Faculty Profile



**Dr. Rekha N.D**

M.Sc., Ph.D

Assistant Professor

PG Dept. of Bio-Technology

# Qualification

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| **Programme** | **Specialization** | **Institution/University** |
| MSc., Ph.D | Biomedical science | JSS University |

Awards and achievements

* 1. Delivered a talk on **“Molecular basis of Cancer cell behavior, treatment: Present and Future”** in an International E-Conference on “Current Science and Technology for Sustainable Society” held on 27-28 Nov 2020.
  2. Participated as a resource person in two day national seminar on “ innovations in Science and Technology for Sustainable Environment” at Hassan held by Dept. of Botany . AVK College for women, Hassan Sponsored by Karnataka Science and technology academy, GOK, Bangalore, held on 21-22, March 2019.
  3. Got **first prize** for presenting paper in science and technical conference on **Immunizing Brinjal (*Solanum melongena* Linn.) and Tomato ( Lycoperscicon esculentum)** Plants against Leaf Blight Disease Caused by *Alternaria solani* Using Glycine, aspartic acid and lysine amino acids as Elicitors, held on 24-25th of Nov 2017 by KSTA
  4. **Patent filed** **(CBR No: 9452, Application No. 3437/CHE/2012** [ Isolation and characterization of 4,9,14,19-tetramethyl-1,6,11,16-tetraoxacyclosa-3,8,13,18- tetraene].
  5. Got **UGC minor research project** in the year 2009 for **Isolation of bioactive molecules from the leaf and root extracts of *Memecylon malabaricum***
  6. Qualified KSET examination in the year 2014

# PhD Thesis

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| **Sl.No.** | **Title** | **Guide Name** | **Institution** | **Month Year** | **Status** |
| **1** | **Enumeration of the Pathophysiological Basis of Anti- inflammatory and Antiangiogenic Cellular Responses in Milieu with Bio- functional Properties of *Memeceylon malabaricum*,**  **kostel** | Dr. Jayashree K  Prof. and Head Department of Pathology, JSS Medical College, Mysuru. | **JSS Medical College, Mysuru.** | **March, 2015** | Awarded |

**Articles in journals**

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| **Sl.No** | **Title** | **Name of Journal** | **Volume No/Issue No/Page No** |
| 1 | *In vitro* studies of some plant extracts against *Rhizoctonia solani* Kuhn infecting FCV tobacco in Karnataka Light Soil, | Journal of Agricultural Technology | 2011 Vol. 7(5): 1321-1329 |

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|  | Karnataka, India. |  |  |
| 2 | Design, Synthesis, and Anticancer Properties of Novel  Benzophenone- Conjugated Coumarin Analogs | Arch. Pharm. Chem. Life Sci. | 2013, 346, 901–911 |
| 3 | Synthesis of (E)-2- (arylbenzylidene)-2-((4- methoxyphenyl)amino) acetohydrazide derivatives and their  antimicrobial activity | Current Chemistry Letters | 2013 |
| 4 | Synthesis, Characterization, Thermal and Biological Studies of Substituted Benzophenone Derived Schiff Base Metal(II) Complexes | *Chem Sci Rev Lett* | 2014, 3(11), 735-746 |
| 5 | Synthesis, characterization, biological and catalytic applications  of transition metal complexes derived from Schiff base | Bioorganic & Medicinal Chemistry Letters | 24 (2014) 3559–3564 |
| 6 | *In Vitro* Antioxidant Activity of 1-[5-(4- Methoxy-phenyl)- [1,3,4]oxadiazol-2-yl]- piperazine Derivatives | Canadian Chemical Transactions | 2014, 2 (4), 518-525 |
| 7 | Synthesis and evaluation of antiangiogenic and anticancerous properties of novel oxadiazole analogues. | Int. Res.J. Pharm. | 2014, 5 (6) |
| 8 | Synthesis and diverse *in vitro* biological activities of 5-(4-fluoro-3- nitrophenyl)-3-phenyl- 1,2,4-oxadiazole derivatives. |  | 2014, Journal of pharmacy research. 8(10),1544-1551 |
| 9 | Synthesis, | International | (2014),Vol 4, 41-52 |

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|  | characterization, thermal, anticancer and dna binding Properties of co(ii), ni(ii), cu(ii), cd(ii) and zn(ii) Complexes with schiff base. | Journal of Medicine and Pharmaceutical Sciences |  |
| 10 | Synthesis and Biological Efficacy of Novel Piperazine Analogues Bearing Quinoline and  Pyridine Moieties | *Russian Journal of Bioorganic Chemistry* | 2015, Vol. 41, No. 5,  pp. 576–583. |
| 11 | Synthesis and biological evaluation of novel 1,5- benzothiazepin-4(5H)- ones as  potent antiangiogenic and antioxidant agents | *Current Chemistry Letters* | 4 (2015) |
| 12 | Mononuclear mixed ligand transition metal complexes: synthesis, characterization, antioxidant and antimicrobial activity  along with dna cleavage studies. | Indo American Journal of Pharm Research. | (2015) Vol5,(07)2503-11 |
| 13 | The antiangiogenic, antioxidant and proapoptotic chemopreventive properties of tannins from *memecylon malabaricum* (cl.) | International journal of pharmaceutical sciences and research | (2015), vol6 |
| 14 | Synthesis of Aryl Tetralone Derivatives by Chalcone Route. | Med Chem | (2016)6: 525-530 |
| 15 | Synthesis, Characterization of Novel Furan Based Imidazolones and  Their Boilogical Studies.. | British Journal of Pharmaceutical Research. | (2016), 11(4):1-7 |
| 16 | Synthesis, characterization of novel furan based polymericnanoparticles and their biological  studies. | International Journal of Recent Scientific Research. | (2016)7, (4) 10385-  10390 |

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| 17 | Design, synthesis of novel furan appended benzothiazepine derivatives and in vitro biological evaluation as potent  VRV-PL-8a and H+/K+  ATPase inhibitors | Elsiver publication, Bio- organic and medicinal chemistry letters | Volume 27, Issue 14,  15 July 2017, Pages  3048-3054 |
| 18 | Biosynthesis Nickel Nanoparticle by Microorganism and Their Biological Activity | Der Pharma Chemica | 2017, 9(13):80-84 |
| 19 | Synthesis of Salicylic Acid Fused Dihydropyrazole Analogues and their Mechanism of Action on Escherichia coli Cells | Der Pharma Chemica, | 2017, 9(16):91-97 |
| 20 | Biosynthesis of Nickel Nanoparticles from Bacteria and Evaluation of Their Biological Activity | Journal of Pharmacy Research | 2017,11(5),459-463 |
| 21 | Synthesis of nickel nanoparticles via biological entity and their Antiinflammatory activity | Journal of Microbiology and Biotechnology research  Volume 7, Issue  3, Page No: 1-6 | 2017, 7 (3):1-6 |
| 22 | Green Synthesis of Gold and Silver Nanoparticles Using Memecylon malabaricum Leaf Extract and  Their Anti-Angiogenic Activity | Advanced Science, Engineering and Medicine | Vol. 10, 1–7, 2018 |
| 23 | Anti-inflammatory and antioxidant activity of salicylic acid conju- gated dihydropyrazoline analogues | Journal of Applied Pharmaceutical Science | Vol. 8(02), pp 060-  064, February, 2018 |

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| 24 | Synthesis of metal nanoparticles using *Heliconia rostrata* leaf extract and their antiproliferative and  apoptotic property | Current Chemistry Letters | 7 (2018) |
| 25 | Synthesis of Biologically Active Silver Nanoparticles using Tinospora cordifolia Leaf Extract for Antimicrobial Applications | Indian Journal of Advances in Chemical Science | 15th January 2019 |
| 26 | Co(III) and VO(IV) complexes with a new bidentate Schiff base: Interaction with BSA and antimicrobial studies | Biointerface Research in Applied Chemistry | Volume 9, Issue 1, 2019, 3776 - 3782 |
| 27 | Bio-mediated synthesis of ZnO nanoparticles using Lantana Camara flower extract: Its characterizations, photocatalytic, electrochemical and anti-inflammatory applications | Environmental Nanotechnology, Monitoring & Management | 2020 |
| 28 | Vanadium oxide nanorods as DNA cleaving and anti-angiogenic agent: novel green synthetic approach using leaf extract of Tinospora cordifolia | Current Research in Green and Sustainable Chemistry | 2020 |
| 29 | Multifunctional applications of Nickel Oxide (NiO) nanoparticles 2 synthesized by facile green combustion method using limonia 3 acidissima natural fruit juice | Inorganica chemical acta | 2020 |
| 30 | Phytochemical analysis of methanolic leaves extract of Grewia Flavescenes And their biological activity | Journalof advanced scientific research | 2021 |
| 31 | 'Phytochemical analysis and evaluation of antimicrobial, antioxidant, anti-inflammatory and antiangiogenic activity of methanol extract of Urochloa ramosa' | Research Journal of Pharmacy and Technology | 2022 , Vol : 15 , issue : 8 |
| 31 | Phytochemical screening, antimicrobial, anti-inflammatory  and anti-cancerous activities of ethanol and hexane extracts of  Urochloa ramosa | Plant Science today | 2022 |
| 32 | Green synthesis of Zn/Cu oxide nanoparticles by Vernicia fordii  seed extract: their photocatalytic activity toward industrial dye  degradation and their biological activity | Inorganic and Nano-Metal Chemistry | 2022 |

**Seminars/Conferences/Symposium/Workshops**

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| **Sl. No** | **Name of the Conference**  **/Seminar**  **/Symposiu m/Worksh op** | **Type of Program** | **Title of the Article** | **Role** | **Venue/ place** | **Date** |

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| **1** | UGC  sponsored national conference | on Advance trends and perspectives in Biotechnology- Implications in Agriculture and Industry | **“**Isolatontion of Bioactivemolecules from Memecylon malabaricum | **Presented paper** | Pooja Bhagavat Memorial Mahajana Post Graduatio  n Centre, | 29th and 30th April 2010 |
| **2** | chemical biology and KPC medical college & hospital, | 1st national conference on animal,microbial,plant toxins& snake bite management’ Biotoxins in health & disease | **Neutralization of snake venom PLA2 by Memecylonmalabaric um(Cl.). Ollekudi.** | **Presented paper** | medical colle ge & hospi tal, |  |
| **3** | “at 4th  international  conference. | International conferenceon on stem cells and cancer (ICSCC- 2013): Proliferation, Differentiation and apoptosis | **Antiangiogenic and proapoptotic activity of memecylaene- A nove compound from memecylon**  **malabaricum**” | **Presented paper** | bai | 19th and 22nd October 2013 |
| **4** | Symposium | National symposium on innovations in science and | **Anti-inflammatory properties of** | **Presenrd paper** | dies in Zool ogy  ,Uni versi ty of Mys ore Man asag ango tri. | 3rd & 4th  January, |
|  |  | technology for inclusive | **memecylaene: a** |  | 2014 |
|  |  | development | **novel compound** |  |  |
|  |  |  | **from *Memecylon*** |  |  |
|  |  |  | ***malabaricum*(Cl.)** |  |  |
| 5 | 5 day Faculty enrichment programme | Cutting edge science in cellular and molecular medicine and stem cell culture |  |  | Amity University. Uttar Pradesh, Noida, India. | 27th to 31st July 2021 |
| 6 | In the 2 day international e- conference | on drug discovery and material science. |  | Taken part as judge for oral/e-poster presentation | organized by IQAC in association with chemicstry. JSSCACS | 15- 16th of September2021 |
| 7 |  | Innovations in Sciencetechnology Commerce and management for the welfare of society” |  | Chairperson for an international e- conference | Aurora,s degree and PG College. Hyderabad. | 29-31st July- 2021 |

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| **8** | Conference | science and technical conference | Immunizing Brinjal (*Solanum melongena* Linn.) and Tomato ( Lycoperscicon esculentum) Plants against Leaf Blight Disease Caused by *Alternaria solani* Using Glycine, aspartic acid and lysine amino acids as  Elicitors, | **Paper presented** |  | 24-25th  of Nov 2017 by KSTA |
| **9** | workshops | Sponsored by Department of Science and technology | .“Hands on training course on use of cell culture technology |  |  |  |
| **10** | workshops | Science and | for studying apoptosis and |  |  | fro m Jan 24  to Jan 31,  201  1 |
|  |  | technology | angiogenesis” conducted at the |
|  |  | technology | Department of studies in |
|  |  |  | Biotechnology, |
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| **11** |  |  | Basic techniques in molecular biology and bioinformatics” |  | SS College of Arts, Commerce and Science,Ooty road, Mysore in association with Microbiologis ts of  India(AMI)an d BIORAD | 15t h to 18t h Mar ch 201  3. |
| **12** | Sponsored by UGC | .One day state level workshop | on “Basic Techniques in Instrumental Methods” |  | PG  Departments | 27t h Mar ch 201  3 |
|  |  |  | Sponsored by UGC | of |
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|  |  |  |  |  | Arts, Commerce and Science, Ooty Road,  Mysore – 25 | 2. |
| **10** |  | State Level Workshop | Choice Based Credit System held at Mysore |  | JSS College of Arts, | 25  on 10t |
|  |  | Commerce | h |
|  |  | and Science, Ooty Road, | Dec em  ber |
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**Orientations/Seminars**

1. Two Day Orientation Programme for Postgraduate Teachers organized by JSS College of Arts, Commerce and Science, Ooty Road, Mysore – 25 from 7th – 8th December 2012.
2. One Day Orientation Programme on Life Skills and ICT Enabled Teaching organized by JSS College of Arts, Commerce and Science, Ooty Road, Mysore – 25 on 25th February 2012.
3. One day State Level Seminar on Emerging Trends and Future Prospects in Phytopharmaceuticals” December 8, 2011 organized by PG Departments of

Biotechnology and Biochemistry, JSS College of Arts, Commerce and Science, Ooty Road, Mysore, Karnataka.

1. Phytopharmaceuticals, January 21, 2011 One day State Level Seminar on Ayurveda and organized by PG Departments of Biotechnology and Biochemistry, JSS College of Arts, Commerce and Science, Ooty Road, Mysore, Karnataka.
2. A Seminar on ‘Emerging infectious diseases in genomic era”on 27th Oct 2010, Mahajana Post Graduate Centre, Mysore.
3. UGC sponsored National seminar on Intellectual Property Rights in Bio-Informatics” organized by PG dept. of Biotechnology,JSSCACS mysore 8th November 2012.
4. Organizing committee member for ‘’National Seminar on Applications of science and Technology to promote Agricultural growth and value Addition” 2nd and 3rd December 2012 JSSCACS,Mysore.
5. UGC sponsored national symposium on” microes and human welfare” held on 23rd and 24th March 2015 organised y P.G Dept. of io-technology in association with Association of Microbiologists of India (Mysore chapter)
6. Attended one day worshop on “Promotion of Research in Colleges” for UG and PG teachers organized y JSS College of Arts, Commerce and Science OOty Road Mysoru on 14 th March 2015.
7. UGC sponsored two day national conference on “Current trends in chemical biology” held on 2nd and 3rd March 2015 organized by Post graduate Dept. of chemistry. JSS College of Arts, Commerce and Science. Ooty Road Mysore.
8. Attended UGC sponsored one day National seminar on “Stem cells to human development- Basics and applications” held on 11th March 2016 organized by Department of Biotechnology, JSSCAC&S. B. N. Road, Mysore.
9. Attended one day national seminar on “ Technological advances in M- health and diagnosis of diseases using retinal imaging” Organized by JSS research foundation, Mysuru on 25th January 2016.
10. Participiated as judge for oral presentations in two day national conference on “ Application of modern analytical techniques to fundamental research in chemistry” held on 9th and 10th March 2016 organized by Post graduate department of chemistry.
11. Participiated in UGC sponsored three- day national workshop on “ Strategies for recombinant protein production” held from 25th to 27th February 2016 organised by Post graduate Department of Biochemistry.