# CURRICULUM VITAE

**Dr. Rambabu Sydam**,
S/o. Yedukondalu Sydam,
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## Educational Qualifications

- **Ph.D.** (Physical Chemistry) (**2011–2015**), **Supervisor: Prof. M. Deepa**, Dept. of Chemistry, Indian Institute of Technology Hyderabad (IITH), Telangana, India.
  **Thesis Title: "**Poly(3,4-ethylenedioxythiophene) and Viologen Based Materials for Electrochromic Devices**"**
- **M.Sc.** (Analytical Chemistry) (**2005–2007**) with **69.8% marks**, Andhra University, Visakhapatnam, Andhra Pradesh.
- **B.Sc.** (M.P.C.) (**2002–2005**) with **79.9% marks,** Sir C.R. Reddy College, Affiliated to Andhra University, Eluru, Andhra Pradesh.
- **Intermediate (XII Std.)** (Mathematics, Physics & Chemistry) (**2000-2002**) with **91.9% marks**, Sri Helapuri Jr. College, Board of Intermediate Education, Eluru, Andhra Pradesh.
- **Secondary School Certificate (X Std.)** (**1999–2000**) with **80.2%** marks, Z.P. High School, Koppaka, Andhra Pradesh.

## Work Experience

- Worked as **Assistant Professor** of **Chemistry** (**Nov 2020–Oct 2021**) in the Applied Sciences & Humanities Department at **Sasi Institute of Technology & Engineering**, Tadepalligudem, Andhra Pradesh.

- **Postdoctoral Researcher** (**April 2018–Feb 2020**) worked in the field of electrically conductive two-dimensional coordination polymers (2D CPs) and their applications; State Key Laboratory of Structural Chemistry, **Fujian Institute of Research on the Structure of Matter (FJIRSM)**, Chinese Academy of Sciences (CAS), Fujian, China.

- **Postdoctoral Researcher** (**Oct 2015–Oct 2017**) worked in the field of electro-optical materials and electrochromic devices; Dept. of Chemical Engineering, **National Taiwan University**, Taipei, Taiwan.

- **Teaching Assistant** for I B.Tech. Chemistry Practical (**2011-2012**) at Indian Institute of Technology Hyderabad (IITH), Telangana, India.

❖ **Lecturer for M.Sc. Analytical Chemistry** (**2008-2010**) at **D.N.R. College of P.G. Courses and Research Center**, Bhimavaram, Andhra Pradesh.

## Awards & Achievements

✓ **Outstanding Postdoctoral Researcher Fellow** (**2018-2020**) Grant by Haixi Institute (Fujian Institute of Research on the Structure of Matter) of Chinese Academy of Sciences (Grant No.2018010, dated 25th April 2018), China.

✓ Qualified **Lectureship (LS)** CSIR-UGC- NET, **June 2010**.

✓ Qualified **UGC-JRF** (Junior Research Fellowship) CSIR-UGC-NET, **Dec 2009**.

✓ Secured **6th Rank** in **AUCET Chemistry** (Andhra University Common Entrance Test held in **2005**) for obtaining my seat in M.Sc. Chemistry.

## List of Publications

1. **Rambabu Sydam**, Manoranjan Ojha, M. Deepa., Ionic additive in an ionogel for a large area long lived high contrast electrochromic device, Sol. Energy Mater. Sol. Cells 220 (2021) 110835. (Impact Factor: 7.267)
2. **Rambabu Sydam**, R.K. Kokal, M. Deepa., Fast, direct, low cost route to scalable, conductive and multipurpose poly(3,4-ethylenedixoythiophene) coated plastic electrodes, ChemPhysChem 16 (2015) 1042-1051. (Impact Factor: 2.850)
3. **Rambabu Sydam**, A. Ghosh, M. Deepa., Enhanced electrochromic write–erase efficiency of a device with a novel viologen: 1,1'-bis(2-(1H-indol-3-yl)ethyl)-4,4'-bipyridinium diperchlorate, Org. Electron. 17 (2015) 33-43. (Impact Factor: 3.721)
4. **Rambabu Sydam,** M. Deepa, S.M. Shivaprasad, A.K. Srivastava., A $WO_3$–poly(butyl viologen) layer-by-layer film/ruthenium purple film based electrochromic device switching by 1 volt application, Sol. Energy Mater. Sol. Cells 132 (2015) 148-161. (Impact Factor: 7.267)
5. **Rambabu Sydam,** M. Deepa., A new organo-inorganic hybrid of poly-(cyclotriphosphazene-4,4′-bipyridinium) chloride with a large electrochromic contrast, J. Mater. Chem. C 1 (2013) 7930-7940. (Impact Factor: 7.393)
6. **Rambabu Sydam,** M. Deepa., A.G. Joshi, A novel 1,1′-bis[4-(5,6-dimethyl-1H-benzimidazole-1-yl)butyl]-4,4′-bipyridinium dibromide (viologen) for a high contrast electrochromic device, Org. Electron. 14 (2013) 1027-1036. (Impact Factor: 3.721)
7. **Rambabu Sydam,** M. Deepa, A.K. Srivastava., Electrochromic device response controlled by an *in-situ* polymerized ionic liquid based gel electrolyte, RSC Adv. 2 (2012) 9011-9021. (Impact Factor: 3.240)
8. **Rambabu Sydam,** M. Deepa., Color in poly(3,4-ethylenedioxythiophene) with profound implications for electronic, electrochemical, and optical functions, ChemPlusChem 77 (2012) 1-12. (Impact Factor: 2.390)

## Conference Presentations

1. Rambabu Sydam, Arnab Ghosh, M. Deepa., A new 1,1'-bis(2-(1H-indol-3-yl)ethyl)-4,4'-bipyridinium diperchlorate (viologen) with a better write-erase efficiency, The 11th International Meeting on Electrochromism (IME-11, Sept 2014); Taipei, Taiwan. **(Oral Presentation)**
2. Rambabu Sydam, S. M. Shivaprasad, M. Deepa., An Electrochromic Device with a $WO_3$—Poly(butyl viologen) Layer-by-Layer film/Ruthenium Purple Film Switching by 1 Volt Application, The 11th International Meeting on Electrochromism ((IME-11, Sept 2014); Taipei, Taiwan. **(Poster Presentation)**
3. Rambabu Sydam, M.Deepa., A New Organo—inorganic Hybrid of Poly(cyclotriphosphazene bipyridinium) chloride with a Large Electrochromic Contrast, International Conference on Nano Science and Technology (ICONSAT, March 2014); Chandigarh, India. **(Poster Presentation)**

## Instrumentation & Analytical Skills

Acquired quality experience in operating and maintaining sophisticated instruments of repute, such as Fourier Transform Infrared (FTIR) Spectrometer, Raman Spectrometer, UV-Vis-NIR Spectrophotometer, Electrochemical work-station (PGSTAT 302N-Autolab), Avantes (Avaspec-2048) coupled with Autolab, Chemiresistive gas sensors, Keithley 4200, Solartron, X-Ray Diffractometer (XRD), Low Resolution SEM, TGA/DTA and DSC, HRMS, HPLC and others.

## Personal Details

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| **Date of birth** | : 01-09-1984 |
| **Nationality** | : Indian |
| **Sex & Marital status** | : Male, Married |

**Permanent Address** : S/o S. Yedukondalu, H.No. 4-55, Ammapalem village, Bhogapuram (Post), Pedavegi Mandal, West Godavari Dist., Andhra Pradesh, India PIN - 534007.

## Declaration

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



(Dr. Rambabu Sydam)