



DEPARTMENT OF PHYSICS

**SECAB INSTITUTE OF ENGINEERING & TECHNOLOGY, VIJAYAPUR-
586109. KARNATAKA. INDIA.**

Research Centre Details

Sl. No	Name of the Research Centre	Year of Establishment
1.	Research Centre for Physics	2016

PhD Registrations

Sl. No	Name of the Research Guide	Name of the Research Scholar	Year of Registration
1.	Dr.Mohammed Ikram	Padma. C. Albal	2018
2.	Dr. Shirajahammad Hunagund	--	--

Faculty Research

1. Faculty Research Areas

Sl. No.	Faculty Name	Research Area
1.	Dr. Shirajahammad M. Hunagund	Bio-Physics, Fluorescence Spectroscopy, Waste water treatment and energy harvesting.
2.	Mrs. P. C. Albal	Green nanotechnology

2. Ph. D. Registrations

Sl. No.	Faculty Name	Title of the Research Work	Research Centre	Year of Registration
1.	P. C. Albal	Synthesis of mesoporous nanoparticles and their applicatio	SECAB Institute of Engineering & Technology, Vijaypur	2018-19

3. Publications

Sl. No.	Author's Name	Paper Title	Journal Name with ISSN	Year and Month
1.	Vani R. Desai, Shirajahammad M. Hunagund , Mahantesha Basanagouda, Jagadish S. Kadadevarmath, Ashok H. Sidarai	Solvent Effects on the Electronic Absorption and Fluorescence Spectra of HNP: Estimation of Ground and Excited State Dipole Moments	Journal of Fluorescence, 26, 1391 (2016).	2016
2.	Ashok H. Sidarai, Vani. R. Desai, Shirajahammad M. Hunagund , Mahantesha. Basanagouda, Jagadish. S. Kadadevarmath	Fluorescence quenching of DMB by aniline in benzene-acetonitrile mixture,	International Letters of Chemistry, Physics and Astronomy, 65, 32-36, 2016.	2016
3.	Shirajahammad M. Hunagund , Pradeep. Chavan, Vani. R. Desai, L. R. Naik, Jagadish. S. Kadadevarmath and Ashok H. Sidarai,	Influence of Fe ³⁺ ion substitution on thermal and dielectric properties of titanium dioxide,	International Letters of Chemistry, Physics and Astronomy, 67, 9-13 (2016).	2016
4.	Vani R. Desai, A.H. Sidarai, Shirajahammad M. Hunagund , M. Basanagouda, R.M. Melavanki, R.H. Fattepur, J.S. Kadadevarmath,	Steady state absorption and fluorescence study: Estimation of ground and excited state dipole moments of newly synthesized pyridazin-3(2H)-one derivatives,	Journal of Molecular Liquids, 223, 141 (2016)	2016

5.	Ashok H. Sidarai, Vani. R. Desai, Shirajahammad M. Hunagund , Mahantesha. Basanagouda and Jagadish. S. Kadadevarmath,	Effect of solvent polarity on the fluorescence quenching of TMC molecule by aniline in benzene-acetonitrile mixtures,	Canadian Journal of Physics, 94, 1125 (2016).	2016
6.	Shirajahammad M. Hunagund , Vani R. Desai, Jagadish S. Kadadevarmath, Delicia A. Barretto, Shyamkumar Vootla and Ashok H. Sidarai,	Biogenic and chemogenic synthesis of TiO ₂ NPs via hydrothermal route and their antibacterial activities,	RSC Advances, 6, 97438 (2016).	2016
7.	Vani R. Desai, Shirajahammad M. Hunagund , Mahantesha Basanagouda, Jagadish S. Kadadevarmath, J. Thipperudrappa and Ashok H. Sidarai,	Spectroscopic studies on newly synthesized 5-(2-hydroxy-5-methoxy-phenyl)—2H-pyridazin-3-one molecule,	Journal of Molecular Liquids, 225, 613 (2017).	2017
8.	Vani R. Desai, Shirajahammad M. Hunagund , Malatesh S. Pujar, Mahantesha Basanagouda, Jagadish S. Kadadevarmath and Ashok H. Sidarai,	Spectroscopic interactions of titanium dioxide nanoparticles with pharmacologically active 3(2 <i>H</i>)-pyridazinone derivative,	Journal of Molecular Liquids, 233, 166 (2017).	2017

9.	Ashok H. Sidarai, Vani. R. Desai, Shirajahammad M. Hunagund , Mahantesha. Basanagouda, Jagadish. S. Kadadevarmath,	Study of fluorescence quenching on novel coumarin derivatives by aniline in different solvents,	Journal of Solution Chemistry, 46, 1328 (2017).	2017
10.	Shirajahammad M. Hunagund , Vani R. Desai, Delicia A. Barretto, Malatesh S. Pujar, Jagadish S. Kadadevarmath, Shyamkumar Vootla and Ashok H. Sidarai,	Photocatalysis effect of a novel green synthesis gadolinium doped titanium dioxide nanoparticles on their biological activities,	Journal of Photochemistry & Photobiology, A: Chemistry, 346 (2017) 159–167.	2017
11.	Ashok H. Sidarai, Vani. R. Desai, Shirajahammad M. Hunagund , Mahantesha. Basanagouda, Jagadish. S. Kadadevarmath,	Study of photophysical properties on newly synthesized coumarin derivatives,	Journal of Fluorescence, 27, 2223(2017).	2017