

# **Dr. Y. VENKATARAMANAPPA**

**Title:** Associate Professor & Coordinator

**Education:** M.Sc., (Chemistry), Ph.D. Bangalore University.

**Research Area:** Electro- Analytical & Inorganic Chemistry

**Phone:** 080-26637042(O), Mobile: + 91 9449184538

**Email:** [venkataramanappa.nmkrv@rvei.edu.in](mailto:venkataramanappa.nmkrv@rvei.edu.in)



## **Principal Research Area**

The nature of work includes Development of different newer methods to quantify nitrogen dioxide/nitrite/nitrate at trace level with its application to variety of environmental matrices i.e. blood, urine, wine, pharmaceutical products, water samples, milk, milk products, Industrial effluents, Vegetables, fruit juices, soil samples etc., by using UV-Visible Spectrophotometer, FT-IR (Infra-red spectroscopy), Nuclear Magnetic Resonance (NMR) Spectroscopy, Cyclic Voltammetry. Studies on Biosensors and its Applications ranging from Clinical through various Environmental and Agricultural and Biological fields.

## **Present Students**

**Smt. Shridevi Salagare:** She is working on “Development and validation of methods for the determination of nitrogen dioxide / nitrite/ nitrate at trace level in various environmental and biological samples.”

And also Nitrite/Nitrate sensing its Applications in Various Environmental and Biological Samples.

**Smt. Suparna K:** Presently she is working on Synthesis of Silver, Palladium, Zinc Oxide,

Nanoparticles and its Applications in Electrochemical Biosensors.

## **List of Publications: Papers Published in Refereed Journals**

1) Shridevi Salagare, Prashanth Shivappa Adarakatti & **Yarradoddappa Venkataramanappa**, “Designing and construction of carboxyl functionalized MWCNTs/Co-MOFs-based electrochemical sensor for the sensitive detection of nitrite”. *International Journal of Environmental Analytical Chemistry*. Received 08 Apr 2020, Accepted 08 Jul 2020, Published online: 03 Aug 2020, <https://doi.org/10.1080/03067319.2020.1796989>.

2) Chinnakurli Dwarakanath Shruthi, **Yarradoddappa Venkataramanappa** and Gurukar Shivappa Suresh,<sup>1</sup> Reduced MWCNTs/Palladium Nanotubes Hybrid Fabricated on Graphite Electrode for Simultaneous Detection of Ascorbic Acid, Dopamine and Uric Acid, *Journal of The Electrochemical Society*, 165(10), B458,(2018).

- 3) M. Pandurangappa and **Y. Venkataramanappa**, A Continuous Flow system for the measurement of ambient Nitrogen Oxides [NO + NO<sub>2</sub>] using rhodamine B hydrazide as a Chemosensor, *Journal of Analytical Chemistry Insights*, 9, 67-73(2014).
- 4) M.Pandurangappa and **Y.Venkataramanappa**, Nitrite/nitrate speciation through arsenomolybdenum blue complex at trace level: Application to Biological and Environmental samples, *Analytical Methods*, 3, 1838 – 1844 (2011).
- 5) M.Pandurangappa and **Y. Venkataramanappa**, Quantification of nitrite/nitrate in food stuff samples using 2-aminobenzoic acid as a new amine in diazocoupling reaction, *FoodAnalyticalMethods*, 4, 90-99(2011).
- 6) M. Pandurangappa and **Y. Venkataramanappa**, Diaminobenzene as a novel reagent for nitrite assay in environmental samples: An evidence for its mechanistic aspects, *Analytical letters*, 41, 3342-3363(2008).
- 7) M. Pandurangappa and **Y. Venkataramanappa**, Aminophenyl Benzimidazole as a novel and new reagent for the estimation of NO<sub>2</sub>/nitrite/nitrate at trace level: Application to environmental samples, *Analytical letters*, 40, 2974 - 2991 (2007).

#### **As Resource Person**

**Dr. Y. Venkataramanappa**, Coordinator, PG-Department of Chemistry, had been invited as chief guest to inaugurate M.Sc (Chemistry) Course on **17<sup>th</sup> Feb-2021** at Govt First Grade College (GFGC), Chickaballapur and delivered a talk on **“Start your Future in Chemistry and End-Up Changing the World”** under the banner Orientation Programme for Fresher’s.

**Dr. Y. Venkataramanappa**, Coordinator, PG-Department of Chemistry, has delivered a talk on **“Environmental Pollution and Its Controlling Techniques”** and contributed as a resource person for One day Seminar on Energy Storage Devices and Pollution Controlling Techniques held at **Kalpataru Institute of Technology**, Tiptur, Tumkur (Dist), on the occasion of **National Science day-2020 on 28<sup>th</sup> Feb 2020**.

#### **Attended/Presented a Research Papers in National/International Conferences / Symposiums**

- 1) **Shridevi Salagere**, research scholar and Ph.D student of **Y. Venkataramanappa** has presented a research paper on **“Facile synthesis of silver nanoparticle-decorated Zinc Oxide nanocomposite based pencil graphite modified electrode for selective electrochemical**

**determination of nitrite** in DAE BRNS Sponsored “Proceedings of Conference on Electrochemistry in Industry, Health and Environment (EIHE-2020) Bhaba Atomic Research Centre (BARC), Mumbai, Maharashtra from 21<sup>st</sup> -25<sup>th</sup> January 2020.

2) **Shridevi Salagare**, research scholar and Ph.D student of **Y. Venkataramanappa** has attended and presented a poster in International Winter School 2019 on “**Frontiers in materials science**”, JNCASR Bengaluru from 2<sup>nd</sup> - 6<sup>th</sup> December 2019.

3) **Shridevi Salagare**, research scholar and Ph.D student of **Y. Venkataramanappa** has participated and presented a paper “*Facile synthesis of silver nanoparticle decorated Zinc Oxide nanocomposite based pencil graphite modified electrode for selective electrochemical determination of nitrite*” in a “**1<sup>st</sup> International Conference on life, chemical, and Health sciences(ICLCHS)**” Organized by department of Life Sciences Ramaiah College of Arts, Science & Commerce in collaboration with Karnataka Science and Technology Academy (KSTA), Department of IT, BT, and Science & Technology, Government of Karnataka(GoK) on 24<sup>th</sup> to 26<sup>th</sup> October 2019.

4) **Shridevi Salagare**, research scholar and Ph.D student of **Y. Venkataramanappa** has participated and presented a paper on “**Desg. & Const. of Co-functionalized MW-CNT/CO-MOFS based electrochemical sensors**” in an International Conference on Recent advances in Applied Sciences (ICRAAS-2019)” Organized by School of Applied Sciences, REVA University, Bengaluru-560 064 on 17<sup>th</sup> -18<sup>th</sup> of October 2019.

5) **Shridevi Salagare**, research scholar and Ph.D student of **Y. Venkataramanappa** presented a research paper on “**Designing and Construction of Carboxyl Functionalized MWCNTs / Co-MOFs based electrochemical sensor for the sensitive detection of nitrite**” at three day International Conference on Advances in Material Research-2019 (ICAMR-2019), organized by Department of Applied Sciences, M.S.Ramaiah University, Bangalore from 25-27 July 2019

6) **Dr.Y.Venkataramanappa, HOD, PG-Chemistry, worked** as a **Conference Coordinator** in collaboration with KSTA in 11<sup>th</sup> Annual Conference on “**New Vistas in Science and Technology for Common Good**” held at NMKRV College for Women, Bangalore on 1<sup>st</sup>-2<sup>nd</sup>February, 2019.

7) **Shridevi Salagare**, research scholar and Ph.D student of **Y. Venkataramanappa** presented a research paper on “**Sulfaguanidine 2-(4-aminophenyl) sulfonylguanidine) as a novel reagent for the estimation of nitrite/nitrate at trace level: Application to Environmental and food**

**samples**” at one day 4<sup>th</sup> International Conference on Chemical and Environmental Research (ICCER-2018), organized by Jamal Mohamed College, Tiruchirapalli, Tamilnadu, INDIA and **AWARDED FIRST Prize for the BEST ORAL presentation** on 19<sup>th</sup> December-2018.

8) **Shridevi Salagare**, research scholar and Ph.D student of **Y. Venkataramanappa**, presented a research paper Orally on **“Composite material for the determination of nitrite”** in one day National Conference on Emerging Trends in Material Science organized by K.L.E.Society’ S . Nijalingappa College, Rajajinagara, Bangalore on 5<sup>th</sup> October 2018.

9 ) Participated in 10<sup>th</sup> Annual conference of Karnataka Science and Technology Academy(KSTA) 2018 jointly organized by Karnataka Science and Technology Academy and REVA University on 18<sup>th</sup>-19<sup>th</sup>Jan-2018.

10) Attended **One day National Level Capacity Building Programme** on 19.12.2017 organized by Internal Quality Assurance cell (IQAC) - St. Joseph’s College of Commerce (Autonomous) on **“Teachers and Patents – Negotiating the world of intellectual property rights”**.

11) Presented a paper on **“Green Synthesized Pd Nanoparticles / MWCNTs Hybrid Fabricated on Graphite Electrode for Selective Determination of Dopamine in Presence of Ascorbic Acid and Uric Acid.”** in three day International Conference on Recent Advances in Analytical Sciences(RAAS) held during 07-09 April 2016 at Department of Chemistry, Indian Institute of Technology(BHU) & Indian Society of Analytical Scientists(ISAS) Varanasi Chapter, Varanasi, Banaras Hindu University, UP, INDIA.

12) Attended one day workshop on **‘Institutional Quality Improvement: An Overview from NAAC Perspective’** on 9<sup>th</sup> December 2014 organized by Internal Quality Assurance Cell at NMKRV College for Women, Jayanagar, 3<sup>rd</sup> Block, Bangalore-560011.

13) Attended and interacted in two day workshop on **‘Quality initiatives for NAAC assessment’** on 13<sup>th</sup>& 14<sup>th</sup> of June 2014, conducted by Education Management Service under the aegis of Internal Quality Assurance Cell (**IQAC**) at NMKRV College for Women, Jayanagar 3<sup>rd</sup> block, Bangalore-560011.

14) Attended the 6<sup>th</sup> Annual State Level Conference on **“Science and Technology Challenges for Promoting Innovative Research and Development”** jointly organized by Karnataka Science and Technology Academy (KSTA) and Christ University during 20-21 December 2013 at Christ University, Bangalore, Karnataka.

- 15) Attended the Chemposium-**2013**: A State Level Chemistry Symposium held on 23<sup>rd</sup> March 2013 in Indian Academy Degree College, Bangalore.
- 16) Participated in the one day State Level Symposium **CHEM-THIRST 2013** held at PG-Department of Chemistry NMKKRV College for Women, 3<sup>rd</sup> Block Jayanagar, Bangalore on 20<sup>th</sup> March 2013.
- 17) Attended a one day UGC sponsored National Seminar on Emerging Trends in Chemistry with Emphasis on Environment (ETCE-2011), Organized by Department of Chemistry and Biochemistry, Vijaya College and DOS in Chemistry Bangalore University, Bangalore held at Vijaya College, R.V. Road, Basavanagudi, Bangalore-560004 on 23<sup>rd</sup> December-2011.
- 18) Attended a two day Science Academics Lecture workshop on “Nanotechnology and Biosensors: present and future perspectives” jointly organized by Indian Academy of Sciences (IASc) Bangalore, Indian National Sciences Academy (INSA), New Delhi, The National Academy of Sciences (NAS), Allahabad and Department of Chemistry, Dayanada Sagar Academy of Technology and Management (DSATM), Bangalore held during 9<sup>th</sup> - 30<sup>th</sup> Nov 2011.
- 19) Presented a paper on ‘Flow injection analysis of atmospheric nitrogen dioxide at ppb levels through Rhodamine B hydrazidespirolactam ring opening process at regional and expert International Conference on “Adaptive management of ecosystems” organized by Institute for Social and Economic Change (ISEC), Dr.V.K.R.V.Rao Road, Nagarabhavi, Bangalore, INDIA and Alexander von Humboldt Foundation, Germany, from 19<sup>th</sup> October - 2011- 21<sup>st</sup> October-2011 at ISEC, Bangalore.
- 20) One day seminar and workshop on “**Recent advances in Atomic Absorption Spectrometry and its Analytical Applications.**” organized by the Indian Society of Analytical Scientists (ISAS) Bangalore Chapter, on 9<sup>th</sup> January-2010 at Atomic Minerals Directorate for Exploration and Research, Department of Atomic Energy, Jnanabharati Road, Nagarabhavi, Bangalore-560072.
- 21) Presented a paper on “Quantification of nitrite and nitrate using Arsenomolybdenum blue complex.” **In Two day International Conference on Current Trends in Chemistry and Biochemistry of Environmental Research (ICCTCB-2009) organized by the Dept of Studies in Chemistry, Central College Campus, Bangalore University, Bangalore on 18<sup>th</sup> to 19<sup>th</sup> Dec-2009 at Bangalore.**

- 22) Presented a paper on “Quantification of nitrite/nitrate in vegetable and fruit juices using 2 - amino benzoic acid as a reagent.” in two day *National Conference on Emerging Areas in Chemistry (NACEAC-09) held during 31-07-2009 and 01-08-2009*, at **Department of Studies in Chemistry University of Mysore, Manasagangotri, Mysore - 570 006, Karnataka, INDIA.**
- 23) Attended one day UGC Sponsored symposium on “**Battery Technology –A Novel Power Device**” organized by Sri Renukacharya College of Arts, Science and Commerce, Race course Road, Bangalore on 6<sup>th</sup> March – (2009).
- 24) Attended and presented a paper on “Diaminobenzene (DAB) as a new reagent for nitrite quantification in environmental samples” in three day International Conference in Chemistry at Bhopal, Madhya Pradesh (INDIA), **Organized by: Journal (An International, Interdisciplinary Research Journal of Environment) in collaboration with Government Geetanjali Girls P.G. College, Bhopal, Department of Higher Education, Govt. of Madhya Pradesh (INDIA) from December 28th -30th 2007.**
- 25) Attended one day workshop organized by DOS in Chemistry, Bangalore University, Bangalore for the preparation of blow up syllabus and scheme of valuation for VI Sem on March 3<sup>rd</sup> (2007).
- 26) Attended one day UGC Sponsored symposium on “**Green Chemistry**” organized by Sri Renukacharya College of Arts, Science and Commerce, Race course Road, Bangalore on February 21<sup>st</sup> (2007).
- 27) Two day **National symposium on the role of Analytical Instrumentation in Characterization and Quantification of materials**,(AICQOM-2007)organized by Indian Society for Analytical Scientists (ISAS) and DOS of Chemistry, Bangalore University, Bangalore held at ISEC campus, Nagarabhavi, Bangalore, during January 27 - 28 (2007).
- 28) Presented a paper on “Amino phenyl benzimidazole as a new sensitive reagent for the Spectrophotometric determination of nitrogen dioxide in air and nitrite/ nitrate in water at trace level”. In three day National Conference in Chemistry, conducted by Department of Studies in Chemistry, Bangalore University, Bangalore, from September 27 – 29, 2006.
- 29) Attended two day in - house symposium in Chemistry & Biochemistry, Dept. of Studies in Chemistry, Bangalore University, Dec. 26 - 27, 2005.

30) Attended one day seminar “**VISION-2010**” Analytical Techniques and Instrumentation for Industries, Research and Academics conducted by Indian Society of Analytical Scientists (ISAS), BARC Mumbai Chapter, at CPRI Bangalore on November 25<sup>th</sup>, 2005.

31) Attended one day Symposium on “**Nanoscieece and Technology-prospects and Challenges**” (ANVIKSKI-2005) organized by SSMRV degree College, Bangalore on 10<sup>th</sup> Aug, 2005.

32) Attended one day UGC Sponsored workshop on “**Modern tools in Teaching-Learning processes**” organized by Sri Renukacharya College of Arts, Science and Commerce, Race course Road, Bangalore, on 29<sup>th</sup> June-2005.

**Details of Project:**

Sl No	Title of the Project	Period	Funding Agency	Amount Sanctioned	Amount Released	Status
1	Spectrophotometric Determination of Nitrogen dioxide/Nitrite/Nitrate at trace level in Various Environmental Samples	February, 2015 to January , 2017	UGC	Rs. 4,00,000=00	Rs. 4,00,000=00	Completed

**CONSULTANCY**

We undertake baseline environmental monitoring and assessment studies on water, waste water and soil by using some of the best instruments & equipments.

The customer’s services include:

**Water:** water quality analysis (surface and ground water).

**Wastewater:** We offer our customers industrial and domestic effluent quality monitoring services. The information obtained can be used by clients for a variety of applications including meeting defined regulatory compliances.

**Soil:** Soil samples will be collected and will be analyzed as per the procedure.