

## Curriculum Vitae

**1. Name :** Dr. K.Rama

**2. Designation:** Assistant Professor

**3. Department :** Forensic Science Unit, Department of Chemistry, University  
College of Science Osmania University

**4. Date of appointment:** 06 September 2013

**5. Address:** Forensic Science Unit, University College of Science, Osmania University Taranaka,  
Hyderabad Telangana – 500 007

**Email ID:** [ramakoyyati@gmail.com](mailto:ramakoyyati@gmail.com); [ramakoyyatioucs@osmania.ac.in](mailto:ramakoyyatioucs@osmania.ac.in)

**6. Date of Birth:** 06 November 1988

**7. Qualifications :** M.Sc Forensic Science (2011), PhD Biochemistry (2020)  
UGC NET : JRF in Forensic Science 2011

**8. Teaching Experience:** 11 years

PG-Level – 11 years

From September 2013 : Assistant Professor

### Topics Taught:

- Criminal justice system
- Crime Investigation
- Forensic Medicine
- Forensic Chemistry
- Forensic Toxicology
- Forensic Physics
- Forensic Ballistics
- Biochemistry
- Molecular Biology
- IPR

**9. Other reaching activities:**

Guest Faculty:

Pg Diploma in Forensic Science, Department of Chemistry, Telangana mahila  
viswavidyalayam , Koti, Hyderabad.

**10. Research Experience:** 4 years (after award of PhD)

**a) Field of Research:** Applied Biotechnology and Biochemistry, Forensic Science

Title of PhD Thesis: “**Biohydrogen, Bioplastic and Bioherbicide production from two anoxygenic  
phototrophic bacteria isolated for sugar industrial effluents**”

**b) Research Papers**



**i) List of papers published**

1. Veerababu Nagati, **Rama Koyyati**, Manisha R Donda, Jahnavi Alwala, Karunakar Rao Kudle, PratapRudraManthur Padigya. **"Green Synthesis and characterization of Silver nanoparticles from Cajanus cajan leaf extract and its antibacterial activity"** Published year: 2012; International Journal of Nanomaterials and Biostructures, volume 2(3) 39-43.
2. Karunakar Rao Kudle, Manisha R Donda, JahnaviAlwala, **Rama Koyyati**, Veerababu Nagati, Ramchander Merugu, Y.Prashanthi, M.P.PratapRudra. **"Biofabrication of silver nanoparticles using Cuminum cyminum through microwave irradiation"** Published year: 2012; International Journal of Nanomaterials and Biostructures, volume 2(4) 65-69.
3. VeeraBabu Nagati, **Rama Koyyati**, Manisha R Donda, Jahnavi Alwala, Pratap Rudra Manthur Padigya. **"Biosynthesis of Silver Nanoparticles using Catharanthus roseus Leaf Extract and Antimicrobial Activity"** Published year: 2013; Nano Trends: A Journal of Nanotechnology and Its Applications, volume 15(1)1-6.
4. **Rama Koyyati**, Veerababu Nagati, Ramchander Merugu & Pratap Rudra Manthur Padigya. **"Biological Synthesis of Silver Nanoparticles Using Raphanus Sativus Var. Longipinnatus Leaf Extract And Evaluation of their Antioxidant and Antibacterial Activity"** Published Yr: 2013; Journal: International Journal of Medicine and Pharmaceutical Sciences (IJMPS) Voume 3(4) 89-100..IF(JCC) 4.83. (UGC Referred journal 2017-18)
5. Veerababu Nagati, **Rama Koyyati**, Rajkiran Banala, Jahnavi Alwala, Manisha R Donda, Pratap Rudra Manthur Padigya. **"Green Synthesis of plant-mediated silver nanoparticles using Withania Somnifera leaf extract and evaluation of their antimicrobial activity"** Published Yr: 2013. Journal: International Journal of Advanced Research, Volume 1(9) 307-313.
6. Raju Nalvothula, VeeraBabuNagati, **Rama Koyyati**, Ramchander Merugu, Pratap Rudra Manthur Padigya. **"Biogenic Synthesis of Silver Nanoparticles Using Tectona grandis Leaf Extract and evaluation of their Antibacterial Potential"** Published Yr: 2014. Journal: International Journal of ChemTech Research, Volume 6(1) 293-298. (Scopus indexed)
7. **Rama Koyyati**,Veerababu Nagati, Raju Nalvothula, Ramchander Merugu, Karunakar rao Kudle, Paul Marx and Pratap rudra Manthur padigya. **"Antibacterial activity of silver nanoparticles synthesized using Amaranthus viridis twig extract"** Published Yr: 2014. Journal: International journal of research in pharmaceutical sciences, volume 5(1) 33-39. (Scopus indexed)
8. VeeraBabu Nagati, Raju Nalvothula, **RamaKoyyati**, Pratap Rudra ManthurP adigya. **"Green synthesized of silver nanoparticles using Canna indica leaf extract and its characterization"** Published year: 2014; International Journal of ChemTech Research, Volume 6(4) 2271-2276. (Scopus indexed)
9. Veerababu Nagati, **Rama Koyyati**, Paul Marx, Venkataramana Devi Chinnapaka and Pratap Rudra Manthur Padigya. **"Effect of heavy metals on seed germination and plant growth on Grass pea**

**plant (*Lathyrus sativus*)”** Published year: 2015; International Journal of PharmTech Research, Volume 7(3) 528-534. (Scopus indexed)

10. **Rama Koyyati**, Karunakar Rao Kudle and Pratap Rudra Manthur Padigya. “**Antibacterial and cytotoxic activity of Green Synthesized Cobalt Nanoparticles Using *Raphanussativus var. longipinnatus* Leaf Extract**” Published year: 2016; International Journal of PharmTech Research, Volume 9(3), 466-472. (Scopus indexed)
11. Z. Anjana, Karunakar Rao Kudle, **Koyyati Rama**, D. R. Manisha, Madhukar Rao Kudle, M. P. Pratap Rudra. “**Effect of growth factors on hydrogen production by *Rhodopsuedomonaspalustris KU 001* And *Rhodopsuedomonaspalustris OU 001***” Published year: 2016; European Journal of Pharmaceutical and Medical Research, Volume 3(5), 375-378. (UGC Referred journal 2017-18)
12. Dongamanti Ashok, Raju Sandupatla, **Rama Koyyati**, “**Phytomediated Synthesis of Silver Nanoparticles using *Dicrostachys cinerea* leaf extract and evaluation of its Antibacterial and Photo catalytic activity of Textile dye**” Published year: 2017; International Journal of ChemTech Research, Volume 10(3), 302-314. (UGC Referred journal 2017-18)
13. Veera Babu Nagati, Swathi Tenugu, **Rama Koyyati**, Pratap Rudra Manthur padigya. “**Biosynthesis of Silver Nanoparticles from Seed Powder Extracts of *Lathyrus sativus*, Medicinally Potent Legume Plant**” Published year: 2017; European Journal of Pharmaceutical and Medical Research, Volume 4(2), 511-516. (UGC Referred journal 2017-18)
14. **Rama Koyyati**, M.P.Pratap Rudra, Karunakar Rao Kudle. “**Need of biopolymers and applications of polyhydroxybutyrate(PHB): A short review**” Published year: 2017; Anveshana’s International Journal of Research in Pharmacy and Life Sciences, Volume 2(2), 33-36.
15. Veera Babu Nagati, Chandra Shakar Reddy Nallagouni, **Rama Koyyati** and Pratap Rudra Manthur padigya, “**Eco-Friendly Synthesis and Characterization of Silver Nanoparticles from Putative Medicinal Plant *Annona reticulate***” Published year: 2018; European Journal of Pharmaceutical and Medical Research, Volume 5(1), 385-390. (UGC Referred journal 2017-18)
16. Ramchander Merugu, Swetha Garimella, **Rama Koyyati**, Kalpana V. Singh, “**Defluouridation of Water by *Penicillium diversum* Fungal Biosorbent**” Published year: 2018; European Asian Journal of Biochemical and Pharmaceutical Research, Volume 8(2), 101-105. (UGC Referred journal 2017-18)
17. Dongamanti Ashok , Sandupatla Raju and **Koyyati Rama** , “ **Assessment of *In-Vitro* Anticancer and Antibacterial Activities of *Carchorus hirsutus* Phytomediated Optimized Nanosilver**” Published year: 2019; International Journal of Pharmaceutical Sciences and Research, Volume 10(10), 4587-4597. . (Web of science indexed)
18. **Rama Koyyati**, Karunakar Rao Kudle and Pratap Rudra Manthur Padigya, “**Antibacterial, Antioxidant and Cytotoxic Activity of Bacterial Carotenoids Isolated from *Rhodopseudomonas palustris KRPR01* and *KRPR02***” Published year: 2019; International Journal of Pharmaceutical Sciences and Research, Volume 10(10), 4644-4649. . (Web of science indexed)

19. Dongamanti Ashok, Raju Sandupatla, Ananda Rao Boddu and **Rama Koyyati**, “**Antibacterial and Textile Dye Degradation of Green Synthesized Silver Nanoparticles**” Published year: 2019; International Journal of Engineering Research & Technology (IJERT), Volume 8(12), 396-402.
20. **Rama Koyyati**, P.C Latha, Raju Sandupatla, V Laxman, Ramchander Merugu. “**Evaluation of anti-bacterial and rice seed germination potential of green and chemically synthesized ZnO nanoparticles**”, Published year: 2021; Materials Today: Proceedings, Volume 44, Part 1, 2611-2616, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.12.658> . (Scopus indexed)
21. Raju Sandupatla, Ashok Dongamanti, **Rama Koyyati**. “**Antimicrobial and antioxidant activities of phytosynthesized Ag, Fe and bimetallic Fe-Ag nanoparticles using *Passiflora edulis*: A comparative study**”, Published year: 2021; Materials Today: Proceedings, Volume 44, Part 1, 2665-2673, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.12.679> . (Scopus indexed)
22. **Rama Koyyati**, Karunakar Rao Kudle, Veerababu Nagati, Ramchander Merugu, Pratp Rudra Manthur Padigya. “**Extracellular Synthesis of Mono and Bimetallic Nanocomposites from Novel Strains of *Rhodopseudomonas palustris* and Evaluation of Their Biomedical Applications**”, Published year: 2022; Macromolecular Symposia, Volume 402, issue 1, 1-11, 1521-3900, Scopus, Web of science indexed
23. **Rama Koyyati**, Karunakar Rao Kudle, Ramchander Merugu, Pratp Rudra Manthur Padigya, “**In Vitro Studies on Protein Binding of Polyhydroxybutyrate Isolated from *Rhodopseudomonas palustris* KRPR02**”, Published year: 2022; Molecular Symposia, Volume 402, Issue 1, 1-5, 1521-3900, Scopus, Web of science indexed
24. Raju Nalvolthula, Ramchander Merugu, **Rama Koyyati**, M. P. Pratap Rudra, 2023, “**Synthesis, Characterization, Anticancer, and Antimicrobial Activities of Bimetallic Silver and Gold Nanoparticles Synthesized Using a Purple Non-Sulfur Bacterium *Rhodopseudomonas faecalis***”, Published year: 2023; Macromolecular Symposia, Volume 407, Issue 1, 1-7, 1521-3900, Scopus, Web of science indexed
25. M. Manjula , **Rama Koyyati** and B. Rajani, “**Isolation, molecular identification, cultural characteristics and biomass production by three purple non sulphur bacteria from soil and water samples**”, Published year: 2024; BIOCHEMICAL AND CELLULAR ARCHIVES, Volume 24, Issue 1, 0-0, 0972-5075, Clarivate Analytics, ISI Master list indexed
26. M.Manjula, **Rama Koyyati** and B.Rajani, “**Impact of Biofertilizers and Bio stimulant of Three Different *Rhodopseudomonas* Strains on Experimental Cultivation of Chilli Plants (*Capsicum Annuum*)**”, Published year: 2024; International Journal of Research and Analytical Reviews (IJRAR), Volume 11, Issue 2, 504-523, 2348-1269, google scholar and Semantic Scholar, UGC approved journal indexed

## ii) List of Papers Presented:

1. Presented a paper “**Synthesis of Plant-Mediated Cobalt Nanoparticles Using *Raphanus Sativus* Var. *Longipinnatus* Leaf Extract and Evaluation of its Anti Microbial Activities**” in “**International Conference on “Nano, Bio & Material Sciences (ICONBMS-2014)”** Organized by Department of Physics, Nizam college, OU from **8-10 January 2014. (Oral presentation)**
2. Presented a paper “**Microbial Forensics: A New Discipline in Criminal Justice System**” in **National Conference on “Recent Trends in Microbial Biotechnology”** Organized by Department of Microbiology, UCS, OU from **26-28 February 2015. (Poster presentation)**
3. Presented a paper “**Identification and Characterization of *Rhodopseudomonas* Sp., Nitrate Reducing Purple Non-Sulfur Bacterium from Waste Water**” in **International conference on “Biochemistry, Nutrition & Pharmacy in Human Welfare: Recent Trends & Future Challenges”** Organized by Department of Biochemistry, UCS,OU from **3-5 September 2015. (Oral presentation)**
4. Presented a paper “**Effect of PVA capped Zinc oxide nanoparticles on seed germination of Rice**” in **National conference on “Emerging challenges and opportunities in Agriculture, social, plant, environment, cooperatives and technology, ECOASPECT2016”** Organized by Genesis Urban And Rural Development Society(GUARD) from **10-11 September 2016. (Best Oral presentation).**
5. Presented a paper “**Need of Biopolymers and applications of Polyhydroxybutyrate (PHB): A short review**” in **National level conference on “Research with innovative ideas in Pharmaceutical education, health care and life sciences (NLCRIIPEHCLS-2017)”** Organized by Anveshana Educational and research foundation in association with Shri JYT University, Rajasthan on **4 February 2017. ( Oral presentation).**
6. Presented a paper “**Evaluation of anti-bacterial and rice seed germination potential of green and chemically synthesized ZnO nanoparticles**” in **11<sup>th</sup> International conference on “Material processing and Characterization- 2020 (ICMPC 2020)”** Organized by Indian Institute of technology Indore from **15-17 December 2020. ( Oral presentation).**
7. Presented a paper “**In vitro studies on protein binding of polyhydroxybutyrate isolated from *Rhodopseudomonas palustris* KRPR02**” in **4<sup>th</sup> International Conference on science and engineering of materials (ICSEM-2021) online conference** Organised by School of basic sciences, Department of Physics, Sharda University from **19-22 July 2021 ( Oral presentation)**
12. **a. Orientation, Refresher Courses,Workshop, FDP and STP attended:**
  1. Participated in Workshop on “**Synthesis and Characterisation oh Nano Materials (SCNM-2016)**” Organized by Centre for Nano Science and Technology, Institute of Science & technology, JNTU, Hyderabad from **14-18 March 2016.**

2. Participated in Workshop on **“Teaching, learning and assessment , methodologies”** Organized by University College of Science and University College of Arts and Social Sciences, Osmania University, Hyderabad on **17 December 2016**.
3. Participated in **UGC Sponsored Orientation Course (84<sup>th</sup>)** Organized by UGC-HRDC, Osmania University, Hyderabad from **19 January to 16 February 2017**.
4. Participated in **UGC Sponsored Refresher Course in Life Sciences** Organized by UGC-HRDC, Osmania University, Hyderabad from **29 October to 20 November 2018**.
5. Participated in **One week Faculty development Programme on “ICT based tools and its applications in teaching and learning process”** Organized by BSVS Educational Learning centre, Nagpur from **27 May to 2 June 2020**.
6. Participated in **One week Faculty development Programme on “Institutional benchmarking of best practices”** Organized by 10 premier Institutions of India from **8-14 June 2020**.
7. Participated in **UGC Sponsored Online Short Term Course on Research Methodology** Organized by UGC-HRDC, Osmania University, Hyderabad from **15-17 June 2020**.
8. Participated in **One week Faculty development Programme on “Spectroscopical studies in structural analysis- Modern era applications”** Organized by Department of Science and Humanities, Hyderabad Institute of technology and Management, Medchal, Rangareddy from **25-29 January 2021**.

#### **b. Conferences, seminars and webinars attended**

##### **Conferences/ symposium**

1. Participated in National symposium on **“Current Trends in Biotechnology”** Organized by Department of Botany, UCS, OU on **7-8 December 2013**.
2. Presented a paper **“Synthesis of Plant-Mediated Cobalt Nanoparticles Using *Raphanus Sativus* Var. *Longipinnatus* Leaf Extract and Evaluation of its Anti Microbial Activities”** in **“International Conference on “Nano, Bio & Material Sciences (ICONBMS-2014)”** Organized by Department of Physics, Nizam college, OU from **8-10 January 2014**. (Oral presentation)
3. Participated in the National Conference on **“Emerging and Re-emerging Viral Outbreaks in India- Clinical and Management”** held from **20-22 January 2015**.
4. Participated in the **National Conference on “New Frontiers in Biotechnology – Prospectus and Challenges”** Organized by Department of Genetics and Biotechnology, Koti women’s college, OU from **29-30 January 2015**.
5. Presented a paper **“Microbial Forensics: A New Discipline in Criminal Justice System”** in **National Conference on “Recent Trends in Microbial Biotechnology”** Organized by Department of Microbiology, UCS, OU from **26-28 February 2015**. (Poster presentation)

6. Presented a paper **“Identification and Characterization of *Rhodopseudomonas Sp.*, Nitrate Reducing Purple Non-Sulfur Bacterium from Waste Water”** in **International conference on “Biochemistry, Nutrition & Pharmacy in Human Welfare: Recent Trends & Future Challenges”** Organized by Department of Biochemistry, UCS,OU from **3-5 September 2015**. **(Oral presentation)**
7. Presented a paper **“Effect of PVA capped Zinc oxide nanoparticles on seed germination of Rice”** in **National conference on “Emerging challenges and opportunities in Agriculture, social, plant, environment, cooperatives and technology, ECOASPECT2016”** Organized by Genesis Urban And Rural Development Society(GUARD) from **10-11 September 2016**. **( Best Oral presentation).**
8. Presented a paper **“Need of Biopolymers and applications of Polyhydroxybutyrate (PHB): A short review”** in **National level conference on “Research with innovative ideas in Pharmaceutical education, health care and life sciences (NLCRIPEHCLS-2017)”** Organized by Anveshana Educational and research foundation in association with Shri JYT University, Rajasthan on **4 February 2017**. **( Oral presentation).**
9. Participated in the **One day National Conference on “New Vistas on Biotechnology for sustainability”** Organized by Department of Biotechnology, University college of Science, Saifabad, OU on **7 November 2017**.
10. Participated in the **International Conference on “Integrative Biology and Applied Genetics ICIBAG-2018”** Organized by Department of Genetics and Biotechnology, OU on **15-18 March 2018**.
11. Participated in the **International Conference on “Material Science for societal advancement”** Organized Under UGC UPE FAR Programme, OU on **20-22 January 2020**.
12. Participated in the **Two day Virtual International Conference on “Current research trends in Chemical Sciences (CRTCS-2020) ”** Organized by Department of Chemistry, University college for Women, Koti, Hyd, OU on **10 and 11 September 2020**.
13. Presented a paper **“Evaluation of anti-bacterial and rice seed germination potential of green and chemically synthesized ZnO nanoparticles”** in **11<sup>th</sup> International conference on “Material processing and Characterization- 2020 (ICMPC 2020)”** Organized by Indian Institute of technology Indore from **15-17 December 2020**. **( Oral presentation).**
14. Presented a paper **“In vitro studies on protein binding of polyhydroxybutyrate isolated from *Rhod pseudomonas palustris* KRPR02”** in **4<sup>th</sup> International Conference on science and engineering of materials (ICSEM-2021)** online conference Organised by School of basic sciences, Department of Physics, Sharda University from **19-22 July 2021** **( Oral presentation).**

## Seminars

1. Participated in National seminar on **“Prevalence and Incidence of Blood sucking (Haematophagous) vectors and their clinical importance in South India”** Organized by Department of Zoology, OU on **26 August 2014**.
2. Participated in National seminar on **“Forensic Accounting & Fraud Examination”** Organized by Department of Commerce, OU on **1-2 December 2014**.
3. Participated in National seminar on **“Aerobiology and Public health-2014”** Organized by Department of Botany, UCS, OU on **12 December 2014**.
4. Participated in Seminar on **“Drugs of Abuse and youth”** Organized by Forensic Science unit, Department of Chemistry, RBVRR Women’s College, OU on **26 June 2015**.
5. Participated in UGC SAP sponsored National Seminar on **“Multifunctional Materials and their Applications (NSMMA -2016)”** Organized by Department of Physics, UCS, OU on **29-30 March 2016**.

## Webinars

1. Participated in International webinar series 2020 on **“HPTLC and Forensic applications”** Organized by Indian criminology and Forensic association (ICFSA) on **30 May 2020**.
2. Participated in International webinar series 2020 on **“Application of revolutionary biochip and array technology in Forensic Toxicology”** Organized by Indian criminology and Forensic association (ICFSA) on **30 May 2020**.
3. Participated in webinar on **“Role of chemist in COVID 19 Pandemic” Am interactive session with the distinguished Alumni of Chemistry** Organized by Department of Chemistry, Osmania University, Hyderabad on **1 August 2020**.
4. Participated in International webinar on **“Real world applications in Nanotechnology”** Organized by Department of Chemistry, Osmania University, Hyderabad on **4 and 5 August 2020**.
5. Participated in Two days National webinar on **“Online teaching tolls for the Faculty: Live sessions”** Organized by Department of Chemistry, UCS, Osmania University, Hyderabad on **5 and 6 August 2020**.
6. Participated in SPSR National webinar on **“Impact of COVID 19 on Pharmaceutical education and research”** Organized by Society of Pharmaceutical Sciences and research (SPSR) on **8 January 2021**.
7. Participated in SPSR National webinar on **“Nanotechnology and Medical Science: Challenges Ahead”** Organized by Society of Pharmaceutical Sciences and research (SPSR) on **16 January 2021**.

## 12. Administrative experience:

- BOARD OF STUDIES MEMBER for M.Sc Forensic Science,OU from 18 Jun 2022



- BOARD OF STUDIES MEMBER for M.Sc Forensic Science ,OU from 02 Jan 2019 to 02 Jan 2021
  - STUDENT ADVISOR in Forensic Science Unit, OU from 27 Sep 2018 to 27 Sep 2019
  - STUDENT ADVISOR in Forensic Science Unit, OU from 04 Aug 2017 to 26 Sep 2018
- Appointed By - PRINCIPAL.

**13. Life Member:**

- The Indian Science Congress Association (L33739)

**Place:** Hyderabad

**Date:** 30-07-2024

**Dr. K.RAMA**