KALASALINGAM
ACADEMY OF RESEARCH AND EDUCATION
(DEEMED TO BE UNIVERSITY)
Under sec. 3 of UGC Act 1956. Accredited by NAAC with "A" Grade

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

APPLICATION FOR ADMISSION TO Ph.D. PROGRAMMES

Date of Application:19-05-2021

Department	CHEMISTRY	Application No.	202110013
Area of Research	BIO SENSORS & NANOMATERIALS SUPRAMOLECULAR CHEMISTRY	Research Mode	FULL TIME

Name :GOWRI PRIYA M

Date of Birth / Age :20-05-1998 / 23 Years

Gender :FEMALE

Category :MBC

e-Mail ID :priyamurugansrm1998@gmail.com

Mobile :9566751258

Father's/Husband's Name	VIJAYA M	Father's/Husband's Occupation	SUPERVIZOR
Family Income	72000	Residental Type	RURAL
Birth Place	DINDIGUL	Mother Tongue	TAMIL
Religion	HINDU	Martial Status	SINGLE
Aadhaar No.	858552625670	PAN No.	DATPG6066G
Physically Challenged	NO	Type of Disability	-

Address for Communication:	Permenant Address:
59 VAVA COMPLEX OPP M PUTHUPATTY, SITHAYANKOTTAI DINDIGUL DISTRICT TAMILNADU INDIA Pin-624708	59 VAVA COMPLEX OPP M PUTHUPATTY, SITHAYANKOTTAI DINDIGUL DISTRICT TAMILNADU INDIA Pin-624708

Qualification

Degree	Discipline	College/university	Year Passed	AVG/CGPA	Class	Mode
B.SC	CHEMISTRY	MOTHER TERESA WOMENS UNIVERSITY	2018	79	1 WITH DISTINCTION	REGULAR
M.SC	CHEMISTRY	MADURAI KAMARAJ UNIVERSITY	2020	74	FIRST CLASS	REGULAR

Experience

Organization	Designation	Experience From	Experience TO	Work Nature

Payment Details

Transaction ID	Reference	Date of transaction	Amount	Status
202110013_210709105725	VHD40100917915	09-07-2021	600	SUCCESS

Nano Material in Biosensor

Abstract:

A biosensor device is defined by its biological or bio inspired receptor unit with unique specificities toward corresponding analytes. Bioinspired receptor unit with unique specificities toward corresponding analytes. These analytes are often of biological origin like DNAs of bacteria or viruses, or proteins which are generated from the immune system (antibodies, antigens) of infected or contaminated living organisms. Such analytes can also be simple molecules like glucose or pollutants when a biological receptor unit with specificity is available. The use of these nanomaterials has allowed the introduction of many new signal transduction technologies in biosensors. Because of their submicron dimensions, nano sensors, nanoprobes and other nano systems have allowed simple and rapid analyses in vivo. Portable instruments capable of analyzing multiple components are becoming available. This work reviews the status of the various nanostructure-based biosensors. In order to increase sensitivities and to lower detection limits down to even individual molecules, nanomaterials are promising candidates due to the possibility to immobilize an enhanced quantity of bioreceptor units at reduced volumes and even to act itself as transduction element. Among such nanomaterials, gold nano particles, semi-conductor quantum dots, polymer nanoparticles, carbon nanotubes, nano diamonds, and graphene are intensively studied.

Introduction:

As in many different technological sections, nanomaterials have demonstrated their appropriateness for biosensing applications. The intelligent use of such nano-objects led to clearly enhanced performances with increased sensitivities and lowered detection limits of several orders of magnitudes. The advantage of such systems, compared to the other immobilization methods, is the reversibility, enabling the possibility to regenerate the transducer element. Furthermore, all components like the functionalized transducer surface and the modified bio-receptor can be characterized individually assuring the reproducibility of the constructed biosensor. This is the case for affinity biosensors like the immunoreaction between an antigen and its antibody or the hybridization of corresponding DNA strands. The specific properties of some nanomaterials clearly contributed to the development of "label free" transduction techniques or contribute to clear signal amplifications when used as labels.

GOLD NANOPARTICLES

The group of noble metal nanoparticles, gold nanoparticles are mostly used for biosensor application due to their biocompatibility, their optical and electronic properties, and their relatively simple production and modification. Gold nanoparticles have also demonstrated their advantages in bioanalysis using SPR transduction. This method is usually based on the change of the dielectric constant of propagating surface plasmons' environment of gold films where the

detection of the analyte can be recorded in different ways like the changes of the angle, intensity, or phase of the reflected light.

At particle sizes smaller than the excitation wavelength, the oscillating electrons (surface plasmons) cannot propagate along the gold surface leading to a polarization of the electron cloud at one side of the particle. SPR transduction replacing the gold film. The optimal configuration of this approach was determined for gold nanoparticles smaller than 40 nm at a distance to the gold film surface of 5 nm as illustrated. Gold nanoparticles have also shown their ability to form a powerful transduction platform for single molecule detection. By refractive index sensing of localized surface plasmon resonance (LSPR) coupled with enzyme linked immunosorbent assay (ELISA) using isolated gold nanoparticles of 60 nm sizes.

The properties of such gold nanoparticles can be tuned and adjusted. Whatever the desired application, almost any desired shape or size can be obtained using the appropriate synthesis technique. These different morphologies result in different optical, catalytic, and electronic behavior of these gold nanoparticles.
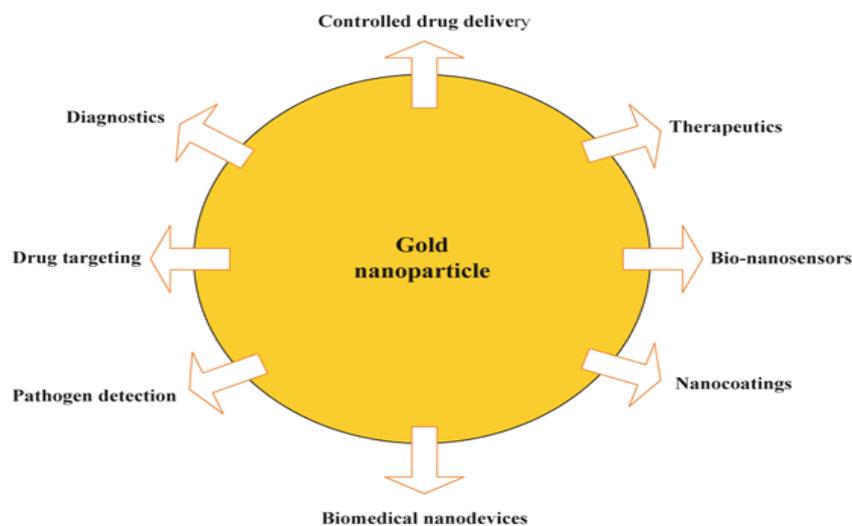
QUANTUM DOTS

Another prominent example of nanomaterials used for bio analytics are luminescent semiconducting nanocrystals called quantum dots (QDs). The most studied colloidal QDs are based on cadmium chalcogenides (S, Se, Te). Which provide a very large absorption spectrum with a size-dependent narrow emission spectrum. This phenomenon is due to the varying band gaps of the semiconductor material for different nanocrystal sizes (the bigger the particle the lower the band gap) which leads to distinct emission wavelengths from the recombination of the electron-hole exit on.

As already described, gold nanoparticles are excellent acceptors and are highly efficient QD quenchers. Due to the more favorable hybridization kinetics of the analyte DNA, the short sequence with the gold nanoparticle is released and the QDs' fluorescence reappears where its

intensity is correlated to the analyte concentration. Another use of non-radiative energy transfer provoking QD fluorescence is called Bioluminescence Resonance Energy Transfer (BRET). Here, a light-emitting protein label transfers the energy to QDs and eliminates the necessity of an external excitation light source.

Magnetic nano particles:

Magnetic nanoparticles are promising alternatives to fluorescent labels in biosensor devices. Nanosized magnetic nanoparticles show different magnetic behaviors compared to its bulk material due to the reduced number of magnetic domains (regions of parallel oriented magnetic moments caused by interacting unpaired electrons of an atom) leading to so called superparamagnetic behavior. Such superparamagnetic behavior prevents therefore from attractive or repulsive forces between the magnetic nanoparticles as long as no external magnetic field is applied. Beside a wide range of ferromagnetic materials, iron oxide is mostly used for bioanalytical applications.

Carbon Nano structures

The beneficial properties of nanostructured carbons such as carbon nanotubes or graphene made them a widely used material as electronic or electrochemical transducer in biosensor devices. In Carbon nanotubes possess the outstanding combination of nanowire morphology, biocompatibility and electronic properties. Therefore, carbon nanotube interfaces present clearly enhanced capacities, e.g., to approach the active sites of a redox enzyme and to wire it to the bulk electrode. Moreover, CNT films exhibit a high electroactive surface areas due to the natural formation of highly porous three-dimensional networks, suitable for the anchoring of a high amount of bioreceptor units, leading consequently to high sensitivities.

These materials are mostly obtained after mechanic exfoliation or chemical oxidation of graphite based on the Hummers and Offeman method. This initially called graphitic oxide is now generally known as graphene oxide and allows obtaining soluble carbon oxide sheets of undefined layer composition and sizes. The electric conductivity of this isolating material can be reestablished by chemical, thermal, or electrochemical reduction.

Prospects of nanomaterials-enabled biosensors for COVID-19 detection:

We are currently facing the COVID-19 pandemic which is the consequence of severe acute respiratory syndrome coronavirus (SARS-CoV-2). Since no specific vaccines or drugs have been developed till date for the treatment of SARS-CoV-2 infection, early diagnosis is essential to further combat this pandemic. In this context, the reliable, rapid, and low-cost technique for SARS-CoV-2 diagnosis is the foremost priority. At present reverse transcription polymerase chain reaction (RT-PCR) is the reference technique presently being used for the detection of SARS-CoV-2 infection.

However, in a number of cases, false results have been noticed in COVID-19 diagnosis. To develop advanced techniques, researchers are continuously working and in the series of constant efforts, nanomaterials-enabled biosensing approaches can be a hope to offer novel techniques that may perhaps meet the current demand of fast and early diagnosis of COVID-19 cases.

It is reviewed those nanomaterials e.g. gold nanostructures, lanthanide-doped polysterene nanoparticles (NPs), graphene and iron oxide NPs can be potentially used to develop advanced techniques offered by colorimetric, amperometric, impedimetric, fluorescence, and optomagnetic based biosensing of SARS-CoV-2. Finally, critical issues that are likely to accelerate the development of nanomaterials-enabled biosensing for SARS-CoV-2 infection have been discussed in detail. This review may serve as a guide for the development of advanced techniques for nanomaterials enabled biosensing to fulfill the present demand of low-cost, rapid and early diagnosis of COVID-19 infection. At present, the reliable, rapid, and low-cost technique for SARS-CoV-2 diagnosis is the foremost priority. In this context, nanomaterials enabled based biosensors can be a hope to offer novel techniques that may perhaps meet the current demand for early and rapid diagnosis of SARS-CoV-2 infections.

Conclusion:

Nanomaterials became important components in bioanalytical devices since they clearly enhance the performances in terms of sensitivity and detection limits down to single molecules detection. The specific properties of such nano objects also offer alternatives to classic transduction methods. Furthermore, the combination of different nanomaterials, each with its characteristics, to increase even more the performances of biosensors is a well-accepted strategy. Nanomaterials became important components in bioanalytical devices since they clearly enhance the performances in terms of sensitivity and detection limits down to single molecules detection.

Reference Books

1. BIO SENSOR -RAJMOHAN JOSHI-2006.

2. Biosensor principles and application -Pierre R. Coulet, Loïc J. Blum,2019.

3. Biosensor Nanomaterials -Songjun Li, Jagdish Singh, He Li, 2011.

4. Advance in biosensor: Perspectives in biosensor -Bansi Dhar Malhotra, Anthony Turner, 2003.

5. Biosensor application in healthcare diagnosis -Zeynep Altintas, 2017

G.T.N.ARTS COLLEGE

(Autonomous)

(Affiliated to Madurai Kamaraj University)

G.T.N NAGAR, KARUR ROAD, DINDIGUL –624005

Ph: 0451-2431299, 2432199

E-mail: gtncollege@yahoo.co.in   website : www.gtnarts.org

Date: **14.10.2020**

COURSE COMPLETED

CUM

CONDUCT CERTIFICATE

This is to certify that Selvan / Selvi. **GOWRI PRIYA M**

Reg. No. **18PCHA005** was a student of this Institution. He/ She studied

M.Sc. CHEMISTRY during the year **2018 - 2020** and he / she has

completed his/her course in **April 2020.**

His / Her Character and Conduct were ....GOOD............

PRINCIPAL
(Dr.P.BALAGURUSAMY)

PRINCIPAL
G.T.N.ARTS COLLEGE,
DINDIGUL-5.

G.T.N. ARTS COLLEGE (AUTONOMOUS)

(Affiliated to Madurai Kamaraj University)

(Accredited by NAAC with 'B' Grade)

Dindigul - 624 005, Tamil Nadu, India.

CONSOLIDATED STATEMENT OF MARKS AND GRADES

(CHOICE BASED CREDIT SYSTEM)

S. No. **0601**

NAME OF THE CANDIDATE	REGISTER No.	DATE OF PUBLICATION
GOWRI PRIYA M	18PCHA005	16-10-2020

NAME OF THE PROGRAMME	CENTRE CODE	EXAM M & YR
M.Sc. Chemistry	611	APR - 2020

SEMESTER	COURSE CODE	COURSE TITLE	CREDIT	MAXIMUM MARKS INT.	EXT.	TOT.	MARKS SECURED INT.	EXT.	TOT.	GRADE POINT	GRADE	RESULT	MONTH & YEAR OF PASSING
I	17PCHC11	Introduction to Organic Reactions	5	25	75	100	23	37	60	6.0	A	P	N - 18
I	17PCHC12	Structure and Bonding	4	25	75	100	23	34	57	5.7	B+	P	N - 18
I	17PCHC13	Thermodynamics, Chemical Equilibrium and Electrochemistry	4	25	75	100	22	35	57	5.7	B+	P	N - 18
I	17PCHE11	Medicinal and Pharmaceutical Chemistry	5	25	75	100	22	59	81	8.1	D+	P	N - 18
I	17PCHC1P	Inorganic Qualitative, Quantitative Analysis and Preparations	5	40	60	100	38	57	95	9.5	O+	P	N - 18
II	17PCHC21	Stereochemistry and Organic Reactions	4	25	75	100	22	43	65	6.5	A+	P	A - 19
II	17PCHC22	Coordination and Organometallic Chemistry	5	25	75	100	24	42	66	6.6	A+	P	A - 19
II	17PCHC23	Group Theory and Spectroscopy	4	25	75	100	23	43	66	6.6	A+	P	A - 19
II	17PCHE21	Analytical Chemistry	5	25	75	100	22	45	67	6.7	A+	P	A - 19
II	17PCHC2P	Organic Qualitative, Quantitative Analysis and Preparations	5	40	60	100	37	56	93	9.3	O	P	A - 19
III	17PCHC31	Organic Spectroscopy and Natural Products	4	25	75	100	22	34	56	5.6	B+	P	N - 19
III	17PCHC32	Inorganic Spectroscopy and Coordinated Ligands	4	25	75	100	23	42	65	6.5	A+	P	N - 19
III	17PCHC33	Quantum, Nano and Macromolecular Chemistry	4	25	75	100	23	37	60	6.0	A	P	N - 19
III	17PCSN31	Internet and Web Programming	5	25	75	100	23	40	63	6.3	A	P	N - 19
III	17PCHC3P	Conductometric and Potentiometric Titrations, Adsorption and Spectral Measurements	5	40	60	100	37	54	91	9.1	O	P	N - 19
IV	17PCHC41	Biomolecules, Rearrangements and Synthetic Methods	4	25	75	100	24	64	88	8.8	D++	P	A - 20
IV	17PCHC42	Nuclear and Analytical Chemistry	4	25	75	100	24	64	88	8.8	D++	P	A - 20
IV	17PCHC43	Chemical Kinetics, Surface, Biophysical and Photo Chemistry	4	25	75	100	24	57	81	8.1	D+	P	A - 20
IV	17PCHE41	Introduction to Nanoscience	5	25	75	100	23	64	87	8.7	D++	P	A - 20
IV	17PCHC4P	Project	5	40	60	100	38	56	94	9.4	O	P	A - 20

* * END OF STATEMENT * *

MARKS SECURED / MAXIMUM	TOTAL CREDITS EARNED	ADDITIONAL CREDIT(S) EARNED	CGPA EARNED	GRADE	CLASSIFICATION
1,480 / 2,000	90	--	7.46	A++	FIRST CLASS

DATE : 22-10-2020

SIGNATURE OF THE CANDIDATE	PRINCIPAL	CONTROLLER OF EXAMINATIONS
M. Gowri Priya	P. Balasundaram	

G.T.N.ARTS COLLEGE,(Autonomous) Dindigul District

ஜி.டி.என்.கலைக் கல்லூரி,(தன்னாட்சி) திண்டுக்கல் மாவட்டம்

மாற்றுச் சான்றிதழ் (TRANSFER CERTIFICATE)

வ.எண்;(S.No): **SSC/874/2020**   பதிவு எண்.(Reg. No): **18PCHA005**   சேர்க்கை எண்;(Admn No): **991/2018**

1. மாணவர் பெயர் Name of the Pupil (in BLOCK LETTERS) (as entered in +2 or equivalent certificate)	:	**GOWRI PRIYA M**	
2. தந்தை அல்லது தாயாரின் பெயர் Name of the Father (or) Mother	:	MURUGAN R	
3. தேசிய இனம் : சமயம் மற்றும் சாதி Nationality Religion and Caste	:	INDIAN - HINDU - PIRAMALAI KALLARS	

4. இனம் (Community) INDIAN - HINDU - PIRAMALAI KALLARS   சாதிச் சான்றிதழ் எண் (No.) : 438501

அவன் அவள் பின்வரும் ஐந்து பிரிவுகளிஸ்ளனவயேனும் ஒன்றைச் சார்ந்தவரா' Whether he, she belongs to ___

அ) ஆதிதிராவிடர் அல்லது பழங்குடி (SC / ST)	ஆ) பின்தங்கிய வகுப்பு (B C)	இ)மிகவும் பின்தங்கிய வகுப்பு (MBC)	ஈ)ஆதி திராவிடர் இனத்திலிருந்து கிறித்துவ மதத்திற்கு மாறியவர் (Converted from SC)	உ)அட்டவணையிலிருந்து நீக்கப்பட்ட இனம் (D N C)
--	--	--	--	YES

5. பாலினம் (Sex)	:	FEMALE	
6. பிறந்த தேதி (எண்ணினும். எழுத்திலும்) (மாணவர் சேர்க்கைப் பதிவேட்டில் உள்ளபடி) Date of Birth as entered in the Admission Register in figures and Words	:	20.05.1998 (Twentieth May Nineteen Ninety Eight)	
7. உடலில் அமைந்த அடையாளக் குறிகள் Personal Marks of identification	:	அ) a) -- ஆ) b) --	
8. கல்லூரியில் சேர்க்கப்பட்ட தேதி மற்றும் சேர்க்கபட்ட வகுப்பு Date of admission and class in which admitted	:	28.06.2018	
9.அ)மாணவர் கல்லூரியை விட்டு நீங்கும் காலத்தில் பயின்று வந்த வகுப்பு (எழுத்தால்) (Class in Which the pupil was studying at the time of leaving (in words)	:	II M.Sc. CHEMISTRY	

ஆ) தேர்ந்தெடுக்கப் பாடம் மற்றும் துணைப்பாடம் b) The Course offered Main and Ancillary	இ) பகுதி I இல் தேர்ந்தெடுத்த மொழி C) Language offered under Part – I	ஈ) பயிற்று மொழி d) Medium of instruction
CHEMISTRY	--	ENGLISH

10. கல்லூரிக்குச் செலுத்த வேண்டிய கட்டணத் தொகை அனைத்தையும் மாணவர் செலுத்தி விட்டாரா? Whether the Student has paid all the Fees due to the College	:	YES	
11. மாணவர் படிப்புதவித் தொகை அல்லது கல்விச் சலுகை எதுவும் பெற்றவரா? (அதன் விவரத்தை குறிப்பிடுக) Whether the student was in receipt of any Scholarship (Nature of the Scholarship to be specified) or any Education Concessions.	:	NO	
12. மாணவர் கல்வியாண்டில் மருத்துவ ஆய்வுக்குச் சென்றாரா? (முதல்தடவை அல்லது அதற்கு மேல் குறிப்பிட்டு எழுதவும்) Whether the student has undergone medical Inspection if any, during the academic year (first or repeat to be Specified)	:	YES	
13. மாணவர் கல்லூரியை விட்டு விலகிய நாள் Date on which the student actually left College	:	16.03.2020 (COVID-19)	
14. மாணவரின் ஒழுக்கமும் பண்பும் The Students Conduct and Character	:	**GOOD**	
15. பெற்றோர் அல்லது பாதுகாவலர் மாணவரின் மாற்றுச் சான்றிதழ் கோரி விண்ணப்பித்த நாள் Date of Which application for Transfer Certificate was made on behalf of the student by his Parent or guardian	:	06.11.2020	
16. மாற்றுச் சான்றிதழின் நாள் (Date of the Transfer Certificate)	:	11.11.2020	
17. படிப்புக் காலம் (Course of study)	:	(2) TWO YEARS	

கல்லூரியின் பெயர் Name of the College	கல்வி ஆண்டுகள் Academic Year	படித்த வகுப்பு Classes studied	முதல் மொழி First Language	பயிற்று மொழி Medium of Instruction
ஜி.டி.என். கலைக் கல்லூரி (தன்னாட்சி) திண்டுக்கல்	2018 - 2020	M.Sc. CHEMISTRY	--	ENGLISH

18. கல்லூரி முதல்வரின் கையொப்பம் (நாள் மற்றும் கல்லூரி முத்திரையுடன்) Signature of the principal with date and, with College seal   :

PRINCIPAL
G.T.N. ARTS COLLEGE,
DINDIGUL-5

குறிப்பு : 1) இச்சான்றிதழில் திருத்தல் மற்றும் நம்பகமற்ற அல்லது மோசடியான திருத்தங்கள் இருப்பின் இச்சான்றிதழை ரத்து செய்ய வழிவகுப்பதாகும்.
2) கல்லூரி முதல்வரால் கையினால் கையொப்பமிட வேண்டும். பதிவு செய்யப்பட்ட கையொப்பங்கள் சரியானவை என்பதற்கு அவர் பொறுப்பாவார்.
3) பெற்றோர் அல்லது பாதுகாவலர் அளிக்கும் உறுதிமொழி "மேலே பதிந்த வரையிலுள்ள இனங்களுக்கெனப்பதிவு செய்யப்பட்டுள்ள விவாங்கள் சரியானவை என்றும் எதிர்காலத்தில் அவற்றில் மாற்றம் எதுவும் கேட்க மாட்டேன் என்றும் உறுதியளிக்கின்றேன்."

பெற்றோர் அல்லது பாதுகாவலரின் கையொப்பம்
(Signature of the Parent / Guardian)

आयकर विभाग
INCOME TAX DEPARTMENT

भारत सरकार
GOVT. OF INDIA

स्थायी लेखा संख्या कार्ड
Permanent Account Number Card

DATPG6066G

नाम / Name
GOWRI PRIYA M

पिता का नाम / Father's Name
MURUGAN

जन्म की तारीख /
Date of Birth
20/05/1998

M. Gowri Priya.
हस्ताक्षर / Signature

25072019

இந்திய தேர்தல் ஆணையம்
Election Commission of India

வாக்காளர் புகைப்பட அடையாள அட்டை ELECTOR PHOTO IDENTITY CARD

UJV1299395

கௌரி பிரியா

வாக்காளரின்:
பெயர் **Gowri Priya**

**Elector's :
Name** முருகன்

உறவினரின்: **Murugan**
பெயர்

**Relation's :
Name**

भारत निर्वाचन आयोग

R.Dis.............../9   dt.

DNC

சான்றிதழ் எண் :
Certificate No.

438501

மாவட்டக் குறியீடு எண் :
District Code | 2 | 9 |

வட்டக் குறியீடு எண் :
Taluk Code | 0 | 3 |

இராமக் குறியீடு எண் :
Village Code | 0 | 2 | 2 |

சாதிச் சான்றிதழ்
COMMUNITY CERTIFICATE

தேனி மாவட்டம் ஆண்டிபட்டி வட்டம்
மயிலாடும்பாறை கிராமம்/நகரம் திரு/திருமதி/செல்வி
செல்வன் கௌரிப்பிரியா தகப்பனார்/கணவர்
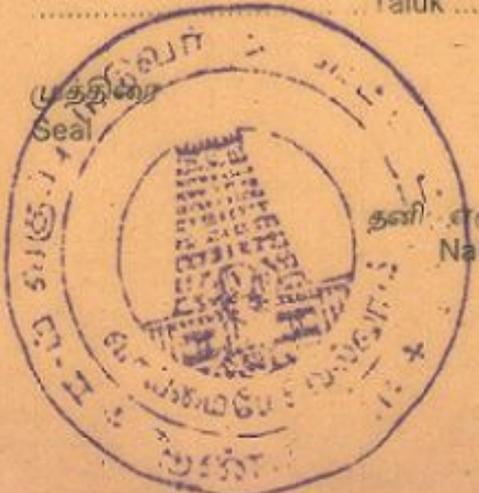பெயர் முருகன்
காந்த் பிரமணைக்கேளார்

வகுப்பைச் சார்ந்தவர், அரசு ஆணை நிலை எண் எண். 28 பிற்பட்ட மற்றும்
மிகவும் பிற்பட்ட பிரிவின் நலத்துறை நாள் 19-7-1994 வரிசை எண் 229 படி
சீர் மரபினர் பிரிவினைச் சார்ந்தவர் எனச் சான்றளிக்கப்படுகிறது.

This is to certify that...Son / Daughter

of Thiru...of

..................................Village / Town,.................................Taluk.

....................District of the State of Tamil Nadu belongs to

................................Community, which is recognised as a

Denotified Community as per Government Order (Manuscript Series) No. 28,
Backward Classes and Most Backward Classes Welfare dated 19th July 1994,
vide Serial No

2 இது /திருமதி பெயரண்ட செல்வி கௌரிப்பிரியா
என்பவரும் அவருடைய குடும்பத்தினரும் தமிழ்நாட்டில் தேனி
மாவட்டத்தில் ஆண்டிபட்டி வட்டத்தில் மயிலாடும்பாறை
கிராமத்தில் தகராறு வழக்கு பேர்கள் எனச் இறது.

2. It is certified the u/Tmt./Selvan/Selvi...............................and

his/her family ordinarily reside(s) at....................................age/Town

...........................Taluk.......................................Nadu.

முத்திரை
Seal

கையொப்பம் :
Signature

நாள் :
Date   Head Quarters Deputy Tahsildar
              ANDIPATTI.

தனி எழுத்துக்களில் பெயர் :
Name in Capital Letters

பதவிப் பெயர்
Designation

21.7.06