

## ACADEMIC PROFILE

**NAME:** Capt. Dr. Arun. V  
**DESIGNATION:** ASSISTANT PROFESSOR,  
DEPARTMENT OF CHEMISTRY  
**MOB:** 9446110741  
**EMAIL:** arun.organic.chem@gmail.com

### EDUCATIONAL

**QUALIFICATION:** M.Sc.; B.Ed., Ph.D.; Post doc  
**AREA OF INTEREST:** Material Science, Coordination Chemistry, Catalysis, Crystal Structure, Computational Chemistry etc.  
**SPECIALISATION:** Queer theory

### TEACHING EXPERIENCE:

Designation	Institution	Period
Assistant professor	S. N. College, Punalur	Since 05/01/11

### ADMINISTRATIVE POSITIONS HELD:

**PRINCIPAL IN CHARGE (DRAWING & DISBURSING OFFICER)** Sree Narayana College, Punalur (Under University of Kerala, Kerala, India) (1<sup>st</sup> May 2017 TO 28 May 2018)

**HOD** in Charge, P.G. Department of Chemistry, Teaching B.Sc. and M.Sc. Students. (18-06-2015 to till date)

**CHIEF SUPERINTENDENT :** FOR UNIVERSITY OF KERALA EXAMINATIONS AT S.N. COLLEGE, PUNALUR

CENTRE NUMBER: 41 & INSTITUTION NUMBER: 133; (From 22-11-2018 to till date)

**IQAC COORDINATOR :** Sree Narayana College, Punalur (Under University of Kerala, Kerala, India) from 17-05-2017 to 11-06-2019

**ASSOCIATE NCC OFFICER (ANO) :** NCC Sree Narayana College Unit, Punalur (Under 9(K) Bn NCC, Kottarakkara) from 09-08-2011 to till date [Date of NCC commission: 18-12-2013; NCC No: NCC/07110149]

**CONVENOR, DST-FIST:** Sree Narayana College, Punalur (Under University of Kerala, Kerala)

Amount sanctioned 90 Lakhs to various Science Departments by DST, Government of India.

From 2013 to till date

**RUSA INSTITUTIONAL COORDINATOR:** Sree Narayana College, Punalur (Under University of Kerala, Kerala, India) from 17-05-2018 to till date.

**UGC Major Research Project**, April-2013. Title: Synthesis, Spectral Characterisation and Crystal Structure of Noval Chiral N<sub>2</sub>O<sub>2</sub> Schiff Base Complexes. Ref: F. No. 42-312/2013 (SR) dt 25 March 2013. Amount: Rs. 11,24, 800/-

Research Experience

### **Research Guide, University of Kerala**

(Ac E1.A1/017121/2013 dated 24/05/2013) Research Guide. University of Kerala. Research Department in Sree Narayana College, Kollam.

### **Research Students**

1. **SHIJU THOMAS**, Part-Time, Assistant Professor, Department of Chemistry, St. Gregorios College, kottarakkara (UO No. AcEVI(2)/116/CHE/13801/2016 dated 24-10-2016 with effective date of registration 17-10-2016.
2. **BARAKALA PUSHPA**, Part-Time- Assistant Professor, Department of Chemistry, St. Joseph's College for Women, Alappuzha (UO No. AcE.VI(2)/717/CHE/16321/2017 dated 03-02-2018) with effective date of registration 09-01-2018.
3. **NEETU PRADEP**, Part-Time- Assistant Professor, Department of Chemistry, S. N. College, Punalur (UO No. AcE.VI(2)/717/CHE/16115/2017 dated 03-02-2018) with effective date of registration 04-01-2018.
4. **RAJI. V**, Part-Time- Assistant Professor, Department of Chemistry, S. N. College, Punalur(UO No. AcE.VI(2)/718/CHE/17519/2018 dated 04-02-2019) with effective date of registration 06-12-2018.

### **PUBLICATIONS:**

**Arun. V**; Manoj SV and Ambili Raj DB (2021): Synthesis and Spectral Characterization Copper(II) Schiff Base Complex Derived from 3-hydroxyquinoxaline-2-carboxaldehyde. Bulletin of Pure and Applied Sciences, Vol. 40C (Chemistry), No. 2, July-December 2021, 90-95.

**Lt. Dr. Arun. V**; Quinoxaline Schiff base Complexes and their catalytic activity studies, **2016; ISBN Number 978-3-659-79469-8**

**Arun, V.**, Preetha. G.P., Manju, S., Biju, A.R., and Yusuff, K.K.M. (2011): Hydrogen bonded triple helical structure of 3-hydroxyquinoxaline-2-carboxalidine-4-aminoantipyrine. Journal of chemical crystallography **41**, 1013-1017

Sebastian, M., **Arun, V.**, Robinson, P.P., Leeju, P., Varghese, D., Varsha, G., and Yusuff, K. K. M. (2011): Template synthesis and spectral characterization of some Schiff base complexes derived from quinoxaline-2-carboxaldehyde and L-histidine. Journal of Coordination Chemistry **64**, 525-533

**Arun, V.**, Mathew, S., Robinson, P.P., Jose, M., Nampoori, V.P.N., and Yusuff, K.K.M. (2010): The tautomerism, solvatochromism and non-linear optical properties of fluorescent 3-hydroxyquinoxaline-2-carboxalidine-4-aminoantipyrine. Dyes and Pigments **87**, 149-157

**Arun, V.**, Robinson, P.P., Manju, S., Leeju, P., Varsha, G., Digna, V., and Yusuff, K.K.M. (2009): A novel fluorescent bisazomethine dye derived from 3-hydroxyquinoxaline-2-carboxaldehyde and 2,3-diaminomaleonitrile. Dyes and Pigments **82**, 268-275

**Arun, V.**, Sridevi, N., Robinson, P.P., Manju, S., and Yusuff, K.K.M. (2009): Ni(II) and Ru(II) Schiff base complexes as catalysts for the reduction of benzene. Journal of Molecular Catalysis A: Chemical **304**, 191-198

Sebastian, M., **Arun, V.**, Robinson P. P., Varghese A. A., Abraham R., Suresh E., Yusuff, K. K. M. (2010): Synthesis, structural characterization and catalytic activity study of Mn(II), Fe(II), Ni(II), Cu(II) and Zn(II) complexes of quinoxaline-2-carboxalidene-2-amino-5-methylphenol: Crystal structure of the nickel(II) complex. *Polyhedron* **29**, 3014-3020

Varsha, G., **Arun, V.**, Robinson, P.P., Sebastian, M., Varghese, D., Leeju, P., Jayachandran, V.P., and Yusuff, K.K.M. (2010): Two new fluorescent heterocyclic perimidines: first syntheses, crystal structure and spectral characterization. *Tetrahedron Letters* **51**, 2174–2177

Sebastian, M., **Arun, V.**, Robinson, P.P., Leeju, P., Varghese, D., Varsha, G., and Yusuff, K. K. M. (2010): Synthesis, characterization and the crystal structure of a new cobalt(II) Schiff base complex with quinoxaline-2-carboxalidene-2-amino-5-methylphenol. *Journal of Coordination Chemistry* **63**, 307-314

Robinson, P.P., **Arun, V.**, Manju, S., Aniz, C.U., and Yusuff, K.K.M. (2010): Oxidation kinetics of nickel nano crystallites obtained by controlled thermolysis of diaqua-bis(ethylenediamine)nickel(II) nitrate. *Journal of Thermal Analysis and Calorimetry*. 100, 733-740

Sebastian, M., **Arun, V.**, Robinson P. P., Yusuff, K. K. M. (2010): Metal-induced rearrangement of benzothiazoline ring: Synthesis and characterization of transition metal complexes of an ONS-donor Schiff base. *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*, **40**, 541-547

Varghese, D., **Arun, V.**, Sebastian, M., Leeju, P., Varsha, G., and Yusuff, K.K.M. (2009): N,N'-Bis[(E)-quinoxalin-2-ylmethylidene]ethane-1,2-diamine. *Acta Crystallographica Section E* **E65**, o435

Varsha, G., **Arun, V.**, Sebastian, M., Leeju, P., Varghese, D., and Yusuff, K.K.M., (2009): (Z)-2-Amino-3-[(E)-benzylideneamino]-but-2-enedinitrile. *Acta Crystallographica Section E* **E65**, o919

Leeju, P., **Arun, V.**, Sebastian, M., Varsha, G., Varghese, D., and Yusuff, K. K. M. (2009): N-[(E)-Quinoxalin-2-ylmethylidene]-1Hindazol-5-amine. *Acta Crystallographica Section E* **E65**, o1981

Varghese, D., **Arun, V.**, Robinson, P.P., Sebastian, M., Leeju, P., Varsha, G., and Yusuff, K. K. M. (2009): Two novel bis-azomethines derived from quinoxaline-2-carbaldehyde. *Acta Crystallographica Section C* **C65**, o612–o614

## PRESENTATIONS:

Oral Presentation: Presented a paper entitled “Catalytic hydroxylation of phenol with H<sub>2</sub>O<sub>2</sub> by a binuclear copper (II) complex of NN' bis(3-hydroxyquinoxaline-2-carboxalidene)2,3-diaminomaleonitrile” By **V. Arun** and K.K. M. Yusuff in the International Conference in the Emerging trends in Computational and Material Chemistry Research (ICCMCR-2020) organised by Research and Post graduate department of chemistry & Polymer Chemistry of KSMDB College, Sasthamcotta, Kerala, India, on 9<sup>th</sup> to 12 November 2020.

Oral Presentation: Presented a paper entitled “Oxovanadium(IV) heterocyclic Schiff base complex: Synthesis, spectral investigation and catalytic activity in cyclohexane oxidation” By **V. Arun** and K.K. M. Yusuff in the UGC sponsored national seminar on “Advances in the Frontier Areas of Chemical Sciences (NSAFC-2016) organised by the Department of Chemistry, St. John’s College, Anchal on 09<sup>th</sup> and 10<sup>th</sup> November 2016.

Oral Presentation: Presented a paper entitled “Phenol hydroxylation with hydrogen peroxide catalysed by a binuclear copper(II) Schiff base complex catalyst by **V. Arun**, Nitha Prabha and K.K. M. Yusuff in the two day National Seminar sponsored by the Kerala State Council For Science Technology and Environment (KSCSTE) at Post Graduate and Research Department of Chemistry, S.N. College, Kollam 691 001, from 29<sup>th</sup> and 30<sup>th</sup> June **2016**

Oral Presentation: Presented a paper entitled “Hydroxylation of phenol with hydrogen peroxide catalyzed by a new binuclear copper(II) Schiff base complex derived from 3-hydroxyquinoxaline-2-carboxaldehyde” by **V. Arun** and K. K. M. Yusuff, in the UGC sponsored national seminar on Nano Material for Energy Applications at P.G. Department of Physics, S.N. College, Punalur-691 305, from 7<sup>th</sup> and 8<sup>th</sup> January, **2016**

Oral Presentation: Presented a paper “Synthesis and characterization of a new fluorescent material: N,N’-bis(3-hydroxyquinoxaline-2-carboxalidene)-1,8-diaminonaphthalene” in the UGC Sponsored **Refresher Course** for University/College Teachers conducted by, the UGC-HRDC, Kariavattom, Thiruvananthapuram from **28-05-2015 to 17-06-2015**

Oral Presentation: Presented a paper “A comparative study of common ions present in branded and handmade tooth paste by simple laboratory analysis” in the UGC Sponsored **Orientation Programme (IT oriented)** for University/College Teachers conducted by, the UGC-Academic Staff College, University of Kerala, Kariavattom, Thiruvananthapuram from **14-10-2014 to 10-11-2014**

Short Presentation: on “FTIR Spectroscopy-One of many tools to predict the coordination in transition metal Schiff base complexes” by **Dr. V. Arun**-UGC sponsored national conference on “Recent Advances in Spectroscopy: A Chemical and Biological Perspective” held at the Post Graduate Department of Chemistry, Newman College, Thodupuzha, Idukki- 685 585, Kerala, India, on February 28- March 2, 2013

Oral Presentation: on “A new ruthenium(II) Schiff base complex as efficient catalyst precursor for toluene hydrogenation” by **Dr. V. Arun**- National Seminar on “Current Trends in Chemistry” (CTriC 2014) organized by the Department of Applied Chemistry, Cochin University of Science and Technology, Cochin- 682 022, Kerala, India, from 18<sup>th</sup> and 19<sup>th</sup> January 2004

### **Seminars conducted**

**Convenor**- UGC Sponsored National Seminar, “Chemical Applications of Spectroscopic Techniques(NSCAST-2015) at P.G. Department of Chemistry, Sree Narayana College, Punalur, Kerala, Kerala on 12<sup>th</sup> and 13<sup>th</sup> February 2015 amounting 1 lakhs

### **Seminars attended**

“National Workshop on Spectroscopy” organized by Department of Chemistry, St. Paul’s College, Kalamassery, Cochin, Kerala, India, in collaboration with M.G. University, Kottayam, Kerala, India from 2 to 3 September 2003

“Orientation program for research scholars in Catalysis” organised by the Department of Applied Chemistry, Cochin University of Science and Technology, Cochin- 682 022, Kerala, India, under the auspices of Department of Science and Technology, New Delhi, India from 06-10-2003 to 29-10-2003

“National Symposium on Current Trends in Inorganic Chemistry” organized by the Department of Applied Chemistry, Cochin University of Science and Technology, Cochin-682 022, Kerala, India, from 15<sup>th</sup> to 17<sup>th</sup> March 2004

National seminar on “Emerging Trends and New Vistas in Chemistry” organized by the Department of Chemistry, University of Calicut, Kerala, India on 29<sup>th</sup> and 30<sup>th</sup> November 2005

Participated in the National seminar held on 17<sup>th</sup> June 2016 in connection with “World Environmental Day Celebrations-2016” organised by the Department of Botany & Zoology, Sree Narayana College, Punalur in association with Kerala state Council for Science, Technology & Environment

Participated in the National Symposium on “the innovative trends in chemical education and research: Hurdles and Successive Progress (ITCER-2017)” held at Post Graduate and Research Department of Chemistry, Sree Narayana College, Kollam during March 22-24, 2017

Participated in the one day workshop on “New Methodology of NAAC Accreditation (UGC-CPE Sponsored) organised by IQAC, St. Thomas College, Palai on 21<sup>st</sup> June 2018

Attended the “UGC-NAAC Awareness Workshop on Quality Assessment & Accreditation” organised by UGC & NAAC in association with University of Kerala held at the Senate House Campus, University of Kerala on 15<sup>th</sup> October 2018

Attended the “UGC-PFMS Training” at St. Joseph’s College (Autonomous), Irinjalakuda on June 2019

Posters presentations

UGC sponsored national seminar on “FRONTIERS IN CHEMISTRY” (FIC-06) held at the Department of Applied Chemistry, Cochin University of Science and Technology, Cochin-682 022, Kerala, India, on 24<sup>th</sup> and 25<sup>th</sup> March 2006

“International Conference on Materials for the Millennium” held at the Department of Applied Chemistry, Cochin University of Science and Technology, Cochin- 682 022, Kerala, India, during 1-3 March 2007. Title: *Synthesis, characterisation and antibacterial activity of metal complexes of a new Schiff base, quinoxaline-2-carboxalidine-4-aminoantipyrene*

“International Conference on Coordination & Organometallic Chemistry (ICCO-2009) organised by Department of Chemistry, School of Chemical Sciences, Bharathiar University, Coimbatore-641 046, Tamilnadu, India on 19<sup>th</sup> and 20<sup>th</sup> March 2009. Title: *A new binuclear ruthenium(II) Schiff base complex derived from 3-hydroxyquinoxaline-2-carboxaldehyde and 2-aminophenol: Synthesis, characterization and catalytic activity towards hydrogenation of benzene and toluene.*

“International Conference on Materials for the Millennium” organized by Department of Applied Chemistry, Cochin University of Science and Technology, Cochin- 682 022, Kerala, India, during 11-13 January 2010. Title: *Non-linear optical properties, tautomerism and solvatochromism in fluorescent 3-hydroxyquinoxaline-2-carboxalidine-4-aminoantipyrene*

UGC Sponsored National Seminar, “Chemical Applications of Spectroscopic Techniques(NSCAST-2015) at P.G. Department of Chemistry, Sree Narayana College,

Punalur, Kerala on 12<sup>th</sup> and 13<sup>th</sup> February 2015. Title: *Synthesis and Spectral Characterisation of a New Fluorescent Bisazomethine Dye*

DST-KSCSTE Sponsored National Seminar, “Recent Trends in Advanced Chemistry Research (RTACR-2017)” at P.G. & Research Department of Chemistry, Sree Narayana College, Kollam, Kerala on 25<sup>th</sup> and 26<sup>th</sup> May 2017. Title: Oxovanadium(IV) Schiff base complex : Synthesis, spectral investigations and catalytic activity in hydroxylation of phenol

### **Training and Orientation/Refresher Courses**

**Three month PRCN Course for ANO at OTA**(Officers Training Academy), Kamptee, Nagpur, Maharashtra, India from 16.08.2013 to 14.11.2013

UGC Sponsored **Orientation Programme (IT oriented)** for University/College Teachers conducted by, the UGC-Academic Staff College, University of Kerala, Kariavattom, Thiruvananthapuram from **14-10-2014 to 10-11-2014**

UGC Sponsored **Refresher Course** for University/College Teachers conducted by, the UGC-HRDC, Kariavattom, Thiruvananthapuram from **28-05-2015 to 17-06-2015**.

**One month NCC Refresher Course for ANO** at NCC OFFICERS TRAINING ACADEMY, KAMPTEE, NAGPUR, MAHARASHTRA from 01 March to 30 March 2019.

UGC Sponsored **Refresher Course** for University/College Teachers conducted by, the UGC-HRDC, Kariavattom, Thiruvananthapuram from **21-11-2019 to 04-12-2019**.

Completed successfully the **16 weeks** (From 01 Sep 2019 to 31 Dec 2019) SWAYAM ARPIT Online Course for Career Advancement Scheme(CAS) promotion Online Refresher Course In Chemistry For Higher Education with a "A" Grade in the proctored examination held on **16.02.2020** by Sri Guru Tegh Bahadur Khalsa College, University of Delhi

Completed successfully a ten day course titled “A Short Term Course in E-Teaching with Learning Management Systems” conducted by The All Kerala Private College Teachers' Association in **June 2020**

Participated in IP in IP Awareness/Training program under NATIONAL INTELLECTUAL PROPERTY AWARENESS MISSION (NIPAM) on **March 22, 2022** organised by Intellectual Property Office, India