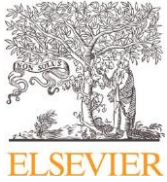


3.7.1- Number of functional MoUs/linkages with institutions/ industries in India and abroad for Internship, on the job training, project work, student/faculty exchange and collaborative research during the last five years

Activities conducted under MoUs

Sl No	CONTENTS	PAGES
1	Florida International University supporting document	3-12
2	RV Engineering Engineering College supporting document	13-18
3	Texas supporting document	19-24
4	Ipomo supporting document	25-34
5	Ellipsonic supporting document	35
6	Sri Siddhi Softteck supporting document	36-40
7	Newsman supporting document	41-42
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13	Nijalingappa KLE S College supporting document	54-59
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16	Guru krupa Auto solutions supporting document	66-67
17	Green Paradise supporting document	68-69
18	Imarticus Learning supporting document	70-77
19	Syon Chit Fund Pvt Ltd supporting document	78-79



The impact of Beltrami effect on dusty fluid flow through hexagonal channel in presence of porous medium



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^c Department of Mathematics, PES University, Bangalore, India

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article info

MSC:

76T10

76T15

Keywords:

Dusty fluid

Hexagonal channel

Laminar flow

Velocity of fluid and dust phase

Beltrami flow

Porous media

abstract

This paper presents a novel solution to a two-dimensional Beltrami flow through hexagonal channel of a dusty fluid evaluation. The uniqueness of the solution is focused on characterizing the flow behavior of fluid and dust phases by considering the effect of Reynolds number and permeability of porous medium. The governing Navier–Stokes equations are transformed into dimensionless equations and solved using Laplace transform, Fourier transform and Crank–Nicolson techniques. A detailed comparison of analytical and numerical solutions are presented and results are interpreted through performance analysis graphs. Finally, the skin friction at the boundaries are calculated to understand the phase of dusty fluid in the porous medium.

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1. Introduction

Dynamics of fluids with suspended particles in porous structures have a vast applications in industries and in the natural atmosphere. For instance, X-ray tomography, terahertz tomography, electrical capacitance tomography, geological materials, liquid foams, polymeric fluids, slurries etc. Beltrami flows have been analysed for several decades by mathematicians and mechanicians. Study of Beltrami flow takes the importance due to its technological need in effective denoising algorithms in image processing. The main objective in early computer vision is to smooth images without destroying the semantic content i.e., edges, features, corners etc. In other words, the boundaries between objects in the image should survive as long as possible along the scale, while homogeneous regions should be simplified and flattened in a rapid way. This is particularly important since the denoising an image is usually a precursor to segmentation and representation which often rely on edge fidelity. The analysis of such flows finds its applications in different areas such as electromagnetic analogy of the Beltrami fields, observation of ball-lightning in nature, existence of stable formations of free magnetic field and ring-like formations of free electric fields [2–4,7–11,13,17–19,26].

A particular important type of dusty fluid flow through porous media have received considerable attention due to the importance of these types of flows in studies associated with the design of industrial filters, liquid-dust separators, water purification plants, various natural environment, industrial settings including contaminant transport modeling and filtration

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Impact of Heat and Mass Transfer on Mixed Convective Flow of Nanofluid Through Porous Medium

K. R. Madhura^{1,2,3} · Babitha^{1,4} · S. S. Iyengar⁵

Published online: 25 September 2017
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Abstract This paper presents, a novel solution to the effect of heat and mass transfer on nanofluid over a moving/stationary vertical plate drenched in porous medium under the consideration of various pressure gradients. Copper C_u as nanoparticle and water as a base fluid have been considered. The governing equations are solved analytically by applying Laplace transform technique and unified closed form results are exhibited. Numerical solutions are also obtained by using Crank Nicolson method with the aid of mathematical software Matlab and solutions are compared with closed form solutions. The velocity, concentration and temperature profiles are plotted graphically for different flow pertinent parameters like magnetic parameter, porosity parameter, thermal and solute Grashof number, nanoparticle volume fraction parameter, time, Schmidt number, chemical reaction parameter and Prandtl number. A detailed results in the contest of Skin friction, Sherwood number and Nusselt number are calculated for the benefit of engineering interest.

Keywords Nanofluid · Heat transfer · Magneto-nanofluid · Chemical reaction · Sherwood number and Nusselt number

Mathematics Subject Classification 76T10 · 76T15

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Analysis of Heat Transfer and Thermal Radiation on Natural Convective Flow of Fractional Nanofluids

Article in *Journal of Nanofluids* · October 2018

DOI: 10.1166/jon.2019.1645

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Analysis of Heat Transfer and Thermal Radiation on Natural Convective Flow of Fractional Nanofluids

K. R. Madhura^{1,2,*}, Babitha³, and S. S. Iyengar⁴

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Owing to new advances in technological and industrial fields, nanofluids gain an extensive attention considering the fact that their thermo-physical characteristics enhance and reduce the transfer of heat. Generally, the considerations of traditional nanofluids are confined to models elucidated by integer order differential equations where the memory and hereditary properties of materials are neglected. To overcome these downsides, the present work is focused on study of fractional nanofluids developed by differential equations having Caputo time derivatives which provides the influence of memory on the characteristics of nanofluids. Heat transfer analysis is carried out by considering three fractional nanofluids containing Cu, CuO and Ag as nanoparticles over an infinite vertical plate under the influence of uniform temperature and thermal radiation. The foregoing sets of governing fractional partial differential equations with suitable boundary conditions are elucidated by using Laplace transform and the results are revealed for velocity and temperature. The impact of fractional parameter and nanoparticle volume fraction on different flow pertaining parameters are analyzed through graphs to get physical view into the flow patterns. Along the principles of engineering, skin-friction and Nusselt number are calculated at the boundaries and the solutions thus obtained are compared with previous study.

KEYWORDS: Fractional Nanofluid, Fractional Parameter, Thermal Radiation, Heat Transfer, Caputo Time Derivative, Wright Function

1. INTRODUCTION

Several industrial and engineering technologies today rely on the premise of ultrahigh performance cooling. However, the energy efficient heat transfer fluids required for ultrahigh performance cooling faces the limitation of low thermal conductivity. The fluids like “nanofluids” provide highly preferable thermal properties like higher convection heat transfer coefficients, thermal conductivity etc., and they contribute more for heat transfer enhancement. Generally nanofluid refers to mixture of solid nanoparticles whose diameter is lower than 100 nm with base liquids like water, oil and other lubricants. Such nanofluids find applications in nuclear reactors, nanofluid coolant, microchips cooling, nanodrug delivery, cancer imaging, nanocryosurgery, pasteurization of milk, etc.¹⁻³ The study

has been carried out on enhancing thermal conductivity of fluids with Cu-nano phase materials by Choi et al.⁴ and proved that the reduction in heat exchanger pumping power due to the applications of nanofluids. An analytical consideration has been carried out by Zhang et al.⁵ to provide distribution of velocity and temperature and also characteristics of heat transfer included with thermal and mechanical dispersion in a flow of nanofluid saturated metal foam.

The nanoparticles like copper, copper oxide and silver gain considerable attention due to its key applications⁶⁻⁸ as pointed below:

- i. *Copper (Cu)*
 - acts like copper diet supplements.
 - enhancing the strength and hardness of the metals and alloys.
 - behaves as an anti fungal agent when added to plastics coating and textiles.
 - used as nano metal lubricant additives.

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Accepted: 9 October 2018



Numerical Investigation on Convective Flow of Two-Phase MHD Dusty Nanofluids over a Wavy Surface with Brownian Motion and Thermophoresis Effects

G. Kalpana¹ · K. R. Madhura^{2,3,4} · S. S. Iyengar⁵ · M. S. Uma⁶

Published online: 4 May 2019
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Abstract

The emergence of dusty nanofluids as a area of nanoscale heat transfer in fluids is directly correlated to miniaturization trends and nano technology. So, the prime focus of this analyzation is to describe the model of heat and mass transfer phenomenons of two-phase magneto-hydrodynamic dusty nanofluids over a vertical sinusoidal wavy surface. The significances of Brownian motion and thermophoresis effects have been considered in the model. The three various nanofluids namely Aluminium oxide (Al_2O_3)-water, Copper (Cu)-water and Titanium oxide (TiO_2)-water immersed with conducting dust particles are taken into consideration for flow analysis. Novel governing equations involving conservation of momentum, mass and thermal energy are subjected to irregular region and converted into non-dimensional form. The resultant equations are numerically approached by developing a finite difference technique with Newton's quasilinearization method using mathematical software MATLAB. Dynamic characteristics of the flow with the effect of physical parameters associated with velocity, temperature and concentration distributions are interpreted through graphs to get some physical view into the flow patterns. Also, skin-friction coefficient, heat and mass transfer rate are calculated at the boundaries and the outcomes obtained are compared with existing literature.

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Numerical computation on Marangoni convective flow of two-phase MHD dusty nanofluids under Brownian motion and thermophoresis effects

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Abstract

The current theoretical study describes the Marangoni thermal convective flow of magnetohydrodynamic dusty nanofluids along a wavy vertical surface. The two-phase mathematical model is developed under the influence of thermal radiation and exponentially varying space-dependent heat source. Pure and hybrid nanoparticles together with dust particle suspension in the base fluid are taken into consideration to characterize the behavior of the flow. Brownian motion and thermophoresis mechanisms are considered, since it enhances the convection features of dusty nanofluid. Appropriate transformations are adopted to modify the flow governing equations and boundary conditions to dimensionless form. The forward finite difference scheme is implemented to illustrate the resultant coupled partial differential equations. The Newton quasi-linearization technique is utilized to reduce the nonlinear system into a linear form, which is solved thereafter by Thomas algorithm. The responses of velocity, temperature, concentration, friction factor, and heat and mass transfer rate profiles with various governing parameters are discussed and portrayed graphically. The study evidences that the radiation and space-dependent heat generating parameters strengthen the temperature distribution. Also, the heat transfer rate appreciably rises

with the increment in Marangoni convection. The solution methodology and accuracy of the model is validated by generating the earlier outcomes for non-radiating nanofluid flow without heat source/sink.

KEYWORDS

dusty nanofluids, Marangoni convection, space-dependent heat source, two-phase flow, wavy surface

1 | INTRODUCTION

The Marangoni convection is a phenomenon, which is induced by thermocapillarity or solutocapillarity, that is, the variation of surface tension of the fluid with temperature or concentration. Surface tension is one of the fluid characteristics, which remain stable basically. However, the primary conditions affecting the surface tension of the fluid are variation in temperature and addition of chemicals in it. When temperature rises, the molecules in the fluid become more active, which results into the reduction in the surface tension of the fluid. Also, it changes according to the chemical reactions that occur when the chemicals are added to the fluid. Further, the surface tension of the fluid also gets affected by impurities present in it. For instance, the salt which is a highly solvable substance, increases the surface tension of water, whereas the soap, which is a sparingly soluble substance, decreases it. Hence, it is worthy to investigate the Marangoni effect on dusty nanofluid flow. The study on Marangoni convection is essential in view of numerous industrial applications including crystal growth, thin liquid films, semiconductor processing, coating flow technology, microfluidics, etc. After a promising research, this mechanism has been adopted in the field of nanotechnology to get an artificial rain by a process called cloud seeding. Here, substances like dry ice (silver iodide aerosol is commonly used, which acts as a cloud condenser) is dispersed into the upper parts of clouds, which alters the surface tension and then causes microphysical changes within the clouds. Therefore, condensation of water vapor in the atmosphere occurs. One of the widely practiced applications using this effect is suppressing the fog in airports during harsh weather. The concept of Marangoni boundary layer was introduced by Napolitano,¹ and, later, several authors²⁻⁷ studied the flow under the Marangoni effect. It is evident from Mahanthesh et al⁸ that Marangoni effect enhances the temperature and concentration fields of Casson liquid flow due to an infinite disk. The buoyancy and thermocapillary effect on convective fluid flow and transfer of heat inside a vertical cylindrical cavity under the impact of evaporation was evaluated numerically by Kozhevnikov and Sheremet.⁹ Siddiqa et al¹⁰ have assessed the effect of thermal radiation on Marangoni boundary layer flow along a vertical irregular surface and their mathematical results disclosed that water-particle mixture, that is, dusty fluid, reduces the heat transfer rate.

The mechanism of heat transfer plays a significant role in hypersonic, space vehicles, gas turbines, etc. In those applications, the thermal performance of commonly employed traditional fluids like water, oils, glycol, etc, is deficient. With the intention of boosting the thermal conductivity of these base fluids, several processes, such as adding surfactant, salts, alcohol to the base fluids, inclusion of radiation effect, consideration of different boundaries and geometries, etc, are implemented. However, in recent years, an alternate technique to attain the desired heat transfer rate is dispersion of nanoparticles into the traditional fluids. Nanofluid technology has emerged in different fields like automotive

Workshop

Date: 12th February 2018.

Topic: Content Management System

Resource person: Prof Vishal of R.V. Engineering College

The National College Jayanagar, Department of Computer Science has conducted a Workshop with the collaboration of RV College of Engineering. (MOU dated 26th October 2018). The following activities were conducted.

A Workshop on “**Content Management System**” was organized by the Department of Computer Science on 12th February 2018 for the faculty and students of Computer Science. The Resource person Prof. Vishal of R.V. Engineering College highlighted the latest tools and technologies used for managing web content. Resource person highlighted about three regularly used Content Management tools such as Wordpress, Joomla and Drupal. The main motive of organizing this workshop was to help **students** learn about the latest information and new skills related to the concerned subject included in their academia. The staff and students had hands-on experience on Drupal in the computer science Lab. They managed to create their own simple website using Drupal.



The National College Jayanagar - Autonomous

Date: 7th February 2019

Topic: WORKSHOP ON IoT

Resource person: Dr.Renuka Prasad B of R.V. Engineering College

A five day CISCO certified IoT workshop was organized from 7th January 2019 to 11th January 2019 for second and final year BCA students. The workshop was conducted by CISCO and RVCE Centre for Potential Excellence faculties DR.Renukaprasad B, Dr. Chandra Shekhar B H, Dr. Manjunath M, Prof Vishal C and Prof.Prashanth k. About 35 students and faculties of the Computer Science Department had participated.



Date: 13th and 14th September 2019

Topic: WORKSHOP ON Business Intelligence

Resource person: Dr. Vijayalakshmi M N and Dr, Anupama Kumar of R.V. College of Engineering

Business Intelligence workshop was conducted on 13th and 14th of September – 2019. It was a two day session held for the third semester students of BCA. The resource people were associated with CISCO Company. We were visited by two resource people who were highly knowledgeable Ph.D as their merit.

Dr. Vijayalakshmi M.N and Dr. Anupama Kumar who is currently working as an associate professor in R.V College of Engineering handled the BI workshop very well. The workshop was scheduled very well utilizing time efficiently. Both the resource person has until now conducted 5 workshops on BI being associated with CISCO

The workshop was very effective for students of 3rd semester. It was also equally informative regarding the job opportunities and the scope of BI in the upcoming future. A total of 30 students had registered for the workshop.

It was scheduled right from morning 10.30 up to 5 in the evening. Software's like talend and anaconda was used on 13th and 14th respectively which was provided by them supporting 64-bit systems provided by the laboratory.

Date: 26th to 30th November 2020

Topic: WORKSHOP ON Augmented Reality

Resource person: Dr.Ashwini K B and Dr. Preeti Patil of R.V. College of Engineering

5-Days Virtual Hands – On Workshop on Augmented Reality from IEEE Student Branch National College, Jayanagar, Bangalore was conducted from 26-11-2020 to 30-11-2020 between 1:30 pm to 4:30 pm through CISCO WebEx. Dr. B. R. Parineetha, Principal, The National College, Jayanagar, Bangalore introduced Resource persons from R V College of Engineering. Mr. Chengappa M.R, Co-Chair, Professional activities & MDC Committee shared Highlighted about IEEE and our IEEE SB NCJ. Dr. Ashwini K B Associate professor, R.V College of Engineering. , Dept. Of Computer Science, gave an exposure on Augmented Reality, through unity .Dr. Preethi N Patil Assistant professor, R V College of Engineering. , Dept. of Computer Science, shared how to create a game model through unity. B V Sreedharasway, Vice Principal, the National College, Jayanagar, Bangalore, thanked the resources persons.



T. S. Sesh
PRINCIPAL
The National College
Jayanagar, Bangalore-70.

DECLARATION

I, **ANUSHA H S** student of The National College, Jayanagar, Bengaluru, hereby declare that the matter embodied in this project has been compiled and prepared by me on the basis of available literature, on the topic titled:

“SYNTHESIS AND CHARACTERISATION OF ALUMINIUM OXIDE NANOPARTICLES”

As a partial fulfilment of the requirements for the award of the degree of Master of Science in Physics. This project has not been submitted either partially or fully to any university or institute for the award of any degree, diploma or fellowship.

Date: 5/9/19

Place: Bengaluru

Anusha H.S
[ANUSHA H S]


Dr. Pramod N.G

Project Guide

Co-ordinator

Department of Post-Graduate Studies and Research in Physics

The National College, Jayanagar, Bengaluru-560070

ACKNOWLEDGEMENT

I humbly consider a privilege and honour to express my heartiest and profound gratitude to Dr. Pramod N. G, Associate professor, Department of Post Graduate Studies and Research in physics, The National College, Jayanagar, for his valuable suggestions and kind supervision throughout the project.

I wish to express my sincere gratitude to Shri. Abhiram. J and Shri Siddhalingeswar B. P, Assistant professors, Department of Post Graduate Studies and Research in Physics, The National College, Jayanagar, for their support.

I express my gratitude to Mr. Vinayak patar JNCASR, Dr. Murugendrappa Head of Physics department, BMS College, Basavanagudi. Student of Jain Engineering College, and also Physics department of R. V. Engineering College, for providing their helpful service for characterizing the samples.

My special thanks goes to Mr. Ananth T. V. and Mr. Bhairava Swami Lab assistants in The National College, Jayanagar, for being a helping hand during my course of work.

I am obliged to my friends for their co-operation and co-ordination during the entire course.

I also extend my deepest love and thanks to my family for their support and motivation towards successfully completing the project.

ANUSHA H S

Register no: 17NCJPP004



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Jayanagar, Bangalore-70.

**THE NATIONAL COLLEGE,
AUTONOMOUS,
JAYANAGAR, BANGALORE-70**

(AUTONOMOUS Institution, Affiliated to Bangalore University)

Date: 26th and 27th July 2021

Topic: Embedded Systems and its Applications

Resource person: **Kushal Nesarkar
 Embedded system Engineer at Edgate Technologies**

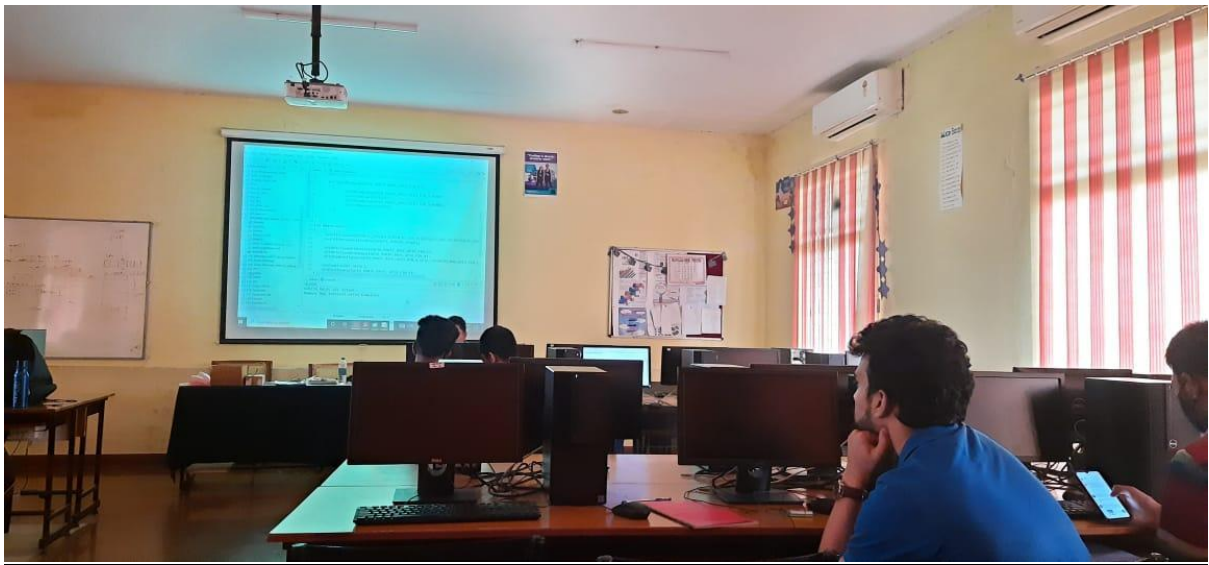
Krishna Chaitanya
 Embedded system Engineer at Edgate Technologies

The National College Jayanagar, Department of Computer Science - IOT has conducted a Workshop with the collaboration of Texas Instruments Innovation Center. (MOU dated 31st December 2018)

About the workshop: A Workshop on “**Embedded system and its applications**” was organized by the Department of Computer Science on 26th and 27th July 2021 for the students of BCA(IoT). The Resource persons Mr. Kushal Nesarkar and Mr. Krishna Chaitanya from Edgate Technologies (Texas University Partner) highlighted the latest tools and technologies used for Implementing application with Embedded systems. The main motive of organizing this workshop was to help **students** learn about the latest information and new skills related to the concerned subject included in their academia. The students had hands-on experience on TivaWare Ti tools. They managed to create their own simple applications with the software.

Number of students attended: 16





T. Suresh
PRINCIPAL
The National College
Javanagar, Bangalore-70.



CERTIFICATE OF PARTICIPATION

This is to certify that **Inchara R** of **National Degree College, Jayanagar, Bengaluru**. has successfully undergone Three Months Internship Program from **25th April 2022 to 25th July 2022** on **Embedded System Design & IoT**.

Mameet Usur

Edgate Technologies Pvt Ltd

EDGATE PARTNERS:





CERTIFICATE OF PARTICIPATION

This is to certify that **Charan S** of **National Degree College, Jayanagar, Bengaluru**. has successfully undergone Three Months Internship Program from **25th April 2022 to 25th July 2022** on **Embedded System Design**.

Mameet Usur

Edgate Technologies Pvt Ltd

EDGATE PARTNERS:



Memorandum of Understanding

Between

ipomo Communications India Pvt Ltd,

793, 36 A Cross, 18th Main, 4th T Block, Jayanagar, Bangalore – 560 041

And

The National College (Autonomous),

7thBlock, Jayanagar, Bangalore – 560 070



Memorandum of Understanding

This agreement is made on 17th February 2020 between The National College (Autonomous), 7th Block, Jayanagar, Bangalore – 560 070 represented by its Principal, (hereinafter referred to as NCJ which expression shall mean and include its officers for the time being and its successors) and

ipomo Communications India Pvt. Ltd., a company incorporated under the Companies Act, 1956, having its office at # 793, 1st Floor, 36th 'A' cross, 18th Main, Jayanagar, Bangalore-560041 represented by Managing Director, Mr. HariPrakashShanbhog (hereinafter referred as ipomo which expression shall mean and include here the context so requires or admits its permissible successors and assigns) of the other part.

Witnesses as follows:

- I. WHEREAS, NCJ desires to deploy ipomo Campus solution from ipomo in its campus at 7th Block, Jayanagar, Bangalore 560 070.
- II. WHEREAS, ipomo is involved in design, development and deployment of ipomo Campus solution related to Mobile Learning.
- III. Now this agreement witness as follows:

That in consideration of the mutual undertakings, promises and covenants set forth in this agreement, the parties hereto have mutually agreed upon the terms and conditions hereinafter set forth.

1. Scope of the Agreement: The scope of the agreement will include the following:

- a. Deployment and execution of ipomo Campus solution of ipomo in The National College (Autonomous), 7th Block, Jayanagar, Bangalore – 560 070. Below mentioned are services and support details.



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B. S. Anil Kumar
Principal
The National College
Autonomous
Jayanagar 7th Block,
Bangalore - 560 070.



Includes the following services and support (recurring).

SI No	Modules & Features	Description	Remarks
1	User Management	<ul style="list-style-type: none"> ➤ Principal Login ➤ HOD Login ➤ Lecturer's Login ➤ Student / Parent Login 	
2	Principal Dashboard	<p>Real-time lecture status report - For each period - can be viewed on principal dashboard.</p> <p><u>(As and when a teacher submits the attendance, real time data can be seen on the principal dashboard, period wise how many students are absent, attendance submission time, which teacher has taken the class and the subject)</u></p>	
3	Server	<ul style="list-style-type: none"> ➤ Secured server for hosting under ipomo domain ➤ Secured portal will be created for NCJ with full access to manage the portal anytime, anywhere. 	
4	Service & Support	<ul style="list-style-type: none"> ➤ First two weeks, a dedicated resource will be present at the college ➤ After two weeks, a technical person from ipomo will visit the campus once in two weeks for support & service ➤ <u>Monthly review meeting with management team (MRM)</u> ➤ Any ipomo related technical issues will be addressed within TWO working day ➤ One day training will be provided to all the teaching staff ➤ On all working days between 9 a m 	



Signature
Principal
 The National College
 Autonomous
 Jayanagar 7th Block,



			&6 p m, help desk will be available for support, help line numbers – 81399 99903 / 04	
5	Reports	Related to Students	<ul style="list-style-type: none"> ➤ Subject attendance register. (No need for manual attendance register) ➤ Consolidated attendance report ➤ Attendance shortage report ➤ Continuous Absentee report 	All the reports can be accessed by the Admin / Principal directly from his/her PC.
		Related to Faculty	<ul style="list-style-type: none"> ➤ Lecture Status report ➤ Lecture weekly / monthly work diaries ➤ Topics coverage report ➤ Report on till date classes taken by teaching faculty 	
6	Communication (internal & external)		<ul style="list-style-type: none"> ➤ SMS communication to students / parents. ➤ SMS delivery report ➤ Internal SMS Communication to faculty (both teaching & non-teaching) ➤ <u>SMS</u>- One lakh Free SMS can be sent to students, parents and staff per institution / year. After one lakh SMS, each SMS will be charged extra 	All these communication can be sent by the admin locally at real-time.
7	Examination		<ul style="list-style-type: none"> ➤ QR Code generation (Roll No wise, irrespective of combinations) ➤ Marks Sheet generation (Invigilator sheet) ➤ Result sheet generation ➤ Marks submission app ➤ Online result ➤ Marks card generation ➤ Supplementary QR code generation ➤ Supplementary marks sheet generation ➤ Supplementary result sheet generation 	



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Principal
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		<ul style="list-style-type: none">➤ Marks submission app for supplementary (Reappear) students➤ Hall Ticket generation	
8	ipomo Room on mobile learning platform	<p>Students / parents can install app on their own mobile devices / tablets to view following reports –</p> <ul style="list-style-type: none">➤ Student Consolidated Attendance➤ Monthly Attendance Register➤ Internal Marks➤ Topics Coverage➤ Assignments➤ Notice Board➤ Events➤ Gallery➤ Cultural Activities and more...	
9	Alumni	The National College, Jayanagar, Bangalore would be provided a Alumni room on the bimba app.	

2. Obligation of NCJ:

- a. NCJ shall ensure the accuracy and correctness of student and teachers data.
- b. NCJ shall make payments to ipomo as agreed (ref: Annexure I&II)

3. Obligations of ipomo:

- a. Deployment- ipomo shall deploy the ipomo Campus solution in The National College (Autonomous), 7th Block, Jayanagar, Bangalore – 560 070.
- b. Training & Support: ipomo Communications shall deploy ONE person to provide necessary training to the teaching staff on usage of the ipomo campus solution (for a period of two weeks - onsite) and later monitor the operations during the execution (need basis offsite/onsite).

4. ipomo indemnifies NCJ against any loss or liability due to any actions taken in good faith which may arise as a consequence of discharge of its obligations towards this agreement.



Confidential

Page 5 of 8

[Signature]
Principal
The National College
Autonomous



Similarly NCJ indemnifies ipomo against any loss or liability due to any actions taken in good faith which may arise as a consequence of discharge of its obligations towards this agreement.

5. Confidentiality:

5.1 ipomo and NCJ shall each exercise due diligence to maintain in confidence and not disclose to any third party any proprietary information furnished by the other to it on a confidential basis and identified as such when furnished. Except in accordance with this Agreement, neither party shall use such information without permission of the party that furnished it. As used in this paragraph, "due diligence" means the same precaution and standard of care which that party uses to safeguard its own proprietary data, but in no event less than reasonable care.

5.2 This Agreement does not grant any license under any patents or other intellectual property rights owned or controlled by or licensed to ipomo. NCJ shall not have any right to manufacture, reengineer, and reverse engineer products by ipomo.

6. General:

6.1 Uptime Guarantee – Availability of the Application and Service – 99% uptime

6.2 At any given time, ten teachers can simultaneously login into the application

6.3 In case NCJ decides to withdraw from the contract or does not renew, Ipomo will provide the data to the college in a suitable format. Disc has to be provided by NCJ.

7. Duration of the Contract: This agreement shall be valid for the Academic Year 2019 – 2020, 2020–2021 and 2021 – 2022 initially and shall be further renewed for a period agreeable by both the parties. Both the parties shall be at liberty to terminate the agreement by giving to the other notice of THREE months. It shall not be necessary to assign any reasons thereof.

8. Force Majeure: If a force majeure situation arises either party shall inform the other in writing of such conditions, the cause there of and likely duration of the delay.


9. Arbitration: Should any dispute arise between the two parties, the matter shall be resolved by arbitration under the provisions of Arbitration and Conciliation Act, 1996 and the venue of Arbitration to be Bangalore.

10. Any litigation arising of this agreement will be subject to the exclusive jurisdiction of Bangalore.



Confidential

Page 6 of 9


Principal
The National College
Autonomous
Jayanagar 7th Block,



In witness whereof the parties have caused this agreement executed on the day, month and year first above written.

For The National College (Autonomous), 7th Block, Jayanagar, Bangalore – 560 070

[Signature]
Principal
 The National College
 Autonomous
 Jayanagar 7th Block,
 Bangalore - 560 070.

Name: *Dr. B. R. Faizee*

Date: *17.2.2020*

For ipomo Communications India Private Limited, Bangalore.

[Signature]
 Authorized Signatory:


Name: *Hari Prakash Shankh*

Date: *17.2.2020*

Witnesses:

1. *M. Mahadev. COE NCT Bangalore*
2. *C. V. Kulkarni, IQAC coordinator, NCT*



Annexure I

a. Pricing

Subscription fee per student per academic year (exclusively for The National College (Autonomous) 7th Block, Jayanagar, Bangalore – 560 070): Rs.400/- (Rupees Four Hundred only). The applicable taxes and duties will be charged extra at actual. At present, GST of 18 % is applicable. However, in case of changes in taxes / duties levied by the Government, it will be claimed at actual.

The National College, 7th Block, Jayanagar, Bangalore will use its staff personal devices (Android V 4.0 & above), ipomo app will be installed on the device to engage the classroom for attendance. Each staff device IMEI no will be shared with us for data security.

If additional changes or customization required, ipomo will study the same and provide a separate proposal (with or without any charges) for the customization work. Only after due approval, customization work will be taken.

SMS's are subject to a maximum of one lakh for NCJ. Beyond one lakh SMS, 25 paise per SMS will be charged.



[Signature]
Principal
The National College
Autonomous
Jayanagar 7th Block,
Bangalore - 560 070.



Annexure II

a) Billing & Payment

Milestone	Details	Amount
<u>Year 1 (2019 – 2020)</u>		
1	Start of the semester – 25%	
	At the end of the semester – 25%	
<u>Year 2 (2020 – 21)</u>		
2	At the beginning of the next semester – 25%	
	Balance at the end of the semester – 25%	

For The National College (Autonomous), 7th Block, Jayanagar, Bangalore – 560 070.

Signature
Principal
 The National College
 Autonomous
 Jayanagar 7th Block,
 Bangalore - 560 070.

Dr. B. R. Parineetha
 Principal
 National College
 Jayanagar
 Bangalore

Date: 17.2.2020

For ipomo Communications India Private Limited, Bangalore.

Signature
 Authorized Signatory:
 Name: *H. S. ...*

Date: 17.2.2020

Internship Report - Data Science

Duration - 25/10/2021 - 25/11/2021

Co-ordinators - Likhith, Sandeep

Candidates -

1. Apoorva
2. Swasti G Shetty
3. Monica B
4. Spoorthi S

Internship Activity -

During the period of internship the interns performed research activities described below.

1. Individual Tasks – Individual tasks were given for each of the intern.

Tasks Details -

- | | | |
|--------------------------------|---|-----------------|
| 1. Movie recommendation system | - | Monica B |
| 2. Sentiment Analysis | - | Swasti G Shetty |
| 3. Hand writing recognition | - | Spoorthi S |
| 4. Web scraping | - | Apoorva |

Results -

The tasks were completed successfully in stipulated time.

2. Mapping the data and storing in the dictionary format.
3. SQL Query assignments.
4. Working on Zeep.
5. Working on metadata framework.
6. Working on SFTP Server.

Analysis -

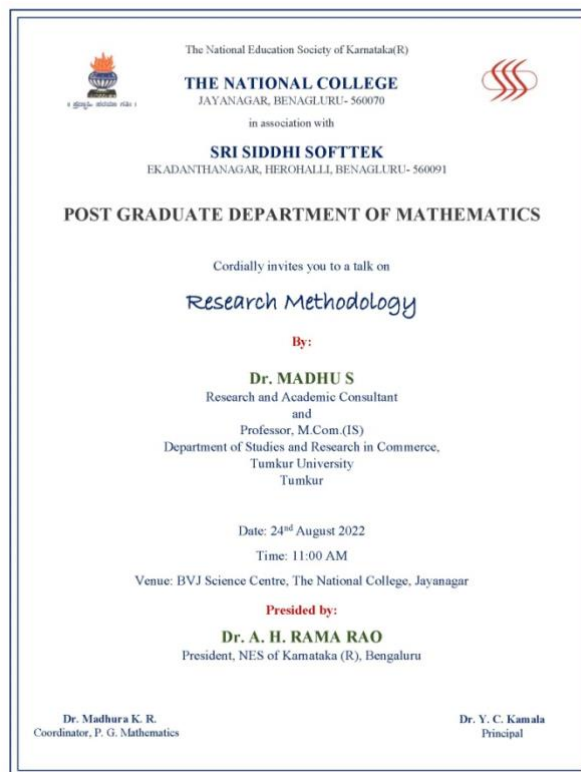
All the interns were good at completion of the tasks and has a good understanding level of the problems and also good analytical skills too.

THE NATIONAL COLLEGE
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Jayanagar, Bengaluru-560 070.

POST GRADUATE DEPARTMENT OF MATHEMATICS

Report of seminar on RESEARCH METHODOLOGY

The Post Graduate Department of Mathematics, The National College, Jayanagar organized a seminar on “**Research Methodology**” on 24th August 2022. The inaugural function was held at Multimedia Hall, B. V. J. Science Center at 11AM, the Resource Person: Dr. Madhu S, Research and Academic Consultant, Sri Siddhi Softtek, Bangalore addressed the gathering. There are more than 100 students from both PG and UG were participated and information about research methodology, coursework, project works have shared by the resource person.







THE NATIONAL EDUCATION SOCIETY OF KARNATAKA (R)

THE NATIONAL COLLEGE

AUTONOMOUS

JAYANAGAR, BANGALORE- 560 070

Accredited 'A' Grade by NAAC

UG DEPARTMENT OF COMMERCE

invites you to join for

PROJECT

ORIENTATION

Chance to Experience Reality

| Monday | 23rd May 2022 | at 1:30 pm

| Dr. H.N. Multimedia Hall, BVJ Science Centre |



Resource Person

Dr. Madhu S

Professor, Department of Commerce
Dr. P. Sadananda Maiya School of Commerce & Management
Tumkur University, Tumkur

Convener

Dr. N. K. Satya Pal Sharma

Head, UG Department of Commerce



Prof. H.C. Bellad

Secretary, College Council

Dr. Y.C. Kamala

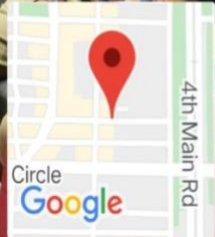
Principal

A Report on Project Orientation

Organized by UG Department of Commerce

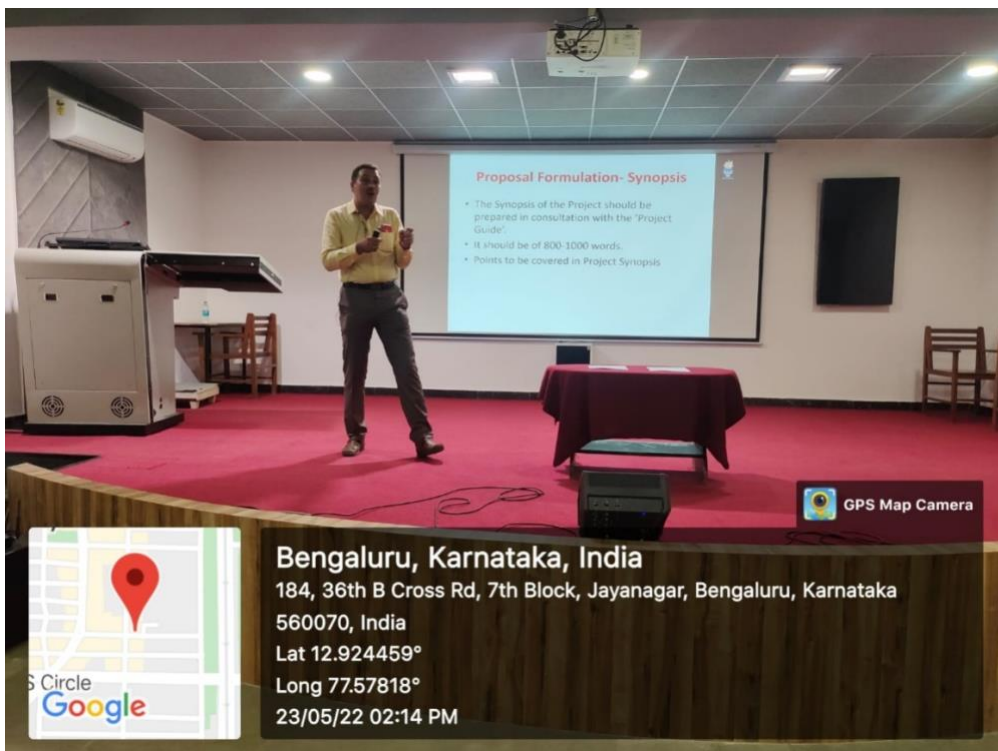
The UG Department of Commerce organised Project Orientation, on 23rd May 2022 in BVJ Science Centre, Multimedia Hall. The resource person was Dr. Madhu S, who is a Professor at Dr. P. Sadananda Maiya School of Commerce and Management, Tumkur University. He spoke about the Research methodology with reference to the project for final year B. Com students. He also detailed the students about the project formulation methods, preparation of synopsis, and details of the project, types of research and designs, sampling and sampling techniques, hypothesis, preparation of questionnaires. It was a knowledgeable session for the students.





Bengaluru, Karnataka, India
186, 36th B Cross Rd, 7th Block, Jayanagar, Bengaluru, Karnataka
560070, India
Lat 12.924418°
Long 77.578339°
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GPS Map Camera



Bengaluru, Karnataka, India
184, 36th B Cross Rd, 7th Block, Jayanagar, Bengaluru, Karnataka
560070, India
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Long 77.57818°
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GPS Map Camera

T. Senthil
PRINCIPAL
The National College
Jayanagar, Bangalore-70.

**The National College
(Autonomous)
Jayanagar-70
Department of Journalism**



THE NATIONAL COLLEGE

AUTONOMOUS

36th B Cross, 7th Block, Jayanagar, Bangalore - 560 070

Phone : 080-26549684 Tele Fax : 080-26656644

Website : www.ncjayanagar.com E-mail: ncjblore@yahoo.com

NAAC ACCREDITED - 'A' GRADE

Ref. No. NC/J/ 324 / 2022-2023

Date 28th April 2022

MEMORANDUM OF UNDERSTANDING

Between

The National college, Jayanagar
(Autonomous)

Department of Journalism

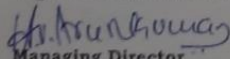
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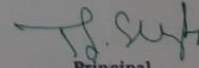
Newsman Press Relations



The Memorandum of Understanding between The Department of Journalism National College, Jayanagar and Newsman Press Relations, contains the following terms and conditions:

1. Newsman Press Relations would be extending its support to Journalism Students of National College for organizing the training programmes and project works required for different courses like B.A Journalism related guest lectures, media visit, internships, career guidance and placements.
2. Newsman Press Relations would extend its support to journalism students to involve in media related practical activities by providing projects, research assignments, experts talks etc.
3. The student and college shall maintain absolute confidentiality of data collected only for academic purpose. The data shall not be used by the student or the college for any commercial or personal gain.
4. Any other requirements this association would be accepted with the mutual concurrence.
5. Duration of MOU is three years
6. Here is no financial liability on the part of both the parties except the one agreed from time to time.


Managing Director


Principal
The National College
Jayanagar, Bangalore-70

**The National College
(Autonomous)
Department of Journalism**



THE NATIONAL COLLEGE

AUTONOMOUS

36th B Cross, 7th Block, Jayanagar, Bangalore - 560 070

Phone : 080-26549684 Tele Fax : 080-26656644

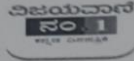
Website : www.ncjayanagar.com E-mail: ncjblore@yahoo.com

NAAC ACCREDITED - 'A' GRADE

Ref. No. NC/J/324/12022-2023

Date 28th April 2022

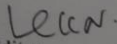
MEMORANDUM OF UNDERSTANDING
Between
**The National College, Jayanagar
(Autonomous)
Department of Journalism**
And

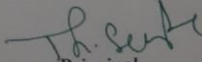


Vijayavani Kannada Daily, Bengaluru-18

The Memorandum of Understanding between The Department of Journalism National College, Jayanagar and Vijayavani Kannada Daily, contains the following terms and conditions:

1. Vijayavani Kannada Daily, would be extending its support to Journalism Students of National College for organizing the training programmes and project works required for different courses like B.A Journalism related guest lectures, media visit, internships, career guidance and placements.
2. Vijayavani Kannada Daily, would extend its support to journalism students to involve in media related practical activities by providing projects, research assignments, experts talks etc.
3. The student and college shall maintain absolute confidentiality of data collected only for academic purpose. The data shall not be used by the student or the college for any commercial or personal gain.
4. Any other requirements this association would be accepted with the mutual concurrence.
5. Duration of MOU Three years.
6. Here is no financial liability on the part of both the parties except the one agreed from time to time.


Editor


Principal
The National College
Jayanagar, Bangalore-70

Programs conducted under MOU between the department of Journalism and Vijayavani daily

Journalism Student's visit to 'Vijayavani' Media



With a view to provide print media exposure to the final year students of B.A Journalism, a visit to a leading Kannada daily 'Vijayavani', was organized from the department of Journalism. Students have witnessed different facilities and functioning of the newsroom.



Students had a rare privilege of interacting with Channe Gowda, the Chief Editor of Vijayavani daily.



Students also had an interaction session with the different section heads of the newspaper organization including digital section.




Students were also shown their interest to take up journalism as a profession in future.

Class Interaction program on Future Journalists

The Department of journalism has organized a class interaction program on the topic 'Future Journalists' for the Students of 6th semester. National College Alumnus, Sub editor of Vijayavani Daily Mr. Gurunaganandan addressed the students and explained the role of future journalists. All the students have actively participated in the interaction activity.




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Jayanagar, Bangalore-70.

**THE NATIONAL COLLEGE (AUTONOMOUS)
Jayanagar, Bangalore**

Department of Economics

Report on Guest lecture

Department of Economics of the National College, Jayanagar in collaboration with Genius Kidz Learning Private Ltd (GKLPL) had organized a Guest lecture on “*The Concepts of Bad Bank and Non-Performing Assets*” on 17th May 2022 (11.00 AM) at Multimedia Hall, B.V. Jagadish Science Centre.

Dr. Y. C. Kamala, Principal introduced the guest speaker and delivered welcome speech. **Prof. Nataraj Sarjapur**, Director, GKLPL, was the resource person. He delivered a lecture giving insights of increasing NPA’s in India and explained meaning, need, and role of Bad Bank to manage these NPA’s.

More than 80 students attended this lecture and the platform was open for question-and-answer session at the end. The guest effortlessly answered all the queries, hence the agenda of the whole lecture to reach out to the students on this topic was effectively accomplished.

Dr. Nagachampa Jain, Head of the Department of Economics hosted the programme and proposed vote of thanks.

The National Education Society of Karnataka (R.)
The National College
Autonomous
Jayanagara, Bengaluru
NAAC Accredited With Grade 'A'

DEPARTMENT OF ECONOMICS
in collaboration with **GENIUS KIDZ LEARNING PRIVATE LTD.**
organising a Guest Lecture on

**The Concept of Bad Bank
and Non Performing Assets**

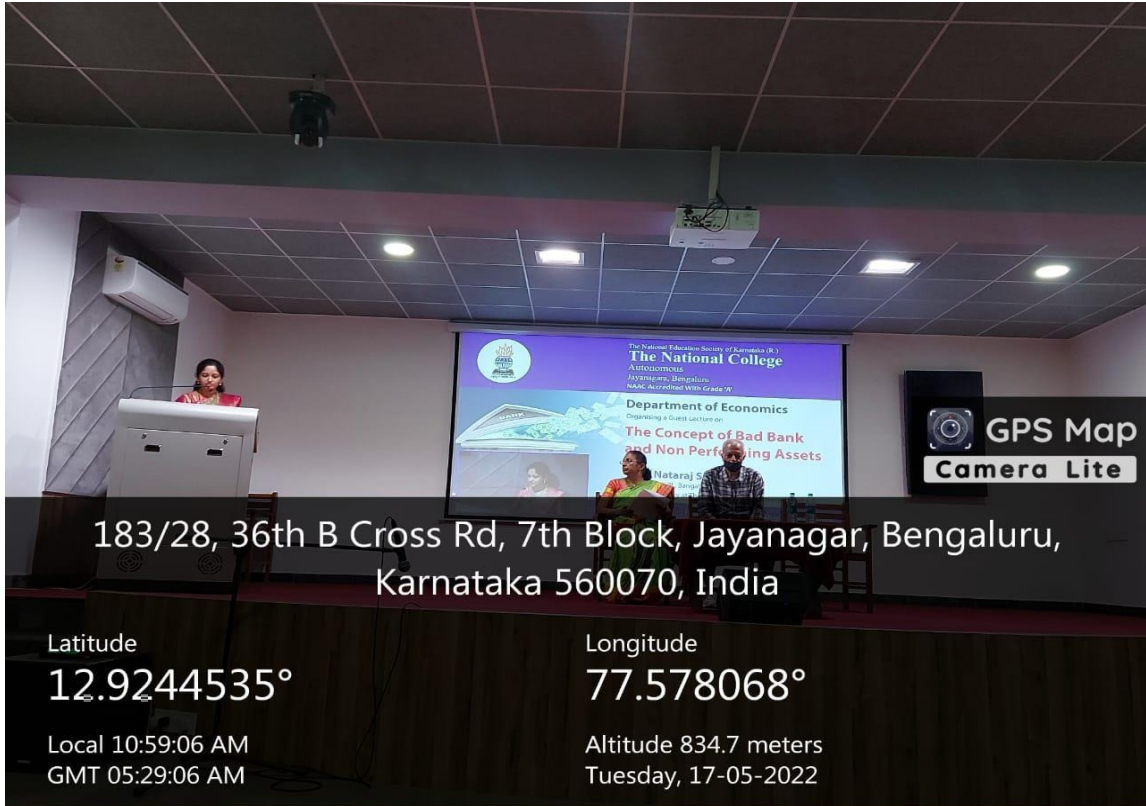
by
Prof. Nataraj Sarjapur
Director, GKLPL, Bangalore
A Visiting Faculty at
The National College, Basavanagudi

On Tuesday, 17-05-2022 at 11.00 AM
Venue
Multi-Media Hall, BVJagadeesh Science Centre
The National College, Jayanagar

looking forward to welcoming you

Dr. Nagachampa Jain
HoD
Dept. of Economics

Dr. Y.C. Kamala
Principal



T. S. Suresh
PRINCIPAL
The National College
Jayanagar, Bangalore-70.

THE NATIONAL COLLEGE
AUTONOMOUS
Jayanagar, Bengaluru-560 070.

POST GRADUATE DEPARTMENT OF MATHEMATICS

Report on “Way to Re-search” 2022

The Post Graduate Department of Mathematics, The National College, Jayanagar, in association with Srinivasachaar Ramachaar Foundation, organized a talk on “*Way to Re-search*” on March 30, 2022. The Resource Person Dr. Madhavi Rao, Director, Mandaara Centre for Research and Innovation, addressed the gathering. She began the talk by giving an outline about research in general. She highlighted on the challenges that one faces in the field of research. She also emphasized on the need for research. Further she empowered students as to how they can pursue a career in the field of research. More than 30 post graduate students actively participated in the talk.



The National Education Society of Karnataka(R)
THE NATIONAL COLLEGE
JAYANAGAR, BENGALURU - 560070



Post Graduate Department of Mathematics
And
Srinivasachaar Ramachaar Foundation

Cordially invites you to a talk on
“WAY TO RE-SEARCH”

By:
DR. MADHAVI RAO
Director,
Mandaara Centre for Research and Innovation, Bengaluru.

Date: 30th March 2022
Time: 3:00 PM
Venue: BVJ Science Centre, The National College, Jayanagar

Presided by:
DR. A. H. RAMARAO
President, NES of Karnataka (R), Bengaluru

Dr. Madhura K. R.
Coordinator, P. G. Mathematics

Dr. Y. C. Kamala
Principal



T. Senthil
PRINCIPAL
The National College
Jayanagar, Bangalore-70.

THE NATIONAL COLLEGE
AUTONOMOUS
Jayanagar, Bengaluru-560 070.

POST GRADUATE DEPARTMENT OF MATHEMATICS

Report on Employability Skills 2022

The Post Graduate Department of Mathematics, The National College, Jayanagar, in association with Brain Labs eEducation Pvt. Ltd., organized a talk on “**EMPLOYABILITY SKILLS**” on December 28, 2022. The Resource Person Dr. Madhavi Rao, Subject Matter Expert, Brain Labs eEducation Pvt. Ltd., addressed the gathering. She began the talk by giving an outline about the current scenario of employability in the corporate sector. She highlighted on the gap that exists between the academic institutions and the corporate sector. Further she empowered students as to how they can address this gap and what is required of them to be done in this regard. More than 30 post graduate students actively participated in the talk.

The National Education Society of Karnataka(R)
THE NATIONAL COLLEGE
JAYANAGAR, BENGALURU- 560070

Post Graduate Department of Mathematics
And
Brain Labs eEducation Pvt. Ltd.
Jointly invites you to a talk on
EMPLOYABILITY SKILLS
By:
DR. MADHAVI RAO
Subject Matter Expert
Brain Labs eEducation Pvt. Ltd.

Date: 28th December 2022
Time: 2:30 PM
Venue: BVJ Science Centre, Room No: 208
The National College, Jayanagar

Presided by:
DR. A. H. RAMARAO
President, NES of Karnataka (R), Bengaluru

Dr. Madhura K. R.
Coordinator, P. G. Mathematics

Dr. Y. C. Kamala
Principal



T. Senthil
PRINCIPAL
The National College
Jayanagar, Bangalore-70.

**NATIONAL COLLEGE
(AUTONOMOUS)
JAYANAGAR, BANGALORE
*Department Of English***

Seminar


on

***Importance of the English language in the domain of
Newspaper Publication***



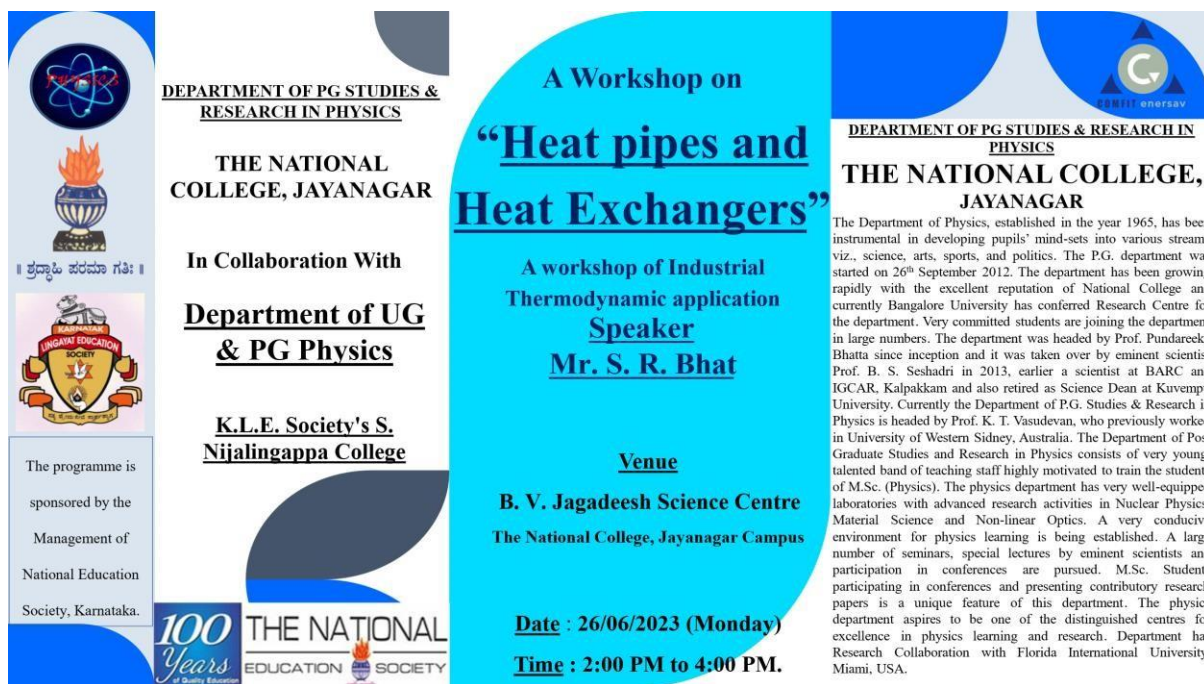
The Department of English has organized a talk on the topic, ***Importance of the English language in the domain of Newspaper Publication***. Sri.DhyanPaanacha, the Editor Of ***City Highlights Newspaper***, Queens Road, Bangalore, addressed the students of Optional English and English Open Elective students and students from other programmes interested in the topic, about the ***Importance of the English language in the domain of Newspaper Publication***. He educated the students about

Content Writing, Fossilized Errors, Report Writing, nuances of editing, developing content for Web Digital Publications etc., on 8th September, 2022. He also stressed the importance of reading and writing for a successful career in any field supported by active listening. This was followed by an interactive question answer session where the queries raised by the students were effectively addressed by him.


Principal
The National College
Javanagar, Bangalore-70

A Workshop on “Heat pipes and Heat Exchangers”

A workshop of Industrial Thermodynamic application



DEPARTMENT OF PG STUDIES & RESEARCH IN PHYSICS
THE NATIONAL COLLEGE, JAYANAGAR

In Collaboration With
Department of UG & PG Physics
K.L.E. Society's S. Nijalingappa College

The programme is sponsored by the Management of National Education Society, Karnataka.

100 Years of Quality Education
THE NATIONAL EDUCATION SOCIETY

A Workshop on
“Heat pipes and Heat Exchangers”

A workshop of Industrial Thermodynamic application
Speaker
Mr. S. R. Bhat

Venue
B. V. Jagadeesh Science Centre
The National College, Jayanagar Campus

Date : 26/06/2023 (Monday)
Time : 2:00 PM to 4:00 PM.

DEPARTMENT OF PG STUDIES & RESEARCH IN PHYSICS
THE NATIONAL COLLEGE, JAYANAGAR

The Department of Physics, established in the year 1965, has been instrumental in developing pupils' mind-sets into various streams viz., science, arts, sports, and politics. The PG department was started on 26th September 2012. The department has been growing rapidly with the excellent reputation of National College and currently Bangalore University has conferred Research Centre for the department. Very committed students are joining the department in large numbers. The department was headed by Prof. Pundareeka Bhatta since inception and it was taken over by eminent scientist Prof. B. S. Seshadri in 2013, earlier a scientist at BARC and IGCAR, Kalpakkam and also retired as Science Dean at Kuvempu University. Currently the Department of P.G. Studies & Research in Physics is headed by Prof. K. T. Vasudevan, who previously worked in University of Western Sidney, Australia. The Department of Post Graduate Studies and Research in Physics consists of very young, talented band of teaching staff highly motivated to train the students of M.Sc. (Physics). The physics department has very well-equipped laboratories with advanced research activities in Nuclear Physics, Material Science and Non-linear Optics. A very conducive environment for physics learning is being established. A large number of seminars, special lectures by eminent scientists and participation in conferences are pursued. M.Sc. Students participating in conferences and presenting contributory research papers is a unique feature of this department. The physics department aspires to be one of the distinguished centres for excellence in physics learning and research. Department has Research Collaboration with Florida International University, Miami, USA.

A workshop on Heat pipes and heat exchanges was organized by Department of Physics, The National College, Jayanagar, Bengaluru, in collaboration with Department of Physics, K.L.E. Society's S. Nijalingappa College, Rajajinagar, Bengaluru. The program was started with the invocation song by our students and Prof. K T Vasudevan welcomed all the dignitaries to the dais and welcomed all the faculties and participants, and introduced the chief guest to the audience. It is an interesting industrial application of thermodynamics and its finds applications in space ships and other places. There was a practical demonstration of this concept. The workshop was mainly organized to the students and faculties to understand in a practical way it made the subject interesting and gain knowledge on the thermodynamic behaviour in heat pipes and also to know the mechanism in between heat pipes and normal metals. Prof. P Nagaraju concluded the program with the vote of thanks.







T. Seshu
PRINCIPAL
The National College
Jaynagar, Bangalore-70.

Structural and Optical Properties of AgO Nanoparticles Synthesized using Solid State Combustion

Thejas R ^a, Vinay D ^{a,b}, Ganesh S Hegde ^{a,b}, Siddivinayaka T S ^a, and Abhiram Jagannathan ^{a, c*}

^{a)} Department of Post Graduate Studies and Research in Physics, The National College, Jayanagar, Bangalore- 560070, Karnataka, India


^{b)} Department of Physics, KLE's S Nijalingappa College, Rajajinagar, Bangalore- 560010

^{c)} Department of Physics, Indian Academy Degree College- Autonomous, Hennur Cross, Hennur Main Road, Kalyan Nagar, Bangalore-560043 Karnataka, India

*Corresponding Author: abhi.ram.jagan@gmail.com

Abstract: Silver oxide nanoparticles (AgO NPs) were synthesized using solid state combustion technique using cow dung and cow urine as fuel. The structural features of samples were examined using XRD technique and these samples were found to exhibit prominent peaks at 28°, 32°, 46° respectively. These samples were subjected to Rietveld refinement and it is interesting to note instead of having Ag phase, the nanoparticles confirmed existence of the phase with a similarity to that of Ag₂O₃ nanoparticles, thereby indicating the formation of silver oxide nanoparticles. It is further interesting to note that the samples have exhibited SPR shoulder peak at 435 nm, indicating the existence of Ag NPs, which is slightly red-shifted from its characteristic 410 nm position or it may also be due to formation of AgO NPs.

Keywords: solid state combustion method, silver nanoparticles, plasmon resonance.


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Department of Electronics

in collaboration with

SCIENIOT TECHNOLOGIES

organising

a one day workshop on

RF REMOTE

04-05-2023 | The NCJ

Resource Person

Dr. Sanjeev S

CEO, SCIENIOT Technologies

Prof. Cheluvappa S.
HoD of Electronics

Prof. H C Bellad
College Council Secretary

Dr. B. Suresha
Principal

THE NATIONAL COLLEGE
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JAYANAGAR, BENGALURU-70



DEPARTMENT OF ELECTRONICS
In Collaboration with

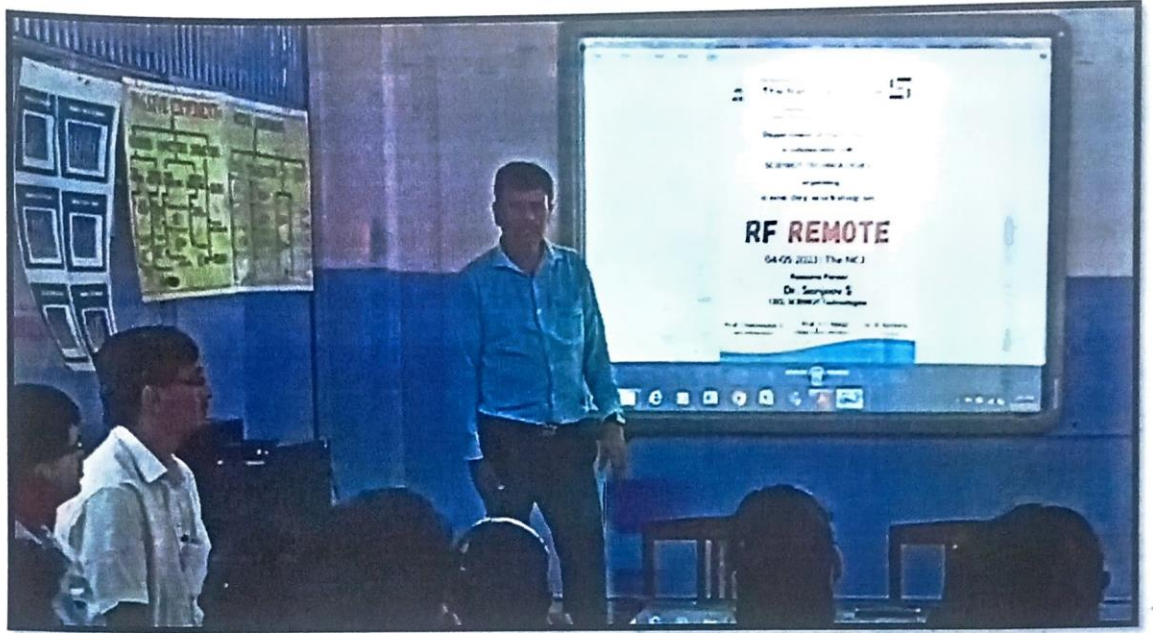
SCIENIOT TECHNOLOGIES, BENGALURU

Organized a

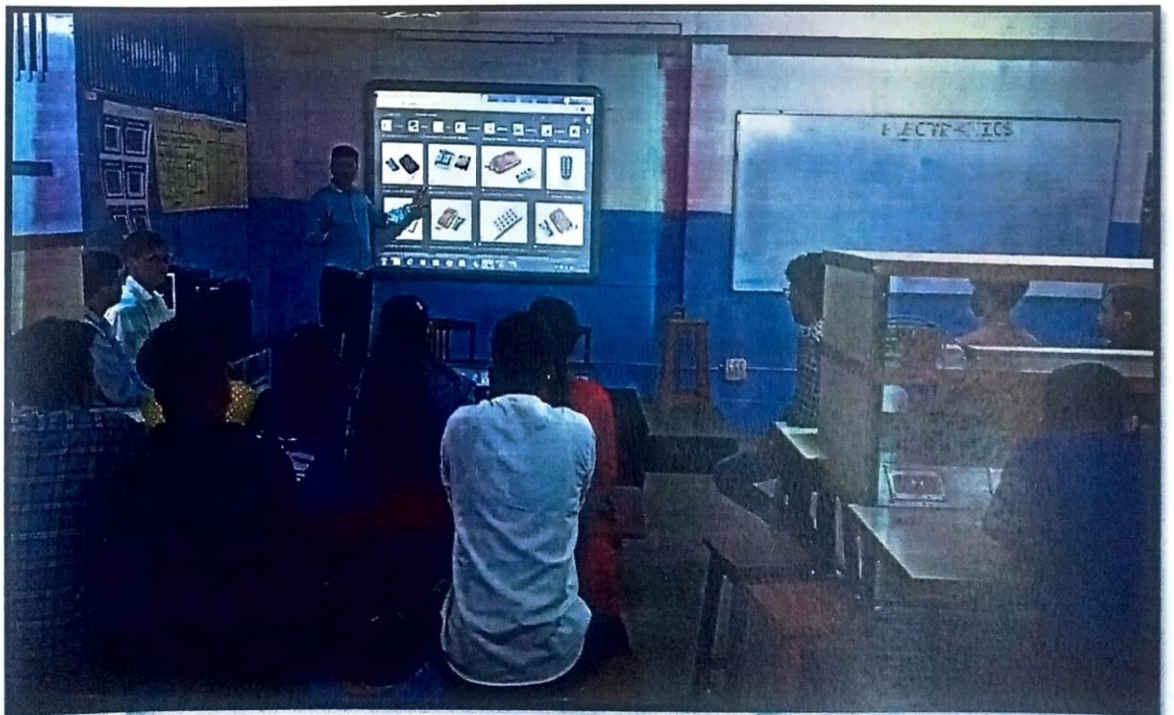
One Day Workshop on
“RF Remote”
ON 4TH May 2023

As a part of the Memorandum of Understanding between the, **National College, Jayanagar, Bengaluru and SCIENIOT TECHNOLOGIES, BENGALURU**, The Department of Electronics organized a one Day workshop on 'RF Remote for B.Sc Electronics and BCA IOT students on 4th May 2023. Dr. Sanjeev S, CEO, **SCIENIOT TECHNOLOGIES, BENGALURU** was the resource person.

Dr. Sanjeev S gave an introduction on various aspects of working of RF remotes then conducted a hands-on session RF Remote. The workshop enabled students to build their own RF Remote at the end.



Dr Sanjeev giving Introduction to RF Remote





Head of The Dept of Electronics
The National College,
(Autonomous)
Jayanagar, Bengaluru - 560 070

Principal
The National College
Autonomous
Jayanagar 7th Block,
Bangalore - 560 070

Fax: 080 - 26656644



E-mail: ncjblore@yahoo.com

☎ 080 - 26549684

THE NATIONAL COLLEGE, JAYANAGAR, BENGALURU – 560 070

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Website: www.ncjayanagar.com

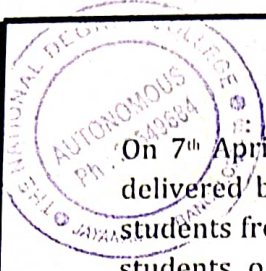
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**REPORT ON STUDENT EXCHANGE PROGRAMME FOR THE NATIONAL COLLEGE
& JANATHA FIRST GRADE COLLEGE**

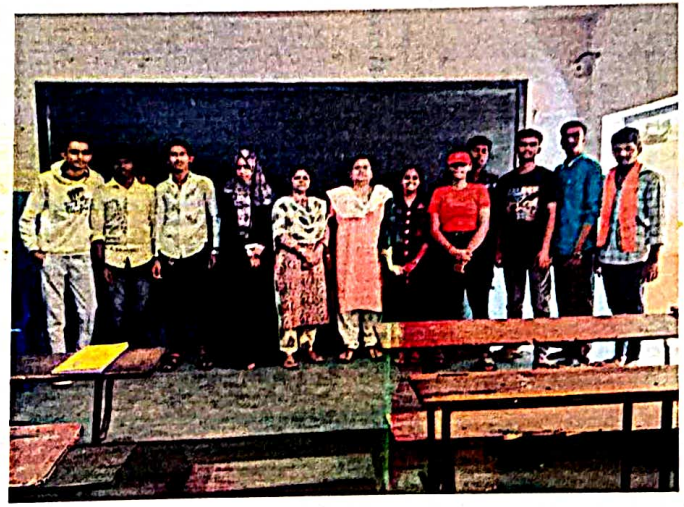
29th March 2023: A novel idea of a Student Exchange Program was initiated for the exchange of ideas, culture and thoughts, with the students of **Janatha First Grade College, Bangalore**. This initiative gave scope to achieve the vision and the objectives of B.Com Students in enriching vibrancy. The whole process began to articulate from the third week of March under the guidance and leadership of **Prof. Subhashini S, Head, Department of Commerce, JFGC, and Bangalore**. This idea took concrete shape in the month of April and took place from 4th - 7th April, 2023. The program was coordinated by Prof. Arun Kumar G S and Prof. Nagamani P L, faculties, NCJ. The success of this program lay in the team work of all the faculty & staff of JFGC. We thank and congratulate all for making this event memorable. The event kick-started with the inauguration on 4th April. The students were on a campus tour in the morning to experience the infrastructure and the diversity on campus. They were enthralled by the way the academic infrastructure and facilities were provided to the students at NCJ. They enjoyed the refreshments provided at cafeteria. They were happily sharing their experiences after seeing the wonderful campus. The Staff members gave their valuable insights to the students.

The orientation program continued with a faculty interaction with students followed by a brief introduction of Commerce Career by Prof. Sowmya Shree (Head, Commerce - NCJ), an introduction of Commerce Forum and activities by taking place which benefits the students, Importance of skill based and value based education as per NEP, Interaction with NCC Officer and the Sport PED of NCJ, Introduction to Center of Continuing Education By Prof. Arun Kumar GS, Associate Professor, NCJ. From 5th April to 7th April we arranged special sessions for the students, by the NCJ faculty apart from the regular classes. Special sessions have been taken by: Prof. Nagamani P L on Leadership Prof. Arun Kumar G S on Gandhian Thought, Prof. Geetha Srinivasa on Emerging trends in Psychology, Prof. Aditya B V conducted an exercise on Reading & learning practice, Prof. Varalakshmi S on Corporate communication and Prof. Asha T S on Understanding Human Behaviour through experimental analysis.





On 7th April, 2023 a valedictory program was conducted in which a special lecture was delivered by Dr. Y C Kamala, Principal, NCB, followed by a cultural program where the students from both, NCJ and JFGC had participated. It was a thrilling experience where few students of JFGC shared their memories of the exchange programme. This exposure enriched their academic profile in understanding the functioning of cooperatives. The student exchange program was a fantastic experience.



Dr. Seshu
PRINCIPAL
The National College
Jayanagar, Bangalore-70.

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THE NATIONAL COLLEGE, JAYANAGAR, BENGALURU – 560 070
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Website: www.ncjayanagar.com

REPORT ON STUDENT INTERNSHIP ORIENTATION PROGRAMME IN
COLLABORATION WITH GURU KRUPA AUTO SOLUTIONS

Location	BVJ Science Centre, The National College Campus
Target Audience	80 Plus
Department	Commerce
Programme	B.Com.
Name of Activity	Orientation on Student Internship and Organizational Study
Date	10 th April 2023, Monday
Organizers and Brief Details	Prof. Arun Kumar G S, Associate Professor, Department of Commerce, The National College, Autonomous, affiliated to Bangalore University, us The session was initiated by Prof. Puspha N with a welcome address and chief guest introduction and presided by Dr. B Suresha B, Principal, NCJ.
Faculty in charge	Prof. Nagamani P L, Associate Professor

Description of the Event:

On 10-04-2023 between 11.00 a.m. to 03.00 p.m at BVJ Science Centre, NCJ Campus. The internship is has completed and project work about to start during 15th April and extends for a period of 4 months. The following are the terms and conditions :

1. The confirmation of the employment is subject to the satisfactory performance which will be evaluated at the end of internship and project periods.
2. The students are expected to live Company Values, Professional Ethics, Code of Conduct and always abide by the policies during their stay with the company. They shall not take up parallel assignments during this assignment with the company and promise to dedicate their time for the intended goals of the program.
3. Internship and Project certificate will be issued upon successful completion of the assignment and demonstration of satisfactory performance at end the internship based on formal reviews.
4. The internship and project program is designed as training and learning experience with an objective of providing industry exposure and real-world business environment.

Page 1 of 3

5. During the course of their assignment, they will be exposed to confidential information pertaining



[Handwritten Signature]
Principal
The National College
Jayanagar, Bengaluru

to the Company and it's business operations, markets, customers, products, services and know-hows how. They are bound by the confidentiality agreement which will be required to be signed along with this offer letter.

6. Company operates under strict requirements of Data privacy and security.

All the work output produced through the research, development, and the data belong to the company, and they undertake should not be disclosed or published without prior written approval from the authorized signatories of the company.

7. Company reserves the right to assign them to projects or tasks based on business priorities.

8. They need to agree to comply with operating protocols such as regular reporting of work progress, documentation, source of code control and on-time attendance to meetings and reviews. They need to inform the assignment leader and HR on their leave requirements and take prior approvals to ensure compliance to HR policies.

9. Owing to the criticality of the position and the nature of responsibilities, 90-days' notice period will be required to ensure smooth hand over and transition. Discontinuing the assignment halfway will not qualify for Internship Certificate or Academic Credits or Project work for which they have been selected.

If they had to discontinue the assignment, they shall give a written notice to the HR and line manager and discuss the transition of tasks and information.

10. Email is our official communications mode for all HR operations. They need to agree to adhere to the business etiquettes, courtesy, and professionalism all the time. Discussing sensitive information on WhatsApp or social media chats or anything outside of authorized company tools (Official Emails) is strictly prohibited.

11. They need to agree to abide by the company policies and the company core values during their tenure with the company.

12. All other terms will be as per the company policies that will be updated from time to time.

On behalf of Guru Kurpa Auto Solutions, Sri. Srikanth, Head-Manging Director, addressed the selected students with their Auto services development cycle and internship cycle

Photographs





Fax: 080 - 26656644

E-mail: ncjblore@yahoo.com

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Report on Workshop 'Event Management & Team Building' Organized by Department of Commerce and in Collaboration with Green Paradise 20th April 2023.

In order to enhance the students' skills in leadership, Management, Team Building, Human and skill management, Department of Commerce had organized a one day workshop for the 20th April 2023 for UG students.

The workshop is on the topic "**Team Building & Event Management**" by **Mr. Sandeep and Mr. John on 20th April 2023**. Total 88 students of UG Students

- Workshop and successfully completed the same. The motive of this course was to give required leadership skills and event
- Management skills to the students. It benefit students for improving skills regarding self-improvement, developing positive environment, building self-confidence, self-realization, Decision making, working under group, social manners and etiquettes, interpersonal skills etc.


Apart from theoretical knowledge, Sir also provided practical exposure, also to the students by giving them presentations and various activities.

Students have thoroughly enjoyed and did an impeccable job in the activities. **E Certificates were provided to all the participants.**

- The learning outcome from the whole workshop is that students came out to be better individuals with good communication skills, confidence, Team building, organizing skills and power to make everything possible.



Page 1 of 3


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On the Same day there was a Marathon - Awareness among Public





The National Education Society of Karnataka (R.)

The National College

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Jayanagara, Bengaluru - 560070



Certificate of Participation

This is to certify that

has participated in the workshop on

“Event Management & Team Building”

conducted by the Department of Commerce in collaboration with
Green Paradise on 20th April 2023

Sowmya Shree
Prof. Sowmya Shree
Head, Dept. of Commerce

D. Suresha
Dr. B. Suresha
Principal



The National Education Society of Karnataka (R.)
The National College
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Jayanagar, Bangalore -70

Department of Commerce
in collaboration with
Green Paradise
is organizing Workshop on
“Event Management & Team Building”
Date: 20th April 2023
Venue : Multimedia Hall, BVJSC

Resource person:
Mr. John
Proprietor, Green Paradise

Prof. Sowmya Shree **Dr. B. Suresha**
Head, Dept. of Commerce Principal

Page 3 of 3



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Activity Report PROFESSIONAL COURSES – CA,CMA & CS

IN ASSOCIATION WITH IMARITUS LEARNING

1. Academic year 2022-23	
Name of Activity	Career Orientation Programme in ACCA and CS
Date	25 th April 2023
Coordinator	Prof. Sowmya Shree
Organized by Name of Department/ Name of Committee/ Club	Department of Commerce
Members/ In-charge of Activity	Prof. Arun Kumar G S and Prof. Nagamani P L
Time	11.00 A.M. Onwards
Venue	Lecture Hall No. 101, 102 and BVJ Science Centre Multi Media Hall
Activity for Class/Group	2022 – 23 Batch B.Com 1 st , 2 nd and 3 rd year students
Nature: Academic /Cocurricular/extracurricular/other	Awareness about Professional course –CA, CMA and CS Course in association with Imaritus Learning, Bangalore
2. Brief information about Activity	
Topic /Subject of activity	Orientation Programme on Professional Course – CA, CMA and CS
Objectives of the activity	• To make students aware of Orientation on Professional courses – CA, CMA and CS Course with details and employability after the course completion.
Methodology	Orientation session by: Mr. Rakesh H H Senior Business Analyst - Imaritus Learning
Outcome of Activity	The program was successfully conducted for one day and received good response from over 75 (CA-38 – CA, 30 – CS and 7- CMA) students of first year
3. Proofs attached Letters /Attendance sheet/Certificate/ Feedback/Account document /Photo etc.	

Prof. Nagamani P L
Activity In-charge

Resource Person:



Mr. Rakesh H H
MBA - AIMIT
Senior Business Analyst - Imarticus Learning
Senior Growth Associate - Skillovilla
Key Account manager - Byjus

Proposal Letter through E-mail

To: nplncj@gmail.com
Cc: Surjith Gangadharan <surjith.gangadharan@imarticus.com>, Mark Vernum <mark.vernum@imarticus.com>

Dear Sir/Ma'am,

I am writing to you on behalf of [Imarticus Learning](#), led by entrepreneurial giants, [Nikhil Barshikar](#) and [Sonya Hooja](#). We are one of India's Premier organizations in India for training and placement by curating knowledge and tech to make learning accessible, to prepare our global learning community for a futuristic, tech-driven society.

I am writing to propose the implementation of a Certified Management Accountant (CMA) course at **The National Degree College, Jayanagar**. The CMA designation is highly regarded in the field of accounting and finance, and offering a dedicated course to prepare individuals for the CMA examination would greatly enhance the professional development opportunities for students.

Course Overview:

The proposed CMA course aims to provide participants with a comprehensive understanding of management accounting principles, financial management, and strategic management. The course will cover the syllabus prescribed by the Institute of Management Accountants (IMA) for the CMA examination.

Course Highlights

- Global Certification and recognition
- Work in 178+ countries
- 100% Pass Guarantee and Money back
- Classes conducted by IMA Certified Faculty
- Students gets Flat 40% discount on IMA Board Fees
- Salaries In The Range Of 6-15 Lakhs Per Year

We request a 60 minute seminar with all the first and second year BCOM, BBA students to expose them to the opportunities of elite careers like CMA, ACCA, and CPA.

"The Seminar would be presided over by one of the most renowned members from the prestigious IMA Board which would include Chartered Accountants, Accredited Chartered Accounts UK and Management Accountants US. This would be a once in a lifetime experience for the students to be a part of this prestigious event."

Thank you for considering this proposal. I look forward to your positive response. Please find the attached brochures.



Professional Course CA Orientation on 25/4/2023 at BVJ Science Centre Multi Media Hall



Professional Course CMA Orientation on 25/4/2023 at BVJ Science Centre Multi Media Hall



Professional Course CA Orientation on 25/4/2023 at Lecture Hall No 101

BEHIND EVERY SUCCESSFUL BUSINESS DECISION, THERE IS ALWAYS A CMA

Make Global Careers In **Accounting And Finance**

**Top
Placements**

**Salaries In The
Range Of 6-10
Lacs Per Year**

**Global
Certification**

**High
Return On
Investment**

**Sustainable
Career
Growth**

**CMA Course
Study For
6-8 Months**

**Easily Attainable
With A Degree
Or A Job**



CMA® Curriculum

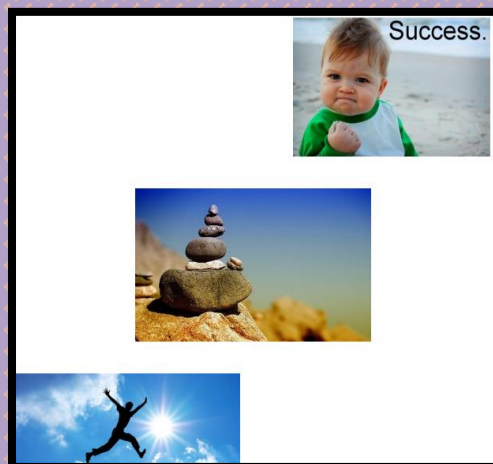
CMA Part 1:

Financial Planning, Performance and Analytics	Weightage
External Financial Reporting Decisions	15%
Planning, Budgeting and Forecasting	20%
Performance Management	20%
Cost Management	15%
Internal Controls	15%
Technology and Analysis	15%

CMA Part 2:

Strategic Financial Management	Weightage
Financial Statement Analysis	20%
Corporate Finance	20%
Decision Analysis	25%
Risk Management	10%
Investment Decisions	10%
Professional Ethics	15%

U will definitely gain Success



STUDENTS PARTICIPATED IN THE ORIENTATION – CS

01	BHUMIKA M G
02	POONAM S
03	PALLAVI E
04	HARSHITHA S
05	RAKSHITHA S
06	SWAROOPA C P
07	BALAJI
08	R VARSHA
09	Ankitha S
10	RAJESHWARI B
11	SUSHMITHA S
12	PAVITHRA R
13	KIRAN R
14	RAHUL N
15	SYED IRFAN PASHA
16	SHARATH D
17	SNEHA KUMARI
18	CHARAN TEJA N S
19	SINCHANA K K
20	VINAMRATHA K

STUDENTS PARTICIPATED IN THE ORIENTATION – CA

01	SOWMYA R
02	AVINASH S
03	DHANUSH L
04	KARTHIK N V
05	MADHUSUDHAN M
06	HARSHA P
07	LUCKSHITH S
08	KAVYA D
09	MANOJ M
10	NANDAN G
11	ROHITH V
12	JEEVAN G K
13	SURYANARAYANA G
14	SAIPREM B A
15	AMOGH M
16	SANDEEP KUMAR S G
17	SUJITH CHOWHAN
18	RAKSHITH V
19	ARVIND Y
20	VIKYATH R NAYAKA

STUDENTS PARTICIPATED IN THE ORIENTATION – CMA

01	ABHISHEK.K
02	ABHISHEK V R
03	ANUSHA
04	BHAVANA G M
05	CHANDAN.V
06	CHANDANASHREE G
07	CHEZHAN S
08	DARSHAN N S
09	DEEKSAHA C
10	DILIP S
11	DHANUSH.M
12	HARSHAVARDHAN RAO N
13	HARI PRASAD K S
14	HARSHITHA.M.K
15	KARAN G
16	KARTHIK S



The National Education Society of Karnataka (R.)

The National College

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Jayanagara, Bengaluru - 560070

Certificate of Participation

This is to certify that

has participated in the **ORIENTATION PROGRAMME ON**
“PROFESSIONAL COURSE - CA / CMA / CS”
CONDUCTED BY THE DEPARTMENT OF COMMERCE IN ASSOCIATION WITH
IMARITUS LEARNING ON 25th April 2023

Sowmya Shree

Prof. Sowmya Shree
Head, Dept. of Commerce

T. Suresha

DR. B. SURESHA
Principal



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THE NATIONAL EDUCATION SOCIETY OF KARNATAKA (R)
THE NATIONAL COLLEGE
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JAYANAGAR, BANGALORE - 560 070

DEPARTMENT of COMMERCE
IN ASSOCIATION with
IMARITUS LEARNING
is ORGANIZING ORIENTATION PROGRAMME ON
“PROFESSIONAL COURSE - CA / CMA / CS”

DATE: 25th April 2023
VENUE : MULTIMEDIA HALL, BVJSC
TIME: 11.00 AM

Prof. Sowmya Shree
Head, Dept. of Commerce

DR. B. SURESHA
Principal

Report on Public Speech on the "Chit Funds as an Innovative Access to Finance for Low-income Households" conducted by Department of Commerce in collaboration with Syon Chit Fund Pvt Ltd.,

Title: Public Speech on the "Chit Funds as an Innovative Access to Finance for Low-income Households"

Date(s): 24th May 2023

Preamble:

A One day Public Speech on the "Chit Funds as an Innovative Access to Finance for Low-income Households" has been conducted on 24th May 2023, at The National College, Autonomous, Jayanagar in order to spread awareness about innovative investments literacy among the Household.

Participant's Profile:

A total of 68 students from different programmes were participated.

Description about the Program:

On the inaugurual function, Dr. H N Surbramanya, President of the N.E.S of Karnataka, participated as Chief Guest.

Sri. Dhanush, Director, Syon Chit Funds, Jayanagar, has participated and spoke on the topic: Chit Funds as an Innovative Access to Finance for Low-income Households. In his speech, he emphasized and engage the investment amongst the students how various innovative investment varieties and elaborated the role of finance and in helping and protecting them their investment and return.

The entire session was an interactive session and the speakers answered many queries raised by the participants and students.

Dr. B. Suresha, Principal, NCJ proposed vote of thanks.

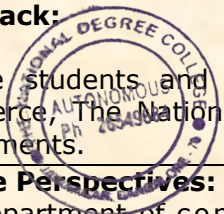
The entire programme was co-ordinated with the support of the Principal, faculty and staff members of The National College.

Feedback:

All the students and participants expressed their gratitude to staff of department of commerce The National College for creating awareness on basic Innovative Ideas about Investments.

Future Perspectives:

The department of commerce looking forward to organize future conferences on financial related aspects in order to create awareness to public about their investments and return as rewards for their investments.



B. Suresha
PRINCIPAL

The National College
Jayanagar, Bangalore-70.

Report Submitted by: Prof. Sowmya Shree
Designation: Associate Professor & Head
Department: Commerce



Inagural Function



Chief Guest Address



Vote of Thanks



Post lunch session



Sowmya Shree
PRINCIPAL
The National College
Jayanagar, Bangalore-70.