# **Faculty Profile**

1. Name : Prabha.K

2. Designation : Associate professor

3. Date of Joining : 04.08.144. Nature of Association : Regular

5. E mail : prabhak@ksrct.ac.in
6. Mobile no. : +91 9865972521



## 7. Academic Qualifications:

Course	Name of the Institution /	Year of Passing	% of	Class
	University		Marks	
Ph.D	Bharathiar University	May 2014	-	-
(Chemistry)	Coimbatore			
M.Phil	Bharathiar University	March 2009	58	Second
(Chemistry)	Coimbatore			
M.Sc	Bharathiar University	April 2007	70.5	First
	Coimbatore			
B.Sc	JKK Natarajah College of	April 2005	76.9	First
	Arts and science,			
	Komarapalayam			
H.S.C.	M.D.V Hr.Sec School,	April 2002	76	First
	Tiruchengode			

**Teaching Experience** 

- **Assistant Professor,** K.S.Rangasamy college of Technology, Tiruchengode, from 04.08.19 to 30.06.2019.
- **Associate Professor,** K.S.Rangasamy college of Technology, Tiruchengode, from 04.08.19 to till date.

## 8. **Projects:**

## **Post Graduate**

Title: "Synthetic studies on quinoline alkaloids"

# M.Phil

Thesis title: "Synthetic studies on dibenzonaphthyridines"

# Ph.D

**Thesis title:** "Synthesis and biological evaluation of benzo naphthyridines and benzonaphthonaphthyridines"

# **CSIR SRF Project**

**Thesis title:** "Metal catalyst mediated synthesis of novel sulphur isosteres of quinoline alkaloid analogs and its biological evaluation"

#### 9. Publications

#### **International Journals**

- 1. **K. Prabha**, R. Satheeshkumar, Muthusankar Aathi, C. Chandrasekar, T.A. Sukantha, B. Mythili Gnanamangai, Roberto Acevedo, Koray Sayin, K.J.Rajendra Prasad "Eaton's reagent is an alternative of PPA: Solvent free synthesis, molecular docking and ADME studies of new angular and linear carbazole based naphtho naphthyridines" *Tetrahedron*, Available online 23 February **2023**, 133320 (**IF-2.4**)
- 2. C. Chandrasekar and **K. Prabha** "Potential for Fourier Transform Infrared Spectroscopy toward Predicting Phytochemicals with Potent Antioxidant Activity in Leaves of *Annona squamosa* Linn" *Indian J Pharm Sci.*, 85(1):267-272, (2023) (IF-1.0)
- 3. R.Satheeshkumar, K.Prabha K.N.Vennila, Koray Sayin Elif Güney Werner Kaminsky, Roberto Acevedo "Spectroscopic (FT-IR, NMR, single crystal XRD) and DFT studies including FMO, Mulliken charges, and Hirshfeld surface analysis, molecular docking and **ADME** analyses of 2-amino-4'fluorobenzophenone (FAB)" Available online 20 June 2022, https://doi.org/10.1016/j.molstruc.2022.133552. (IF-3.8)
- 4. **K.Prabha**, R.SatheeshKumar, Vesim Nasif, Jayapalan Saranya,Koray Sayin,Jeyakumar Natarajan,Chinnarasu Chandrasekar,K. J. Rajendra Prasad "Synthesis, In Vitro Cytotoxicity, and DFT Studies of Novel 2-Amino Substituted Benzonaphthyridines as PDK1 Inhibitors" 7, doi.org/10.1002/slct.202200288, **2022**. (**IF-2.1**)
- 5. **K.Prabha**, R.SatheeshKumar and K.J.Rajendra Prasad "Synthesis of novel benzo naphthonaphthyridines from 2,4-dicloroquinolines, Journal of Heterocyclic Chemistry, 1943-5193. **2021** (**IF-2.2**)
- 6. **K.Prabha,** R.SatheeshKumar and K.J.Rajendra prasad "Synthesis of novel indoloquinolines and benzonaphthyridines from 4-chloro-2,8-dimethylquinoline and variety of hetero amines with its cytotoxicity" *Chemistry select*, 6, 7136-7142, **2021**. (**IF-2.1**)
- 7. K. N. Vennila, **K. Prabha**, Deval Sunny, S. Madhuri & K. P. Elango "Preparation and biological evaluation of quinoline amines as anticancer agents and its molecular docking". *Medicinal chemistry Research*, 28 1298-1307 (2019) (IF-1.9)
- 8. **K. Prabha**, K. J. Rajendra Prasad. "Synthesis and Pharmacological distinction of benzo[h] naphtho[1,2-b][1,6] naphthyridine and its isomeric benzo[b]naphtho[1,2-h][1,6]naphthyridines". *Medicinal chemistry journal*,6 (2016) (IF-2.0)
- 9. **K. Prabha**, K. J. Rajendra Prasad. "Benzoquinoline amines Key intermediate for the synthesis of angular and linear dinapthonaphthyridines". *Journal of advanced research*, 6, 631-641 (2015) (**IF-10.4**)
- 10. **K. Prabha** and K. J. Rajendra Prasad. "Synthesis and their spectroscopic distinction of benzonaphthonaphthyridines and its isomer". *Syn. Comm.*, 4 1441–1452 (2014). (IF-1.8)
- 11. **K. Prabha**, K. J. Rajendra Prasad. "Dinaphthonaphthyridines A class of novel molecules with potent antioxidant and anticancer activity". *Medchemcomm* **4**, 340-346 (**2013**). (**IF-2.4**)
- 12. **K.Prabha**, K. J. Rajendra Prasad. "Synthesis of alkyl and aryl substituted benzo[h]naphtho[1,2-b][1,6] naphthyridines". *Syn. Comm.*, 42, 2277–2289 (**2012**). (**IF-1.8**)

- 13. K. N. Vennila, **K. Prabha**, M. Manoj, K. J. Rajendra Prasad and D. Velmurugan "4-Chloro-6-methyl-*N*-(4-methylphenyl)quinolin-2-amine" *ActaCryst*. **(2011)**. E67, o490. (IF-0.5)
- 14. K. N. Vennila, **K. Prabha**, K. J. Rajendra Prasad and D. Velmurugan. "7-(7-Methoxy phenyl)-4,9-dimethyl-N-(4-methylphenyl)-5,12-diazatetraphen-6-amine" *ActaCryst.* (**2011**). E67, o762–o763. (IF-0.5)
- 15. K. N. Vennila, M. Manoj, **K. Prabha**, K. J. Rajendra Prasad and D. Velmurugan. "2,9-Dimethyl-7-phenyl-N-(4-methylphenyl)dibenzo[b,h][1,6]naphthyridin-6-amine" *ActaCryst.* (**2011**). E67, o102-o103. (IF-0.5)
- 16. **K. Prabha**, K. N. Vennila, K. J. Rajendra Prasad. "4-Chloro-2,5-dimethylquinoline", and D. Velmurugan, *ActaCryst*. (**2010**). E66, o2020. (IF-0.5)
- 17. K. N. Vennila, **K. Prabha**, M. Manoj, K. J. Rajendra Prasad and D. Velmurugan. "7-(2-Chlorophenyl)-2,6,9-trimethyldibenzo[*b*,*h*][1,6]naphthyridine" *ActaCryst*. (**2010**). E66, o2426–o2427. (IF-0.5)
- 18. K. N. Vennila, **K. Prabha**, M. Manoj, K. J. Rajendra Prasad and D. Velmurugan. "2-Chloro-7-methyl-12-phenyldibenzo[*b*,*g*][1,8]naphthyridin-11(*6H*)-one" *ActaCryst.* (**2010**). E66, o1823. (IF-0.5)

#### **National Conferences**

- 1. C.Chandrasekar and **K.Prabha** "Microwave assisted extraction of antioxidant compounds from Solanum trilobatum using green solvent: A comparative study of conventional extraction techniques" in international conference on Environmental pollution and control technologies at Annamalai University during 26-27Aug.**2022**. Abs. No. 8, pg.8.
- **2. K.Prabha**, and R.SatheeshKumar "Synthesis of Novel 2-Amino Substituted Benzonaphthyridines as PDK1 Inhibitors" in International conference on Innovation in science and technology for industrial application at KSRCT during 01- 03 June **2022**.
- **3. K. Prabha** and T.A.Sukantha, "Effective Management of Sugarcane Pressmud as Manure" paper presented in the international Conference at PSGR Krishnammal College for Women, Coimbatore, during 05 -07 Jan **2022**. Abs. No. 11, pg.24.
- **4. K.Prabha,** Associate Professor, Department of chemistry has successfully presented a research article entitled "An efficient CuIcatalyzed synthesis of Naphthonaphthridinesvia aminoquinoline intermediate" in the international Web-conference on Recent trends in scientific research organized by Department of chemistry, Dr.Ambedkar Government arts college Chennai in collaboration with Tamilnadu State council for science and technology, DST, Government of India held on 03-04 sep **2020**
- **5. K. Prabha** and K. J. Rajendra Prasad, "Synthesis, spectroscopic distinction and biological activity of benzo[h]naphtho[1,2-b][1,6]naphthyridine and its isomeric benzo[b]naphtho[1,2-h][1,6]naphthyridine" paper presented in the national Conference at Bharathidasan University, Tiruchirappalli, India, during 24-26 Feb **2011**. Abs. No. 41, pg.92

- **6. K. Prabha** and K. J. Rajendra Prasad, "Synthesis and antibacterial activity of pyridine substituted dibenzobenzonaphtyridines" paper presented in the national Conference at Bharathiar University, Coimbatore, India, during 2-3 Dec **2010.** Abs. No. 65, pg.71.
- **7. K. Prabha** and K. J. Rajendra Prasad, "Synthesis, photoluminescence studies and anti-microbial cctivity of methoxysubstituted dibenzonapnthyridines" paper presented in the national Seminar of Sri VenkateswaraUniversity, Tirupati, Andhra Pradesh, India, during 29-30 March **2010**. Abs. No.48, pg.62.

#### 8. Fellowships

• Awarded the Senior Research Fellowship (CSIR SRF) Govt. of India fellowship during doctoral course.

## **Book Chapter**

- Book Chapter in 2<sup>nd</sup> international cancer days, CONGRESS BOOK SİVAS-TURKEY from 16<sup>th</sup> sep to 18<sup>th</sup> sep entitled" SYNTHESIS AND CYTOTOXICITY OF NOVEL INDOLOQUINOLINES AND BENZONAPHTHYRIDINES" (ISBN -978-605-70947-0-4)
- **K.Prabha**, and R.SatheeshKumar "Synthesis of Novel 2-Amino Substituted Benzonaphthyridines as PDK1 Inhibitors" in International conference on Innovation in science and technology for industrial application at KSRCT during 01.06.2022 to 03.06.2022.(**ISBN 978-93-94899-33-9**)
- C.Chandrasekar, and K. Prabha "Green synthesis of iron complex nanoparticles using eucalyptus globulus leaves extract with potential antioxidant activity" in International conference on Innovation in science and technology for industrial application at KSRCT during 01.06.2022 to 03.06.2022.(ISBN 978-93-94899-33-9)

# **Books Published**

• Book published entitled "Applied Chemistry - Edition I" on May 2022 by SHANLAX PUBLICATINS (ISBN – 978-93-94899-31-5).

## 9. Programmes Participated

- **1.** Underwent 10 days INPLANT TRAINING at TNPL from 4.11.2004 to 04.12.2004
- **2.** Attended 4days Short term course on "Photophysics of organic systems: Theory and applications" from 1<sup>st</sup> to 4<sup>th</sup>Feb 2006 at Bharathiar University, Coimbatore.
- **3.** Attended two days Lecture-Workshop on "Fundamental & Advance Aspects in spectroscopy" from 14.02.2006 to 15.0.2006 at St.Joseph College, Irinjalakuda.
- **4.** Attended two days National seminar on "Current developments in chemistry" from 18<sup>th</sup> and 19<sup>th</sup> January 2007 at Bharathiar University, Coimbatore.
- **5.** Attended 5 days 11<sup>th</sup> Asian conference on "Solid state Ionics from 9<sup>th</sup> to 13<sup>th</sup> June 2008 at Bharathiar University, Coimbatore.
- **6.** Attended one day Awareness programme on "e-resources under UGC-INFLIPNET digital library consortium on 30<sup>th</sup> January 2008 at Bharathiar University, Coimbatore.
- **7.** Attended to weeks STTP on "Environmentsl Science" at K S RangasamyCollege of technology, Tiruchengode.

- **8.** Attended one day International seminar on"Frontiers in life and chemical science" on 19<sup>th</sup> September 2018 at VellalarCollege for women, Erode.
- **9.** Attended two days workshop on "Entrepreneurship development for rural women in in food processing sector" on 5<sup>th</sup> and 6<sup>th</sup> July 2019 at K S RangasamyCollege of technology, Tiruchengode.
- **10.** Attended one day workshop on "J Gate An electronic gateway for research" on 10<sup>th</sup> July 2019 at KSR college of Engineering, Tiruchengode.
- **11.** Attended 5days FDP on "Rural immersion camp" on 19<sup>th</sup> to 23<sup>rd</sup> August at K S RangasamyCollege of technology, Tiruchengode.
- **12.** Attended ATAL Sponsored FDP on "Novel materials for next generation" on 2.7.21 to 30.07.71 at NGM College Pollachi.

#### 10. Awards and Achievements

- Got **Young Scientist Award** in 10<sup>th</sup> International Scientist Awards on Engineering, Science and Medicine in the year **2020** conducted by VD Good Professionals.
- **CSIR** Senior Research Fellowship (**SRF**) for Ph.D Research.
- 100% result produced in the academic year 2017 and 2018.
- Proficiency in studies during UG degree.
- Underwent 15 days NSS CAMP in the year 2005.
- Underwent two weeks In-Plant training at TNPL in the year 2004.
- Advisory Committee member in Tamilnadu students Research organization.
- Associate editor for International conference on the topic "International conference on Innovation in science and technology for industrial application" in June 2022

#### 11. Personal Details

**Fathers Name** : K. Kolandaivel

**Date of Birth & Age** : 08.05.1985 & 38 Years

**Gender** : Female

Marital Status : Married

**Permanent Address**: 6/54, Athikkadu,

Karumanoor (po), Tiruchengode, Namakkal - 637503.