

<p style="text-align: center;"><b>Name:</b></p> <p style="text-align: center;"><b>Dr. R. RAJASEKARAN</b></p>				
<b>Designation:</b>	Associate Professor			
<b>Qualification:</b>	M.Sc., B.Ed., Ph.D.			
<b>Area of specialization:</b>	Spectroscopy, Biophotonics, Imaging, Cancer Diagnosis, Photodynamic therapy, Nano BioPhotonics.			
<b>Experience:</b>	<b>Industrial Experience</b>	<b>Postdoctoral Experience</b>	<b>Teaching Experience</b>	
	-	-	8 years 1 month	
<b>Number of workshops / FDP attended:</b>	<b>Number of Workshops</b>		<b>Number of FDPs</b>	
	-		5	
<b>Publications:</b>	<b>Conference</b>		<b>Journal</b>	
	<b>National</b>	<b>International</b>	<b>National</b>	<b>International</b>
	1	7	1	12
<b>Books / Book Chapters</b>	-			
<b>Patents:</b>	<b>National</b>		<b>International</b>	
	-		-	
<b>Professional Body Membership</b>	1. IEEE 2. Indian Laser Association			
<b>Research</b>	<b>Google Scholar ID:</b> pdC-5sIAAAAJ <b>Researcher ID:</b> AAE-7153-2022 <b>Orcid ID:</b> 0000-0003-3319-0886 <b>Scopus ID:</b> 57451398100 <b>Anna University Guideship:</b> Yes			

<b>Staff Achievements</b>	<ol style="list-style-type: none"> <li>1. Received CAPES fellowship for one year from Govt. of Brazil for doing Post Doctoral Research</li> <li>2. Delivered Invited talk at SPIE Photonics West 2017 – San Francisco, USA</li> </ol>
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### Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Sc.,	Physics	2003	T B M L College	Bharathidasan University	67	First
	B.Ed	Physics	2006	National College of Education	Thirruvallur University	55	Second
PG	M.Sc.,	Physics	2006	T B M L College	Bharathidasan University	70	First class
Doctorate	Ph D.	2014	CEG	Anna University,	2014	Highly Commented	

### Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Sri Sai Ram Engineering College	Associate Professor	01.07.2025	Till Date	0	8	12
Sri SaiRam Institute of Technology	Assistant Professor	15.11.2021	30.06.2025	3	7	15
Anna University, Guindy	Teaching Fellow	04.08.2021	26.10.2021	0	2	17
Anna University, Guindy	Teaching Fellow	23.11.2020	18.05.2021	0	5	25
Dire Dawa University, Ethiopia	Assistant Professor	26.10.2017	28.02.2020	2	4	2
Bannari Amman Institute of Technology	Assistant Professor	17.08.2016	20.05.2017	0	9	3
Total				8	1	12

## **FDP/STTP Attended:**

1. Accreditation and Outcome Based Learning FDP
2. Nanobiophotonics\_ Touching Our Daily Life FDP
3. Techniques of Materials Characterization FDP
4. Biophotonics FDP
5. Infrared Spectroscopy for Pollution Monitoring FDP

## **Papers presented in International / National Conferences:**

1. Ramu Rajasekaran, Prakasa Rao Aruna, Munusamy Balu David, Dornadula Koteeswaran, Kulandaivel Muthuvelu, Rai R, Singaravelu Ganesan, "Steady state and time-resolved fluorescence spectroscopic characterization of normal and cancerous urine", SPIE Proc. 2013, Vol. 8577, DOI: 10.1117/12.2006086.
2. R. Rajasekaran, E. Brindha, P. Aruna, S. Ganesan, "Fluorescence Emission Spectroscopic Characterization of Urine of Normal Subjects and Breast Cancer Patients", OSA Optical Infobase, 2014.
3. Brindha Elumalai, Ramu Rajasekaran, Prakasarao Aruna, Dornadula Koteeswaran, Singaravelu Ganesan, "Discrimination of Premalignant conditions of oral cancer using Raman Spectroscopy of urinary metabolites", SPIE Proc. 2015, Vol. 9318, DOI: 10.1117/12.2078029.
4. E. Brindha, R. Rajasekaran, L. Pereira, P. Aruna, D. Koteeswaran, A. A. Martin, S. Ganesan, "Raman Spectroscopy of Human Urine in the Diagnosis of Cervical Cancer", Proc. of EnBraER, 2015, Brazil.
5. Ramu Rajasekaran, Brindha Elumalai, Prakasarao Aruna, Dornadula Koteeswaran, Singaravelu Ganesan, "Fluorescence anisotropy characterization of urine in the diagnosis of cancer", SPIE Proc. 2016, Vol. 9703, doi: 10.1117/12.2212618.
6. Ramu Rajasekaran, Brindha Elumalai, Prakasarao Aruna, Dornadula Koteeswaran, Singaravelu Ganesan, "The effect of Stokes Shift in the discrimination of cervical cancer from normal subjects", SPIE Proc. 2016, Vol 9703, doi.10.1117/12.2213178.
7. Brindha Elumalai, Ramu Rajasekaran, Prakasarao Aruna, Dornadula Koteeswaran, Singaravelu Ganesan, "Raman spectroscopy of Bio Fluids : An exploratory study for oral cancer detection", SPIE Proc. 2016, Vol 9703, doi: 10.1117/12.2212684.
8. Ramu Rajasekaran, Elumalai Brindha, Ganesan Bharanidharan, Biniyam Girma Manaye, Prakasarao Aruna, Singaravelu Ganesan" Optical characterization of riboflavin as a potential biomarker in the diagnosis of cervical cancer", SPIE Proc. 2024, Vol 12836, doi.org/10.1117/12.3010046
9. Elumalai Brindha, Ramu Rajasekaran, Ganesan Bharanidharan, Biniyam Girma Manaye, Prakasarao Aruna, Singaravelu Ganesan" Raman and fluorescence spectroscopic characterization of pteridines in

the blood of normal subjects and oral cancer patients”, SPIE Proc.2024, Vol.12836, doi.org/10.1117/12.3010048

10. R. Rajasekaran, P. Aruna, D. Koteeswaran, M. Balu David and S. Ganesan “Fluorescence Excitation Spectroscopic Characterisation of Urine Samples of Normal Subjects and Oral Cancer Patients” Proc. of NLS 22, 2014.
11. E. Brindha, R. Rajasekaran, P. Aruna, D. Koteeswaran, M. Balu David, G. Bharanidharan, and S. Ganesan, “Characterization of Urine of Normal Subjects and Oral Cancer Patients by Raman Spectroscopy” Proc. NLS 22, 2014.
12. R. Rajasekaran, P. Aruna, J. Raji, D. Koteeswaran, M. Balu David and S. Ganesan, “Autofluorescence Characterisation of Urine of Normal Subjects and Cervical Cancer Patients”. Proc. of NLS 21, 2013.
13. Brindha Elumalai, Ramu Rajasekaran, Ranjini, Prakash Rao Aruna, Singaravelu Ganesan, “Raman Spectroscopic characterization of Normal and Cancerous Oral tissue, Proc. of NCRAP 2013, Tamilnadu, India.
14. Bhupeshwaran Mani, Vasudevan B, Sivasubramanian A, Rajasekaran R, “Study on 8-DPSK Modulated Radio over Fiber in Single and Multichannel Systems for Mobile Communication Applications”, Proc. of NC4T’13, 2013, Sathyabama University, Tamilnadu, India.

### **Journal Publications:**

1. Ramu Rajasekaran, Prakasa Rao Aruna, Dornadula Koteeswaran, Loganathan Padmanabhan, Kulandaivel Muthuvelu, Ram Rathan Rai, Palraj Thamilkumar, Chilakapati Murali Krishna, Singaravelu Ganesan, “Characterization and Diagnosis of Cancer by Native Fluorescence Spectroscopy of Human Urine”, J. Photochem. and Photobiol., 2013, 89: 483–491.
2. Ramu Rajasekaran, Prakasa Rao Aruna, Dornadula Koteeswaran, Ganesan Bharanidharan, Munusamy Baludavid and Singaravelu Ganesan, “Steady-state and time-resolved fluorescence spectroscopic characterization of urine of healthy subjects and cervical cancer patients”, J. Biomed. Opt., 2014, 19(3), 037003-9.
3. Ramu Rajasekaran, Prakasarao Aruna, Dornadula Koteeswaran, Munusamy Baludavid, Singaravelu Ganesan, “Synchronous luminescence spectroscopic characterization of urine of normal subjects and cancer patients” J. of Fluoresc., 2014, 24, 1199-1205.
4. Niranzana PA, Jayachandran S, Ganesan S, Rajasekaran R, “Treatment of oral leukoplakia with photodynamic therapy – a pilot study”, J. Can. Res. & Therapeutics, 2015, 11(2), 464-467
5. Everton Diniz dos Santos, Gerson Luqueta, Ramu Rajasekaran, Thaisa Baesso dos 6 Santos, Anelise Cristina Osorio Cesar Doria , Polyana Alves Radi, Rodrigo Savio Pessoa, Lucia Vieira, Homero Santiago Maciel, “Macrophages Adhesion Rate On Ti-6al-4v Substrates: Polishing 3 And Dlc Coating Effects” Res. Biomed. Eng. - 2016 - 32(2), 144 - 152.

6. Claudio A. Tellez S., Liliane Pereira, Laurita dos Santos, Ramu Rajasekaran, Priscila Favero, Airton A. Martin, "DFT:B3LYP/3-21G theoretical insights on the Confocal Raman experimental observations in skin dermis of healthy young, healthy elderly and diabetic elderly women", J. Biomed. Opt. - 2016 - 21 (12), 125002.
7. Elumalai Brindha, Ramu Rajasekaran, Prakasarao Aruna, Dornadula Koteeswaran and Singaravelu Ganesan - Highwavenumber Raman spectroscopy in the characterization of urinary metabolites of Normal Subjects, Oral Premalignant and Malignant Patients. Spectrochimica Acta. Part A, 2017 - 171, 52-59.
8. Monica Bergamo Lopes, Ramu Rajasekaran, Ana Clara Figueira Lopes Cançado, Airton Abrahão Martin, "In vivo Confocal Raman Spectroscopic Analysis of the Effects of IR Radiation in the Human Skin Dermis" - Photochemistry and Photobiology - 2017 - 93 (2), 613 - 618.
9. Luis Felipe Carvalho, Marcelo Saito Nogueira, TanmoyBhattacharjee, LázaroNeto, Lucas Daun, Thiago Mendes, Ramu Rajasekaran, Maurílio Chagas, Airton Martin and Luis Eduardo Soares, "In vivo Raman spectroscopic characteristics of different sites of the oral mucosa in healthy volunteers" - J. Clin. Oral Investigation, 2018, 23(7), 3021-3031.
10. Medeiros-Neto, L.P., Tellez Soto, C.A.; Chagas, M.J., Carvalho, L.F.C., Rajasekaran, R., Martin, A.A., "In Vivo Raman Spectroscopic Characterization Of Papillary Thyroid Carcinoma" - J. Vibrational Spectroscopy, 2019, 101(0), 1-9.
11. Gerson R Luqueta; Julia M Abdala; Rajasekaran Ramu; Elisa Esposito; Erico Teixeira; Leandro B Rezende; Lucia Vieira; Homero S Maciel; Milton Beltrame, "Antimicrobial silver coating using PVD-PECVD system", Indian J. of Fibre & Textile Research, 2020, 45(2), 197-206.
12. Shanmugam M, C Jayashree, Rajasekaran R, Brindha E, Saeedah M A, Govind Raj M, J Kim, Abinaya S, Senthil B, Atchudan R: "Emerging silver-doped strontium titanate nanostructures as photocatalysts for the degradation of organic pollutants under visible light" J. of Molecular Structure, 2024, 1306,137854.

### **Awards:**

1. Received **CAPES** fellowship for one year from Govt. of Brazil for doing Post Doctoral Research
2. **Junior Research Fellow** in the project "Setting up of laser facility for medical and technological applications", Anna University, Chennai, India

### **Online Courses:**

1. NITTTTR: Completed 8 Modules of National Initiative for Technical Teachers Training
2. NPTEL
  1. Accreditation and Outcome Based Learning
  2. Nanobiophotonics\_ Touching Our Daily Life
  3. Techniques of Materials Characterization

4. Biophotonics

3. Infrared Spectroscopy for Pollution Monitoring