coordinator, 2022
- ❖ Assembling of Water Purification System
- ❖ Maintenance of free drinking water camp located near NGRI Main Road, Uppal, Hyderabad.
- ❖ Maintenance of research lab (Lab-5, PFM division, CSIR-IICT, Hyderabad) in all the aspects as a project assistant from 2015-2016.
- ❖ Actively participated three times in blood donation camps.
- ❖ Actively participated two times in orphan's home fund collection.

## Development of e- Content

| Module Developed                               | Platform | Document link   | Video Link  |
|--|----------|---|---|
| Module -1<br>Mass<br>Transfer<br>Operations II | Online   | <a href="https://docs.google.com/presentation/d/1u5GbC8PXcLs2W8DCv_NRNMZ883dBV4yN/edit?usp=sharing&amp;ouid=117573795844547470349&amp;rtpof=true&amp;sd=true">https://docs.google.com/presentation/d/1u5GbC8PXcLs2W8DCv_NRNMZ883dBV4yN/edit?usp=sharing&amp;ouid=117573795844547470349&amp;rtpof=true&amp;sd=true</a> | <a href="https://drive.google.com/file/d/1DpRLC1JgaRpmzs_RLM5xQ4os8YHgeuZw/view?usp=sharing">https://drive.google.com/file/d/1DpRLC1JgaRpmzs_RLM5xQ4os8YHgeuZw/view?usp=sharing</a> |

## Contact of the References

**1. Dr. A. V. Sessa Sainath**

Senior Scientist,  
Polymers and Functional Materials Division,  
CSIR-Indian Institute of Chemical Technology,  
Hyderabad,  
India-500007.  
Phone No: +91 9440732018

**2. Dr. B. Dilip Kumar**

Associate Professor & Head  
Department of Chemical Engineering  
J.N.T.U.A. College of Engineering (Autonomous),  
ANANTHAPURAMU - 515 002,  
Andhra Pradesh, India.  
Mob. + 91-9247192692

## Declaration

I hereby declare that the above information is correct to the best of my knowledge and belief.

Thanking you,

Place: Anantapur

Date: 27/07/2022



(Haldhi Rehana Anjum)

