## O/o. Academic Research

## No. of students and Vacancy details under the guides.

## Name of the Centre: CO2 Research and Green Technologies Centre

S. No.	Emp ID	Guide Name	Area of Expertise	School/ Centre	Total Scholar	Total Vacancy
1	11322	Dr. Senthil Kumar A	askumar@vit.ac.in	CO2	6	0
			Research interests:			
			Electrochemistry, Redox reactions & Electrocatalyst			
			Energy Materials, Super-capacitor, Zn-ion battery			
			Nanomaterials			
			Design and development of chemically modified electrodes			
			Electrochemical reduction of CO2			
			Electrochemical and bioelectrochemical sensors			
2	12575	Dr. Kavitha M.S	kavitha.ms@vit.ac.in Research interests:	CO2	2	4
			Bioenergy Technology			
	4000-		Alternate Fuel ranjitha.j@vit.ac.in			
3	13605	Dr. Ranjitha J	Research interests:	CO2	6	0
			Chemical Reaction Engineering			
			<ul> <li>Bio-fuel Production from Biomass</li> </ul>			
			<ul> <li>Phycoremediation</li> </ul>			
			Bio-process Engineering			
			<ul> <li>Electrochemical Engineering</li> </ul>			
			Bio-diesel Production using organometallic catalysts			
			Hydrothermal Liquefaction			
			<ul> <li>Bio-sensors, Bio-diesel</li> </ul>			
4	13611	Dr. Vijayalakshmi S	vijayalakshmi.s@vit.ac.in	CO2	6	0
4	13011		Research interests:	02	0	0
			Bio-chemical Engineering			
			Environmental Engineering			
			Bioremediation			
			Biogas Technology			
			Hydrocarbon derivative production from Microbe, Algal Technology			
			Bio-energy Technology			
5	14016	Dr. Murugavelh S	murugavelh.s@vit.ac.in	CO2	2	4
5			Research interests:		_	
			Chemical Engineering			
			Bioprocess Engineering			
			Biofuels			
			Environmental Engineering			
6	14839	Dr. Thirumalini S	thirumalini.selvaraj@vit.ac.in	CO2	6	0
			Research interests:		-	
			Ancient materials			
			Structural materials			

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			Characterization			
			Conservation			
			Restoration			
			Carbon Sequestratio			
7	15782	Dr. Velvizhi G	velvizhi.g@vit.ac.in	CO2	5	1
			Research interests:			
			CO2 Conversion to Value Added products			
			<ul> <li>Biogas and Biofuel production</li> </ul>			
			Solid Waste Management			
			Ecological Engineering systems			
8	17040	Dr. Ashish Alex Sam	ashishalex.sam@vit.ac.in	CO2	2	4
U			Research interests:			
			Turbomachinery			
			Waste heat recovery systems			
			Carbon capture Technologies			
			Computational fluid dynamics			
			Cryogenic Engineering			
9	1892/	Dr. Shanmugam R	shanmugam.r@vit.ac.in	CO2	4	2
9	10924		Research interests:	02	4	2
			Computational catalysis			
			<ul> <li>Small molecule activation and transformation</li> </ul>			
			Reaction mechanism			
			<ul> <li>Inter and intra molecular forces</li> </ul>			
			Enzyme engineering			
			Renewable energy generation			
10	18925	Dr. Ramesh Kumar Singh	rameshkumar.singh@vit.ac.in Research interests:	CO2	4	2
			<ul> <li>Renewable Energy Technologies: Anion Exchange Membrane Fuel Cells and Electrolyzers</li> </ul>			
			Electrolyzers			
			Electrochemistry, Nanomaterials, Corrosion			
			Electrocatalysts: Precious and Nonprecious metal catalysts, Metal-free Catalysts,			
			Metal-oxide Supports			
			<ul> <li>Fuel Oxidation: Hydrogen, Urea, Ammonia, Methanol, and Borohydride</li> </ul>			
			<ul> <li>Oxygen Reduction, NH3 Reduction and CO2 Reduction Reactions</li> </ul>			
			<ul> <li>Ion Exchange Membranes: Proton Exchange Membrane and Anion Exchange</li> </ul>			
			Membrane			
11	19564	Dr. Rajesh Kanna	rajeshkanna.p@vit.ac.in	CO2	3	3
			Research interests:			
			Fluid-Thermal Engineering			
			CFD Simulation			
			CO2 based thermal systems			
			Solar Energy			
			Nanofluids			
12	20041	Dr. Sreetama Ghosh	sreetama.ghosh@vit.ac.in	CO2	1	5
**	20041		Research interests:	002	±	
			Heterogeneous catalysis			
			• CO2 capture			
			Electrochemical CO2 reduction			
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			<ul><li>Thermocatalytic CO2 hydrogenation</li><li>Water splitting</li></ul>			
13	20148	Dr. Sarigamala Karthik Kiran	karthikkiran.sarigamala@vit.ac.in	CO2	2	4
			Research interests:			
			Electrochemistry			
			<ul> <li>Energy Storage (Batteries &amp; hybrid devices, Solid state electrolytes)</li> </ul>			
			2D Materials & Heterostructures			
			<ul> <li>Transport at nano-interfaces, CDI</li> </ul>			