



Anand Nagar, Krishnankoil - 626126, Srivilliputtur (via), Virudhunagar District, Tamilnadu.

APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:06-09-2024

Department	PHYSICS	Application No.	20240012
Area of Research	NANOMATERIALS	Research Mode	FULL TIME

Name :RAMKUMAR S
Date of Birth / Age :21-08-2001 / 23 Years
Gender :MALE
Category :OC
e-Mail ID :sairamkumar7756@gmail.com
Mobile :7339493534



Father's/Husband's Name	SARAVANAN S	Father's/Husband's Occupation	WEAVER
Family Income	85,000	Residential Type	RURAL
Birth Place	SRIVILLIPUTHUR	Mother Tongue	TAMIL
Religion	HINDU	Martial Status	SINGLE
Aadhaar No.	499909481411	PAN No.	FEUPR8707C
Physically Challenged	NO	Type of Disability	-
Address for Communication: 251 URANIPATTI STREET SRIVILLIPUTHUR VIRUDHUNAGAR DISTRICT TAMILNADU INDIA Pin-626125		Permenant Address: 251 URANIPATTI STREET SRIVILLIPUTHUR VIRUDHUNAGAR DISTRICT TAMILNADU INDIA Pin-626125	

Qualification						
Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
BSC PHYSICS	PHYSICS	ARULMIGU KALASALINGAM COLLEGE OF ARTS AND SCIENCE	2022	8.6	FIRST	REGULAR
MSC PHYSICS	PHYSICS	ANJAC	2024	6.3	FIRST	REGULAR

Experience				
Organization	Designation	Experience From	Experience TO	Work Nature

Payment Details				
Transaction ID	Reference	Date of transaction	Amount	Status
20240012_240906130949	ZHD529Q00MFB1C	06-09-2024	600	SUCCESS

Subject: Proposal for Nanomaterials Synthesis and Applications Research

Dear Professor,

I am writing to propose an exciting nanomaterials research project that I would be honored to pursue under your guidance and mentorship. Given your pioneering work in the field of nanoparticle synthesis and applications, I believe this project will greatly benefit from your invaluable expertise.

The primary objectives of this proposed research are as follows:

1. Develop novel methods for synthesizing various nanoparticles, including metal (e.g., Au, Ag), metal oxide (e.g., TiO₂, ZnO), and semiconductor (e.g., CdSe, CdTe) nanoparticles with precise control over size, shape, and surface chemistry using colloidal synthesis techniques.
2. Employ advanced characterization tools, such as transmission electron microscopy (TEM), X-ray diffraction (XRD), UV-Vis spectroscopy, and dynamic light scattering (DLS), to thoroughly investigate the structural, optical, and physicochemical properties of the synthesized nanoparticles.
3. Explore the unique size- and shape-dependent properties of these nanoparticles, including their optical, electronic, catalytic, and biological properties, and investigate the underlying structure-property relationships.
4. Functionalize the nanoparticles with various organic ligands, polymers, or biomolecules to enhance their stability, biocompatibility, and specific targeting capabilities for applications in areas such as catalysis, sensing, bioimaging, and drug delivery.
5. Incorporate the synthesized nanoparticles into composite materials, thin films, or devices, and evaluate their performance in comparison to bulk counterparts for applications in areas such as photovoltaics, optoelectronics, and energy storage.

The ability to precisely control and engineer materials at the nanoscale offers tremendous opportunities for developing advanced technologies. However, realizing the full potential of nanomaterials requires overcoming significant challenges in synthesis, characterization, and integration. With your extensive expertise in nanoparticle synthesis, surface chemistry, and nanomaterial applications, I am confident that we can make significant contributions to this exciting field.

This research will leverage the state-of-the-art facilities available at our institution, including the [nanomaterials synthesis lab, materials characterization center, etc.].

I would greatly appreciate the opportunity to discuss this proposal with you at your earliest convenience. Your guidance and insights will be invaluable in shaping this research and ensuring its success.

Thank you for your consideration, and I look forward to your response.

Sincerely,

[RAMKUMAR]

KSD 046765



UNIVERSITY WITH POTENTIAL FOR EXCELLENCE



அறிவியற் புலம்
FACULTY OF SCIENCE

மதுரை காமராசர் பல்கலைக்கழக ஆட்சிப்பேரவை
ராம்குமார் . ச.

இயற்பியல் பிரிவில் அறிவியல் இளையர் பட்டம்

பெறுதற்குத் தகுதியுடையவர் என முறையாக அமைக்கப்பெற்ற தேர்வினோர் ஏப்பிரல் 2022 இல்

நடைபெற்ற தேர்வுகளில் சான்றளித்தவாறு, முதல் வகுப்பு

பெற்று இச்சான்றிதழ் பெறுதற்கு உரியவர் ஆகின்றார் என இதன்வழி அறிவிக்கின்றது.

பல்கலைக்கழக இலச்சினையுடன் இது வழங்கப்படுகின்றது.

The Senate of the MADURAI KAMARAJ UNIVERSITY

hereby makes known that RAMKUMAR S has been admitted to the
DEGREE OF BACHELOR OF SCIENCE IN PHYSICS

he/she having been certified by duly appointed Examiners to be qualified to receive the same, and
having been placed by them in the FIRST CLASS at the

Examination held in APRIL 2022 in the MEDIUM: ENGLISH

Register No.: B9S29336

Centre Code.: 333

Given under the seal of the University



நாள் Date 02 November 2023

பல்கலைநகர், மதுரை - 625 021
Palkalai Nagar, Madurai - 625 021

தேர்வாளையர்
Controller of Examinations
in-charge

பதிவாளர்
Registrar
in-charge

துணைவேந்தர்
Vice-Chancellor



MADURAI KAMARAJ UNIVERSITY

(UNIVERSITY WITH POTENTIAL FOR EXCELLENCE)

KPVS 38 2703

B Sc PHYSICS(SEMESTER)

STATEMENT OF MARKS AND GRADES

(CHOICE BASED CREDIT SYSTEM)



NAME OF THE CANDIDATE: RAMKUMAR S

NAME OF THE CENTRE: A.K. COLLEGE OF ARTS AND SCIENCE, KRISHNANKOIL

REGISTER NO: B9529336

CENTRE CODE: 333

DATE OF PUBLICATION: 21-SEP-2022

EXAM M & YR: APR 2022

PART	SEMESTER	COURSE CODE	COURSE TITLE	CREDIT	MAXIMUM			MARKS SECURED			GRADE POINT	GRADE	RESULT	M & YR
					INTERNAL	EXTERNAL	TOTAL	INTERNAL	EXTERNAL	TOTAL				
I	1	UTMJL11	TAMIL PAPER-I	3	025	075	100	020	045	065	6.5	A+	P	N19
I	2	UTMJL21	TAMIL PAPER-II	3	025	075	100	023	062	085	8.5	D++	P	A20
I	3	UTMJL31	TAMIL PAPER-III	3	025	075	100	021	045	066	6.6	A+	P	N20
I	4	UTMJL41	TAMIL PAPER-IV	3	025	075	100	022	060	082	8.2	D+	P	A21
II	1	UENJE11	ENGLISH PAPER-I	3	025	075	100	021	046	067	6.7	A+	P	N19
II	2	UENJE21	ENGLISH PAPER-II	3	025	075	100	024	064	088	8.8	D++	P	A20
II	3	UENJE31	ENGLISH PAPER-III	3	025	075	100	021	053	074	7.4	A++	P	A21
II	4	UENJE41	ENGLISH PAPER-IV	3	025	075	100	024	065	089	8.9	D++	P	N19
III	1	SMTJA11	ANCILLARY MATHEMATICS-I	3	025	075	100	020	050	070	7.0	A++	P	A21
III	2	SMTJA21	MECHANICS AND PROPERTIES OF MATTER	4	025	075	100	022	036	058	5.8	B+	P	N19
III	2	SPHC21	ANCILLARY MATHEMATICS-II	4	025	075	100	022	036	058	5.8	B+	P	N19
III	2	SPHC2P	THERMAL PHYSICS AND ACOUSTICS	5	025	075	100	023	069	092	9.2	O	P	A20
III	3	SELJA31	LAB-PHYSICS PRACTICAL-I	4	025	075	100	021	055	076	7.6	D	P	A20
III	3	SMTJA31	ELECTRONIC DEVICES	3	040	060	100	040	060	100	10.0	O+	P	A20
III	3	SPHC31	ANCILLARY MATHEMATICS-III	4	025	075	100	024	053	077	7.7	D	P	N20
III	3	SPHC31	ELECTRICITY AND ELECTROMAGNETISM	4	025	075	100	025	073	098	9.8	O+	P	N20
III	4	SELJA41	APPLICATION OF ELECTRONICS DEVICES AND INSTRUMENTATION	4	025	075	100	024	055	079	7.9	D	P	N20
III	4	SELJA4P	INSTRUMENTATION	4	025	075	100	024	067	091	9.1	O	P	A21
III	4	SMTJA41	PRACTICAL-APPLIED ELECTRONICS	1	040	060	100	040	060	100	10.0	O+	P	A21
III	4	SPHC41	ANCILLARY MATHEMATICS-IV	5	025	075	100	016	057	073	7.3	A++	P	A21
III	4	SPHC4P	OPTICS AND SPECTROSCOPY	4	025	075	100	023	057	080	8.0	D+	P	A21
III	4	SPHC4P	PRACTICAL-PHYSICS	4	025	075	100	023	057	080	8.0	D+	P	A21
III	5	SELJA51	LINEAR INTEGRATED CIRCUITS	3	040	060	100	040	059	099	9.9	O+	P	A21
III	5	SPHC51	MODERN PHYSICS	4	025	075	100	023	062	085	8.5	D++	P	N21
III	5	SPHC52	NUCLEAR PHYSICS	4	025	075	100	022	060	082	8.2	D+	P	N21
III	5	SPHC53	ANALOG ELECTRONICS	4	025	075	100	023	070	093	9.3	O	P	N21
III	6	SELJA61	ELECTRONIC COMMUNICATION	4	025	075	100	022	062	084	8.4	D+	P	N21
III	6	SELJA6P	LAB-ELECTRONIC COMMUNICATION	4	025	075	100	023	046	069	6.9	A+	P	A22
III	6	SPHC61	CLASSICAL AND STATISTICAL MECHANICS	1	040	060	100	040	060	100	10.0	O+	P	A22
III	6	SPHC62	SOLID STATE PHYSICS	4	025	075	100	021	038	059	5.9	B+	P	A22
III	6	SPHC63	DIGITAL ELECTRONICS	4	025	075	100	022	039	061	6.1	A	P	A22
III	6	SPHC63	PHYSICS PRACTICAL-III	4	025	075	100	023	046	069	6.9	A+	P	A22
III	6	SPHC6P	PHYSICS PRACTICAL-IV	5	040	060	100	040	060	100	10.0	O+	P	A22
III	6	SPHC6P	PHYSICS PRACTICAL-V	5	040	060	100	040	060	100	10.0	O+	P	A22
III	6	SPHC6R	PHYSICS PRACTICAL-V	5	040	060	100	040	060	100	10.0	O+	P	A22
IV	1	SPHS11	PROGRAMMING IN C	2	025	075	100	022	030	052	5.2	B	P	N19
IV	1	SPHS12	SOLAR ENERGY	2	025	075	100	022	040	062	6.2	A	P	N19
IV	1	UVEJV11	VALUE EDUCATION	2	025	075	100	020	041	061	6.1	A	P	N19
IV	2	UESJD21	ENVIRONMENTAL STUDIES	2	025	075	100	019	057	076	7.6	D	P	A20
IV	2	SPHS21	ASTROPHYSICS	2	025	075	100	020	060	080	8.0	D+	P	A20
IV	2	SPHS22	MEDICAL PHYSICS	2	025	075	100	020	060	080	8.0	D+	P	A20
IV	5	SNTJN51	INTRODUCTION TO INFORMATION TECHNOLOGY	2	025	075	100	023	067	090	9.0	O	P	N21
IV	5	SPHS51	NANOPHYSICS	2	025	075	100	022	063	085	8.5	D++	P	N21
IV	6	SCSN61	INTRODUCTION TO INTERNET	2	025	075	100	021	040	061	6.1	A	P	A22
IV	6	SPHS61	OPTO ELECTRONICS	2	025	075	100	023	051	074	7.4	A++	P	A22
V	4	UEAJG4G	EXTENSION ACTIVITY - YOUTH RED CROSS SOCIETY (YRC) (PAPER-I)	1	100	---	100	095	---	095	9.5	O+	P	A21

<< END OF STATEMENT >>

PART	CREDITS EARNED (IN THE CURRENT SEMESTER)	GPA	CUMULATIVE PERFORMANCE				
			PART	CREDITS EARNED (IN ALL SEMESTERS)	CGPA	GRADE	CLASSIFICATION
I	0	0	I	12	7.45	A++	FIRST CLASS
II	0	0	II	12	7.95	D	FIRST CLASS
III	32	8.225	III	97	8.29485	D+	FIRST CLASS
IV	4	6.75	IV	20	7.21	A++	
V	0	0	V	1	9.5	O+	

The candidate is declared to have Passed only when he/she earned not less than 142 Credits.

MEDIUM OF INSTRUCTION: ENGLISH

S. Ravi
Signature of the Candidate



Dharmaraj

Prof Dr T DHARMARAJ

CONTROLLER OF EXAMINATIONS
IN CHARGE

Any tampering or overwriting makes the Statement of Marks and Grades invalid.



AYYA NADAR JANAKI AMMAL COLLEGE

[Autonomous, affiliated to Madurai Kamaraj University, Madurai, Re-accredited (4th Cycle) with 'A+' Grade (CGPA 3.48 out of 4) by NAAC, Recognized as College of Excellence & Mentor Institution by UGC]

SIVAKASI - 626 124

VIRUDHUNAGAR DISTRICT - TAMIL NADU

TRANSFER AND CONDUCT CERTIFICATE

Admission No: 629/22 Book No: A23 T.C. No: 153

1. Name of the Student : RAMKUMAR S
2. Date of Birth as entered in the Admission Register (in words) : 21/08/2001 (TWENTYFIRST AUGUST TWOTHOUSAND ONE)
3. Name of the Father of the Student : R SARAVANAN
4. Nationality, Religion & Caste : INDIAN HINDU SALIYAR
5. Community to which he/she belongs : BC
6. Gender : MALE
7. Date of Admission to that Class : 02/07/2022
8. Class in which the student was studying at the time of leaving the College : II M.Sc. PHYSICS
9. Whether the Student has paid all the fees due to the College : YES
10. Whether he/she is qualified for promotion to a higher class : REFER MARK STATEMENT
11. Date on which the student left the College : 18/04/2024
12. Whether the student was in receipt of any Scholarship : YES
13. Date of Application for Transfer Certificate : 06/05/2024
14. Identification Marks
 - a) A MOLE ABOVE THE LEFT HAND WRIST
 - b) A MOLE ON THE BELLY
15. The Conduct and Character of the Student : *Good*

Date: 06/05/2024



[Signature]
PRINCIPAL

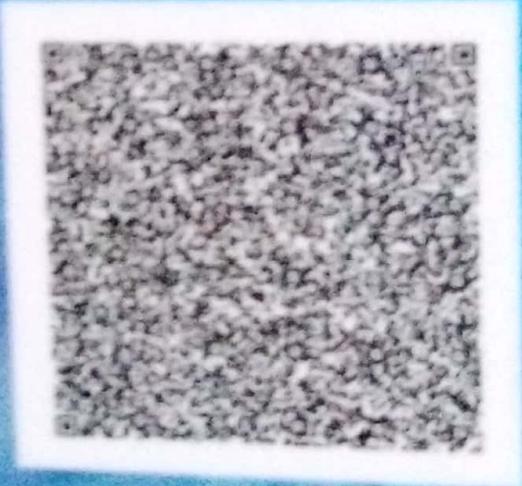
Principal
Ayya Nadar Janaki Ammal College,
SIVAKASI.

आयकर विभाग
INCOME TAX DEPARTMENT



भारत सरकार
GOVT. OF INDIA

स्थायी लेखा संख्या कार्ड
Permanent Account Number Card
FEUPR8707C



नाम / Name

RAMKUMAR S

पिता का नाम / Father's Name

SARAVANAN

जन्म की तारीख / Date of Birth

21/08/2001

हस्ताक्षर / Signature

75698

A MORE ON



UNION OF INDIA Driving Licence (Tamil Nadu)



DL. No. **TN84 20210004856**

VT



Date of Issue

27-07-2021

Valid Till

20-08-2041

Date of Birth

21-08-2001

Blood Group

O



Name

RAMKUMAR S

Son/Daughter/Wife of

SARAVANAN

BC



மாவட்டக் குறியீடு / District Code	26
வட்டக் குறியீடு / Taluk Code	02
கிராமக் குறியீடு / Village Code	041

வகுப்புச் சான்றிதழ்
COMMUNITY CERTIFICATE



சான்றிதழ் எண் / Certificate No: TN-5202405271667

நாள் / Date: 29-05-2024

விருதுநகர் மாவட்டம், திருவில்லிபுத்தூர் வட்டம், வடக்கு ஸ்ரீவில்லிபுத்தூர் கிராமம்/நகரம், கதவு எண் 251, ஊரணிப்பட்டி தெரு ஸ்ரீவில்லிபுத்தூர் என்ற முகவரியில் வசித்து வரும் திரு ச ராம்குமார் தந்தையின் பெயர் திரு சரவணன் என்பவர், அரசு ஆணை நிலை எண்:85. பிற்படுத்தப்பட்டோர், மிகப்பிற்படுத்தப்பட்டோர் மற்றும் சிறுபான்மையினர் பிரிவின் நலத்துறை நாள் 29.07.2008 வரிசை எண் 103 ன்படி சாலியர் என்ற பிற்பட்ட வகுப்பைச் சேர்ந்தவர் எனச் சான்றளிக்கப்படுகிறது.

This is to certify that **Thiru S Ramkumar** son of Thiru Saravanan residing at Door No. 251, Uranipatti street srivilliputtur, of Vadakku Srivilliputtur Village / Town Srivilliputhur Taluk Virudhunagar District of the State of Tamil Nadu belongs to Saliyar Community, which is recognized as a Backward Class as per Government Order (Ms.) No. 85, Backward Classes, Most Backward Classes and Minority Welfare Department (BCC), dated 29th July 2008 vide Serial No. 103.

Signature valid

Digitally signed by NIRMALKUMAR R
Date: 29/05/2024 18:15:44 IST

மாவட்டம் / District : Virudhunagar
வட்டம் / Taluk : Srivilliputhur

பதவி / Designation : மண்டல துணை வட்டாட்சியர் // Zonal Deputy Tahsildar

குறிப்பு / Remarks :

இச்சான்றிதழ் மின்கையொப்பம் இடப்பட்டதால், கையொப்பம் அல்லது முத்திரை தேவையில்லை /
This certificate is digitally signed and does not require any seal or signature.



ஆவண விவரங்களை உறுதி செய்ய:

(அ) TN-5202405271667 என்ற தனிப்பட்ட சான்றிதழ் எண்ணை <https://tnedistrict.tn.gov.in/tneda/VerifyCerti.xhtml> ல் உள்ளீடு செய்து சரிபார்க்கவும்.

(அல்லது)

(ஆ) கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் இணையதளத்தில் சரிபார்க்கவும்.

Genuineness of the certificate can be verified by.

(a) Keying in the unique certificate number TN-5202405271667 in the URL <https://tnedistrict.tn.gov.in/tneda/VerifyCerti.xhtml>.

(or)

(b) Reading the 2D barcode with mobile barcode reader and verify through online.