



**A NATIONAL LEVEL TECHNICAL SYMPOSIUM**  
**on**

**Digital Marketing, Blue Eyes technology, Brain Finger Print  
Technology, Colonics CHROMMEST 2K20**

**05<sup>th</sup> Feb 2020**

Organized by

**Department of Electronics & Communication  
Engineering**

In association with



**Er. Perumal Manimekalai Polytechnic College**

**Hosur, Krishnagiri, Tamil Nadu - 635 117.**

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**[www.pmctech.org](http://www.pmctech.org)**

## Our Institution

“PMC TECH play influential role with Industries for providing meaningful impact on overall competency and skill levels of the students in relation to knowledge updating with practicality in learning and professionalizing them aiming at the developing scenario of current and future technologies.”

PMC TECH Group of Institutions, Hosur, Tamilnadu established in the year 1996 is run by “Er. Perumal Manimekalai Telugu Minority Educational and Charitable Trust” under the dynamic leadership of Shri. Er. P. Perumal, Founder Chairman. The Institutions comprise Matriculation School, ITI, Polytechnic, Engineering College and Research Studies providing quality education in the region.

Er. Perumal Manimekalai polytechnic college (established 1996) approved by AICTE and affiliated to Dote Chennai, is an ISO 9001:2015 certified Institution. The Institute provide scholarly and professional environment with quality education & skill oriented training that help students becoming best employable for Industries and professional entrepreneurs for the Nation. The Institute supports students’ creativity/innovations by establishing Scientific and Industrial Research Organization (SIRO), Women Technology Park (WTP), Centre for IIT Bombay Employability Skill Trainings, Business Incubation Centre (MSME BI), Innovation & Entrepreneurship Development Centre (IEDC) etc., for research and developments.

### **Vision:**

PMC Tech -Polytechnic College shall emerge as a premier Institute for valued added technical education coupled with Innovation, Incubation, Ethics and Professional values.

### **Mission:**

1. To foster the professional competence through excellence in teaching and learning.
2. To nurture overall development of students by providing Quality Education & Training.
3. To provide innovative environment to learn, innovate and create new ideas for the betterment of oneself and society.

## About the Department

The Department of Electronics and Communication Engineering was established in the academic year 2001-2002. It has well equipped laboratories with a state of art Computer Laboratory, Electronics Devices etc... VLSI & Simulation Lab well equipped with software's such as Multisim, Xilinx, etc., Qualified and experienced faculty members have been involved in teaching and conducting various short term courses for the benefit of students.

### **Vision:**

To provide quality environment for Electronics and Communication Engineering diploma holders to excel in profession to cater the needs for self and societal development.

### **Mission:**

**M1: Provide** good learning environment to enable the students to face the challenges of technological advancement through theoretical and practical orientation.

**M2: Enable** students to develop skills to solve complex technological problems.

**M3: To** nurture innovation and leadership quality to address the industrial and social needs.

### **Program Educational Objectives (PEOs)**

**PEO1:** Adopt and upgrade themselves in the technological challenges of present and futures.

**PEO2:** Have good practice in using modern electronics, and IT Tools, for the design and analysis of complex engineering problems.

**PEO3:** Absorb and apply fundamental knowledge to solve industry and societal problem.

### **Program Specific Outcomes (PSOs)**

**PSO1:** The Electronics and Communication Engineering diploma students will be able to provide with a solid foundation in Electronics, Communication and Networking which required to design products for modern electronics.

**PSO2:** To provide students with an academic environment, to innovate and adopt to technical changes.

**PSO3:** To prepare the students to excel in their profession to provide viable solution for industrial and societal problem.

## **About the Symposium**

Most of the present day research are taking place with focus towards technology and education in this engineering the foremost leader. It plays a unique role in exploiting innovative technology

This Conference provides a real opportunity to bring together scientists, researchers and academician of different disciplines to discuss new issues, tackle complex problems and find advanced solutions breeding new trends in Engineering.

## **Chairman's Message**

### **Organizing Committee Members**

#### **Chief Patrons**

**Er. P. Perumal, Chairman, PMC TECH – Group of Institutions**

**Shri. P. Kumar, Secretary, PMC TECH – Group of Institutions**

**Smt. P. Mallar, Trustee, PMC TECH – Group of Institutions**

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**Mr. N. Balasubramaniam, Principal, PMC TECH – Polytechnic College**

#### **Convener**

**Mrs.J.Blaizelet Mary, HOD/ECE**

#### **Co-ordinators**

**Mr. C Veeramani Lect/ECE**

#### **Members**

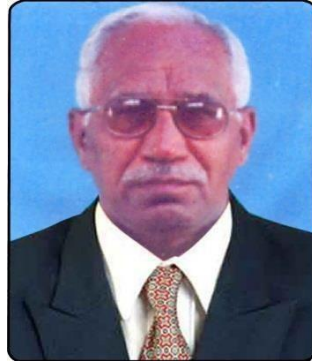
**Mrs. M. Selvakumar, Lect/ECE**

**Mrs. Flarance Jenifer Lect/ECE**

**Mr. M Rajkumar Lect/ECE**

**Mrs. N Nagalakshmi Lect/ECE**

## Chairman's Message



I feel immense pleasure to inscribe my message for the souvenir. It has been said that the mask of success contains many hidden faces behind it. CHROMFEST 2K20 symposium as well as this institution is an assertion of this fact.

Absolute teamwork and strong vision resulted in Digital Marketing (CHROMFEST 2K20) a National level symposium organized by the Department of Electronics and Communication Engineering. Our Institution Strive to travel beyond the boundaries of Mere books. We have realized that our future is abstract and unknown but youth in our hands are real and can be Moulded. This souvenir gives us just the glimpses of the achievements be held by our institution. Brighter days are still to come. And my heartfelt wishes for that.

The diligent contribution made by our faculty members and elaborated endeavor done by our students are the foundations of CHROMFEST 2K20 Conference.

“You don't have to be great to start, but you have to start to be great”

My best wishes for the future!

**Er. P. Perumal**

**Chairman,**

**PMC TECH – Group of Institutions.**

## Secretary's Message



It gives me great pleasure to send the message for the souvenir, which is to be released at CHROMFEST 2K20 Symposium. CHROMFEST 2K20 Symposium is being organized on 5<sup>th</sup> Feb 2020 by Department of Electronics and Communication Engineering, Hosur.

An Institution of Higher Education, where students and faculty members are busy in learning and research, organizes such co-curricular activities for giving an opportunity to the students to celebrate their competence in technology and to inculcate in them the qualities of confidence, innovative thinking and analytical abilities. Co-curricular activities are intimately connected with the inner-being of a person. On the one hand, these permit an individual to express oneself and understand oneself better.

We want PMC Tech to be a great Institution. While making every single classroom, laboratory and workshop interesting is important, while working to make our programs practice-oriented is PMC Tech's mission, development of the complete personality of every student in all the hues, which come together to create a great human being, is the objective of the Institution. Such programs contribute a great deal in achieving the PMC Tech's objectives.

I convey my Best Wishes for the success of CHROMFEST 2K20, organized by department of Electrical and Electronics Engineering.

**Shri. P. Kumar,  
Secretary,**

**PMC TECH – Group of Institutions.**

## Trustee's Message



A feeling of great pride and contentment rises to witness our event “CHROMFEST 2K20 and this souvenir is nothing else but the reflection of the success saga our institution has created.

It has always been a tradition of our institution of confer holistic education to the learners which not only gives the qualification but also intends to mold them into better human beings. And I wish the same tradition will be followed in future years. Being a constant witness of the progress of our institution, I can surely acclaim that in times to come, our institution will prove to be an epitome of excellence in imparting quality education.

The sincere work and strength put up by our faculties and dear students in materializing this conference is worth admiring. This souvenir reflects aspiring vision and inspiring insight of our students and faculties.

So, my good wishes are always with them.

Many congratulations to all!

**Smt. P. Mallar,**

**Trustee,**

**PMC TECH – Group of Institutions.**



## Principal's Message



Er. Perumal Manimekalai Polytechnic College has been the crest of jewels in the educational map of Tamilnadu. Its unrivalled excellence in conferring quality education of PMC Tech has played pivotal role in the technical development of the learners.

The sincere and meticulous work pattern has been the heritage given by our Institution. As a consequence, our institution has cultivated a tradition of bestowing learners with best quality academic education. Apart from that, to develop creative, conceptive and analytical skills as well as to furnish the learners with research and leadership skills technical festivals are essential. So the Department of Electronics and Communication Engineering has organized 'CHROMFEST 2K20' a National level Symposium and it stands a class apart from all the events. And I dream our conference will provide a forum for all the students to exchange their learning experiences as well as their creative technical knowledge. I am assured that our Symposium will represent the students both quantitatively and qualitatively.

My cordial felicitations to all!

Congratulation to all of the students. Yours efforts have not gone unnoticed!

Best wishes for this, **National Level Symposium – CHROMFEST 2K20.**

**Mr. N. Balasubramaiam,**  
**Principal,**

## HoD's Message



This National conference on "**Digital Marketing, Blue Eyes technology, Brain Finger Print Technology, Colonics** (CHROMFEST 2K20)" organized by ECE department, to focus the attention of all concerned professionals to discuss at length concern with emerging trends in engineering and technology.

To seek solutions wherever possible and identify areas where further in research. Invited contributions from professional bodies for knowledge sharing. Enormous participants confirmed their registration and presentation in conference.

PMC Tech is making strides towards evolving directions for the growth and dissemination of technical knowledge for the purpose of research and innovation. It is with these clear thoughts the department of Electronics and communication Engineering has been organizing National level Symposium. This year the focus is on

Moreover, this whole event is a conclusion of synchronized efforts done by our faculty members and students. Congratulations to them for their sincere and earnest hard work. I, hope this conference will be a platform for all our energized students where they can explore their hidden potential.

Wish you best of luck in your endeavor.

**Mrs.J.Blaizelet Mary , HOD/ECE,**

**PMC TECH – Polytechnic College.**

## Table of Contents

<b>S. No</b>	<b>Paper Title</b>	<b>Page. No</b>
1.	Digital Marketing	1
2.	Blue Eyes technology	11
3.	Brain Finger Print Technology	21
4.	Cellonios	27

# Digital Marketing

## ABSTRACT

Digital marketing is the marketing of products or services using digital. Technologies, mainly on the Internet, but also including mobile phones, display. Advertising and any other digital medium.

The world is shifting from analog to digital and marketing is no exception. As technology development is increasing, the use of digital marketing, social media marketing, search engine marketing is also increasing. Internet users are increasing rapidly and digital marketing has profited the most because it mainly depends on the internet.

Consumer's buying behavior is changing and they are more inclined towards digital marketing rather than traditional marketing. The purpose of this review paper is to study the impact of digital marketing and how important it is for both consumers and marketers. This paper begins with an introduction of digital marketing and then it highlights the mediums of digital marketing, the difference between traditional and digital marketing, and the pros, cons, and importance of digital marketing in today's era.

# BLUE EYES PRINT TECHNOLOGY

## ABSTRACT

Have you guys just imagined the world where the computer tells you to calm down when you are angry, motivates you when you are frustrated, and provides all the help and pleasure? They are the actual best friends that do to you. This is actually possible by a technology called **blue eyes technology**.

It is an aim at creating computational machines that have sensory abilities like those of human beings. It creates computational machines that also feel like a human which uses camera and microphone to identify the actions and the emotions of a user by identifying the actions and emotions of the user. It also repeats like a human being.

The word **blue** in the **blue eye technology** stands for **Bluetooth** which facilitates **wireless communication** and **eye** stands for the **eye movement** which allows us to obtain a lot of interesting and necessary information. The basic thought behind this technology is to give the **computer the human potential**. We all have some perspective skills that as we can understand each other's feelings for example we can understand one's emotional state by analyzing his facial expression basically **computer gains human power and intelligence**. The **blue eye technology** aims at designing computational machine that have per spectral and sensory abilities similar to that of human beings. It uses our non-obtrusive sensing method using most modern video cameras and microphones to identify the users action through the use of imported sensory abilities. The machine can understand what a user wants where he is looking at and even realize his physical or emotional.



# BRAIN FINGER PRINT TECHNOLOGY

## Abstract

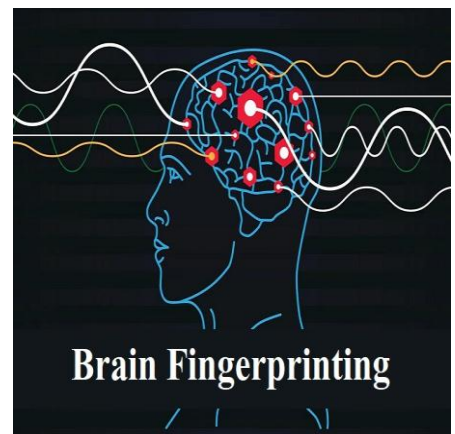
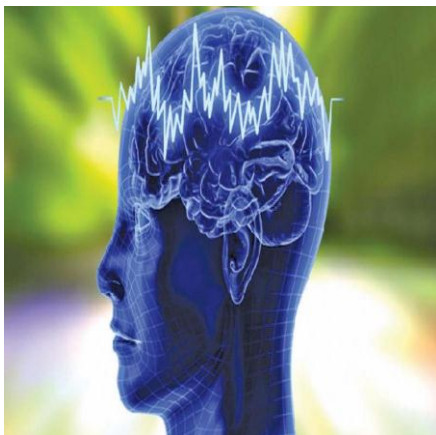
Brain fingerprinting is an objective, scientific method to detect concealed information stored in the brain by measuring electroencephalographic (EEG) brain responses, or brainwaves, non-invasively by sensors placed on the scalp. The technique involves presenting words, phrases, or pictures containing salient details about a crime or investigated situation on a computer screen, in a series with other, irrelevant stimuli. Brain responses to the stimuli are measured.

## Introduction

When the brain processes information in specific ways, characteristic brainwave patterns can be detected through computer analysis of the brain responses. When an individual recognizes something as significant in the current context, he experiences an “Aha!” response. This response is characterized by a specific brainwave pattern known as a P300-MERMER. Brainwave responses are analyzed to determine whether or not the specific information tested is stored in the brain of the subject or not.

Brain fingerprinting computes a determination of “information present”—the subject knows the critical information, or “information absent”—he does not. The system also computes a statistical confidence for each individual determination, e.g., “information present, 99.9% confidence” indicates that there is a 99.9% probability that the subject knows the relevant information tested.

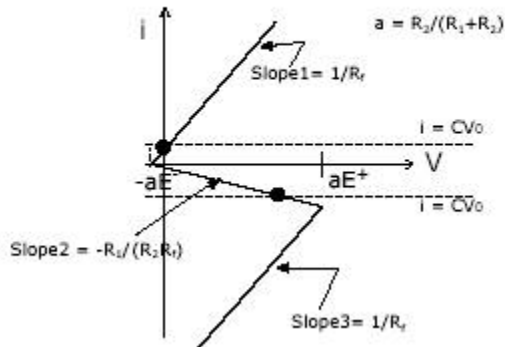
If the statistics computed do not provide a statistical confidence high enough to meet a predetermined criterion for either a determination of “information present” or “information absent,” then no determination is made: the outcome is “indeterminate.”



# CELLONICS

## ABSTRACT

Cellonics technology is a **new technology in wireless communication**, and it is used to fix the problems permanently for modem technology (modulator or demodulator) as well as other communication technologies. Generally, this technology is very helpful in increasing the modem speed to 1000 times than our normal modems.



Cellonics technology is a new technology in wireless communication, and it is used to fix the problems permanently for modem technology (modulator or demodulator) as well as other communication technologies. Generally, this technology is very helpful in increasing the modem speed to 1000 times than our normal modems. The progress of this technology depends on the mode of communication between the biological cells as well as NDS (nonlinear dynamic systems). This technology has come out after learning the behavior of a biological cell. The major telecommunication companies will get profits by using this technology. The study of the biological cell tells that a human cell responds to stimulus and generates waveforms that include a constant line of pulses divided with the stage of silence. The Cellonics technology establishes a method to imitate these pulses to apply them to telecommunication industries. The element of this technology allows analog waveforms as input and produces an output pulse.

## APPLICATION

The Cellonics technology can be used in several applications like communications, electronic circuits (clock multipliers, sigma-delta modulator, gated oscillator, delta modulator).

As a receiver, this technology can be used to notify the UWB signals.

This technology can be used as a modulation or demodulation method with the component set in the demodulator.

The circuit of the N modeled Cellonics circuit is used on the receiver end in a narrowband wire-line communication system for recovering the digital data, which will give the lengthy distance function.

The S modeled Cellonics circuit is used in a narrowband wireless-communication-system to recover the digital information. The speed of data will be speedy than a profitable LAN device, which will give better performance than the present wireless LAN.

This technology is used at the ending of the receiver in the ultra-wideband audio systems.

A simple transmitter and receiver of this technology are used in an ultra wideband-video system