

ESTD 1964

# **BASELIUS COLLEGE**

K. K. Road, Kottayam, Kerala

E-mail: [principal@baselius.ac.in](mailto:principal@baselius.ac.in)

[www.baselius.ac.in](http://www.baselius.ac.in)

**NAAC 4<sup>th</sup> CYCLE**







Dr. Biju Thomas  
Principal

# Baselius College

(NAAC Reaccredited @ A Grade (with CGPA 3.11) & Fully Accredited by IAO)

Kottayam, Kerala - 686 001

A Post Graduate Institution of the Orthodox Church with faculties of  
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Phone: 91-481 { 2563918 (Office)  
2565958 (Principal)  
2565958 (Fax)  
9447214457 (Mobile)

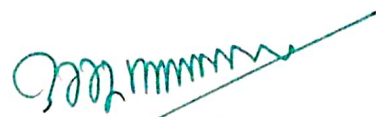
Website : [www.baselius.ac.in](http://www.baselius.ac.in)  
E-mail : [principal@baselius.ac.in](mailto:principal@baselius.ac.in)  
[bijuthomas@baselius.ac.in](mailto:bijuthomas@baselius.ac.in)

3.3.2 Number of research papers per teachers in the Journals notified on UGC website /Scopus Indexed/ Web of Science/Others during the last five years

## Consolidated number of Research Papers from 2016-21

Sl.No.	Year	Total number of Research papers
1	2016-17	26
2	2017-18	24
3	2018-19	22
4	2019-20	30
5	2020-21	26



  
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## Consolidated list of Research Papers

### 3.3.2

2019-10



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### List of Research Papers during 2019-20

Sl. No.	Title of the Paper	Name of the authors	Department	Name of the journal	Link to the paper
1	Perceptions of Salaried Class on the Covid-Driven Financial Consequences and Buyer Behavioural Changes	Dr. Manoj Narayanan K S	Commerce	Mukt Shabd Journal	<a href="http://shabdbooks.com/gallery/384-may2020.pdf">http://shabdbooks.com/gallery/384-may2020.pdf</a>
2	The Quality of the Services and Awareness Level Among the Customers of Public and Private Sector Banks in Kerala	Dr. Sheeba Joseph	Commerce	JETIR	<a href="https://www.jetir.org/papers/JETIR2003241.pdf">https://www.jetir.org/papers/JETIR2003241.pdf</a>
3	Seasonal vegetation shift and wetland dynamics in vulnerable granitic rocky outcrops of Palghat gap of Southern Western Ghats, Kerala, India.	Dr. Arabhi P.	Botany	Journal of Threatened Taxa	<a href="https://threatenedtaxa.org/index.php/JoTT/article/view/4732">https://threatenedtaxa.org/index.php/JoTT/article/view/4732</a>
4	Record of Oldenlandia hygrophila Bremek. (Spermacoceae: Rubiaceae), a lesser known herb from Palghat Gap of Western Ghats, Kerala, India.	Dr. Arabhi P.	Botany	Journal of Threatened Taxa	12(3): 15400–15404. <a href="https://doi.org/10.11609/jott">https://doi.org/10.11609/jott</a> .
5	Choiijwal' ( <i>Piper wallichii</i> (Miq.) Hand.-Mazz.): a wild pepper used as spice and medicine in Andaman Islands of India.	Dr. Krishnaraj MV	Botany	Genetic Resources and Crop Evolution	DOI:10.1007/s10722-019-00812-7
6	A reddish-orange emitting samarium doped $\alpha$ -Na <sub>3</sub> Y(VO <sub>4</sub> ) <sub>2</sub> nanocrystals for single phased UV excitable white light applications,	Dr. Linju Ann Jacob	Physics	Journal of Solid State Chemistry	<a href="https://www.journals.elsevier.com/journal-of-solid-state-chemistry">https://www.journals.elsevier.com/journal-of-solid-state-chemistry</a>



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7	High purity blue photoluminescence in thulium activated $\alpha$ -Na <sub>3</sub> Y(VO <sub>4</sub> ) <sub>2</sub> nanocrystals via host sensitization	Dr.Linju Ann Jacob	Physics	Journal of Luminescence	<a href="https://doi.org/10.1016/j.jlumin.2020.117169">https://doi.org/10.1016/j.jlumin.2020.117169</a>
8	A new potential green emitting erbium activated $\alpha$ -Na <sub>3</sub> Y(VO <sub>4</sub> ) <sub>2</sub> nanocrystals for UV excitable single phase pc-WLED applications,	Dr.Linju Ann Jacob	Physics	SN Applied Sciences	DOI: 10.1007/s42452-020-2873-2
9	Synthesis, structural and luminescence characterization of single phased Tm <sup>3+</sup> /Dy <sup>3+</sup> co-doped Na <sub>3</sub> Y(VO <sub>4</sub> ) <sub>2</sub> nanocrystals,	Dr.Linju Ann Jacob	Physics	Journal of Crystal Growth	<a href="https://doi.org/10.1016/j.jcrysgro.2020.125957">https://doi.org/10.1016/j.jcrysgro.2020.125957</a>
10	Single phased white light emitting Dy <sup>3+</sup> / Sm <sup>3+</sup> co-doped CePO <sub>4</sub> nanocrystals for white light applications	Dr. Linju Ann Jacob	Physics	Journal of Materials Science: Materials in Electronics	DOI: 10.1007/s10854-019-01483-x
11	Effect of doping concentration and annealing temperature on the luminescence of novel orange red emitting CePO <sub>4</sub> :Sm <sup>3+</sup> nanocrystals	Dr. Linju Ann Jacob	Physics	Journal of Luminescence	<a href="https://doi.org/10.1016/j.jlumin.2019.01.043">https://doi.org/10.1016/j.jlumin.2019.01.043</a>
12	High color rendering index single phase white light emitting phosphor based on Tb <sup>3+</sup> /Sm <sup>3+</sup> co-doped CePO <sub>4</sub> nanocrystals: The role of Tb <sup>3+</sup> as a bridge between Ce <sup>3+</sup> and Sm <sup>3+</sup> .	Dr. Linju Ann Jacob	Physics	New Journal of Chemistry	DOI: 10.1039/C9NJ00702D
13	Sm <sup>3+</sup> doped tetragonal lanthanum molybdate: A novel host sensitized reddish orange emitting nanophosphor	Dr. Linju Ann Jacob	Physics	Journal of Luminescence	<a href="https://doi.org/10.1016/j.jlumin.2019.03.045">https://doi.org/10.1016/j.jlumin.2019.03.045</a>
14	Novel blue emitting Tm <sup>3+</sup> activated lanthanum molybdate : Investigations on	Dr. Linju Ann Jacob	Physics	Optical Materials	<a href="https://doi.org/10.1016/j.optmat.2019.109623">https://doi.org/10.1016/j.optmat.2019.109623</a>



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	luminescence behaviour and Judd-Ofelt theoretical analysis				
15	effect of core stability training on selected fitness components among cricket players	Dr. Biju Thomas	Physical Education	International Journal of Physiology, Nutrition and Physical education	<a href="https://www.journalofsports.com/pdf/2020/vol5issue1/PartD/5-1-145-833.pdf">https://www.journalofsports.com/pdf/2020/vol5issue1/PartD/5-1-145-833.pdf</a>
16	The art of Resilience: The Japanese Ikigai in sports	Dr. Biju Thomas	Physical Education	Our Heritage Journal	Link to the article is not available
17	Is Yoga Beneficial as exercise Practice: A case study Among the secondary school students and teachers in Kerala	Dr. Biju Thomas	Physical Education	Think India Journal	Link to the article is not available
18	Mental toughness and life skills : Combat Sports among senior secondary school girls in Kerala	Dr. Biju Thomas	Physical Education	Our Heritage Journal	Link to the article is not available
19	Emotional intelligence for optimal performance: handling dietary habits, Anxiety and Aggression in football players	Dr. Biju Thomas	Physical Education	History research journal	Link to the article is not available
20	Cognitive Behavior therapy and performance enhancement - A case study	Dr. Biju Thomas	Physical Education	Think India Journal	Link to the article is not available
21	Problems and Prospects of Heritage Tourism in Kumarakom	Resmi Annie Thomas	Commerce	Alochana Chakra Journal	Link to the article is not available
22	Emotions and Choice: A Study of Consumer Behaviour Towards Cosmetic Brands	Dr. Manoj Narayanan K S, Tissy Eruthickal	Commerce	Tathapi	Link to the article is not available
23	Religion And The Pandemic: Tracing The Trauma Of The Grand Narrative in the fictional And The Real	Dr. Jyothimol P.	English	IJRAR	Link to the article is not available



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24	Surface Characterisation of Al <sub>2</sub> O <sub>3</sub> / ZnO Mixed oxides and its catalytic activity towards esterification	Dr. Jalaja J Malayan,	Chemistry	Baselius Researcher	Link to the article is not available
25	Social distancing and lesson planning in Kerala from a Post-Covid 19 perspective	Dr. Jintha Thomas	Chemistry	Baselius Researcher	Link to the article is not available
26	Variables Associated With Electricity Consumption in Urban Households	Annie Cherian	Mathematics	Purakala	Link to the article is not available
27	Corona Nalkiya Rashtreeya Vidhyabhyasam	Dr. Sheeja Kuriyakose	Politics	Baselius Researcher	Link to the article is not available
28	A Comparative Study of the area and productivity of major pepper producing countries in the context of price volatility	Dr.Thara Thomas	Economics	Economic challenger	Link to the article is not available
29	The economic impact of indian Premier League	Dr. Biju Thomas	Physical Education	Carmel Graphics	Link to the article is not available
30	Fitness technology: Virtual Assistants , APPs and Apparatus in the Cyber age	Dr. Biju Thomas	Physical Education	Studies in Indian place names	Link to the article is not available



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# Supporting documents of the Research Papers without hyperlink to Journals



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### **The Art of Resilience: The Japanese Ikigai in Sports**

Dr. Biju Thomas

Principal (i/c) & Associate Professor of Physical Education  
Baselius College, Kottayam.  
Kerala

#### **Abstract**

Austrian psychiatrist Viktor Frankl developed the concept of logotherapy based on the premise that the primary motivational force of an individual is to find a meaning in life. Viktor outlines how his theories helped him to survive his Holocaust experience and how that experience further developed and reinforced his theories. Japan is the nation that suffered the most in the World War II. Japan's cities were destroyed, its stockpiles exhausted, and its industrial capacity gutted. But like a phoenix, it has risen to one of the most valued industrial power. The nation possesses a philosophy called Ikigai that aims at a happy and long life.

In islands like Okinawa, with a remarkably high number of centenarians, they follow a unique diet and Ikigai to live long. The National Geographic Explorer Dan Buettner has recorded Okinawa as a blue zone in his book *The Blue Zones: Lessons for Living Longer from the People Who've Lived the Longest*. Ikigai is what allows a person to look forward to the future even if he/she is miserable right now. Japanese people perceive that the sum of small joys in everyday life results in more fulfilling life as a whole.

Ikigai can be a sports philosophy and applied to the life of ordinary persons and sportspersons. Japanese sportsperson Dai Tamesue is one who continues his mission in life as a coach and developed programmes life TRAC "Relay and Teamwork" to create love towards physical training at an early age. To maintain a healthy body and mind, one needs to have a disciplined life; physical training is essential for the maintenance of health. From the early age,

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**Is Yoga Beneficial as an Exercise Practice? A Case Study among the  
Secondary School Students and Teachers in the Schools of Kerala**


Dr. Biju Thomas  
Principal (i/c) & Associate Professor of Physical Education  
Baselius College, Kottayam.  
Kerala

**Abstract**

Yoga is an art of healthy living. Yoga leads to the union of individual consciousness with that of the Universal Consciousness, indicating a perfect harmony between the mind and body, Man and Nature. The aim of Yoga is Self-realization, to overcome all kinds of sufferings leading to 'the state of liberation' (Moksha) or 'freedom' (Kaivalya). But the modern Yoga has become like the Ship of Theseus. It has moved away from the classical traditions and as taught by the masters like Patanjali. Hatha Yoga has gained superiority over all other practices and it has become a mere physical activity. It has moved away from the original beliefs and practices.

Today, modern Yoga has brought many elements from modern fitness training and gymnastics. Moreover some the practices developed in the later period mainly by Hath Yogis are highly unscientific and may bring adverse effects. The asanas that are practiced today have nothing to do with the original yoga, the original which is a method for practising meditation. Several asanas like Sarvangasana, Sirsasana deceive human body and make the practitioners believe that they have brought desired result. The study is based on a survey conducted among secondary school students and teachers, how they responded to different physical exercise practices. It proves that Yoga as an exercise practice is less useful than the



  
Principal  
Baselius College  
Kottayam



**Mental Toughness and Life Skills: Combat Sports among Senior  
Secondary School Girls in Kerala**

Dr. Biju Thomas  
Principal (i/c) & Associate Professor of Physical Education  
Baselius College, Kottayam.  
Kerala

**Abstract**

Mental toughness is identified as a personality trait in the recent studies in sports psychology. Some of the studies show the relationship between sports and exercise and emotional well-being. Mental toughness consists of personality characteristics that include persistence, resilience, confidence and discipline along with sport psychology interventions. Mental toughness can predict success in sport, education and the workplace. It makes the athlete to be better in his/her item and become capable of facing tough training and tough competitive situations.

The earliest of the studies in mental toughness is done by Professor Peter Clough and Keith Earle combined existing psychological theory and applied sports psychology to bridge the gap between research and practice. It was and continued by Clough and Doug Strycharczyk, Managing Director of AQR International. Their mental toughness model comprises four components, the 4C's of Control, Commitment, Challenge and Confidence. The criterion method used in this study is Alan Heary's Mental Toughness Questionnaire. The questionnaire measures four mental toughness variables such as commitment/motivation, concentration, control under pressure and confidence.

The study reveals that the practise of combat sports has a deep-rooted impact upon the character of the female players. Along with success in their respective fields, the girls attained mental

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**Emotional Intelligence for Optimal Performance: Handling Dietary Habits,  
Anxiety and Aggression in Football Players**

Dr. Biju Thomas

Principal (i/c) & Associate Professor of Physical Education  
Baselius College, Kottayam.  
Kerala

**Abstract**

Emotional intelligence (EI) involves the ability to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought. Emotions play an integral part in the development and performance of athletes and teams. Sport is an environment where individuals have to motivate themselves to achieve long-term goals through hard training. Moreover, athletes are required to consistently cope with the stress of hard training and competitive pressure, and this includes understanding and regulating their emotions and those of other individuals.

Sport and exercise are not an individual activity, but organized in teams or groups as clubs, sport teams, instructional classes etc. Moreover, group goals exist as unique, distinct entities from individual goals. The recent studies in sports psychology stresses the importance of outcome, performance, and process goals. For that physical and psychological fitness is essential.

During times of high physical activity, energy and macronutrient needs—especially carbohydrate and protein intake—must be met in order to maintain body weight, replenish glycogen stores, and provide adequate protein for building and repair of tissue. Fat intake should be adequate to provide the essential fatty acids and fat-soluble vitamins, as well as to help provide adequate energy for weight maintenance. Anxiety can have an impact on several aspects in sports; for instance, anxiety is associated with discontinuation of sports activities,



  
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Baselius College  
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## **Cognitive Behavioural Therapy and Performance Enhancement: A Case Study**

Dr. Biju Thomas

Principal (i/c) & Associate Professor of Physical Education

Baselius College, Kottayam.


Kerala

### **Abstract**

Sports and games have a little influence on the Indian society and we are least concerned about the physical and mental fitness. This is reflected in the curriculum where psychological interventions in the life of a sports person is perceived as unnecessary or as elitism. Most of us are fascinated by the achievements and successes of elite athletes, who train for years to have the opportunity to reach their goals on the world stage. Of all the skills that athletes and sportsmen possess, the most under appreciated ability is a sportsman's mental acuity.

Many athletes view the zone as this magical, hard-to-obtain state of mind. But the zone is really not that complicated or hard to achieve. As an interdisciplinary practice that explores the link between psychological and physical factors affecting performance in competitive sports and athletic activity, sports psychology incorporates the science of physiology, kinesiology and biomechanics to assist sports psychologists in treating a wide range of mental health issues. Cognitive Behavioural Therapy (CBT) is an action orientated form of psychotherapy that assumes that unproductive or unhelpful thinking patterns cause unproductive behaviour and undesired negative emotions. CBT allows sportspersons to



  
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Baselius College  
Kottayam**



**PROBLEMS AND PROSPECTS OF HERITAGE TOURISM IN KUMARAKOM**

\*Renu Susan Thomas, NET&JRF

renususanthomas21@gmail.com

Phone no: 9188771184

\*\*Resmi Annie Thomas, Assistant Professor

Postgraduate Department of Commerce

Baselius College Kottayam, Kerala

resmiannie@gmail.com

**Abstract**

Globalisation brings the economy under one umbrella and tourism is one among the outcome of opening up of our economy to the world economy. The concept of Heritage Tourism has great significance in the world tourism market. When compared with other segments of tourism, heritage tourism accounts for larger share of tourism at the international and national level. This paper envisages the heritage tourism in Kumarakom with a detailing of its problems and prospects. The results found that is no significant difference in the problems and prospects of heritage tourism on the basis of gender, age and education.

Keywords: Heritage tourism, tourists.

**Introduction**

New possibilities for the development of tourism has opened through development of electronic technology, communication and transportation. Natural urge for new experiences and the desire to be educated and entertained motivated the people from all walks of life. Tourism industry is important in the service sector era as it creates demand and growth for many other industries. It not only contributes towards economic activities but also generates more employment, revenues and plays a vital role in development of a nation.

Real soul of a community lies with its people, events or aspects- depicting the historic and cultural resources. These are the most tangible resources of a community's heritage. Tourism along with the culture and heritage highlights the markets for that place. More and more people are seeking unique travel experiences that are authentic. Cultural tourism or Heritage tourism is a personal encounter which blends the traditions, history and culture. Core of heritage tourism is that, each community has a story to tell which is different from another. Though heritage tourism is a segment of tourism with its unique features and wider employment potential, it facilitates to project the ancestral heredity without losing or





## **Emotions and Choice: A Study of Consumer Behaviour Towards Cosmetic Brands**

Merin Elizabeth Cherian<sup>1</sup>, Tissy Eruthickal<sup>2</sup>, Manoj Narayanan K.S<sup>3</sup>

Assistant Professor on Contract<sup>1</sup>, Assistant Professor<sup>2</sup>, Assistant Professor and Head<sup>3</sup>

Department of Commerce, Baselius College, Kottayam, Kerala, India<sup>1,2,3</sup>

+919496542240<sup>1</sup>, +919496324241<sup>2</sup>, +919447110212<sup>3</sup>

[merinelizabethcherian@baselius.ac.in](mailto:merinelizabethcherian@baselius.ac.in)<sup>1</sup>, [tissyeruthickal@baselius.ac.in](mailto:tissyeruthickal@baselius.ac.in)<sup>2</sup>,  
[manojnarayanank@baselius.ac.in](mailto:manojnarayanank@baselius.ac.in)<sup>3</sup>

**Abstract:** A brand name can create and stands for loyalty, trust, faith, premiumness or mass-market appeal, depending on how the brand is marketed, advertised and promoted. Creating an emotional brand association is a key branding issue in today's marketing world. One way to accomplish this is to match the brand with the consumer's self. Quality of the product has the greatest role in creating such an emotional brand association. Once that emotional connection is attained by a brand it will reflect in the brand love and brand recall of the consumers and as a result in the demand.

**Keywords:** Emotional Association, Consumer Buying Behaviour, Brand

### **INTRODUCTION**

One of the most valuable intangible assets of a firm is its brands, building a strong brand is both an art and a science. It requires careful planning, a deep long-term commitment, and creatively designed and executed marketing. A strong brand commands intense consumer loyalty—at its heart is a great product or service.

The degree of emotional association the consumer experiences with an object predict his or her nature of emotional interaction with that object. When consumers experience the emotional element of pleasure in the usage of products, they will have an increased favourable effect towards the brands consumed by them. Therefore, creating emotional association with a brand helps not only in strengthening the consumer-brand relationship but also in predicting the



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Baselius College  
Kottayam



# RELIGION AND THE PANDEMIC: TRACING THE TRAUMA OF THE GRAND NARRATIVE IN THE FICTIONAL AND THE REAL

Dr. Jyothimol.P

Associate Professor of English

Baselius College, Kottayam

Kerala, India

**Abstract:** The paper titled “Religion and the Pandemic: Trauma of the Grand Narrative in the fictional and the Real” is an attempt to look at the location of religion in the wake of Pandemic both in the fictional and real. The literary work selected is *The Plague* by Albert Camus. Along with the perspectives on religion in the wake of pandemics postulated in this fictional narrative, an attempt is made to look into the way the pandemic and the resultant quarantine have brought in a paradigm shift in religion. It has been postulated that the ritualistic drills, compulsory observances and the practices have been rendered redundant in the wake of new spiritual selves attained through introspection. The first part of the paper is on the treatment of religion in the literary work. Camus upholds the human in favour of the divine and openly interrogates the claims of religion and subjects it to severe challenge. These assumptions are analysed in relation to the fall of the grand narrative of religion in the wake of the Covid Pandemic which has caught the world off guard and turned the world topsy-turvy.

**Keywords:** Religion, Pandemic, Grand Narrative, Quarantine, Trauma

Lyotard has expressed the space of postmodern knowledge as located in an incredulity of the grand recits like the concepts of progress, Emancipation, Enlightenment and Marxism. They are meta narratives as they legitimize knowledge through an appeal to universal reason. For him metanarratives are made not only through the foregrounding of reason or of the rationale, but through myths and faith commitments which are arbitrary in nature. Religion is a grand recit as it makes extensive use of myth and faith in staying supreme. The paper titled “Religion and the Pandemic: Trauma of the Grand Narrative in the fictional and the Real” tries to examine the trauma of the grand narrative of religion in times of pandemic and resultant quarantines. The ability of the religion to arbitrarily answer the queries that are generated by unforeseen accidents become questionable in the wake of such pandemics that defy reason. religion and its attendant tools of faith are rendered inactive in the face of such traumatic situations. The trauma that beset religion and its habitual practices are of four types. Primarily the ability of the metanarrative to heal through faith becomes marginal rendering its claims of healing as futile. Secondly the religious dictates that claim to reward the virtuous and punish the vicious are mocked in the wake of the universal pandemic that seem to interrogate the notion of virtue and vice. The tertiary level is one in which the shepherds cannot influence the sheep in a realm of physical and spiritual alienation. The fourth is the loss of opportunities of common festivals and miracles which serve to keep people glued to the folds of religion. The paper is an attempt to prove these multiple levels of trauma beset the realms of religion in its structural and ideological aspects. These levels of traumatic experience have much to do with its functional vacuum in times of trouble. What Yeats communicated through the beginning lines of “The Second Coming” is applicable in religion. The term religion is used in a loose sense to refer to the practice of religious beliefs and rituals by people of all such beliefs.

Turning and turning in the widening gyre/the falcon cannot hear the falconer/

The centre cannot hold/ mere anarchy is loosed upon the world (Yeats).

This could summarise the locale of religion in a world beset with pandemic beyond the comprehension and control of human mechanisms.

The fictional world has manifested this futility of religion and the resultant trauma suffered by the believers in a variety of narratives, the major one being Albert Camus’ *The Plague*. Amidst arguments regarding how *The Plague* is an allegory of the French invasion of Algeria and also how it is a representation of the disease in the life of Camus,





## Surface Characterisation of $\text{Al}_2\text{O}_3/\text{ZnO}$ Mixed Oxides and its Catalytic Activity towards Esterification


Jalaja J. Malayan and Jasla P

### ABSTRACT

Metal oxides are microporous materials with interesting physical and catalytic properties. Oxides because of their ability to take part in the exchange of electrons, protons, or oxide ions, are used as catalysts. The major advantage of this mixed metal oxide is that it is possible to tune oxygen sorption properties by choosing the required metal components so as to crystallize in a particular structural pattern. Oxides can be attacked by acids and bases. Those attacked only by acids are basic oxides, those attacked only by bases are acidic oxides. Oxides that react with both acids and bases are amphoteric. Metals tend to form basic oxides, non-metals tend to form acidic oxides. The surface metal oxides consist of ordered arrays of acid-base centers. The surface metal oxides consist of ordered arrays of acid-base centers. The cationic metal centers act as Lewis acid sites while the anionic oxygen centers act as Lewis bases. Surface hydroxyl groups are able to serve as Bronsted acid or base sites as they are able to give up or accept proton. The strength and the amount of Lewis and Bronsted acid-base sites will determine the catalytic activity of many metal oxides.  $\text{Al}_2\text{O}_3 - \text{ZnO}$  mixed oxides of different composition were found to catalyze the esterification reaction. The product analysis was carried out using IR and GCMS. The surface characterization was carried out using XRD (X-ray Diffraction) and SEM (Scanning Electron Microscopy).

**Key words:** Aluminium nitrate, Zinc nitrate, mixed oxide, XRD, SEM, GCMS, IR Debye Scherrer Formula



  
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# **Social Distancing and Lesson Planning: some Reflections on Higher Education Planning in Kerala from a Post-Covid-19 Perspective**

**Gipson Varghese & Jintha Thomas**

## **ABSTRACT**

The society was going smooth with the help of the advancements we made in the 21<sup>st</sup> century but none of us thought that we are going to face a pandemic in this century. But we understood that, natural disasters and calamities, when seriously affecting the large part of the society, will cause unpredictable problems. COVID-19, the global virus, has seriously affected all walks of life and losing many human lives. This pandemic has affected the functions of socio-economic systems, which will have far reaching consequences in the areas of economic progress, production process, employment, education etc. Although countries and states are recovering with stable health and medical care facilities, more efforts are needed to support the healthy recovery of the economies. One of the supporting factors leading to economic resilience and faster recovery is the education and job creation. Education, especially higher education, in our country requires immediate revival and improvement, in the area of teaching and learning, evaluation, accreditation, certification etc. It is not because of Covid-19 that we are facing these challenges. There were several limitations and problems existing in the area of education even before the pandemic, but lock-down due to the spread of virus intensified the need for a revival of the sector. Therefore, the current situation can be considered as an opportunity to revive our education sector with proper response and innovation to build educational system stronger and effective. This paper would like to suggest some of those provisions for the higher education sector to make better in the days to come. Leaders and policy makers in education sector have to think of innovative ways of teaching and lesson plans from a social distancing perspective.





## Variables Associated With Electricity Consumption in Urban Households

Dr. Susan Cherian<sup>1</sup> Dr. N Kamalamma <sup>2</sup>Dr. Annie Cherian<sup>3</sup>

<sup>1</sup>Associate Professor, Department of Home Science, St. Teresa's College, Ernakulam, Kerala.

<sup>2</sup>Professor and Head (Rtd.) Department of Home Science, Gandhigram Rural University,  
Gandhigram, Tamil Nadu.

<sup>3</sup> Associate Professor, Department of Statistics, Baseliious College, Kottayam, Kerala.

### Abstract


Electricity has become one of the indispensable energy sources of households. Present day population is depending very much on electricity to provide luxury and convenience to their life. Hence it is imperative to take necessary steps to curb these negative changes which put the future generation at risk. The study is an attempt to find out factors affecting electrical energy consumption at household level. The base-line energy survey among the 500 households chosen at random from the total population enabled the researcher to find out the background of the households, their energy consumption pattern and associated variables and the cognition levels of the homemakers on the needs and ways of energy conservation. The statistical analysis of the electricity consumption data of the urban households revealed that the mean consumption of electricity of the households differed significantly with the type of employment of the homemakers, the family income, stage of family life cycle and housing variables like the total floor area and number of rooms in the house.

**Key Words:** Electricity consumption, Associated variables, Urban households, Energy conservation,

### Introduction

The fast pace of urbanization has jeopardized our ecological balance. Acute energy shortage, global warming and water crisis are growing at an alarming rate day by day. In the residential sector, energy, especially electricity, is utilized for various purposes like home lighting, thermal comfort, kitchen utilities, entertainment and for personal care (Sonawane and Gumaste, 2020). Electricity has become one of the indispensable energy sources of households. Present day population is depending very much on electricity to provide luxury and convenience to their life (Kohli, 2016). Moreover, employment of women along with increase in disposable income paved the way to a flood of electrical gadgets at their home. Hence it is imperative to take necessary steps to curb these negative changes which puts the future generation at risk.



  
Principal  
Baseliious College  
Kottayam



## കൊറോണ നൽകിയ രാഷ്ട്രീയ വിദ്യാഭ്യാസം

ഡോ: ഷീജ കുര്യാക്കോസ്

സുരക്ഷിതമായ ഭാവികാലം എല്ലാവരുടെയും ആഗ്രഹവും പ്രതീക്ഷയുമാണ്. ലോകാരംഭം മുതൽ തന്നെ മാനവരാശി അക്ഷീണം പ്രയത്നിക്കുന്നതും അതിനു തന്നെ. സമൂഹക്ഷേമത്തിനാണ് രാഷ്ട്രം മുൻഗണന നൽകുന്നതും. ലോകം ശാസ്ത്ര സാങ്കേതിക മികവിന്റെ നെറുകയിലായിരുന്നുവെന്ന് നാം കരുതിയിരുന്നുവെങ്കിലും ഇന്ന് ഒരു അണുവിന്റെ മുൻപിൽ നമ്മൾ പകച്ചുനിൽക്കുകയാണ്. നമ്മുടെ മുൻഗണനകളും ലക്ഷ്യങ്ങളും തല്ക്കാലത്തേക്കെങ്കിലും ഏകീകരിക്കപ്പെട്ടിരിക്കുന്നു.

ഈ കൊറോണക്കാലത്ത് പൗരന്മാർക്ക് ലഭിച്ച രാഷ്ട്രീയ വിദ്യാഭ്യാസം ചെറുതല്ല. സാമൂഹിക വാർത്താ മാധ്യമങ്ങൾക്ക് ശ്രദ്ധകൊടുക്കുവാൻ കുട്ടികൾക്കും മുതിർന്നവർക്കും ഒരുപോലെ അവസരം ലഭിച്ചു. നമ്മുടെ ദൈനംദിന പ്രവർത്തനങ്ങൾ, കൊടുക്കൽ വാങ്ങലുകൾ എന്നുവേണ്ട എല്ലാ പൊതുപ്രവർത്തനങ്ങളിലും രാഷ്ട്രീയമുണ്ട്. തികച്ചും അനൗപചാരികമായി, ഈ ദിവസങ്ങളിൽ ചിന്തോദ്ദീപകമായ ഒരു രാഷ്ട്രീയ വിദ്യാഭ്യാസം കൂടുതൽ പേരിലേയ്ക്കെത്തിച്ച പ്രതിസന്ധിയാണ് കോവിഡ് -19 എന്ന മഹാമാരി. ഭരണ സംവിധാനങ്ങളുടെ പ്രവർത്തനം, വ്യക്തിയും രാഷ്ട്രീയവും തമ്മിലുള്ള അഭേദ്യമായ ബന്ധം തുടങ്ങിയവയേക്കുറിച്ച് ഒറ്റ വിഷയത്തിലൂടെ ലഭിച്ച സവിശേഷമായ രാഷ്ട്രീയപഠനം. ചരിത്രത്തിന്റെ ഏടുകളിൽ എല്ലാ രാഷ്ട്രങ്ങളും ഒരേപോലെ പങ്കിട്ട ഒരു രാഷ്ട്രീയപാഠം. സമസ്തമേഖലകളെയും ബാധിക്കുന്ന ഒന്നായിമാറി കോവിഡ് -19. മറ്റേതു വിഷയത്തേക്കാളുമുപരി ഒരു രാഷ്ട്രീയപശ്ചാത്തലമാണ് ഇതിൽ നിറഞ്ഞ് നിൽക്കുന്നത്.

നവലിബറൽ ഉപഭോക്തൃ സംസ്കാരം ഒരു പുനർചിന്തയ്ക്കു പോലും സാധ്യതയുണ്ടോ എന്നു സംശയിപ്പിക്കും വണ്ണം നമ്മെ വളരെയേറെ മുന്നോട്ടു കൊണ്ടുപോയിരുന്നു. ഇന്ത്യയെ സംബന്ധിച്ചിടത്തോളം ജാതീയത, തുടർന്നുള്ള മത, സാമൂഹ്യ പരിവർത്തനങ്ങൾ, വൈദേശിക ആക്രമണങ്ങൾ, കൊളോണിയലിസം, ദേശീയത, സഹന സമരങ്ങൾ, മൂല്യകേന്ദ്രീകൃതവും സ്വതന്ത്രവുമായ രാഷ്ട്രീയചിന്തകൾ തുടങ്ങിയവ നമ്മെ ഇവിടെത്തിച്ച നാൾവഴികളാണ്. ഇതിനകം സ്ഥിതിസമത്വം, ഉദാരത തുടങ്ങിയ രാഷ്ട്രീയ മൂല്യധാരണങ്ങളുടെ പ്രത്യേകതകളും ഗുണദോഷങ്ങളും അവ സൃഷ്ടിച്ച മാറ്റങ്ങളും നാം





# A COMPARATIVE STUDY OF AREA AND PRODUCTION OF MAJOR PEPPER PRODUCING COUNTRIES IN THE CONTEXT OF PRICE VOLATILITY

\*Dr. Leena Mathew

\*\* Thara Thomas

\* Principal, and Research Guide, Bishop Kurialaserry College for Women, Amalagiri, Kottayam, Kerala

\*\* (Research Scholar), Assistant Professor, Baselius College, Kottayam, Kerala.

## INTRODUCTION

**B**lack pepper, commonly called the Black gold and King of spices is the most relevant and widely used spice (Abraham, 2019). Black Pepper occupies a unique and supreme position in the world. It is a perennial climbing vine grown for its berries. It is extensively used as a spice and in medicinal preparations. Kerala is the native place of black pepper. Kerala contributes to the majority of the country's black pepper area and production. India is ranked in the topmost position in the world's pepper production until the 19th century, but India lost its position to some other nations like Vietnam and Indonesia.

## OBJECTIVES

The study is based on some objectives

- To make a comparison between area and production of pepper among major pepper producing countries in the world.
- To analyze the price change of pepper during the past years (2008-2018).

## METHODOLOGY

The study is based on secondary data. Data

collected from the Spices Board, IPC, have been used for analysis. Data has also been collected from various articles, journals, books, and reports.

## PRICE TREND IN THE PEPPER MARKET

All through the preceding decade world pepper industry has shown specific changes mainly concerning area and production. The most prominent feature is the behavior of price as it was keeping a trend of climbing after the year 2010, beyond the predictions and expectations of producers and exporters throughout the world. Then the cycle has reversed.



*Principal*  
Principal  
Baselius College  
Kottayam



# THE ECONOMICAL IMPACT OF INDIAN PREMIER LEAGUE

**Dr. Biju Thomas**

*Principal in Charge & Associate Professor in Physical Education  
Baselius College, Kottayam*

**Ms. Githu K. Giji**

*Guest Lecturer, Department of Economics  
Baselius College, Kottayam*

**Dr. Suma Joseph**

*Associate Professor in Physical Education  
Mount Carmel College of Teacher Education for Women, Kottayam*

## ABSTRACT

*This paper aims to analyse the economical impact of Indian Premier League. The study is based on secondary data. Indian Premier League (IPL) was started by Board of Control for Cricket in India (BCCI) in 2008 with the intention of curtailing the private Cricket League ICL (Indian Cricket League), which was getting highly famous around the World. But the Indian Cricket League was not recognized by International Cricket Council and the players participating in it were banned. In order to improve the standards of domestic Cricket and provide fair chances to domestic players, BCCI decided to start a professional Cricket League and thus came into being, one of the most popular Leagues of the Sports World, i.e., Indian Premier League (IPL). It was under the best guidance of Lalit Modi, that IPL got off to such a good start in 2008 with much fanfare.*

**KEY WORDS:** Indian Premier League, Twenty 20, franchisees

## INTRODUCTION

Cricket, more than a game is like a religion in India which has a huge fan following. According to the market research conducted by the International Cricket Council (ICC), cricket has over a billion fans globally with the Indian sub-continent alone constituting more than 90 percent of them. Even on the streets and narrow footpaths of India, one can expect to see children playing street cricket, while the elders watch or listen to cricket updates. With such a large and passionate viewer base, the Board of Control for Cricket in India (BCCI) decided to capitalize on the situation by introducing a domestic cricket league. This led to the birth of Indian Premier League (IPL) in 2008. Within few years after its inception, it became the most lucrative annual sporting event of BCCI.



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*Principal  
Baselius College  
Kottayam*



## **Fitness Technology: Virtual Assistants, Apps and Apparatus in the Cyberage**

Dr. Biju Thomas  
Principal (i/c) & Associate Professor of Physical Education  
Baselius College, Kottayam.  
Kerala

### **Abstract**

Artificial Intelligence is taking over much of our lives, and personal health is no exception. Now, a gym membership or the service of a trainer is no more necessary to maintain physical fitness; we can get a great workout and stay on track through advanced technology. Technology has paved the way for a more flexible and convenient exercise schedule. These are available in different forms in different platforms as: virtual assistant, wearable fitness devices, fitness apps, interactive gym equipment, smart water bottles, and smart apparatus.


AI based personal assistants and third party apps available in smartphone platforms provide exclusive health services to the user. Along with these apps exists a set of wearable devices that monitor the user's health. They are examples of Internet of Things (IoT), and the future of smart devices. They can monitor heart rate, exercise time, and the calories burned. It is possible that in the future that our gym environment could be transformed by popping on a headset as we cycle or hit the treadmill and selecting an exotic backdrop such as the French Alps or Guatemala.

**Keywords:** Artificial intelligence, fitness trackers, smart apparatus, fitness app

### **Introduction:**

\$2.1 billion is the value that Google paid to Fitbit to acquire, a company that was established in 2007; now a star in the fitness-tech world. Fitness technology encompasses



  
Principal  
Baselius College  
Kottayam