

Reflections

BSE / Rf - 3

.... In focus for a better tomorrow

FEBRUARY 2021

Department Monthly News Letter

Highlights – February 2021

Engineering Physics Webinar

Engineering Chemistry Webinar

Aerobic Session

Faculty Achievements

National Science Week

A Cordial Welcome to the new tutors of the Department

For Internal Circulation

Department of Basic Science Engineering & Humanities

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About the Department



Dr. Nalinakshi N

M.Sc., M.Phil., Ph.D.

Professor & Head,
Department of Basic Science Engg. & Humanities
Atria Institute of Technology
Anandanagar, Bengaluru – 560 024

The department of Basic Sciences Engineering and Humanities is a first rostrum all the aspiring engineers step on to. It strongly believes that knowledge is the base of all basic sciences and it strives to achieve this power to its best. This Department is devoted to foster the fundamental principles and understanding of Science to enhance the students' basic knowledge of Engineering. It offers excellent introductory courses in Mathematics, Physics, Chemistry and English which will both instruct and stimulate students in all of the University's programs. The department believes that engineers are a significant source of technological innovation and expertise. To achieve this belief, the department continuously fosters students to focus on their brainpower on solving problems through the application of science and mathematics, discovering new ways to make life better for the general public. Students are guided by well experienced and highly qualified faculty members who strive to improve the students learning, research and development processes. The "spark" of creativity is a hallmark of the department and it endeavors to create the same zest amongst all the budding engineers and this process is unceasing.

Engineering Physics & Chemistry Webinar

ATRIA INSTITUTE OF TECHNOLOGY
 Department of Basic Science Engineering & Humanities
 organizing
WEBINAR
 On
"Recent Developments and Applications of Shockwaves"
Speaker:
Prof. THIRUMALESH,
 Assoc. Prof., & Head, Department of Allied Sciences,
 R L Jalappa Institute of Technology, Doddaballapura

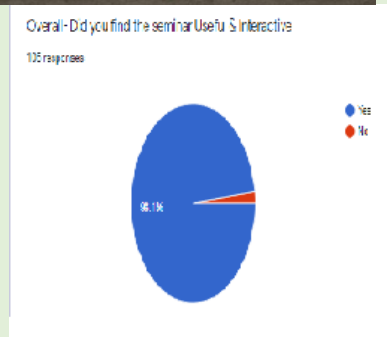
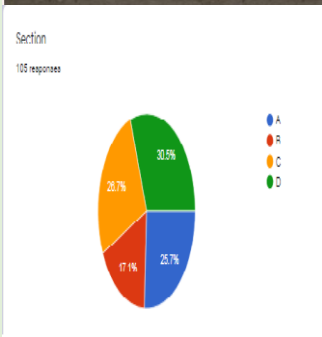
February 03, 2021,
 1:00 PM onward

Webinar link:
<https://us02web.zoom.us/j/87345095307?pwd=ZWJRbkpvYS9NazooT3kvZlBBUUEsUT09>
 Meeting ID: 873 4509 5307
 Passcode: 034873

Coordinator:
Chethan P B
 Assistant Professor

Dr. Nalinakshi N,
 HoD, Basic Science Engineering

Dr. T N Sreenivasa
 Principal, Atria IT



Speaker

Prof. THIRUMALESH,
 Assoc. Prof., & Head, Department of
 Applied Sciences,
 R L Jalappa Institute of Technology,
 Doddaballapura

Prof. Thirumalesh is an avid teacher with more than 17 years of teaching experience in the field of Physics and has nearly 8 years of experience in the field of research. Being inspired with the potential applications of "Shock waves", he changed his research pathway towards shock waves and developed his own shockwave research facility at his private lab. He has published more than 10 research papers at International and National journals and conference proceedings with good impact factor. Furthermore, he received a special appreciation for his work from the former Chairman of "The Society for Shock Wave Research, India", in the 6th National Symposium on Shock Waves held at IIT Madras.

ATRIA INSTITUTE OF TECHNOLOGY
 Department of Basic Science Engineering & Humanities
 organizing
WEBINAR
 On
"Applications of Nanotechnology in Engineering"
Speaker:
Dr. SHANKRAMMA K,
 Asst. Prof., Division of Nano Science & Technology
 JSS Academy of Higher Education and Research, Mysore

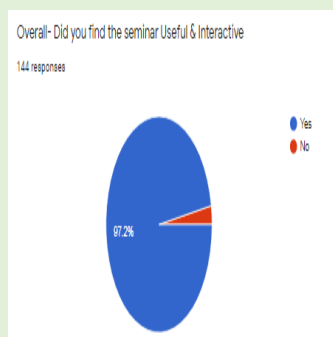
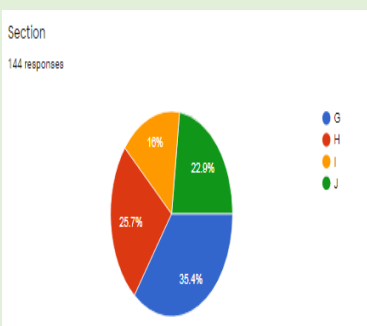
February 03, 2021,
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Webinar link:
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 Meeting ID: 846 9542 6942
 Passcode: 651489

Coordinator:
Dr. Prakashiah B G
 Assistant Professor

Dr. Nalinakshi N,
 HoD, Basic Science Engineering

Dr. T N Sreenivasa
 Principal, Atria IT



Speaker


Dr. SHANKRAMMA K,
 Asst. Prof., Division of Nano Science
 & Technology
 JSS Academy of Higher Education
 and Research, Mysore

The department of Basic Sciences Engineering and Humanities organized a webinar on "Applications of Nanotechnology in Engineering" on the 3rd of February 2021 at 3.30pm. The Resource person was Dr. Shankramma K, Assistant professor, Division of Nano Science and technology, JSS Academy of Higher Education and Research, Mysore. This webinar mainly concentrated on improving students' knowledge in the field of nanotechnology. The talk mainly dealt with the synthesis of nanoparticles and their applications in the field of research. There were nearly 150 participants which includes both student and teaching fraternity from AIT, who were benefitted from the webinar.

Aerobics Session



ATRIA INSTITUTE OF TECHNOLOGY
Department of Basic Sciences Engineering and Humanities
organises
Aerobics Session
TAKE THE LEAP
towards your journey to a fitter you!

Trainer

Kshama Jain
Dept. of BSE
Atria IT

Date: 06/02/2021
Time: 11:00 am onwards

Co-ordinator
Jeslin G
Assistant Professor

Dr. Nalinakshi N
HoD, BSE Dept.

Dr. T N Sreenivasg
Principal, Atria IT



DATE : 06.02.2021
DAY : SATURDAY
TIME : 11 am – 12 pm
MODE OF CONDUCT: ONLINE
TRAINER : Prof. Kshama Jain

The Department of Basic Sciences Engineering and Humanities organized an aerobics session for the students of the first year on the 6th of February 2021 through a virtual mode. Asst. Prof. Kshama Jain from the department of Mathematics trained the students on this effective art form. The session began with Prof. Jeslin G, welcoming the trainer and the participants after which the trainer took over the session. She began the session by educating the students on aerobics and also gave a brief overview on the benefits one could acquire while performing this art form along with the diet plan for the same. The session was divided into three, which included exercises being performed at three levels varying with intensity namely beginning, intermediate and closure. Students were asked to switch on their videos during the session and they participated enthusiastically. After each level of exercises, they were asked to check their heart rate which varied from one person to another. The session ended with the speaker listing out the benefits the students have received through the session and ensured to conduct sessions like this in the future.

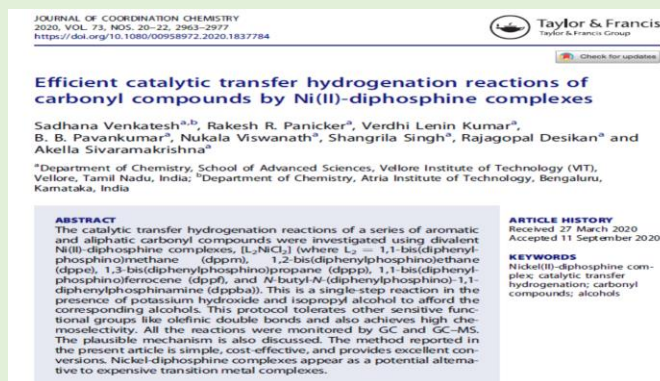
Faculty Achievements

Hearty Congratulations to Dr. Venkatesh S for getting his Papers Published



Dr. Venkatesh S

- * (Q3) Venkatesh Sadhana., Panicker, R. R., Lenin Kumar, V., Pavankumar, B. B., Viswanath, N., Singh, S., ... & Sivaramakrishna, A. (2020). *Efficient Catalytic Transfer Hydrogenation Reactions of Carbonyl Compounds by Ni (II)-Diphosphine Complexes*. Journal of Coordination Chemistry, 73(20-22), 2963-2977.
- * (Q2) Mathias, G. P., Panigrahi, T., Shanbagh, S., Venkatesh Sadhana., Babu, P., Rasikala, K., ... & Ghosh, A. (2020). *Combination of Aqueous Extracts of Phyllanthus niruri, Boerhavia diffusa, and Picrorhiza kurroaor Zingiber officinalealone Inhibit Intracellular Inflammatory Signaling Cascade*. Journal of Herbal Medicine, 23, 100378



JOURNAL OF COORDINATION CHEMISTRY
2020, VOL. 73, NOS. 20-22, 2963-2977
<https://doi.org/10.1080/00989712.2020.1837784>

Efficient catalytic transfer hydrogenation reactions of carbonyl compounds by Ni(II)-diphosphine complexes

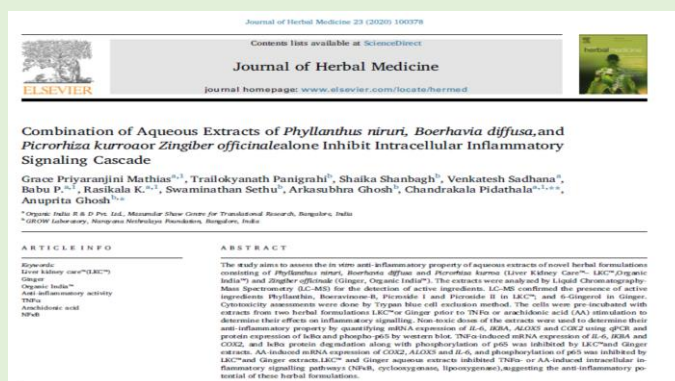
Sadhana Venkatesh^{a,b}, Rakesh R. Panicker^a, Verdhi Lenin Kumar^a, B. B. Pavankumar^a, Nukala Viswanath^a, Shangrila Singh^a, Rajagopal Desikan^a and Akella Sivaramakrishna^a

^aDepartment of Chemistry, School of Advanced Sciences, Vellore Institute of Technology (VIT), Vellore, Tamil Nadu, India; ^bDepartment of Chemistry, Atria Institute of Technology, Bengaluru, Karnataka, India

ABSTRACT
The catalytic transfer hydrogenation reactions of a series of aromatic and aliphatic carbonyl compounds were investigated using divalent Ni(II) diphosphine complexes, [L₂NiCl₂] (where L₂ = 1,1-bis(diphenylphosphino)ethane (dppm), 1,2-bis(diphenylphosphino)ethane (dippe), 1,3-bis(diphenylphosphino)propane (dppp), 1,1-bis(diphenylphosphino)ferrocene (dppf), and N-butyl-N-(diphenylphosphino)-1,1-diphenylphosphinamine (dppba)). This is a single-step reaction in the presence of potassium hydroxide and isopropanol to afford the corresponding alcohols. This protocol tolerates other sensitive functional groups like olefinic double bonds and also achieves high chemoselectivity. All the reactions were monitored by GC and GC-MS. The plausible mechanism is also discussed. The method reported in the present article is simple, cost-effective, and provides excellent conversions. Nickel-diphosphine complexes appear as a potential alternative to expensive transition metal complexes.

ARTICLE HISTORY
Received 27 March 2020
Accepted 11 September 2020

KEYWORDS
Nickel(II)-diphosphine complex; catalytic transfer hydrogenation; carbonyl compounds; alcohols



Journal of Herbal Medicine 23 (2020) 100378
Contents lists available at ScienceDirect
Journal of Herbal Medicine
Journal homepage: www.elsevier.com/locate/jhermed

Combination of Aqueous Extracts of Phyllanthus niruri, Boerhavia diffusa, and Picrorhiza kurroaor Zingiber officinalealone Inhibit Intracellular Inflammatory Signaling Cascade

Grace Priyaranjini Mathias^{a,1}, Trailokyanath Panigrahi^a, Shaika Shanbagh^a, Venkatesh Sadhana^a, Babu P.^{a,1}, Rasikala K.^{a,1}, Swaminathan Sethu^a, Arkasubhra Ghosh^b, Chandrakala Pidathala^{a,1,*}, Anupriya Ghosh^{a,1}

^aOrganic India R & D Pvt. Ltd., Molecular Show Center for Translational Research, Bengaluru, India
^bICITW Laboratory, Nongano, Northchokya, Pondicherry, India

ARTICLE INFO

ABSTRACT
The study aims to assess the in vitro anti-inflammatory property of aqueous extracts of several herbal formulations consisting of Phyllanthus niruri, Boerhavia diffusa and Picrorhiza kurroa (Liver Kidney Care™, LKC™ Organic India™) and Zingiber officinale (Ginger, Organic India™). The extracts were analyzed by Liquid Chromatography-Mass Spectrometry (LC-MS) for the detection of active ingredients. LC-MS confirmed the presence of active ingredients Phyllanthin, Boerhavinone B, Flavonoid 1 and Flavonoid 2 in LKC™ and 6-Gingerol in Ginger. Cytotoxicity assessments were done by Trypan blue cell exclusion method. The cells were pre-incubated with extracts from two herbal formulations LKC™ or Ginger prior to TNF α or arachidonic acid (AA) stimulation to determine their effects on inflammatory signalling. Non-toxic doses of the extracts were used to determine their anti-inflammatory property by quantifying mRNA expression of IL-6, iNOS, ALDH2 and COX2 using qPCR and protein expression of I κ B α and phospho-p65 by western blot. TNF α -induced mRNA expression of IL-6, iNOS and COX2, and I κ B α protein degradation along with phosphorylation of p65 was inhibited by LKC™ and Ginger extracts. LKC™ and Ginger aqueous extracts inhibited TNF α or AA-induced intracellular inflammatory signalling pathways (NF κ B, cyclooxygenase, lipoxygenase), suggesting the anti-inflammatory potential of these herbal formulations.

Faculty Achievements Contd....

Hearty Congratulations to Dr. Nalinakshi N

1. Paper published in *S Biointerface Research in Applied Chemistry*



Title:
Effect of Variable Fluid Properties and Magneto-Hydrodynamics for Convection with Couple Stress Fluid

Dr. Nalinakshi N

(Q3) Nalinakshi N , , (2021) *Effect of Variable Fluid Properties and Magneto Hydrodynamics for Convection with Couple Stress Fluid*, *Biointerface Research in Applied Chemistry*, Volume 11, Issue 5, 2021, 13490 - 13501

2. Paper published in *Springer*

Title:
Thermo-Diffusion and Diffusion-Thermo Effects for a Forchheimer Model with MHD Over a Vertical Heated Plate

Thermo-Diffusion and Diffusion-Thermo Effects for a Forchheimer Model with MHD Over a Vertical Heated Plate

Authors: N. Nalinakshi, P. A. Dinesh

Conference paper
First Online: 11 July 2020

Part of the *Lecture Notes in Mechanical Engineering* book series (LNME)

Abstract

Heat and mass transfer for a Forchheimer model of electrically conducting fluid with Soret and Dufour effects over a vertical heated plate is studied. The governing equations for the physical problem in consideration are highly coupled and nonlinear in nature. A shooting technique is applied to the first-order ODEs which are obtained by using similarity transformations to PDEs and then to higher-order ordinary differential equations. The effects of various non-dimensional significant parameters such as Richardson number, Prandtl number, magnetic parameter, Soret and Dufour parameters and so on are interpreted. Attenuation with the velocity of fluid flow occurs due to the cause of magnetic force. The diffusion effects which are crossed in the energy and solutal equation enhance the thermal effects. Skin friction, rate of heat, and mass transfer are also computed. Results obtained are compared with the existing work and found to be in good agreement.

Keywords
Heat and mass transfer Soret and Dufour effects Boundary layer Porous medium MHD

Nomenclature

U_∞	Free stream velocity
G	Gravitational field
T_∞	Uniform constant temperature
C_∞	Uniform constant concentration
T_∞	Ambient temperature
C_∞	Ambient concentration
u	Velocity component along x -direction
v	Velocity component along y -direction
ϵ	Porosity
\bar{g}	Acceleration due to gravity
p	Pressure
T	Temperature of the fluid

Biointerface Research in Applied Chemistry
Platinum Open Access Journal ISSN: 2019-5831

Article
Volume 11, Issue 5, 2021, 13490 - 13501
<https://doi.org/10.33263/BRIAC11.5.1349013501>

Effect of Variable Fluid Properties and Magneto-Hydrodynamics for Convection with Couple Stress Fluid

Nalinakshi Narasappa¹, Dinesh Pobbathy Ashwatharayana^{2,3}, Harichandra Boodhgiri Prasad⁴, Lakshith Girish⁵

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² Department of Mathematics, M S Ramesh Institute of Technology, Bangalore - 560 064, Karnataka, India; dineshp@msrit.edu (D.P.A.);
³ Department of Mechanical Engineering, M S Ramesh Institute of Technology, Bangalore - 560 054, India; hpobhgiri@msrit.edu (H.B.P.);
⁴ Department of Mechanical Engineering, JSSATE, Bangalore, Karnataka, India; lakshith784@gmail.com (L.G.);
⁵ Correspondence: dineshp@msrit.edu;

Scopus Author ID: 55934627800
Received: 11.01.2021; Revised: 7.02.2021; Accepted: 9.02.2021; Published: 13.02.2021

Abstract: An attempt is made for analyzing MHD mixed convection over a vertical heated plate with a couple of stress fluid numerically in a systematic manner. Unlike other research-based on literature surveys, the fluid properties are varied here where convection improves drastically compare to fixing them constantly. The boundary layer flow is estimated through mathematically formulated equations for the physical configuration considered. These formulated equations are very tedious to solve with specified boundary conditions in nature. Similarity transformations, RK4 scheme, and NR method are used to convert those tedious non-linear PDE to higher-order ODE and hence to first order. Interpretation of various significant parameters is studied and observed their effects with momentum, energy, and solutal equations producing the fluid flow with the plotted graphs. The contribution of the Magnetic field is observed in velocity by reducing the force of the fluid flow. This work's main contribution is to see the effective convection with significant fluid flow parameters, with their inclusion variable fluid properties. Nu and Sh numbers are also computed. Certain added effects making them void are well suited and matched with researchers' previous works with a better agreement.

Keywords: heat and mass transfer; couple stress fluid; variable fluid properties; porous medium; MHD.

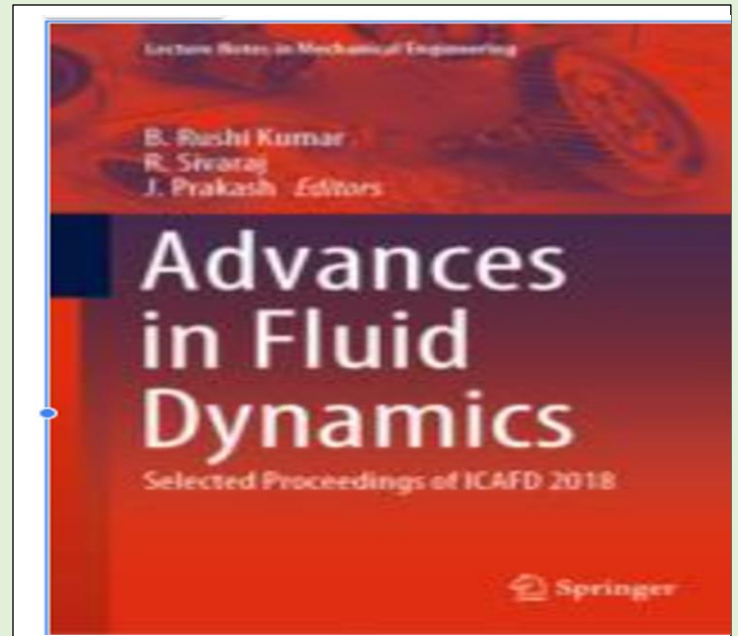
© 2021 by the authors. This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The fluid flow behavior and its characteristics cannot be exactly described by the conventional non-polar fluids, which are Newtonian fluids. Hence, in the present era, the theory of polar fluids, which are non-Newtonian, takes special attention by many authors and scientists as they require for industrial processes like a solidification of liquid crystals, colloidal and suspension solutions, extrusion of polymer fluids, cooling of the metallic plate and exotic lubrications. Couple stress fluids, which own their distinct features like polar effects and having a magnitude of pressure rise very high, are one among the non-Newtonian fluids with their growing importance in recent technology and industries. The physiological process can happen with magnetic therapy, bearings, and many others. The former can be observed in generators, flow-meters, pumping liquid pumps with the presence of a magnetic field. The latter is the

<https://biointerfaceresearch.com/> 13490

Nalinakshi N , *Thermo-Diffusion and Diffusion-Thermo Effects for a Forchheimer Model with MHD Over a Vertical Heated Plate*, *Advances in Fluid Dynamics* pp 343-361



Faculty Achievements Contd....

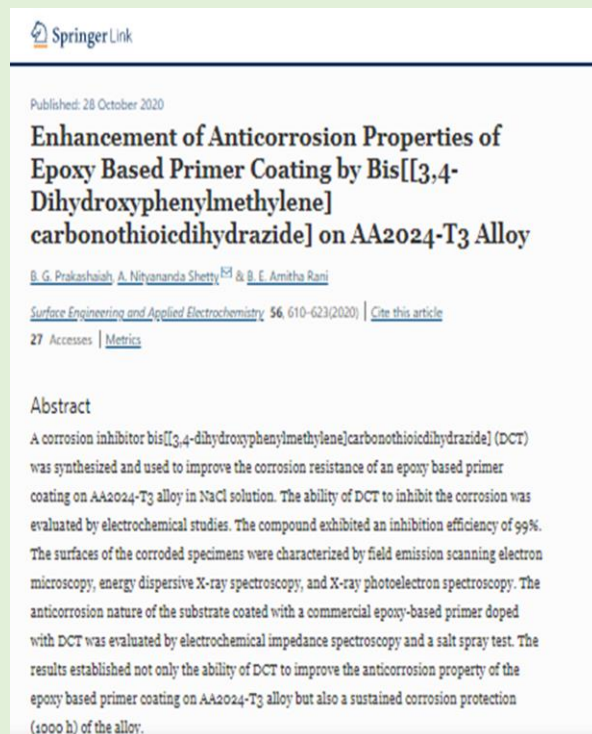
Hearty Congratulations to Dr. Prakashaiah B G



Dr. Prakashaiah B G

Congratulation to Dr. Prakashaiah B G for publishing his research work in the Q3 journal. Title of the research paper is “*Enhancement of Anticorrosion Properties of Epoxy Based Primer Coating by Bis[[3,4-Dihydroxyphenylmethylene] carbonothioicdihydrazide] on AA2024-T3 Alloy*”

Dr Prakashaiah B G applied project to the VGST under the scheme of CISEE: Centers of Innovative Science, Engineering and Education. The title of the project is Effective replace of strontium chromate from the aerospace coating system. The aim of this project is to develop the effective novel organic corrosion inhibitors for AA2024-T3, AA7075-T6 and AA8090-T8.



Hearty Congratulations to Prof. Jeslin G

We congratulate our English Faculty, Prof. Jeslin as she had secured **THREE GOLD Medals and TWO Cash Prizes** from Bangalore University for bagging the First Rank in MA English, 2017-19 batch. She had received the awards from Dr.K Shivan, Chairman of ISRO and Dr. Venugopal the Vice Chancellor of BU on the 30th of January, 2021. We are grateful to have Prof. Jeslin at BSE, AIT and we wish her to continue her endeavors in her future goals too. We wish her to transfer her vast knowledge in English subject to be transferred to our Engineering Students to improve their communication skills and personality development.

Hearty Congratulations to Prof. Umadevi R

Hearty congratulations to **Prof. Umadevi R** for successfully completing her Ph.D open seminar-1 on the topic “*Fluid Flow Past and through a Composite Region*”.

Research Center: Department of Mathematics, Vivekananda Institute of technology Bangalore

Date: 11/02/2021

Research supervisor: Dr. D V Chandrashekhar

Professor and Head, Department of Mathematics,
VKIT, Bangalore

DC members: (a) Dr. Dinesh P. A,
Associate professor,
Department of Mathematics
MSRIT, Bangalore

(b) Dr. Nalinakshi N
Professor and Head,
Department of Mathematics,
Atria IT, Bangalore



NATIONAL SCIENCE WEEK - SCIENTIA – 2021

The Department of Basic Science Engineering and Humanities organized the first edition of National Science Week celebration SCIENTIA – 2021, 22nd February to 26th of February 2021. The events were conducted between 3:00 – 5:00 pm in the department classrooms. Each event was organized with the help of a faculty and student and they were judged by first year teachers and coordinator



The following are the list of events:

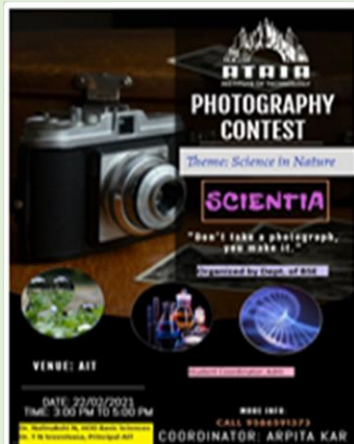
PHOTOGRAPHY

Date: 22.02.2021

Event Coordinator: Prof. Arpita Kar

Student Coordinator: Aditi

The event mainly concentrated on students capturing pictures based on the theme 'Science in Nature' and had to explain how they incorporated the theme in their respective images to the judges. Prof. Chethan S and Prof Sachin K G were the judges of the event.



APP DEVELOPMENT AND MANAGEMENT

Date: 22.02.2021

Event Coordinator: Prof. Jeslin G

Student Coordinator: Timothy, Bharath

This event concentrated on students bringing forth an idea of an app which might help to solve commonly found day to day issues. They could either create an application of their own or could explain their idea to the judges. Students displayed an array of apps pertaining to areas such as e-commerce, fitness, education, gaming etc. The judges for the event was Prof. Gowtham R and Prof. Abhilash who technically involved the students into the concept of app management and also gave them suggestions and hopes for future progress in the apps developed by the them.



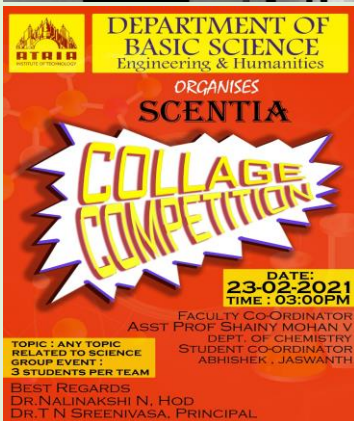
COLLAGE

Date: 23.02.2021

Event Coordinator: Prof. Shainy Mohan

Student Coordinator: Jashwanth, Abhishek B M

The participants of this event displayed an amass of images through a collage by depicting the relevance of science in current scenario. Participants elucidated their craft to the judges namely Prof. Pallavi and Prof. Kavya.





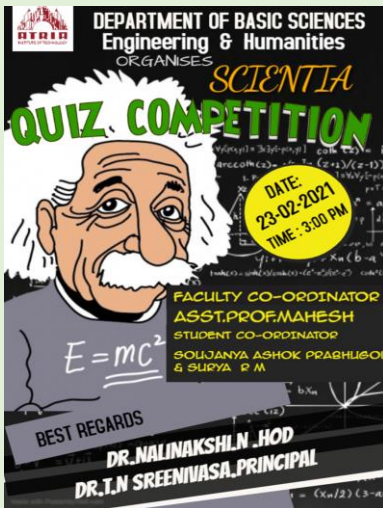
SLOGAN WRITING

Date: 22.02.2021

Event Coordinator: Prof. Nagendra Naik

Student Coordinator: Lakshmi

Unlike every other competition, the coordinators chalked out a theme for writing the slogan. Participants had to write a slogan within 30 minutes based on an image and they were judged accordingly by Dr. Nidhi and Prof. Geetha. Students had put on task their literary ability and had brought a flowery texture to the slogans written by them.



QUIZ

Date: 23.02.2021

Event Coordinator: Prof. Mahesh K S

Student Coordinator: Surya, Soujanya

This event was the most spotted one. The competition was held in two slots namely Quiz Prelims which took place on the 22nd of March and Quiz Finals which was held on the 23rd of March. This was a team event and there were 37 teams, out of which 5 teams were selected for the finals. The finale was a blockbuster with students actively tossing their brains to hit on the right answers.



60 SECOND SCIENCE

Date: 24.02.2021

Event Coordinator: Prof Pavithra K

Student Coordinator: Shravani N

Science is valued by society because the application of scientific knowledge helps to satisfy many basic human needs. In order to recognize and recollect the role of science in the walks and talks of life, the event concentrated on participants identifying and performing basic scientific experiments such as home science, kitchen science etc. This was indeed a unique competition where participants came up with innovative experiments which they could perform within 60 seconds and had explained the concept to the judges of the event namely Prof. Anjan Kumar and Prof. Deep Narayan Singh.





LOGO DESIGNING

Date: 23.02.2021

Event Coordinator: Prof. Anu

Student Coordinator: Yashwardhan

The modern age of technology has taken students to a stage where they have a smooth hands on experience in the art of creation. With technology, participants of this event had to develop a logo for the Science Club of Basic Science department and the results were overwhelming. Students had put on the hat of creative and came up with interesting logos and had explained the logic they have employed in their logo to the judges namely Prof. Pavithra K and Prof. Jeslin G.



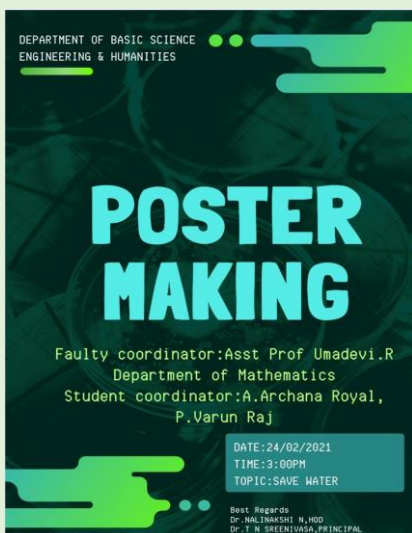
PICK AND SPEAK

Date: 24.02.2021

Event Coordinator: Prof. Chethan P B

Student Coordinator: Bharath M

Speaking skills plays an important role in the process of communication. In this regard, the coordinators of the event had selected topics pertaining to the field of science such as global warming, electric vehicle, forest etc. and participants displayed their oratory skills by placing their ideas and information on the topic chosen by them on the spot. The judges for this event Dr. Ananth and Prof. Asha appreciated the participants and asked them to upgrade their speaking skills by watching International News Channels and Parliamentary debates.



POSTER MAKING COMPETITION

Date: 24.02.2021

Event Coordinator: Prof. Umadevi R

Student Coordinator: Jayalakshmi V

This competition focused on participants creating a poster on the theme "Save Water". The main intent of this theme was to create an awareness amongst students on the dangers they would encounter in the future with a land of no water. Participants involved themselves actively in this contest by designing beautiful posters which were both handmade and digital. The judges of this event were Dr. Nidhi Baranwal and Prof. Geetha G Chavan.





DEBATE

Date: 25.02.2021

Event Coordinator: Prof. Kanchana S K

Student Coordinator: Karthik R, Vaibhav Rohilla

The competitors of this event displayed their argumentative skills based on various science related topics. This competition was a heated one where the opponents fought to justify their take on the topic, and it seemed to be a healthy competition. The participants claimed that the event was a hit and had requested the coordinator to hold such competitions in the future too. The judges for the event were dr. Usha and Prof. Venkateswaralu Dasari.



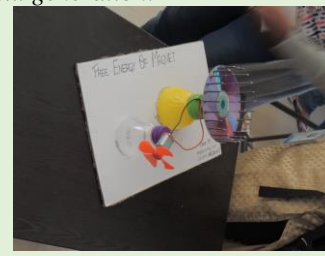
BEST OUT OF WASTE

Date: 24.02.2021

Event Coordinator: Prof. Pavithra K

Student Coordinator: Nakul Prasad

Participants of this competition created extraordinary pieces of art by using waste materials such as cardboards, bottles, plastic materials etc. Their ideas were well crafted and most of the art work could indeed solve day to day problems. The judges Prof. Sanjeev Kumar and Prof. Chetan C S appreciated the participants and asked them to take up their project to the next level and work on the same so that they would offer something promising to the next generation.



PROJECT EXHIBITION

Date: 24.02.2021

Event Coordinator Venkateswarlu Dasari, Dr. Shivaraj Watage, Dr. Prakashaiah B G, Dr. Divya Joseph, Dr Venkatesh Sadhana

Student Coordinator: Dhanush, Megha S, Priyadarshini, Keerthana M, Kirti Pathak

This was a mega event of the week and the projects developed by the participants were filled with creativity. There were nearly 25 teams testing their hands on projects related to the field of Chemistry, Physics and to real life situations. Students had developed mini working samples such as air purifier, steam engine, traffic signal, biometrics for hotel check in, mobile regulated switches etc. Most of the models were cost free and if worked on they could be an asset to the society. The judges of this events was the HoDs of all the departments.



Cordial Welcome to The New Tutors of The Department



Prof. Anu.S

Graduating from the Bangalore University with a Masters in Mathematics Prof. Anu has a recognition of publishing two books for students studying under PU and UG category and has qualified her CTET & AWES Exams. She has worked in colleges of high repute such as St. Annes Degree College for Women, Christ Academy Degree College and Jubilee PU and Degree College as well. She started her journey with BSE, AIT on 27.01.2021.

We cordially welcome Prof. Anu to train our students to improve their applied Mathematical skills in various engineering disciplines and we wish her success for her future endeavors.

Prof. V Shainy Mohan

Prof. Shainy holds a Master's Degree in Chemistry, with Analytical Specialization from Christ University, Bangalore. With a passion towards teaching, she began her career as a teacher of Chemistry for PU and has been guiding several students for competitive examinations such as JEE/CET etc. She has industry-oriented exposure as an intern with Biocon Lmt. Bangalore, for QC (Quality Control) and QA (Quality Analysis) check of Immunosuppressants such as Tacrolimus, Sirolimus. She has also interned with Atomic Minerals Directorate (AMD) for Exploration and Research South, Govt of India, Nagarabhavi, Bangalore working with finding the total Uranium and Thorium Content in various Nuclear Chemistry Based Samples. We welcome Prof. V Shainy Mohan to BSE, AIT to train our engineering students with their engineering chemistry. We wish she uses her academic and industry-oriented experience in training our students.



Dr. Divya Joseph Kayyunnapara

Dr. Divya holds her doctoral degree from VTU, in the area of "Partial Differential Equation". She has published 5 papers in reputed journals such as Acta Mathematica Scientia and Differential Equations and Dynamical Systems. She pursues research in Hyperbolic Partial Differential Equations and teaches Mathematics to undergraduate and graduate students. She is passionate on training students towards Mathematical research is deeply involved in training them for exams such as GATE, GRE etc.

We are glad to have Dr. Divya at our department and we wish her contribution would strengthen the growth of the department.

Prof. Venkateswarlu Dasari

Prof. Venkateswarlu Dasari holds a Masters in Physics from IIT Madras, Chennai. Prior to joining the PhD program at IISc Bangalore, he worked as a Junior Lecturer to teach PUC Physics for JEE aspirants at Nalanda Educational Institutions. Later he was fortunate enough to get a central govt. job as a Scientific Officer at (Bhabha Atomic Research Centre) BARC, Mumbai. But his aspiration towards becoming an academician made him choose PhD at IISc due to his strong interest towards teaching and research. He has an experience of training JEE/NEET/CET aspirants with LMS based e-classes at PRESENOVA, Bangalore. He started his journey with BSE, AIT since February 1st, 2021.

We welcome Prof. Venkat at BSE, AIT to train our UG students by using his academic and research experience in understanding importance of Physics in various core Engineering Subjects and motivating them for their mini project-based projects for guiding towards internships at other R&D Companies and Academic Institutes.



Prof. Indira S

Prof. Indira S is pursuing her doctoral degree on "Double Diffusive Convection in Nano Fluids with or without Variable Fluid Properties", under the guidance of Dr. Nalinakshi N, Prof and Head, Department of Mathematics, AIT Bangalore. She holds a M.Phil. in Mathematics, M.N Study Center, M.S.University Thirunelveli. She has mentored one M.Phil. student. She received the Best Teacher Award from VKIT Bangalore in 2005 for her outstanding teaching and has 22 years of teaching experience at various colleges.

We are glad to have Prof. Indira S at our department and we wish, her contribution would strengthen the growth of the department.

Editors:

Dr. Nalinakshi N

Dr. Prakashaiah B G

Mr. Venkateswarlu Dasari

Ms. Jeslin G