



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
Sivakasi**

(Affiliated to Madurai Kamaraj University, Reaccredited with "A" Grade by NAAC,
College with Potential for Excellence by UGC & Mentor Institution under UGC PARAMARSH)

NAAC SSR Cycle IV (2015-2020)

3.7. COLLABORATION

3.7.1. COLLABORATIVE ACTIVITIES

RESEARCH

2017-2018




**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)


**Title of the Collaborative Activity : Seminar on Reflections of 20th Century in
Tamil & English Literatures**


**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN(Autonomous)
SIVAKASI .**
(An Autonomous Institution, Affiliated to Madurai Kamaraj University Nationally Re-accredited with 'A' GRADE by
NAAC College with Potential for Excellence by UGC)




Golden Jubilee Celebrations
Today's Engagement

Date : 24.08.2017
Time : 1.30 pm – 3.30 pm
Programme : Inter-departmental Seminar
Beneficiaries : PG Students of Tamil & English departments
Organizer : Department of Tamil & English
Venue : S.F.R College for Women, Sivakasi
Topic : The themes dealt in 21st century fictions
21ஆம் நூற்றாண்டின் நாவல் இலக்கிய பாடுபொருள்


Co-ordinators


Information and Publicity Cell


Principal
Dr. D. SASIREKA
PRINCIPAL,
The Standard Fireworks Rajaratnam
College for Women,
SIVAKASI.

தி ஸ்டான்டர்டு ஃபயர்ஓர்க்ஸ் இராஜரத்தினம் மகளிர் கல்லூரி, (தன்னாட்சி)

ஆற்றல்சால் கல்லூரி, தேசியத் தர நினைபக் குழுவின் மறுமதிப்பீட்டில் 'A' தரம் பெற்றது

சிலகாசி

துறைஇணைவுச்செயல்பாடு - ஒருநாள் கருத்தரங்கம்

செய்தி அறிக்கை

சிலகாசி, எஸ்.எஃப்.ஆர்.மகளிர் கல்லூரியின் தமிழ்த்துறையினர் 24.08.2017 அன்று "தமிழ்-ஆங்கில இலக்கியங்களில் இருபத்தொன்றாம் நூற்றாண்டுப்பதிவுகள்" என்ற தலைப்பில் மாநில அளவினான ஒருநாள் கருத்தரங்கம் நடத்தினர். கல்லூரி முதல்வர் முனைவர் தசசிரேகா அவர்கள் நிகழ்வுக்குத் தலைமை தாங்கினார். கருத்தரங்க ஒருங்கிணைப்பாளரும் தமிழ்த்துறை உதவிப்பேராசிரியருமான திருமதி வி அன்னபாக்கியம் அவர்கள் ஆய்வாளர்களை வரவேற்று உரையாற்றினார். பல்வேறு கல்லூரிகளில் இருந்து வந்திருந்த ஆங்கிலம் மற்றும் தமிழ்த்துறை சார்ந்த ஆய்வு மாணவர்களும் கருத்தரங்கம் இனிதே நடைபெற்றது. சிலகாசி அய்யநாடார் ஜானகிஅம்மாள் கல்லூரியின் ஆங்கிலத்துறை உதவிப்பேராசிரியர் முழுவேந்தன் அவர்கள் கருத்தரங்க அமர்வுத்தலைவராகப் பொறுப்பேற்று ஆய்வுக்கட்டுரைகளுக்கு மதிப்புரை வழங்கிச் சிறப்பித்தார். பல்வேறு கல்லூரிகளைச் சார்ந்த தமிழ் மற்றும் ஆங்கிலத்துறை ஆய்வாளர்கள் இருபத்தொன்றாம் நூற்றாண்டின் நிகழ்வுகளை இலக்கியப் படைப்புக்கள் எங்ஙனம் பிரதிபலிக்கின்றன என்பதனை ஆய்வியல் கோட்பாடுகளுடன் இணைத்து ஆய்வுக்கட்டுரைகளை வழங்கினர். தமிழ்த்துறை உதவிப்பேராசிரியர் முனைவர் பமீனாட்சி அவர்கள் நன்றி நலில கருத்தரங்கம் நிறைவுற்றது. தமிழ்த்துறைத்தலைவர் முனைவர் பா.பொன்னி அவர்கள் இக்கருத்தரங்கினை நன்முறையில் ஏற்பாடு செய்திருந்தார். இக்கருத்தரங்கில் தமிழ்த்துறை மாணவியர் மட்டுமின்றி பிறகல்லூரி தமிழ் மற்றும் ஆங்கிலத்துறை சார்ந்த 35 ஆய்வு மாணவர்களும் 14 பேராசிரியர்களும் கலந்து கொண்டு பயன் அடைந்தனர்.

M. Ponni
ஒருங்கிணைப்பாளர்

Dr. B. Ponni
தமிழ்த்துறைத் தலைவர்

M. Poornima
முதல்வர்
முதல்வர்

Dr. B. PONNI
Head & Asst. Professor in Tamil,
The Standard Fireworks Rajaratnam
College for Women, (Autonomous)
Sivakasi - 626 123.

ஸ்டான்டர்டு ஃபயர் ஓர்க்ஸ்,
இராஜரத்தினம் மகளிர் கல்லூரி,
சிலகாசி.





**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

Title of the Collaborative Activity : Paper Publication

Accepted Manuscript

Incorporation of NH_4Br in Tamarind Seed Polysaccharide biopolymer and its potential use in electrochemical energy storage devices

M. Premalatha, T. Mathavan, S. Selvasekarapandian, S. Selvalakshmi, S. Monisha



PII: S1566-1199(17)30414-7
DOI: 10.1016/j.orgel.2017.08.017
Reference: ORGELE 4264

To appear in: *Organic Electronics*

Received Date: 27 April 2017
Revised Date: 29 July 2017
Accepted Date: 16 August 2017

Please cite this article as: M. Premalatha, T. Mathavan, S. Selvasekarapandian, S. Selvalakshmi, S. Monisha, Incorporation of NH_4Br in Tamarind Seed Polysaccharide biopolymer and its potential use in electrochemical energy storage devices, *Organic Electronics* (2017), doi: 10.1016/j.orgel.2017.08.017.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

Title of the Collaborative Activity : Paper Publication

Ionics
https://doi.org/10.1007/s11581-017-2417-y

ORIGINAL PAPER

CrossMark

Effect of ethylene carbonate plasticizer on agar-agar: NH_4Br -based solid polymer electrolytes

S. Selvalakshmi^{1,2,3} · T. Mathavan¹ · S. Selvasekarapandian^{3,4} · M. Premalatha¹

Received: 30 August 2017 / Revised: 30 November 2017 / Accepted: 23 December 2017
© Springer-Verlag GmbH Germany, part of Springer Nature 2018

Abstract
Proton-conducting polymer electrolytes based on biopolymer, agar-agar as the polymer host, ammonium bromide (NH_4Br) as the salt and ethylene carbonate (EC) as the plasticizer have been prepared by solution casting technique with dimethylformamide as solvent. Addition of NH_4Br and EC with the biopolymer resulted in an increase in the ionic conductivity of polymer electrolyte. EC was added to increase the degree of salt dissociation and also ionic mobility. The highest ionic conductivity achieved at room temperature was for 50 wt% agar/50 wt% NH_4Br /0.3% EC with the conductivity $3.73 \times 10^{-4} \text{ S cm}^{-1}$. The conductivity of the polymer electrolyte increases with the increase in amount of plasticizer. The frequency-dependent conductivity, dielectric permittivity (ϵ'') and modulus (M'') studies were carried out.

Keywords Biopolymer · Plasticizer · AC impedance spectroscopy

Introduction
Fenton and Wright in 1973 were the pioneers of solid polymer electrolytes (SPEs) who worked with polyethylene oxide (PEO) and alkali metal salts. Since then, the field of solid polymer electrolytes gained a great deal of attention of the researchers. The main reason behind this was the advantages of using SPEs in solid-state devices like batteries, fuel cells, sensors, electrochromic displays and solar cells [1–3]. Other advantages of SPEs over conventional liquid electrolytes are flexibility, molded to desired shape, mechanical strength, leak-proof and has good electrode-electrolyte contact. Previously, researchers' interests were towards the development of solid polymer electrolytes based on synthetic polymers like PVA [4], PVP [5], PAN [6], PMMA [7] and PVC [8] which exhibited good conductivity values. But currently, this has been adversely swapped with the biodegradable type through the employment of natural polymers. This effort has been undertaken to make the inventions go greener with the environment. Natural or biopolymers possess some outstanding criteria: (i) found in abundance, (ii) sustainable owing to its renewable nature that does not deplete as the petrochemical source, (iii) cheap in cost since it is a naturally occurring polymer and (iv) biodegradable nature that makes it more environmental friendly [9]. Several renewable resource-based biopolymers are suitable to be used as host polymer in the polymer electrolytes, such as starch [10], cellulose [11, 12], chitosan [13], carrageenan [14] and agar [15, 16]. Among all the biopolymers, agar-agar has gained a great attention due to its best film-forming capability. Agar is an unbranched polysaccharide, which is extracted from the family of seaweeds (Rhodophyceae) having the structure of 1,4-linked-3,6-anhydro- α -L-galactopyranose. Agar forms a slightly viscous solution on dissolving in hot water and then becomes a thermoreversible gel when the temperature is brought down. It is widely used in the food industry, in cosmetics and for microbiology. Applications include use as a

This paper has been presented at the "1st World Conference on Solid Electrolytes for Advanced Applications: Games and Competitions" on September 6–9, 2017 at Pudukkottai, India.

✉ T. Mathavan
tjmathavan@gmail.com

✉ S. Selvasekarapandian
selvasekarapandian@rediffmail.com

¹ Department of Physics, N.M.S.S.V.N College, Nagamalai, Madurai, Tamil Nadu 625019, India

² Department of Physics, The Standard Fireworks Rajaratnam College for Women, Sivakasi, Tamil Nadu, India

³ Materials Research Centre, Coimbatore, Tamil Nadu, India

⁴ Department of Physics, Bharathiar University, Coimbatore, Tamil Nadu, India

Published online: 08 January 2018

Springer



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

Title of the Collaborative Activity : Paper Publication

A study of electrochemical devices based on Agar-Agar-NH₄I biopolymer electrolytes

S. Sevalakshmi, T. Mathavan, S. Selvasekarapandan, and M. Premalatha

Citation: AIP Conference Proceedings **1942**, 140019 (2018); doi: 10.1063/1.5029150

View online: <https://doi.org/10.1063/1.5029150>

View Table of Contents: <http://aip.scitation.org/loc/apc/1942/1>

Published by the American Institute of Physics

A Study Of Electrochemical Devices Based On Agar-Agar-NH₄I Biopolymer Electrolytes

S.Selvalakshmi^{1,2}, T.Mathavan^{1,a}, S.Selvasekarapandian³, M.Premalatha¹

¹Department of Physics, N.M.S.S.V.N College, Nagamalai, Madurai, Tamilnadu.

²Department of Physics, The S.F.R. College for Women, Sivakasi, Tamilnadu.

³Materials Research Centre, Coimbatore, Tamilnadu.

Corresponding author: a) tmathavan@gmail.com

Abstract. A polymer electrolyte system has been developed using a biopolymer namely, Agar-Agar in combination with ammonium iodide in different weight percentages by solution casting technique. The films were characterized electrically by AC Impedance Spectroscopy for its conductivity. The highest conductivity achieved at room temperature was for 50 wt. % agar-agar: 50 wt. % NH₄I with a conductivity value of $1.20 \times 10^{-4} \text{ Scm}^{-1}$. An electrochemical cell was fabricated in the configuration of Zn+ZnSO₄.7H₂O + graphite (anode) | 50 wt. % (Agar-agar): 50 wt. % NH₄I (electrolyte) | PbO₂+V₂O₅ + graphite (cathode) and it produced a maximum open circuit voltage of 1.73 V. A single PEM fuel cell was constructed with the highest conducting sample (50 wt. % (Agar-agar): 50 wt. % NH₄I) and it exhibited an output voltage of 408mV.

INTRODUCTION

A new type of non-conventional energy source is essential in day-to day life to meet the challenges like power demand and environmental pollution. In recent years, proton exchange membrane fuel cells (PEMFCs) have been identified as promising power sources for the vehicular transportation and for other applications requiring a clean, quiet, and portable power. The synthesis and characterization of novel membranes for solid state electrochemical devices had become an active area of research in order to develop cheaper and more versatile solid polymer electrolytes [1]. Natural polymers electrolytes, such as hydroxyethyl cellulose [2], agar [3] and gelatin [4] have become substitutes for synthetic polymer electrolytes. Agar, a biopolymer is being extensively used as gelling, stabilizing and encapsulating agent in pharmaceutical and biotechnological industries. It is composed of alternating 1,3-linked d-galactose and 1,4-linked 3,6 anhydro-l-galactose units. Agar has been employed in the preparation of salt bridges, in construction of some reference electrodes in the electrochemical studies [5]. Fabrication of Agar/Biopolymer Blend Aerogels in Ionic Liquid and Co-Solvent mixture has been reported by Ahmad Adlie Shamsuri et al [6]. L. An et al have used agar-agar, glutaraldehyde with acetic acid mixed solution as a binder for their electrode which is used for their Direct Ethanol fuel cells [7]. The present work is concerned with solid-state electrochemical cells and fuel cell which are based on Agar+NH₄I electrolyte films.

Experimental details

Agar-Agar of average molecular weight 120000 (Manufactured by Condo-Forja, 9 Madrid, Spain, Sold by: Colloids Impex Pvt Ltd, India) and NH₄I (Spectrum) were used in the present work. The polymer electrolytes agar doped with NH₄I in different molar ratios such as (100:0), (90:10), (80:20), (70:30), (60:40), (50:50) and (40:60) were prepared by solution-casting technique using distilled water as solvent. Agar was dissolved in boiling water and NH₄I was added and magnetically stirred for 2h until homogeneous solution was obtained. The solution was then transferred in glass petri dishes, and the samples were dried in hot air oven at 50C. Free standing agar films were obtained after 48 h. Electrical measurements were performed on the polymer electrolyte films in the frequency



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

Title of the Collaborative Activity : Paper Publication

**Structural and electrical characterization of tamarind seed polysaccharide (TSP) doped
with NH_4HCO_2**

M. Premalatha, T. Mathavan, S. Selvasekarapandian, and S. Selvalakshmi

Citation: AIP Conference Proceedings **1942**, 070005 (2018); doi: 10.1063/1.5028803

View online: <https://doi.org/10.1063/1.5028803>

View Table of Contents: <http://aip.scitation.org/loc/apc/1942/1>

Published by the American Institute of Physics

Structural and Electrical Characterization of Tamarind Seed Polysaccharide (TSP) doped with NH_4HCO_2

M. Premalatha^{1,2}, T. Mathavan^{1,3}, S. Selvasekarapandian^{2,b)}, S. Selvalakshmi^{1,3}

¹Research Department of Physics, N.M.S.S.V.N.College, Nagamalai, Madurai- 625 019, India.

²Materials Research Center, Coimbatore-641 045, India.

³S.F.R. College for Women, Sivakasi-626 123, India.

corresponding author: ^{a)}sekarapandian@rediffmail.com, ^{b)}tmathavan@gmail.com

Abstract. In the modern era, development of electrochemical energy devices such as batteries, fuel cells and supercapacitors gain attention due to the deficiency of renewable energy resources. More specifically, proton conducting materials create prime interest in the development of electrochemical devices. In this regard, a novel proton conducting biopolymer electrolyte based on Tamarind Seed Polysaccharide (TSP) was synthesized with different concentration of ammonium formate (NH_4HCO_2). The amorphous nature of the polymer electrolytes has been identified by XRD technique. The observed ionic conductivity values reveal that the biopolymer containing 1 g TSP: 0.4 g NH_4HCO_2 has highest ionic conductivity $1.23 \times 10^{-3} \text{ S cm}^{-1}$.

INTRODUCTION

Energy is essential to our society to ensure our quality of life. It is impossible to imagine modern society without electrochemical power sources. The electrochemical power sources include batteries, fuel cells and super capacitors etc [1]. Polymer electrolyte is an indispensable part of batteries which also acts as a separator. Traditional batteries use liquid electrolytes such as acid or alkali solution. However, a liquid electrolyte impedes its further applications due to leakage, corrosion and internal short circuiting of electrolytes. In that aspect, we require a solid polymer electrolyte to overcome the shortcomings of liquid electrolytes. The main concern for achieving the solid polymer electrolyte is the high ionic conductivity at ambient temperature, good mechanical strength and the ability to form good interfacial contacts with electrodes. The main goal is now produce the polymer electrolyte with the above mentioned required properties. Currently, polysaccharide based biopolymer electrolytes have gathered much attention among the researchers. Polysaccharides are formed by a glycosidic linkage of monosaccharide units. Polysaccharides are more hydrophobic if they have a greater number of internal hydrogen bonds and as their hydrophobicity increases there is less direct interaction with water. The main attractive properties of polysaccharides based biopolymers are their easy film forming nature, good mechanical strength and being environmentally green. There has been plenty of works have been done using biopolymers which have been supported by our literature survey. Shukur et al and Majid et al have developed a proton conducting biopolymer electrolytes based on Starch-chitosan blend chitosan- NH_4NO_3 complex respectively [2,3]. Similarly natural polymers such as cellulose and its derivatives [4], pectin [5], carboxy methyl cellulose [6] have been studied extensively by many authors.

Among natural polymers, Tamarind seed polysaccharide (TSP) is a distinct biopolymer having excellent properties such as good gelling agent, easy film forming capacity etc. It is a highly branched anionic polysaccharide with more number of polar groups. To the best of our knowledge, the polymer electrolyte for electrolyte device applications using TSP as host polymer have not been reported except Premalatha et al [7].

The main motive of this paper is to provide the study of a novel proton conducting biopolymer electrolyte based on TSP. Our study shows that, the ionic conductivity of pure TSP is in the order of $10^{-5} \text{ S cm}^{-1}$ hampers its application in electrochemical devices. However, the ionic conductivity of pure TSP is improved by incorporating different concentration of ammonium formate (NH_4HCO_2). Ammonium salts are considered to be a good proton donor to the polymer matrix, since three protons of



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

Title of the Collaborative Activity : Paper Presentation

**BUSINESS MANAGEMENT PRACTICES IN
EMERGING INDIAN ECONOMY**

EDITORS

Dr.R.NEELAMEGAM
Senior Professor - ICSSR

*Department of Management Studies
VHNSN College (Autonomous) Virudhunagar
TamilNadu*

Dr.B.PAVALA KUMAR
Associate Professor & Head

*Department of Management Studies
VHNSN College (Autonomous), Virudhunagar,
TamilNadu*



V.H.N.SenthikumaraNadar College
(Autonomous & Reaccredited with 'A' grade by NAAC)
Virudhunagar

CONTENTS

FINANCE			
S.No	Paper Title	Authors	Page No
1	A perspective of corporate sustainability reporting and auditing	Dr.R.Neelamegam Dr.R.Parameswaran	F1
2	Opinion of customers about banking services – with special reference to Shillong	K.K.Elizabeth	F14
3	Measuring finance inclusion in Srivilliputtur taluk, Tamilnadu	R.MuniSelvam Dr.R.Neelamegam	F24
4	Towards cashless and paperless banking in India	S.Kumaresan Dr.R.Neelamegam	F35
5	Micro finance as an engine for inclusive growth in India	S.Kumaresan Dr.R.Neelamegam	F45
⑥	Perception of investors on service quality of bancassurance: a study with special reference to SBI branch at Sivakasi	Dr.K.PushpaVeni A.Muthumari	F59
7	Women entrepreneurship through green banking in India	Dr.K.Karthikeyan M.Dinesh Kumar	F67
8	A study on customers' perception about electronic banking in Madurai district	T.Suguna Dr.Sekar Subramanian	F77
HUMAN RESOURCE			
1	Satisfaction impact of service quality of management faculty on students	Dr.Sahul Hameed Dr.R.Neelamegam	H1
2	Problems and prospects of fire work industries in Virudhunagar district	R.K.Manju@Mahalakshmi Dr.K.Selvarani	H11
3	Mergers and acquisition – a study with reference to human resource management	Dr.K.Karthikeyan V.Hema	H20
4	A study on demographic changes in India: challenges and opportunities in a changing world	Dr.V. Uma Maheswari	H29
5	A study on worker's absenteeism with special reference to Madhura coats Pvt. Ltd, Madurai	M.Anitha	H37
6	Analysis of safety measurement techniques in fireworks industries in Sivakasi, Virudhunagar district of Tamilnadu	P.Sonika Dr.P.Shyamala	H42
7	Human power planning and practices in selected knitting mills in Tiruppur district of Tamil Nadu	Dr. C. Subramanian G. Ganeshkumar Dr.B.Narayanan	H47
8	A study on patient's satisfaction towards services offered at Sankaranethralaya, a unit of medical research foundation Chennai	Dr.B.Pavala Kumar T. Aruna	H56
9	Factors affecting organizational citizenship behaviour of corporate sector	S.Vignesh Kumar Dr.S.RajaRajeswari	H62
10	A study on employees' engagement in Pommys garments India (p) limited, Dhalavaipuram, Tamilnadu	Dr.M.Balaji V.K.L.Madhumitha	H70

**PERCEPTION OF INVESTORS ON SERVICE QUALITY OF
BANCASSURANCE: A STUDY WITH SPECIAL REFERENCE TO
SBI BRANCH AT SIVAKASI**

Dr. K. PUSHPA VENI

Assistant Professor,
Department of Business Administration,
V.H.N.S.N College (Autonomous),
Virudhunagar.

Mrs.A.MUTHUMARI

Assistant Professor,
Department of Business Administration,
S.F.R College College for Women,
Sivakasi.

ABSTRACT

Bancassurance in its simplest form is the distribution of insurance products through the banks distribution channels. In concrete terms, bancassurance which is known as all finance constitutes a package of financial services that can fulfill both banking and insurance needs, at the same time. The motives behind bancassurance also vary. For banks, it is the means of products diversification and source of additional fee income while Insurance companies see it, as a tool for increasing their market penetration and premium turnover. The customer sees bancassurance as a bonanza in terms of reduced price, high- quality product and delivery at the doorsteps. Both insurers as well as bankers view the cross selling relationship involved in bancassurance as part of a long term strategy. Accordingly, they are adapting themselves organizationally. So, as achieve the long term bancassurance goals in the best possible manner. The present study deals with all the above aspects.

Keywords: Bancassurance, service quality



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

Title of the Collaborative Activity : Paper Presentation

**INNOVATIVE ADVANCES AND CHALLENGES IN
MANAGEMENT**

Edited by

Dr. S. Sekar Subramanian

Dr. G. Murugesan



Virudhunagar Hindu Nadars' Senthikumara Nadar College (Autonomous)

[Re-accredited with 'A' Grade by NAAC]

Virudhunagar – 626001.

support@vhnsnc.edu.in

www.vhnsnc.edu.in

32.	CUSTOMER'S PREFERENCE FOR MICRO INSURANCE: A STUDY WITH REFERENCE TO KOLLAM DISTRICT, KERALA Dr. R. NEELAMEGAM and Dr. A.S. SHAJI	120
33.	IMPACT OF SELF-HELP GROUPS ON THE EMPOWERMENT OF SCHEDULED CASTE WOMEN IN TAMIL NADU Dr. J. BALAMURUGAN and L. PRIYADHARSINI	123
34.	ROLE OF PEERS IN MOTIVATING COLLEGE TEACHERS: A SPECIAL REFERENCE TO AIDED COLLEGES IN VIRUDHUNAGAR & MADURAI M. JOTHILAKSHMI and Dr. S. SEKAR SUBRAMANIAN	129
35.	RECENT CHALLENGES FACED BY MANUFACTURING INDUSTRIES Dr. G. SENTHIL and VE. VIJAYALAKMI	133
36.	A STUDY ON CONSUMERS' OPINION TOWARDS BRANDED DHOTIS IN KOVILPATTI Dr. S. JEYAKUMAR and M. MAHARAJA	136
37.	A STUDY ON PEOPLE'S SATISFACTION WITH SERVICES OF E-GOVERNANCE CENTRES IN KOVILPATTI AND ITS ENVIRONS R. THANGA GANESH, Dr. K. PUSHPA VENI and Dr. R. NEELAMEGAM	140
38.	A STUDY ON ONLINE PURCHASE BEHAVIOUR OF YOUNG MOTHERS' TOWARDS BABY CARE PRODUCTS S. AMSHA LEKHA and Dr. S. SEKAR SUBRAMANIAN	146
39.	INVESTOR PERCEPTION TOWARDS MUTUAL FUND-A STUDY WITH REFERENCE TO SHAREKHAN CHENNAI V. VENKATRAGAVAN and Dr. M. CHANDRAN	150
40.	PERCEPTION TOWARDS ATM SERVICES IN TIRUCHENDUR TALUK Dr. V. VARALAKSHMI and M. ELIZABETH	156
41.	INDIAN STOCK MARKET BEHAVIOR DURING THE PERIOD OF TERRORISM ATTACK R. MUNEESWARAN, C. HARIHARAN and GAYATHRI MAHALINGAM	160
42.	THE PERCEPTION AND EFFECTIVENESS OF DIGITAL MARKETING AMONGST THE MARKETING PROFESSIONALS IN MADURAI CITY P. PATHAMUTHU	163
43.	FINANCIAL INCLUSION MEASURES OF BANKING SECTOR N. VIJAYALAKSHMI	167
44.	MICRO FINANCE AND ITS MULTIFACETS Dr. J. JAYALAKSHMI	172
45.	ATTITUDE OF DEALERS TOWARDS MARKETING OF CELLULAR PHONE SERVICES Dr. A. RAMA and D. JEYA PRIYA	177
46.	A STUDY ON CUSTOMER SATISFACTION TOWARDS BANKING SERVICES OF TMB BRANCH AT RAJAPALAYAM A. MUTHUMARI and Dr. K. PUSHPA VENI	181
47.	A STUDY OF BEHAVIOUR OF CONSUMER TOWARDS ONLINE SHOPPING V. THANASELVI SUBA	186
48.	PERSONALITY FACTORS CAUSING BY STRESS AMONG SCHOOL TEACHERS - A STUDY WITH REFERENCE TO SIVAKASI M. ANDAL	190

A STUDY ON CUSTOMER SATISFACTION TOWARDS BANKING SERVICES OF TMB BRANCH AT RAJAPALAYAM

A. MUTHUMARI, Assistant Professor, Department of Business Administration, The S.F.R. College for Women, Sivakasi.

Dr. K. PUSHPA VENI, Assistant Professor, Department of Business Administration, V.H.N.S.N.College, Virudhunagar.

Abstract - The purpose of this research article is to evaluate the customers' satisfaction towards the banking services rendered by the TMB branch at Rajapalayam. The author conducted a literature search on the banking needs of the inhabitants of research areas. The study also focused on various factors that determine the customers' satisfaction like employees' behaviour, banking services, banking performance, various tools like percentage Analysis, Chi- Square Test and Weighted Average. The result showed that there is a significant relationship between the variable of customer satisfaction and age of the respondents and the customers have a medium level of satisfaction. The TMB could consider the researcher's suggestions in order to alleviate its reputation and customer satisfaction.

Keywords - Customer satisfaction, Banking Services and services of TMB.

INTRODUCTION

In ancient days, the main function of banks was granting loans to individuals or the state in times of crisis. Banking in India originated in the last decades of the 18th century. The first banks were the General Bank of India, which started in 1786 and the Bank of Hindustan. The oldest bank in existence in India is the State Bank of India, a government owned bank that traces its origin back to June 1806 and that is the largest commercial bank in the country. The passing of the Joint Stock Company act in 1850 greatly helped in the establishment of many commercial banks. Later in 1921, the Imperial Bank of India and in 1935 the Reserve Bank of India were also established. After independence in 1947, the RBI was nationalized enabling it with broader power. The government of India nationalized 14 large commercial banks in 1969 and six more banks were added to the list in 1980.

Today customers are now becoming increasingly conscious of their rights and are demanding ever more than before. The recent trends show that most of the banks are shifting from a "product -centric model" to a "customer -centric model" since customer satisfaction has become one of the major determinations of business growth. In this context, prioritization of performance and close monitoring of the customer satisfaction are indispensable.

LITERATURE REVIEW

Mitra (2007),¹ in his article, claimed that financial sectors reforms have brought tremendous changes in the banking sector. He revealed that the essence of financial liberalization lies in three sets of measures: firstly, to open up a country to the free flow of international finance; secondly, to remove controls and restrictions on the functioning of domestic banks and other financial institutions so that they get properly integrated as participants in the world financial markets; and thirdly, to provide autonomy from the government to central bank so that its supervisory and regulatory role vis-à-vis the banking sector is disassociated from the political process, and hence, from any accountability to the people. The author mentioned that the financial sector reforms have stimulated higher competition, convergence and consolidation in Indian banking industry.

Nair (2007),² emphasized that the transformation during the last decade in the Indian banking industry has made it stronger, cleaner, efficient, disciplined and responsive and lot more competitive. The Indian banking industry may now compare itself reasonably well with rest of the Asia in areas like growth, profitability and low rate of NPAs. Few banks have even gone ahead with innovations, growth and value creation. The banking sector which had failed to respond to the changing global market conditions is a big hurdle in the development of financial sector of that country/nation. In India, banking sector has been a significant driver of GDP growth and any failure in this sector adversely affected the speed of growth engine of the country. A suitable knowledge management framework with appropriate online educational initiatives can update and equip the employees across the bank-extremely cost-effective too. This should help the banks to reap rich dividends on return on relationship by transforming them as a financial advisor, a trustworthy friend, philosopher and guide to the customers.

Rao (2007),³ in his article titled, "Reforms in Indian Banking Sector: Evaluation Study of the Performance of Commercial Banks" found that the nationalization process achieved the widening of banking industry in India. By the beginning 1990, the social banking goals set for the banking industry and most of the PSBs unprofitable. The resultant 'Financial repression' led to the declining in productivity and efficiency, and erosion of profitability of the banking sector in general. The researcher revealed that financial



**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**

(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

Title of the Collaborative Activity : Paper Presentation

**WOMEN EMPOWERMENT AND
ENTREPRENEURSHIP**



Edited by

Dr. P.Sundara Pandian

Dr. J.Kamatchi Eswaran

Dr. S.Muthulakshmi



V.H.N.SENTHIKUMARA NADAR COLLEGE (Autonomous)

DEPARTMENT OF COMMERCE

(Accredited with 'A' Grade by NAAC)

VIRUDHUNAGAR - 626 001

TAMILNADU

February, 2018

19.	Prospects and Problems of Social Entrepreneurship in India - <i>R.Sivajothi</i>	86
20.	A Study on Government Sector Initiatives Towards E-Governance in India - <i>Dr.S.Raja & V.Sukthikumar</i>	89
21.	E-Governance: Past, Present and Future in India - <i>Dr. V. Manohar & P.Uma Shanthi</i>	92
22.	E-Governance in Rural India - <i>Dr.T.T.Karthik & G.Chakravarthi Kousik</i>	99
23.	A Study on Peoples' Perception about Rendering Services In E-Governance Centres in Kovilpatti and its Environs - <i>Dr.K.PushpaVeni & R.ThangaGanesh</i>	104
24.	E-Governance in Digital India - Conceptual Study - <i>B. Kirubakaran & P.Muthugopi</i>	110
25.	E-Governance - A Challenge for India - <i>A.Yogapriya & A.Revathi</i>	114
26.	E-Governance in India: Opportunities and Challenges - <i>Dr. V. Manohar and G.Abinaya</i>	118
27.	E-Governance in India, Plan, Initiatives - <i>R. Maheswari</i>	120
28.	Impact of E-Governance Services - A Study with Special Reference to Rural Areas of Virudhunagar District - <i>R.K.Manju @ Mahalakshmi & Dr. K. Selvarani</i>	124
29.	Role of ICTS in Rural Development - <i>R. Maheswari</i>	128
30.	E-Governance in India - <i>Dr.A.A.Magesan & Dr.P.K.Pandiyaraj</i>	132
31.	Servqual Analysis on Customer Perception Towards Bancassurance of Public and Private Sector Banks in Viradhunagar District - <i>Dr.K.PushpaVeni & A.Muthumari</i>	137
32.	Market Potential Analysis on Lever AYUSH Product - <i>S.Anushka, V. Abirami & S. Ashika</i>	141
33.	Innovation Management in Science by New Product Development - <i>Dr.M.Balasubramanian & M.Maheswari</i>	145
34.	Market Potential Analysis of Ask (Assisted Shopping Kiosk) - <i>V. Akhila, S. Iswarva Lakshmi, S. Gowtham & Dr. R. Kanthiah Alias Deepak</i>	148
35.	Education, Economy, and Technology Development of Rural Women in India - <i>G. Rani</i>	152
36.	Women's Expertise in Bhabani Bhattacharya's Music for Mohini - <i>S. Sadha Santhosa & S. Subha</i>	155
37.	Impact of Information Technology in Indian Banking Sector - <i>Dr. S. Chandrasekaran & Mr. M. Mohan</i>	158
38.	Enhancing Women Empowerment Through Information and Communication Technology - <i>Dr P. Shanthi</i>	161

31. SERVQUAL ANALYSIS ON CUSTOMER PERCEPTION TOWARDS BANCASSURANCE OF PUBLIC AND PRIVATE SECTOR BANKS IN VIRUDHUNAGAR DISTRICT

Dr.K.PushpaVeni¹ and Mrs.A.Muthumari²

¹Assistant Professor, Department of Business Administration, VHNSN College (Autonomous), Virudhunagar,
²Assistant Professor, Department of Business Administration, The Standard Fireworks Rajaratnam College for Women,
Sivakasi.

INTRODUCTION

Bancassurance is a knot between bank and insurance company. In this model bank sells insurance product with the help of its established network of branches. However the banking sector in India now operates in a more competitive environment than ever before. Customers have a wider choice of less distinguishable products and they are much better informed. These elevate customer's expectations on how companies should care for them. In this changed environment, creating new customers and retaining the existing ones have become difficult tasks for banks.

LITERATURE REVIEW

"RBI VS IRDA: Finance minister to play peacemaker over broking licence for banks", Feb 26, 2013, Economic Times, New Delhi: The finance ministry is attempting to resolve the differences between the banking and insurance sector regulators over allowin banks to become insurance brokers. FM permits insurance companies to open branches at will in non-metro cities¹.

Monika Malik (2014), in his article titled "Bancassurance: Boon to Insurance Development" stated that opening up of insurance sector and with so many players entering the Indian Insurance Industry it is required by Insurance Companies to come up with well established infrastructure facilities with good call centre service to attract and provide information to customer regarding different good policies & their premium pay scheme. Though the speed of spread is fast, but the proper implementation of bancassurance is still facing so many hurdles because of poor manpower management, lack of call centers, and no personal contact with customers, inadequate incentives to agents and unfulfilment of other essential requirements. The bancassurance would mostly depend on how well insurers and bankers understanding is with each other and how they are capturing the opportunity and how better service providing to their customers².

Dr. Pradeep Asthana and Dr. Pooja Pandey (2015), in his article titled "An Empirical Investigation Of Changes In Banks Income By Bancassurance Business" stated that financial impact of banc-assurance business on performance of the banks and to compare the financial position of banks dealing in insurance. The author concludes that bancassurance is a petite earner for the banks but if it used effectively then this will certainly be the good source of fee-based income for banks. Growth rate of insurance income is remarkable in some of the banks so there is scope of selling bancassurance products by the banks in the long run³.

STATEMENT OF THE PROBLEM

The purpose of the research is to study the view of the customer for using bancassurance services. This study is conducted in selective public and private sector banks in virudhunagar district, tamilnadu. The respondents of the study were the customers of the banks using various bancassurance services (Whole life insurance, Endowment, Joint Life, Pension Scheme and Child life).Therefore the researcher has identified the research area to find the Customer perception of bancassurance. Therefore an attempt is made by the researcher to identify a Service Quality dimension for using Servqual Analysis of customer perception towards bancassurance of public and private sector banks in Virudhunagar district, Tamilnadu.




**THE STANDARD FIREWORKS RAJARATNAM COLLEGE FOR WOMEN (AUTONOMOUS),
SIVAKASI – 626 123.**


(Affiliated to Madurai Kamaraj University, Re-accredited with A Grade by NAAC,
College with Potential for Excellence by UGC and Mentor Institution under UGC PARAMARSH)

Title of the Collaborative Activity : Pursing Ph.D.,

Ph.D PART TIME REGISTRATION WITH M.PHIL. DEGREE



CF/3

**MADURAI KAMARAJ UNIVERSITY**
(University with Potential for Excellence)

Phone off : +91 452 2458471
Fax : +91 452 2459181
email : mkuregistrar@rediffmail.com
Palkalai Nagar, Madurai 625 021
Tamil Nadu, INDIA

Dr.G.Arumugam, M.Sc.(AS), M.B.A., Ph.D., (Paris)
REGISTRAR - IN-CHARGE

Ref. No. 92/PT/ Regn/Physics/17
(Please quote this reference No.)

Date: 10.02.2017
REGN.NO :P4838

To
The Principal,
SFR College, Sivakasi – 626 123.
Sir / Madam,

Sub: Research-Registration for Ph.D. Degree under Part - Time
Application Mrs.M.Nithya - reg.

Mrs.M.Nithya, Assistant Professor, Dept of Physics, SFR College, Sivakasi – 626 123, has been provisionally registered for the Ph.D. degree as a *Part - Time* Research Scholar from 07.01.2017. The Subject Title (@), and the School / Department / College / Institution he / she proposes for doing Ph.D. research work have been approved.

He/ She should work in the School/ / Department / College/ Institution and under the following Supervisor (*) approved for the purpose as per the Ph.D. regulations in force.

He/ She should complete the course work viz., one course work paper on Research Methodology and one course work paper (relevant to the subject paper of the research) within one year from the date of registration as mentioned under provision 6 of the Ph.D. regulations in force. The candidates with an M. Phil., degree in the relevant fields of research shall be exempted from the course work on research Methodology. He/ She should submit his/her thesis not earlier than 07.01.2019 and not later than 06.01.2022.

After completion of the course work, the Ph. D registration shall be confirmed and he/she will be permitted to undertake the research work leading to the submission of Ph. D thesis as mentioned under provision 6 of the Ph.D regulations in force.

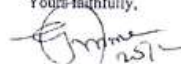
The other terms and conditions regarding change of subject/ guide/ title, submission of thesis, synopsis, duration of the research, payment of fees, Cancellation etc., are available in the University website 'www.nkuresearch.org' (vide under provision 6, 7, 8, 9, 10 and 11 of Ph.D. regulations in force).

He/She should pay the Rs. 7000/- (for Science Candidate) and Rs.5000/- (for Arts / Humanities Candidate) as Research fee and Administration fee of Rs.2500 /- on the given registration date of every year till submission of thesis. Candidate from approved Research Centres (Excluding University Departments) of this University may remit the Administration fee alone, to University. Fee for every year may be remitted within 30 days of the registration day of every year. One month grace period may be availed by the candidate by paying the penal fee of Rs.500/- . Even after this period if the fee is not paid the Registration shall stand automatically cancelled.

All the fee may be remitted into Madurai Kamaraj University Account No:1 through Online Payment of the State Bank of India / Swift Address SBININDB454 A/C @ mkuniversity (2235) beneficiary "THE REGISTRAR, MADURAI KAMARAJ UNIVERSITY"; 'Ph.D.' and the receipt may be forwarded to this office with a covering letter quoting the registration number. The candidate may be informed accordingly.

Faculty : SCIENCE
Subject : PHYSICS
Subject Title (@): "INVESTIGATION OF NONLINEAR OPTICAL SINGLE CRYSTALS BY SOLUTION

SUPERVISOR : Dr.M.Alagar, (Main Guide), Associate Professor and Head, Dept of Physics, ANJA College, Sivakasi, and Dr.B.Sundaresan(Co – Guide), Associate Professor, Dept of Physics, ANJA College, Sivakasi - 626 124.

Yours faithfully,

REGISTRAR i/c
15

Copy to: 1. The Candidate.
2. The Guide.
3. The Co – Guide.