# Dr. R.JAYAPRAKASH, B.Ed, M.Sc, M.Phil, Ph.D,

Associate Professor and Research Coordinator

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## Institution

**Experience Details** 

: School of Arts and Science, AVIT campus, Vinayaka missions research foundations, Chennai – 603104 :

R&D Scientist (Pharma company)

6 y, 9m

Teaching experience IIT and NEET teaching Experience **Qualification:** 

16 y 11 months

Degree/Std	College /School Name	Name Of The Board/Univ.	Class/ Grade
		board/oniv.	Ulaue
Ph.D	B.S.A.R. University	B.S.Abdur Rahman UNIVERSITY, UGC	Highly recommended
B.Ed	Suraj B.Ed college	Tamilnadu Teachers education University	First class with distinction 80%
M.Phil (chemistry)	Periyar University	Periyar University	66%/I
M.Sc (chemistry)	A.M.Jain college, Meenambakkam	Madras university	66%/ <b>I</b>
B.SC (chemistry)	AringerAnna govt Arts college , Cheyyar	Madras university	72.5%/ <b>I</b>
12 <sup>th</sup> standard	Govt Boys Higher Sec.School,Desur (T.V.Dt)	Tamilnadu State Board	77.5%/ <b>I</b>
10 <sup>th</sup> standard	Govt Boys Higher Sec.School,Desur (T.V.Dt)	Tamilnadu State Board	83.8%/I

**Thesis**: Synthesis, Characterization, And Biological Evaluation Of Schiff Bases Derived From Hydroxy Substituted Benzaldehydes.

# **JOURNALS**

- [1] Jayaprakash R and Easwaramoorthy D, "Theoretical docking and antifungal studies of salicylaldehyde derived Schiff base", J. Chem. Pharm. Sci., Vol. 9, pp.1463-1467, 2016.
- [2] Jayaprakash R., Saroj Kumar S., Hemalatha S and Easwaramoorthy D., "QSAR, Brine Shrimp Lethal Assay and antimicrobial studies on Synthesized L-Tryptophan-2,4-dihydroxy benzaldehyde Schiff base", Int.J.Chemtech.Res., Vol.9, No.06, pp. 48-54, 2016.
- [3] Jayaprakash R, Saroj Kumar Sha, Hemalatha S, Easwaramoorthy.D, "Synthesis, characterization, quantitative structure-activity relationship, docking, antibacterial activity,

and brine shrimp lethal studies on I-phenylalanine Schiff bases", Asian.J.Pharm.Clin.Res., Vol 9, Suppl. 3, pp-1-6, 2016.

- [4] Saroj Kumar Sah, Ubaid Rasool, Shanthi B, Jayprakash R, Easwaramoorthy D, Hemalatha S, "Antibacterial Potential Of L-tryptophan On Extended-spectrum Betalactamase Producing Escherichia Coli Strains: A Pathological Promising Approach", Asian J Pharm Clin Res, Vol 11, Issue 7, pp-368-374, 2018.
- [5] R.Jayaprakash, I. Ameeth Basha, R.Shanmugavalli, "CATALYTIC EFFICACY AND COMPUTATIONAL DOCKING STUDIES OF NOVEL ISATIN SCHIFF BASE", GEDRAG & ORGANISATIE 33 (02), 512-521, 2020.
- [6] Rajat Kumar Dwibedi, Jayaprakash.R\*, Siva.T, "Hybrid electric vehicle using photovoltaic panel and chemical battery", Materials Today Proceedings, 2020.
- [7] D. Siva Selvi, N. Vijayakumar\*, R. Jayaprakash and M. Reddi Nagesh, "REVIEW ON ISOLATION, IDENTIFICATION AND APPLICATIONS OF Simarouba glauca PLANT", Rasayan J. Chem., 13(3), 1580-1588(2020) <u>http://dx.doi.org/10.31788/RJC.2020.1335793</u>.
- [8] R Vasanth, K Mohan, S Rengarajan, R Jayaprakash, RA Kumar, "Characterization and corrosion effects of Friction surfaced IS-2062 E250 CU with AA6063", Materials Research Express 6 (12), 126579, 2019.
- [9] B. Preethi, Sarojkumar Sha, R. Jayaprakash, S. Kutti Raniand S. Hemalatha, "SYNTHESIS, CHARACTERIZATION AND BIOLOGICAL STUDIES ON 4-BROMO-2-{(Z)-[(FURAN-2-YLMETHYL) IMINO] METHYL} PHENOL PRASEODYMIUM COMPLEX", Rasayan J. Chem 12 (3), 1455-1462, 2020.
- [10] Rubalakshmi G, Nirubama K, Senthilkumar K.P, Vennila L, Vijayakumar N\*, Prabhakar Y K\*, Siva Selvi.D, Jayaprakash. R, "Analysis of Diplocyclos Palmatus plant biomaterials (proteins) using in-silico approach and homology modeling", Materials today proceedings.
- [11] S. Nagachandrudu, S. T. Maheswari and R. Jayaprakash, Synthesis of Sodium-Y-Zeolite from Agricultural Waste Rice Husk Ash and Encapsulated with Copper Metal for Useful Phenol Hydroxylation, Res Jr of Agril Sci (2021) 12: 1880–1885.
- [12] B. PREETHI, R. JAYAPRAKASH, S. KUTTI RANI, and N. VIJAYAKUMAR, Characterization, Molecular Docking, Antimicrobial and Anticancer Studies on 5-Bromo salicylaldehyde-furan-2-yl-methanamine Condensed Schiff Base Rare Earth Metal Complexes, ASIAN JOURNAL OF CHEMISTRY 33 (9), 2127-2134.
- [13] Amalan Venkatesan, Jose Vinoth Raja Antony Samy1,, Rajeswari Ranga Anantha Sayanam2,, Jayaprakash Rajendran3, and Vijayakumar Natesan1,\*, Antithrombotic, Antihemolytic Activities and Protein Conjugation Properties of Silver Nanoparticles Synthesized from Turbinaria ornata, ASIAN JOURNAL OF CHEMISTRY 33 (8), 1736-1742, 2021.
- [14] Dr. G. K. Ayyadurai, Dr. R. Jayaprakash, Theoretical studies on covid 19-3jcl spike protein and docking study with Azadirachta Indica nimbin and nimbolide, International Journal For Innovative Research In Multidisciplinary Field, Volume - 7, Issue - 4, Apr – 2021.
- [15] Antoine Kada Sanda , David Fotsing , Oumar Mahamat , Vijayakumar Natesan , Jayaprakash Rajendran , Edouard Akono Nantia , Paul Desire Dzeufiet Djomeni , Pierre Kamtchouing, Effect of stem bark aqueous extract in male albino wistar rats: Allanblackia floribunda androgenic activities and penile nitric oxide (NO) production, Asian Journal of Pharmacy and Pharmacology 2021; 7(2): 63-73.
- [16] Dr. R. Jayaprakash, Buvaneswari. K, Review on low cost adsorbents in textile waste water treatment, International Journal of All Research Education and Scientific Methods (IJARESM), Volume 8, Issue 9, September-2020.

5 papers revision 1 submitted (Under pipeline)

## **INTERNATIONAL & NATIONAL CONFERENCES**

[1] Jayaprakash R and Easwaramoorthy D., "Zinc and ammonium acetate involved reduction reaction on 2-methyl nitroso indoline", Vinayaga Mission, 25-26th Feb -2011. NCRAFAS2011.

- [2] Jayaprakash R and Easwaramoorthy D., "Zinc and ammonium acetate involved reduction reaction of N-bonded nitroso indole and activity by useful drug softwares", Easwari engineering college, 2nd March NCAC-2011.
- [3] Jayaprakash R and Easwaramoorthy D., "Diazotization of tryptophan and Meerwin arylation by using methyl metharylate in presence of cuprous oxide, drug activity of the product calculated by online s\w with practical values", SRM university, 4th March New Renaissance In Chemical Research. 2011.
- [4] Jayaprakash R and Easwaramoorthy D., "Diazotization of tryptophan and Meerwin arylation by using methyl metharylate in presence of Cuprous Chloride", Jerusalem college of engineering, 18th -19th ICETSET - April 2014.
- [5] Jayaprakash R and Easwaramoorthy D., "Alternative approaches to control urinary tract infection among diabetic patients", B.S.Abdur rahman university, 2nd 3rd March International Conference on Recent Discoveries of Diabetic Biomarkers and Challenges Ahead-2015.
- [6] Jayaprakash R and Easwaramoorthy D., "National conference on emerging trends in chemical sciences", Jerusalem College of engineering, 6th January NCETCS-2016.
- [7] Jayaprakash R and Easwaramoorthy D., "Theoretical docking and antifungal studies on salicylaldehyde Schiff base", Jeppiar engineering college, 30th -31st March ICONSTEM-2016.
- [8] Jayaprakash R, " characterization, Docking and brine shrimp lethal assay studies on Mannich base derived from carvedilol", dep. Of .chem, periyar university and RSC, SMART2020. (International)
- [9] Jayaprakash R, "characterization of thiazole derivative and inhibition study on candida albicans", SSAMAP-2019.(NATIONAL).
- [10] Jayaprakash R, "International Conference On Technological Advancements In Materials, Designs, Manufacturing And Energy Sectors".ICTAMDMES'20.STJOSEPHS COLLEGE OF ENGINEERING.
- [11] Dr. R. Jayaprakash 2nd National conference on Future Perspective for Dr. M. Surendiran Basic Sciences (NCPBS-21) Department of Chemistry, School of Arts and Science, VMRF, Chennai. 08-09 April 2021.
- [12] Dr. R. Jayaprakash, NCRTNS-2020 National Impact of Gadolinium doping on structure and photoluminescence homes of ZnO nanocrystals.
- [13] Dr. R. Jayaprakash , St. Josephs college of eng. International participated.
- [14] Dr. R. Jayaprakash , SSAMAP-2019 National Characterization of thiazole derivative and inhibition study on candida albicans.
- [15] Dr. R. Jayaprakash, SMART2020 International Characterization, docking and brine shrimp studies on carvedilol derivatives

## Engineering Chemistry-1 Book Published (B.E/B.Tech) on October. 2010

Name of the publisher: CBS Publisher (John Wiley Indian Dealer) New Delhi. (ISBN-978-81-239-1938-6) First Edition 2011.

# UG projects guided: 4

## **INDUSTRIAL EXPERIENCE**

# **Projects involved**

- Mangostone weevil project Thirupathi University, Asthagiri Herbal Research Foundation.
- > Cabergoline drug project, Aza –A, Nimbin, Nimbolide, etc-
- Clopidogrel (Form1), Pioglitazone, pheromones, amino methyl crotonate, Cholic acid, Amino methyl indoline, lysine carbocisteine, 12 intermediates.
- Process development
- Patent breaking

### Software knowledge in chemistry:

- Docking
- DFT study
- Online software knowledge
- Drug design
- Retro synthesis
- Characterization (FTIR, NMR)

## Instrument knowledge

▶ UV, FTIR HPLC, GC,

### Social responsibilities:

MSSW Trained N.S.S. Program Officer and anti-ragging cell coordinator.

<u>Awards received</u>: Best Blood Donating camp conduction award Shield from TN governor

Best NSS unit award from Anna University VC

Under the guidance, student received Indira Gandhi national award from our President.

Best water shed management awareness creation – appreciation received from Ex. Meyor. Saidai Duraisami.

#### Present Research work

Drug design, Synthesis of different designed organic molecules, adsorption, nano materials, catalysis, Plant materials isolation, Corrosion study in blood, Laser coated materials.

#### Seed money project

Sanctioned amount: 1.23 lakhs, Principal investigator **Topic: Waste Polymer Degradation Kinetics Using Honey Comb Wax Worm.**