

CHEMISTRY- RESEARCH CENTRE

Name of the College: K.V.G. College of Engineering



**VISVESVARAYA TECHNOLOGICAL UNIVERSITY,
"Jnana Sangama"
Belagavi – 590018, Karnataka State.**

RESEARCH CENTRE -2022-23

Name of the Recognized Research centre	Chemistry
Year of Est. as Research Centre	2004
Number of Eligible Supervisors	01
Number of Candidates Registered for Ph.D.	10
Number of Candidates Registered for M.Sc. (Engg.) by Research	-
Number of faculty with Ph.D.	02
Number of Professors in the department	02
Number of Assoc. Prof. in the department	-
Number of Asst. Prof. in the department	02

Details of Research Supervisors

Sl. No.	Name of the Research Supervisor	Name of the University from which Ph. D is awarded	Year of Award	Specialization	Department	No. of Candidates Registered for		Status of Completion		
						Ph.D.	M.Sc. (Engg.)	No. of Candidates completed Course Work	No. of Candidates completed Comprehensive Viva-Voce	No. of Candidates completed Submitted Final Thesis / Awarded
1	Dr. Shivakumar H R	Mangaluru	1998	Electro Chemistry, Corrosion, Solution Chemistry, Ultrasonic in solution.	Chemistry	10	--	10	09	08

Details of Research Scholars

Sl. No.	Name of the Research Scholar	Dept.	Registered for			Status of Completion of		
			Year of Registration	Ph.D.	M.Sc. (Engg.) by Research	Course work [Y/N]	Comprehensive Viva-Voce [Y/No]	Submitted Final Thesis / Awarded [Y/N]
1.	Dr. Siju N Antony	Chemistry	2005	Yes	-	Y	Y	Y
2.	Dr. Prasad P	Chemistry	2006	Yes	-	Y	Y	Y
3.	Dr. Guru G S	Chemistry	2006	Yes	-	Y	Y	Y
4.	Dr. Bhavya B B	Chemistry	2009	Yes	-	Y	Y	Y
5.	Dr. Sunil Kumar M	Mechanical	2008	Yes	-	Y	Y	Y
6.	Dr. Vishwanath Bhat	Chemistry	2011	Yes	-	Y	Y	Y
7.	Mrs. Kavitha G	Chemistry	2013	Yes	-	Y	N	N
8.	Dr. Sujay M M	Chemistry	2015	Yes	-	Y	Y	Y
9.	Dr. Surekha M	Chemistry	2015	Yes	-	Y	Y	Y
10.	Mr. Vivek Padpu	Chemistry	2015	Yes	-	Y	Y	N

Publication Details

Sl. No.	Name of the Research Supervisor/ Research Scholar	Title of Paper	Publication Citation	National	International
1	Dr. Shivakumar H R	“Conductance Study on Solvation Behaviour of Tetrabutyl Ammonium Bromide in 2-Ethoxy Ethanol+Water Mixtures AT 288.15K – 318.15K”	Journal of Chemical Sciences and Pharmaceutical sciences. Feb. 2018	-	International
2.		“An Investigation on Mechanical, Wear and Morphological Properties of Areca Leaf Fiber-CNT-Epoxy and Eupatorium Fiber-CNT-Epoxy and Eupatorium Fiber-CNT-Epoxy Reinforced Hybrid Polymer Composites”	Journal of Chemical and Pharmaceutical sciences. Communicated a research paper Feb. 2018. Author	-	International
3		“Acoustical studies on Molecular Interactions of Tetra butyl ammonium bromide in 2-ethoxyethanol and water mixtures at 288.15K to 318.15K”	Journal of Advanced research in Science & Engineering (IJARSE), Volume No. 6, Issue No. 12, December 2017	-	International
4		‘Effect of electron beam irradiation on physico-chemical properties of polyacrylamide films’	Journal of radiation Effects & Defects in solids, 2013, DOI/ 10.1080/10420150. 2013. 848445 vol. 169(2) p.no 137 -143	-	International
5		“Effect of electron beam irradiation on Physico-Chemical Properties of polyacrylamide films”	In Radiation effects & Defects in solids in incorporating Plasma Science & Plasma Technology published on 07-11-2013 (Francis & Taylor)	-	National
6		“Miscibility and Thermal Behavior of Pullulan/Polyacrylamide Blends”	Journal of macromolecular science, Part A: Pure and Applied Chemistry (2011) 48, 920-926.	-	International
7		‘In-Vitro Release Study of Metoprolol Succinate from the Bioadhesive Films of Pullulan-Polyacrylamide Blends’	International Journal of Polymeric Materials (2012) 61 (4), 300-307.	-	International

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8	Dr. Shivakumar H R	'Influence of blending of Chitosan and Pullulan on their drug release behaviour: An In-vitro study'	International Journal of Pharmacy and Pharmaceutical Sciences (2012) 4(3), 313-317.	-	International
9		'Effect of Electron beam irradiation on Physico-Chemical properties of Pullulan'	Journal of Radioanalytical and Nuclear Chemistry (2012) 293(1) 431-435.	-	International
10		'Physico-Chemical Characteristics of Ground water and Surface water-A comparative study'	Indian Journal of Environmental Sciences (2011) 15 (2), 111-113.	-	International
11		'In-Vitro Drug Release Behaviour of PVP/Guar gum Polymer Blend Trans dermal Film with Diclofenac Potassium'	Asian Journal of Pharmaceutical and Clinical Research (2012) 5(2), 148-152.	-	International
12		Study on acoustic behavior of potassium thiocyanate in aqueous and various non-aqueous solvents at 298-313K	Indian J. Chem., 37A (1998), 252.	-	National
13		Solvation behavior of potassium thio cyanate in water, various non-aqueous solvents and their mixtures from 288-313K by conductometry	J. Electro Chem.Soc. India, 48 (1999).	-	National
14		Acoustic and solvation behaviour of potassium thiocyanate in mixed solvents.	Indian J. Pure & Apply. Phys. 38(2000)306.	-	National
15		Conductometric and ultrasonic studies on ion-solvent interaction of potassium thiocyanate in water, methanol, ethanol and their mixtures from 288K-313K,	Indian J.Chem.Tech., 10(2003)7.	-	National
16		Conductometric Studies on Solvation Behaviour of Tartaric Acid in Various Solvent Mixtures.	J. Molecular Liquids 111(2004) 101-108.	-	International
17		'Miscibility, Thermal and Mechanical studies of Hydroxypropylmethyl cellulose (HPMC)/Pullulan blends'	International Journal of Applied Polymer Science. Ref: J Appl Polym Sci 2008, 110, 444-452.	-	International
18	Studies on the compatibility of Pullulan-Carboxy methylcellulose blend using simple techniques"	Malaysian Polymer Journal. Ref: MPJ Vol 3, No 2, p 13-23, 2008.	-	International	

19	Dr. Shivakumar H R	'Miscibility and Thermal Behavior of Pullulan/Polyacrylamide Blends'	Journal of macromolecular science, Part A: Pure and Applied Chemistry (2011) 48, 920-926.	-	International
20		'Miscibility and thermal studies of PVP/Pullulan blends'	Int J Plast Techno (December 2010) 14(2): 234-245.	-	International
21		'Miscibility Studies of Polysaccharide Xanthan Gum/PVP blend' in J Polym Environ (2010) 18:135-140.	Published International Journal of Polymers and the Environment on 24 th April 2010. ISSN 1566-2543, Volume 18, Number 2	-	International
22		'Conductometric Studies of Potassium Thiocyanate in 2-Propanol+ water Mixtures'	Asian Journal of Chemistry Vol. 22 No. 7 (2010) 5493-5498.	-	International
23		'Thermal-acoustical Investigations on Potassium Thiocyanate in 2-propanal+Water Mixtures'	International Journal of Pure and Applied Chemistry Vol. 6 No 1(2011) 65	-	International
24		'In-Vitro Release Study of Metoprolol Succinate from the Bioadhesive Films of Pullulan-Polyacrylamide Blends'	International Journal of Polymeric Materials (2012) 61 (4), 300-307.	-	International
25		'In-Vitro Drug Release Behaviour of PVP/Guar gum Polymer Blend Transdermal Film with Diclofenac Potassium'	Asian Journal of Pharmaceutical and Clinical Research(2012) 5(2), 148-152.	-	International
26		'Influence of blending of Chitosan and Pullulan on their drug release behaviour: An In-vitro study'	International Journal of Pharmacy and Pharmaceutical Sciences (2012) 4(3), 313-317.	-	International
27		'Effect of Electron beam irradiation on Physico-Chemical properties of Pullulan'	Journal of Radioanalytical and Nuclear Chemistry (2012) 293(1) 431-435.	-	International
28		'Investigation on Miscibility of Sodium Alginate/Pullulan Blends'	Journal of Polymers and Environment (2012) DOI 10.1007/s10924-012-0427-4.	-	International

RESEARCH CENTRE -2022-23

1	Dr. Sunil Kumar M	"Preparation and characterization of areca bast fiber reinforced epoxy & Vinylester Composites"	International Journal of Mechanical Engineering & Technology, Volume 5, Issue 12, Dec. 2014, p.p. 55-65.	-	International
2		'Water absorption and diffusion properties areca fiber reinforced epoxy and vinyl ester composites'	IJARSE, vol -4(01), March 2015		International
3		Preparation and characterization of short areca leaf fiber reinforced epoxy and vinyl ester composites'	IJARSE, Vol.-4(01), March 2015		International
1	Mrs. Surekha. M	Ultrasonic studies on Interionic Interactions of KSCN in 2-ethoxyethanol + water mixture at Varying temps.	American International Journal of Research Sc. Technology Engineering and Mathematics. March – May 2019, Impact Factor: 1.58		International
2		"Conductance Study on Solvation Behaviour of Tetrabutyl Ammonium Bromide in 2-Ethoxy Ethanol+Water Mixtures AT 288.15K – 318.15K"	J. Of Journal of Chemical and Pharmaceutical Sciences, special issue 1, Jan. 2018,	-	International
3		"Acoustical studies on Molecular interactions of TBAB in 2-ethoxy ethanol and water mixtures at 288 15k -318 15k"	International journal of Advanced Research in SCC Engg. (IJARSE) impact factor: 2.84, Dec.2017	-	International
4		"Ultrasonic Studies on Interionic Interactions of KSCN in 2-Ethoxyethano + Water Mixture at Varying Temperatures"	American International Journal of Science, Technology, Engineering and Mathematics (AIJRSTEM), 2019, pp179-187	-	International
5		" Acoustic investigations of benzoic acid in methanol + water mixture in the range 293.15-313.15K"	International Journal of Science and Technology and Management, Vol. No. 4, 2015, pp 856-870		International
6		" Thermo-acoustical behaviour of oxalic acid in 2-propanol + water mixtures"	International Journal of Chemistry, Vol. 36, 2015, pp 1754-1764		International

1	Dr. Sujay M M	An investigation on mechanical , wear, and morphological properties of areca leaf fiber-CNT – epoxy and eupatorium fiber-CNT-epoxy reinforced hybrid polymer composites.	J. Of Journal of Chemical and Pharmaceutical Sciences, special issue 1,.Jan. 2018, pp 37-46	-	International
2		‘Water absorption and diffusion properties areca fiber reinforced epoxy and vinyl ester composites’	IJARSE, vol -4(01), March 2015	-	International
3		" Water absorption behavior areca leaf-CNT-epoxy and eupatorium fiber-CNT-epoxy reinforced hybrid polymer composites”	American Int. J. of Sc.,Technology, engineering and mathematics, Vol 26(1), 2019, pp 58-64	-	International
1	Mr. Vivek Padpu	"Development and Characterization of certain nano particle reinforced conducting polymer composites for optoelectronic applications"	Journal of Polymers and Environment Communicated	-	International

Details of Existing Research Facilities

Sl. No.	Facility available
1	Conductivity meter, Viscometer, Constant Single pan balance, Glass distillation, Chemical balance, Electronic balances (4) Flamephotometer, Vacuum pump, centrifuge, Universal Testing Machine
2	ULTRASONIC INTERFEROMETER (Digital) MULTI FREQUENCY ULTRASONIC INTERFEROMETER (Mittal, India) SPECTRO-PHOTOMETER, PC BASED DOUBLE BEAM SPECTROPHOTOMETER (Systronics, India), CRYOSTAT, ELECTRONIC BALANCE(0.00001g) T.D.S. METER, HOT AIR OVEN, VACUUM PUMP, CENTRIFUGER DISTILLATION UNIT, DIGITAL CONDUCTIVITY METER SONICATOR, DIELECTRIC CONSTANT METER (Brookhaven, USA) DIGITAL VISCOMETER (Brookfield, USA), UNIVERSAL TESTING MACHINE (COMPUTERIZED), INTERACTIVE PANEL, Wear Testing Machine