

PROFILE

Name of the Faculty:		Dr. K. PRASADA RAO				
Designation:		Asst. Professor				
Department:		Chemistry				
Date of Birth:		17.04.1967				
AICTE – ID:		1-430162381				
Education		- B.Sc in _Chemistry_ from _ANU_____University/Institute in 1989 - M.Sc in _Organic Chemistry_Specialization from _Vikram_____University/Institute in 1992 - PhD in _Organic Chemistry_ specialization from _Vikram _ University/Institute in 1998				
Experience	Teaching: __28__ Years	Industry: ____ Years	Total: __28__ Years			
	Research: __30__ Years	Others: ____ Years				
Research Specialization		Organic Chemistry Organometallic Chemistry Drug Analysis Nanochemistry				
Courses taught	Engineering Chemistry Natural products Chemistry Drug Chemistry Analytical Chemistry Stereochemistry					
Research contributions						
International/national peer reviewed journals						
S. No.	Title of paper	Journal	Year	Volume	pages	Indexing SCI/WoS/ SCOPUS, Google scholar)
1.	Design and synthesis of new bis(1-aminophosphonates) via ultrasound-driven nano-BF ₃ ·OEt ₂ /SiO ₂ catalysis targeting 1-α-amylase inhibition: In silico ADME and molecular docking study	Phosphorus, Sulphur, Silicon and Relat. Elem	2025-26	201(6)	825-839	SCI

2.	Ultrasound-assisted synthesis of alpha amino phosphonates using nano ZnO catalyst: Evaluation of their anti-diabetic activity	Organic communications	2024-25	17(4)	249-264	SCI
3.	Novel Quantitative Estimation of Rucaparib and Bevacizumab in Rat Plasma Using LC-MS/MS & Study of Pharmacokinetics	International Journal of Pharmaceutical Quality Assurance	2024-25	15(3)	1110-1114	Scopus
4.	Method Development and Validation for Famciclovir and Valacyclovir by using UPLC and its Degradants are Characterized by LC-MS/MS	International Journal of Pharmaceutical Quality Assurance	2022-23	13(3), 25/9/2022,	232-239	Scopus
5.	Validated Method Development of Levamisole and Inosine pranobex by using UPLC & Characterization of Degradants by LC-MS/MS	YMER	2022-23	21(7), July-2022,	734-744	Scopus
6.	Synthesis, spectral characterization and anti-diabetic activity evaluation of phosphoramidate derivatives	Indian Journal of Chemistry	2021-22	61, Jan 2022,	60-68	SCI
7.	Nano TiO ₂ .SiO ₂ catalyzed, microwave assisted synthesis of new α -aminophosphonates as potential anti-diabetic agents: In silico ADMET and molecular docking study	Organic Communications	2021-22	15(2), April, 2022		SCI
8.	Synthesis, Characterization and Antimicrobial studies of Silver nanoparticles from leaf extract of Gomphrena serrate by Green chemical method	Journal of Scientific research	2021-22	6(1), Jan 2022,	658-362	Google Scholar
9.	Evaluation of Antimicrobial Activity of Aryl/Alkyl Cyanamides and Substituted Tetrazole Compounds	Russian Journal of Bioorganic chemistry	2021-22	48(2), May, 2022,	292-299	Scopus
10.	Identification of the Organic Volatile Impurities in Telmisartan Active Pharmaceutical Ingredient and Its Pharmaceutical dosage forms by using Head Space Gas Chromatography Technique	International Journal of Current Research and Review	2021-22	13(24), Dec, 2021, 51-56		Scopus
11.	A Simple RP-HPLC method for the estimation of Related Substances, assay of Cabozantinib and Nivolumab and its application to dissolution studies	Indian Journal of Pharmaceutical Sciences	2020-2021	83(4), July 2021,	701-713	Scopus
12.	Liquid Chromatography – Mass Spectrometry Method Development and its	International Journal of Current	2020-2021	13(24), Dec, 2021,	67-71	Scopus

	Validation for the Estimation of Favipiravir and Remdesivir in the Rat Plasma	Research and Review				
13.	A Novel Validated Gc-Hs Method for The Simultaneous Quantification of Six Organic Volatile Impurities in Biperiden HCl Pure And Pharmaceutical Dosage Forms	International Journal of Pharmaceutical Quality Assurance	2020-2021	12(4), Oct 2021,	3009-3015	Scopus
14.	A novel validated Headspace Gas Chromatography method for the simultaneous quantification of three organic volatile impurities in Enrofloxacin pure and pharmaceutical dosage forms	Asian Journal of Clinical and Pharmaceutical Sciences	2020	13(11), Oct, 2020,	171-177	Scopus
15.	Novel Validated RP-HPLC method for determination of Glucosamine, Diacerein and methyl sulfonyl methane in micro sample Rat Plasma	Asian Journal of Clinical and Pharmaceutical Sciences	2020	13(12), Dec 2020.		Scopus
16.	Iodine-Mediated Multi-Component Reactions: Readily Access to Tetrazoles and Guanidines.	Letters in Organic Chemistry	2020	18(5), May, 2021,	382-388	SCI
17.	A Validated Specific Stability-Indicating Reversed-Phase High-Performance Liquid Chromatography Assay Method For L-Ornithine L-Aspartate And Silymarin And Their Related Substances And Its Application To Dissolution Studies	International Journal of Pharmaceutical Quality Assurance	2020	11(3), Sep, 2020		Scopus
18.	Development and Validation of a Gas Chromatography Headspace Method For The Simultaneous Quantification Of Six Organic Volatile Impurities In Sumatriptan Succinateapi And Its Pharmaceutical Dosage Forms	Asian Journal of Clinical and Pharmaceutical Sciences	2019	13(5), May 2020.		Scopus
19.	ultrasound-promoted solvent-free synthesis of some new A -aminophosphonates as potential antioxidants	Main Group Met. Chem	2019	43, Aug, 2020, 147-153.		SCI
20.	Synthesis, spectral characterization and molecular docking studies of phosphonates containing thiazolidinedione moiety	Journal of Phosphorus, Sulphur, Silicon and the Related Elements	2019	195(7), March, 2020,	586-591	SCI
21.	Copper promoted C-S and C-N cross-coupling Reactions:The synthesis of 2-(N-Aryolamino)benzothiazoles and 2-(N-Aryolamino)benzimidazoles	Tetrahedron	2019	75(29)	3865-3874	WoS

22.	An Efficient Methodology for iodine catalized synthesis of N,N- Di substitutes Guanidines	International Journal of Recent Technology and Engineering	2019	8(13)		Scopus
23.	Nano BF ₃ .SiO ₂ catalysed, microwave assisted Michaelis-Arbuzov reaction to synthesize biologically active phosphonates under solvent-free condition	Materials Today Proceedings	2018	5(12), Dec, 2018,	25832-25842	Scopus
24.	Cobalt promoted tendem reaction towards the synthesis of Aryl/ alkyl cyanamides and substituted tetrazoles	Chemistry of Heterocyclic Compounds	2018	54(5), May 2018,	535-544	SCI
25.	Analytical Stability Indicating HPLC Assay and Validation Of Oxymetazoline Hcl And Sorbitol In Bulk And Pharmaceutical Dosage Form	Journal of Emerging Technologies and Innovative Research	2018	5(12) Aug, 2018,	653-659,	Scopus
26.	Microwave mediated Michaelis Perbuzov reaction to synthesise Bio active phenyl phosphonate derivatives under solvent free conditions	Asian Journal of Organic and Medicinal Chemistry	2018	4(1), Jan 2018,	1-6.	Scopus
27.	Stability indicating RP HPLC method for the determination of doxepin, benzyl alcohol and capsaicin in bulk and pharmaceutical dosage forms	Journal of Emerging Technologies and innovative Research	2018	5(8), Aug, 2018.		Scopus
28.	Microwave assisted <u>greener approach</u> to synthesize α -aminophosphonates under catalyst free and solvent-free condition and their bioactivity evaluation	International Journal for research in Engineering Application and Management	2018			Scopus
29.	Stability Indicating Rp-Hplc Method For The Estimation Of Diethylcarbamazine Citrate, Guaiphenesin And Chlorpheniramine Maleate	International Journal of Applied Pharmaceutics	2018	10(1), Jan, 2018,	124-135	Scopus
30.	Ultrasound-Promoted <u>Greener Approach</u> To Synthesize Some New A-Aminophosphonates Catalyzed By Nano Bf ₃ .SiO ₂ Under Solvent-Free Condition And Their Antioxidant Activity Evaluation	Journal of Phosphorus, Sulphur, Silicon and the Related Elements	2018	193(6), Jan, 2018,	400-407.	Scopus
31.	Microwave assisted greener approach to synthesize α -aminophosphonates under catalyst free and solvent-free condition and their bioactivity evaluation	<i>International Journal for research in Engineering Application and Management,</i>	March 2018	327	2454-9150	Scopus
32.	Efficient Copper Promoted Tendem Multi-component Strategy: The synthesis of N	Chemistry select	Dec 2017	2(35)		Scopus

	benzoyl-1-alkyl/aryl -5-(N-Benzoylamino) Tetrazoles and Guanidine's					
33.	Microwave-Assisted Synthesis And Anti- Inflammatory Activity Evaluation Of Some Novel A-Aminophosphonates	<i>Journal of Phosphorus, Sulphur, Silicon and the Related Elements</i>	July 2017	192(10)	1110- 1113	Scopus
34.	Nano Materials –It's applications in the present era	<i>Anveshana's International Journal of Research in Engineering and applied sciences</i>	June 2017	2(1)		Scopus
35.	Analytical method development and validation of simultaneous estimation of paracetamol, aceclophenac and serratiopeptidase by RP- HPLC	<i>International Journal of Ophthalmology and Visual Science</i>	June 2017	2(4),	69-74	Google Scholar
36.	Pollution study in Bapatla Town, Guntur District, Andhra Pradesh,,	, International journal of modern trends in engineering and science	Dec 2016	3(12)		Google Scholar
37.	An efficient methodology for the synthesis of thioureas from amine mediated by a cobalt source	Tetrahedron Letters,	Nov 2016	57	5297- 5300,	Scopus
38.	Cobalt mediated by desulphurization towards the synthesis of Isothiocyanates	Synthetic Communication s	Aug 2016	46(21),	1758- 1765	Scopus
39.	Synthesis, Charecterisation and Antimicrobial activity of some flavones	Asian Journal of Research in Chemistry	Feb 2013	6(20)	163	Google Scholar
40.	Synthesis, Charecterisation and Antimicrobial activity of some Chalcones	International Journal of Pharmacy and Technology	April 2012	4(1)	4060- 4066	Scopus
41.	Synthesis, Charecterisation and Antimicrobial activity of some Chalcones	International Journal of Pharmaceutical Research and Development	2012	4(4)	97-101	Scopus
42.	Synthesis, Charecterisation and Antimicrobial activity of some Chalcones	International Journal of Pharma and Bio Sciences	2012	3(4)	781- 788	Scopus
43.	Synthesis and spectroscopic studies of Mixed 2-(N- Salicylidene)-5- chlorobenzophenone Dialkyldithiophosphato derivatives of Antimony(III),.	Asian Journal of Research in Chemistry	Oct, 2012	5(10)	1225	Google Scholar

44.	Synthesis and Charecterisation of some mixed benziloximato complexes of antimony(III).,	Synth, React. Inorg. Met - Org, Chem	Nov 1999	29(10)	1699-1710	Scopus
45.	Synthesis and Charecterisation of N-(Salicylidene)-O-mercaptoaniline alkylidithiocarbonato derivatives of antimony(III)	React.Inorg.Met -Org,Chem	1999	29(4)	541-551	Scopus
46.	Synthesis and spectroscopic studies of mixed benzildioximato Dialkylidithio-phosphato derivatives of antimony(III).,	Synth, React.Inorg.Met - Org,Chem	1999	29(4)	663-672	Scopus
47.	Synthesis and spectroscopic studies of mixed b-Ketoimine Dialkylidithio-phosphato derivatives of antimony(III).,	Ind. J.Chem	1998	37(A)80		Scopus
48.	Synthesis and spectroscopic studies of mixed N-(salicylidene)-O-mercaptoaniline dialkylidithiophosphato derivatives of antimony(III).,	Phosphorus, Sulphur, Silicon and Relat. Elem	1998	9(1)		Scopus
49.	exes of 2-(N-Salicylidene)-5-chlorobenzophenone: Synthesis and spectroscopic studies and reactivity with respect to sulphur donor ligands.	Main Group Met. Chem.,	1997	21(1)	5	Scopus
50.	Synthesis and Charecterisation of benziloximato complexes of antimony (III).	Synth, React. Inorg.Met - Org,Chem	1997	27(10)	1509	Scopus
51.	Synthesis and Charecterisation of some Antimony(III) derivatives of the Schiff's bases derived from salicylaldehyde and 2-aminothiophenol	Main Group Met. Chem	1997	20	655	Scopus
52.	Antimony(III) derivatives of b-Ketoimine-N-Acetic acids	Natl. Acad. Sci. Lett	1996	19	193	Google Scholar
53.	Design and synthesis of new bis(1±-aminophosphonates) via ultrasound-driven nano-BF ₃ ·OEt ₂ /SiO ₂ catalysis targeting 1±-amylase inhibition: In silico ADME and molecular docking study	Phosphorus, Sulphur, Silicon and Relat. Elem	2026	Accepted		SCI

Books published

S. No.	Title of the book	Publisher	year
1	-		

Book chapters Published

S.No.	Title of the Chapter	Book title	Publisher	year
1	-			

Details of Patents (Filed & Granted)

S. No.	Applications number	Title of the patent	Date of filing/publicing	Published/granted
1	202541047818 A	Green Synthesis, Antimicrobial Evaluation And Characterization Of Silver Nanoparticles From Polysticum Munitum Leaf Extract	30.05.2025	Published
2	202641054335 A	Phyto-Fabrication of Zinc-Based Nanoparticles Using Portulaca grandiflora Leaf Extract: A Green Route via Zinc Acetate for Structural Characterization and Functional Assessment.	15.05.2026	Published
3	202641061648 A	Green Synthesis of Nickel Oxide Nanoparticles Using Fenugreek (Trigonella foenum-graecum) Leaf Extract.	29.05.2026	Published
4	202641061662 A	Plant-Mediated Green Synthesis and Characterization of Iron Oxide Nanoparticles Using Barleria prionitis	29.05.2026	Published

Details of Conferences/FDPs/STTPs/webinars/Workshops Organized

S.No.	Name of the event	Role	Dates
1	National Conference on Recent trends in chemical, pharmaceutical & material science (RTCPMS-2020)	Co-Convener Bapatla Engineering College	13 to 14 th March, 2020

Details of Conferences/FDPs/STTPs/webinars/Workshops Participated

S.No.	Name of the event	Organized by	Dates
1.	A national conference on Nanotechnology in Chemical and Allied Industries	BEC, Bapatla	2014
2.	National seminar on Advances in Chemical Science.	KBN College, Vijayawada	18 th to 19 th Sept, 2015
3.	A UGC Sponcered two day national seminar on Shaping the future with Nano Sciences	PB Sidhartha College of Arts and Sciences	19 th to 20 th August, 2015
4.	National conference on New challenges of chemistry in Biomedical Research.	KL University	8 th to 9 th January, 2016
5.	One day International Symposium on	SRKR Engineering	31 st August, 2017

	Recent Innovations in Engineering Materials	College, Bhimavaram	
6.	International Conference on Applied Science and Technology	SRKR Engineering College, Bhimavaram	24 th &25 th , January, 2018
7.	National Crop Seminar on Development for Millet Products	Bapatla College of Pharmacy and Bapatla Engineering College	17 th March, 2018
8.	Two Day National Seminar on “Knowledge sharing Technological Advancements and Sustainable development	PVP Sidhartha Institute of Science and Technology	30-31 st March, 2018
9.	International conference on Pharmaceutical Chemistry	National Institute for Engineering and Research, Visakhapatnam	28 th July 2018
10.	Two day workshop on Intellectual property and innovation management	Bapatla Engineering College, Bapatla	31 st Aug to 1 st Sept, 2018
11.	Emerging Trends in Organic Chemistry, Presented a Paper on “Microwave mediated Michaelis Perbuzov reaction to synthesise Bio active phenyl phosphonate derivatives under solvent free conditions.	KBN College, Vijayawada	28 th & 29 th September, 2018
12.	Emerging Trends in Organic Chemistry, Presented a Paper on “Novel Validated RP-HPLC method for determination of Glucosamine, Diacerein and methyl sulfonyl methane in micro sample Rat Plasma.	KBN College, Vijayawada	28 th & 29 th September, 2018
13.	Emerging trends in Engineering, Science and Management. Iodine catalyzed Multi component synthesis of 1-Aryl-5-(N-Benzoylamine) Tetrazoles and Guanidine.	RGM College of Engineering and Technology	Dec, 2018
14.	International Conference on Applied Science and Technology.	SRKR Engineering College	27&28 th March 2019
15.	National Conference on Recent trends in chemical, pharmaceutical & material science (RTCPMS-2020)	Bapatla Engineering College	13 to 14 th March, 2020
16.	FDP: National level faculty development program on tools for online classroom post Covid-19	PB Siddharda College of Arts & Science	18 to 20 th May, 2020
17.	FDP: Recent communication tools and its applications	St Martins Engg College, Secunderabad	19 to 23 May, 2020
18.	FDP: Writing quality research paper and proposal	International School of Management – Patna	22 nd May, 2020
19.	Webinar: Intellectual property rights for Engineers	Kings Engineering College, Chennai	21 st May, 2020
20.	Workshop: IPR and Patents for	RIMT University	17 th May

	Researchers and Academia Wxcwllwnce		
21.	Faculty Program on NBA	Bharathi Vidhyapeet College of Engineering- Mumbai	15 th May, 2020
22.	Quiz:Covid-19 Pandemic Awareness	Ramachandra Engineering College- Eluru	15 th May, 2020
23.	FDP: Indirect effects of Covid-19 against Environment and Society	JMJ College, Tenali	10 th -12 th June 2020
24.	FDP: Research Methodologies, Tools and Techniques	QUIS Engineering College, Ongole	8 th – 12 th June 2020
25.	FDP: Research Methodologies, Tools and Techniques	QUIS Engineering College, Ongole	8 th – 12 th June 2020
26.	FDP: Mentoring Pedagogy and Teaching for Higher Education	E&ICT Academy, IIT Gauhaty and BEC Bapatla	3 – 10 th Aug 2020
27.	FDP: Developing the next generation TEACHERS	Dhruva Academy of Research international and Educational Institutions	11 th – 15 th Aug 2020
28.	Conference- Technical Session Chair: AICTE Sponsored E-Conference on Systems Modelling and System Dynamics	Bapatla Engineering College, Department of EEE.	24 th – 28 th Aug, 2020
29.	FDP- Material synthesis and characterization for Device applications	NITTE Meenakshi Institute of Technology	31 Aug – 5 th Sep 2020
30.	Certificate Course- Digital Teaching Techniques	ICT Academy	16 th 21 st Nov 2020
31.	Conference – Materials, mechanical and energy engineering	IOP Publishing	7-8 th May 2021
32.	Exploring the New Approaches and Dimensions in Organic Chemistry	Sri Padmavathi Mahila Visvavidhyalay	7 th Nov, 2020

Awards/recognitions/achievements

S.No.	Name of the Award	Awarding body/Society/Organization	Year
1	Best Teacher Award	Bapatla Engineering College, Bapatla	2021-22
2	Best Teacher Award	Bapatla Engineering College, Bapatla	2023-24
3	Best Teacher Award	Bapatla Engineering College, Bapatla	2024-25

Details of project proposals submitted/sanctioned/completed

S.No.	Title of the Project	Funding body	Submitted/ Sanctioned/ Completed	Amount	Year/ duration
-------	----------------------	--------------	--	--------	-------------------

	-				
Consultancy contribution					
S.No.	Year	Amount	Details		
1	-				
Student Project/research guidance					
S.No	Level	Total number			
1	UG	Completed: -		Ongoing: -	
2					
3	PhD	Completed: 09		Ongoing: 01	
4	MPhil	Completed: 04		Ongoing: 01	
Interdisciplinary Projects					
S.No	Discipline	Total number			
1	B.Tech (Mech)	2 projects completed in 2025-26			
Administrative experience					
S.No.	Role	Duration (From – to)			
1.					
2.	Institution Library Committee member	2021-23			
3.	Institution R&D Committee member	2021-23			
4.	In charge for departmental Criteria-2	2022-23			
5.	Department NBA, NAAC Coordinator	2023-till date			
6.	Incharge for Glassware and Chemicals procurement (Dept)	2021- till date			
7.	Subject coordinator	2023- till date			
Research credentials					
Index/database		ID/Link			
Google Scholar		https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=kammela+prasada+rao&oq=			
SCOPUS		57191622949			
Web of Science		JED-8386-2023			
Vidwan ID		324296			
Any other relevant information					
Dr. K. Prasada Rao 24.07.2026					