
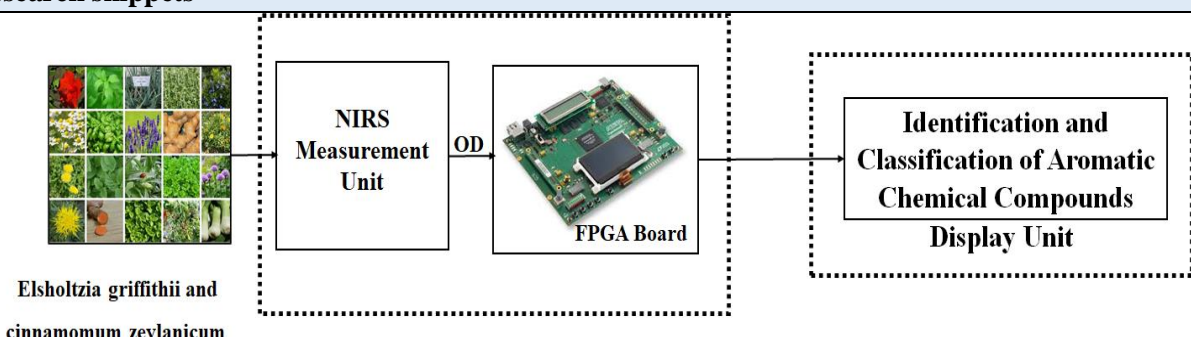


<p align="center">Dr. NEELAMEGAM D Ph. D. (Pondicherry University, Puducherry) Centre for Biomedical Spectroscopy Associate Professor / Department of Electronics and Communication Engineering</p>								
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Research Areas								
Biomedical Signal Processing, Biomedical Optics, Near Infrared Spectroscopy, Bioelectrical Impedance Analysis.								
Projects & Publications Summary								
Project		Publication Count	Citation Count			Impact Factor		
Completed	0	SCI	2	Citations	Google	SCOPUS	12.894	
Ongoing	1	SCOPUS	3		h-index	5		2
Submitted	4	Books	0		i10index	1		1
		Books chapters	0			0		0
National/International Collaboration			<ul style="list-style-type: none"> Institute of Bioresources and Sustainable Development (IBSD), Imphal IIITDM, Manipur, India – Chemo Profiling. Jadavpur University, Calcutta, India. – Raman Spectroscopy 					
Research snippets			 <pre> graph LR A[Elsholtzia griffithii and cinnamomum zeylanicum] --> B[NIRS Measurement Unit] B -- OD --> C[FPGA Board] C --> D[Identification and Classification of Aromatic Chemical Compounds Display Unit] </pre>					
Research facilities			<ul style="list-style-type: none"> NIR spectrometer (950 nm – 1650 nm) Xilinx Virtex-7 FPGA VC707 Evaluation Kit 					
Outline of Research Works			<ul style="list-style-type: none"> To develop portable chemometrics sensor for sensing and classification of aromatic chemical compounds Analysis and chemo-profiling of phyto-constituents in medicinal plants using developed prototype sensor 					

Details of Funded Projects					
S.No	Project Title	Funding agency	Amount (Rs.)	Duration	Collaboration
1.	Development of sensing systems for rapid and in situ quality assessment of Black rice, Ginger (Zingiber Officinale) Elsholtzia griffithii and Cinnamomum zeylanicum of north-east India using spectroscopic (NIR and Raman) technologies	DBT-HBM	29,98,560/-	2 Years (2022-2024) (Ongoing)	IBSD JU
Recent Best 5 SCI Publications					
<ul style="list-style-type: none"> Neelamegam D, Gnanou Florence Sudha. Dual-frequency bioelectrical phase angle to estimate platelet count for prognosis of dengue fever in Indian children, Biomedical Engineering/Biomedizinische Technik, Vol. 65, No. 04, pp. 417-428, 2020. IF-1.44. Neelamegam D, Gnanou Florence Sudha. Dual-frequency bioelectrical impedance analysis to estimate hematocrit for prognosis of dengue fever in Indian children, Biomedical Engineering/Biomedizinische Technik, Vol. 64, No. 04, pp. 459-469, 2019. IF-1.44. Neelamegam D, Gnanou Florence Sudha, Investigation on the Influence of the Extracellular Fluid to Intracellular Fluid Ratio at Dual Frequencies for Prognosis of Dengue Fever in Indian Children, Biomedical Physics and Engineering Express, Vol. 3, No. 01, pp. 01-09, 2017. IF-1.39. 					
Patents					
<ul style="list-style-type: none"> Australian patent “Multimode image fusion technique for automated correlation identification in medical images”, Patent No: 2021105871. (Granted) Indian patent “Integrated Approach by Image Processing and Neural Network to Identify Health of The Plant”, Patent No: 202141044820. (Published) 					
Fellowships/Awards/Recognitions					
<ul style="list-style-type: none"> Recipient of “<i>Research Excellence Award</i>” from Institute of Scholars, Bangalore, India, May 2019). Recipient of “<i>Best Paper Award</i>” for the paper titled “Development and Analysis of Metamaterial Antenna cum Filter (Filtenna) for UWB Short Range Applications” presented at International Conference on Recent Trends in Engineering and Technology (ICRTET - 2014), Organized by Mount Zion College of Engineering and Technology, Pudukkottai, Mar. 2014. 					
PhD Thesis Guidance					
Scholar Name	Thesis Title	University	Status	Year	
Divyabharathi. P	Design and Development Of A Non-Invasive Instrument For Identification And Prognosis Of Blood Cancer Using Near Infra-Red Spectroscopy	Vel Tech, Avadi	Ongoing	2021	
Kruttiventi A Manjusha	Energy Efficient Architectures Using Deep Learning Techniques	Vel Tech, Avadi	Ongoing	2021	

Editorial/Review Activities
<ul style="list-style-type: none">• Medical & Biological Engineering & Computing (SCI)• Reviewer for International Journal of Scholars.