

The
DSU Talent
Search
2019

Open to Students of Class 9-12

Walk away with

**Rs 5
Lakh**
Cash Prizes



DAYANANDA SAGAR
UNIVERSITY

Supported by



DAYANANDA SAGAR
INSTITUTIONS

Show the world that
you are **different!**

12th, 13th & 14th November 2019

NO ENTRY FEE

For registrations / clarifications:

Please call: +91 80 42161759

e-mail to: dsutalentsearch@dsu.edu.in

info@dsu.edu.in

www.dsu.edu.in

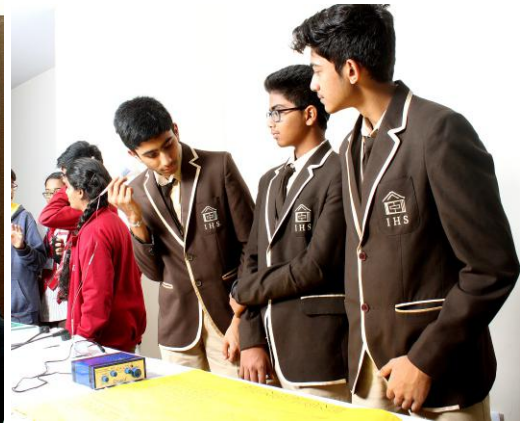
The DSU Leadership



Dr. D. Hemachandra Sagar
Chancellor
- Dayananda Sagar University



Dr. D. Premachandra Sagar
Pro Chancellor
- Dayananda Sagar University



The DSU Talent Search 2019

Presented by Dayananda Sagar University

Dayananda Sagar University (DSU) has chosen an unusual path to transform India into a leader in innovation. Equipped with state-of-art laboratories, set up by global corporates to foster innovation, DSU is now taking the next step of identifying and rewarding the country's talented youth by:

- Nurturing talent in an individual or a group of students
- Enabling students with new skills that they can apply in a real-world situation. It provides a one-of-its-kind opportunity where students from Class 9-12 from schools across India are invited to get trained:
 - a) By mentors in various laboratories set up by industry partners of DSU on the campus or
 - b) By the DSU faculty who would make available a suite of ideas that students could choose.
 - c) Students coming with their own ideas.

On completion of the training, students will apply their newly-acquired skills and expertise to develop a product or service that will reach the prototype stage and proof of concept (POC) level. Students will be empowered to work on a design and demonstrate their skills through working prototypes, 3D models, videos, oral and poster presentations.

In association with:

- › Autodesk
- › GE
- › IBM
- › Bosch ETAS
- › Vmware
- › NVIDIA
- › Boston
- › Bosch Rexroth
- › Dassault Systemes
- › SOLIDWORKS
- › Analog Devices

Open to:

Juniors: Class 9 and 10

Seniors: Class 11 and 12

Training: 12th & 13th November 2019

Talent Demos and Project Exhibition: 14th November 2019 -this would be the day for students under various categories to showcase their projects in the DSU campus.

Venue: Dayananda Sagar University, Innovation Campus, Kudlu Gate, Hosur Road, Bengaluru - 560 068.



Architects perspective of the Dayananda Sagar University Campus coming up on a 130 acre land area on Kanakapura Road in Bengaluru - designed by Architects Hafeez Contractor, Mumbai.

Event 1

MACHINE LEARNING WITH PYTHON

MENTORS:

Prof. Shivaramkrishnan, Dr. Chandra Shaker Balure, Prof. Divyashree H B, Prof. Navya R

INTRODUCTION:

Machine Learning (ML) is a branch of Artificial Intelligence (AI) wherein a computer can be trained to learn to make decisions. Python is a programming language which is widely used for its simplicity and powerful features. In this workshop, students will learn using Python to make machines learn how to classify images, just the way a human, could classify by looking at an image.

This workshop will enable students to:

1. Write basic Python code to perform tasks
2. Understand what machine learning is, and how to use it to solve real life problems
3. Write a machine learning algorithm to classify any image

ACTIVITIES:

DAY-1: Basics of Python

DAY-2: Introduction to Machine Learning

Day-3: Write Machine Learning Algorithms to classify images

CONTACT:

Prof. Sivaramkrishnan S, Department of ECE, DSU, sivaramkrish-ece@dsu.edu.in

Dr. Chandra Shaker Balaure, Department of ECE, DSU, chandra-ece@dsu.edu.in

Prof. Navya R, Department of ECE, DSU, navya-ece@dsu.edu.in

Prof. Divyashree H B, Department of ECE, DSU, divyashree-ece@dsu.edu.in

Event 2

FUN WITH 'C'

MENTORS:

Prof. Sharvari J N, Prof. Nandini K, Prof. Shivaprasad Chikopa

INTRODUCTION:

“Programming is a skill, best acquired by practice and examples rather than from books” —Alan Turing.

Here is an exciting opportunity for all the young minds to learn the basics of programming in a language like C and explore its features and usage. The main feature of coding is to make problem solving easier.

ACTIVITY PLANNED FOR THE PROJECT:

The first two days will be spent on students with an introduction to programming in C with practical training, wherein the students will be familiarised with the basics of programming.

PLAN FOR THE THREE DAYS OF TALENT SEARCH EVENT:

DAY -1 : Introduction to C

DAY - 2 : Hands-on practice sessions

DAY - 3 : Quiz on programming in C

On completion of this workshop the student will be able to:

- Get a basic idea on the programming language
- Learn to code programs in the language
- Explore ideas for solving problems

HIGHLIGHTS:

- Individual attention to students on how to go about programming
- Hands - on experience in the lab with more practical sessions

CONTACT:

Prof. SHARVARI J N, Asst. Professor Dept. of Computer Science & Engineering I Mobile: +91- 9686141344
sharvari-cse@dsu.edu.in

Event 3

INTERNET OF THINGS FOR DAY-TO-DAY LIFE ACTIVITIES

MENTORS:

Dr.Rajesh T M, Prof:Shamant N, Dept:CSE

INTRODUCTION:

The Internet of Things (IoT) is a network of things which are connected to Internet. These things include IoT devices and IoT-enabled physical/logical assets. The ‘thing’ in IoT could be a person with a heart monitor or an automobile with built-in-sensors, i.e. objects that have been assigned an IP address and have the ability to collect and transfer data over a network without manual assistance or intervention.

What can I do with IoT? Where can it be used?

With the help of “Internet of Things” (IoT —Internet of Things), we can sense and gather data and transmit it to a server or a cloud for storage and/or process the data locally (edge computing) or remotely in the cloud (Cloud Computing). The objects or devices of everyday life that are connected to the Internet and can have some kind of intelligence can be part of IoT Application. Applications of IoT are mostly in Health Care, Home Automation Systems, Transportation and Logistics, Retail and Utilities, Agriculture, Environmental Monitoring Systems, Smart Cities, Digital Factory etc.

BENEFITS:

- Saving: Intelligent homes connected to the electrical system allow easy control of the lighting and temperature of the home.
- Safety and protection both at home and in offices: Using camera and IR sensors can be used to monitor and control the opening of doors and / or windows or even the detection of movement inside a home/office.
- Convenience: These systems allow users to remotely control devices/applications, either turning the device/application it on or off using actuators.
- Improving access to information: In the automobile world, it can be analyzed how a car connected to an intelligent system can detect the traveling routes and turn off light or heating using mobile or web application.

Organizing Team

Dr. Rajesh T.M, Prof. CVSN Reddy, Prof. Ranjini K, Prof. Lavanya B Koppal, Prof. Shwetha G S, Prof. Suha Aimen

Coordinating Team

- III semester students from all 6 sections (2 batches from each section)

CONTACT :

Dr.Rajesh T M, Ph No:9591664668,
Email-id:rajesh-cse@dsu.edu.in
Prof:Shamanth N, Ph no:8698239095,
Email-id:shamanth-cse@dsu.edu.in

Event 4

NEW AGE TOYS WITH OPTICS AND SENSORS

MENTORS:

Prof.Nandini Rao G . Prof.Meenakshi M - Prof.Sapna V.M - Dept. of ECE

INTRODUCTION:

If there is one thing that hasn't changed over the years, it is kids' fascination towards toys. In the past wooden toys were used; now, it's the era of technology. Let us build new age toys by using sensors to automatically control various features and optics to attract kids. Educational toys with more of electronics than coding or modifying the present toy and recreating better ones. Let us have fun in learning.

CONTACT :

Prof:Nandhini Rao,9481845366,nandiniraoo@gmail.com
Prof:Meenakshi M, 8105609320,
meenakshi.margale17@gmail.com
Prof:Sapna V M,9503212139, sapnavmk@gmail.com

Event 5

MATERIALS AND MANUFACTURING FOR AEROSPACE APPLICATIONS

MENTORS: Dr. Viswanathan R and Dr. Kamalbabu P
Department: Mechanical Engineering

INTRODUCTION:

Composites are materials made up of two or more components that when combined, becomes a new material that has properties different than each of the materials alone. A composite material is made up of a reinforcement ingredient (such as fiberglass or carbon fiber) and a matrix ingredient (such as epoxy resin). This project introduces the design and use of composite materials with a special focus on polymer composites and their use in modern airplane design and manufacture, such as Boeing 787 Dreamliner.

Day- 1: Launches the project by introducing the design challenge that drives students to explore the composites and airplane design by developing their understanding of materials.

Day-2: Students begin to fabricate composites and understand how the composites could help an airplane perform better.

Day- 3: The students showcase the produced composites.

CONTACT:

Dr.Viswanathan R, Ph no:9600550233,viswanathan-me@dsu.edu.in Dr.Kamalbabu P, Ph no: 9945038652, kamalbabu-me@dsu.edu.in



Event 6

- 1) 3D CAD MODELING AND ANALYSIS, RENDERING-USING AUTODESK FUSION 360
- 2) 3D PRINTING - USING AUTODESK FUSION 360

MENTOR: Mr. Vinayak K

INTRODUCTION:

Product design process: A set of strategic and tactical activities from idea generation to commercialization is used to create a product design. Product designers in a systematic approach, conceptualize and evaluate ideas, turning them into tangible inventions and products.

ACTIVITY PLANNED FOR THE PROJECT:

Designing a phone holder / phone charging dock, a water sustainable flower pot, a reading table, a reading lamp, realistic rendering of a product etc.

PLAN FOR THE THREE DAYS OF TALENT SEARCH EVENT

DAY -1 :

- 1) Training on Basics of Fusion 360 includes
 - Educating students to User Interface of the software and guiding them to make 3D models using Autodesk lab
 - Designing and building a product - Using Fusion 360
- 2) Basic 3D modeling —3D Designing of a product eg. Car, Mobile Casing, Wind Mill
- 3) Assembly
- 4) Rendering —(Giving Realistic look to the product)
- 5) Basic Animation (For mechanical components)
- 6) Basic Introduction for Analysis Work Bench

DAY- 2: Forming teams, freezing upon the topics and participants to start working on the project.

DAY- 3: Finalizing the design, presentation, prize distribution.

On completion of this workshop the students will be able to design their own product using Autodesk Fusion 360.

HIGHLIGHTS

Students will get exposure on 3D Molding and basic animation through Autodesk Fusion 360.

CONTACT:

K. Vinayaka K , Manager - Autodesk, Design and Innovation Centre. Dayananda Sagar University, Ph.No. +91- 9972309580
vinayaka-autodesk@dsu.edu.in

Event 7

DESIGN OF CIRCUITS USING HYDRAULICS AND PNEUMATICS AUTOMATION

MENTOR: Prof. K. Sudha Deepthi

INTRODUCTION:

Hydraulics & Pneumatics Automation plays a very significant role in our daily life, for which one must be well versed with the mechanism. In a practical approach, Engineers design the circuit to understand the physics of a machine and to incorporate the actuation for practical usages. A basic circuit is very much important for smooth functioning of any Machine, Automobile, Aircraft, etc.

ACTIVITY FOR THE PROJECT:

Introduction to Hydraulics & Pneumatics Components, Valves, and Design of Circuit for any application of Hydraulics, Pneumatics will be given to the students. Students will design circuit on the Hydraulics & Pneumatics Test Rig.

ACTIVITIES:

First Two days will be projecting interesting Videos of Industrial Applications using Hydraulics, Pneumatics along with a Demo and Practical Hands-On-Training on Hydraulics, Pneumatics Test Rig and the last day will be a Competition which includes designing of the circuit which has a time limit in a smarter way as well as identifying the components with Symbols.

On Completion of this workshop the students will be able to Design Hydraulics & Pneumatics Circuit with basic Understanding of Valves, Symbols.

HIGHLIGHTS:

Basics of Hydraulic, Pneumatic Components, Valves, Design of Circuits, Industrial Applications, Hands-on-Experience, Overview of Core Engineering

CONTACT:

K. Sudha Deepthi —9502033737, sudha-bosch@dsu.edu.in



Event 8

THINKING LOGICALLY WITH PROGRAMMABLE LOGIC CONTROLLER (PLC)

MENTOR: Prof. K. Sudha Deepthi

INTRODUCTION:

By understanding the features of PLC along with machine control will create awareness on developing a ladder logic diagram. It can also be enabled with home automation to any drive or control unit of machine or vehicle. The control of PLC with code development will enable actuation of any machine. Logic gates, comparators, mathematical expression using ladder logic diagram of PLC is also part of the mentoring session.

ACTIVITY PLANNED FOR THE PROJECT:

Explanation of Programmable Logic Controller, Features and Designing of Ladder Logic Diagram with PLC monitoring. Logic Gates, using of Mathematical Expressions in Ladder Logic Diagram will be explained with monitoring of PLC.

ACTIVITIES:

- Introducing the concepts with interesting videos on Industrial Applications of PLC
- Demo and practical training on PLC.
- Ladder Logic Diagram circuit with time limit

On completion of the workshop students will be able to develop a ladder logic circuit along with monitoring of PLC

HIGHLIGHTS:

PLC features, basic understanding of PLC as Industrial Computer, Inline Modules, Logic Gates, Developing of Ladder Logic Diagram, Monitoring PLC,

CONTACT:

K. Sudha Deepthi —9502033737- sudha-bosch@dsu.edu.in

Event 9

KNOW YOUR GENES, BE HEALTHY: ANALYSIS OF GENES OF AN INDIVIDUAL WILL HELP TO MANAGE HEALTH AND LIFESTYLE CHANGES TO LIVE LONGER AND HEALTHIER.

MENTOR: Dr. Dinesh S. M

INTRODUCTION:

Analysis of individual genes will help doctors to predict the existence of faulty genes or aberrations and help them in treating diseases. This personalized gene analysis also enables a better life style, cautions about various disease predispositions and susceptibility and delays or prevents the manifestation of disease besides helping to minimize the side effects by recommending more target specific drugs.

ACTIVITIES:

Student can get an idea about the theme with case studies or research findings and can make oral/poster presentation on the following topics:

- a) Precision medicine
- b) Individualized drug therapy
- c) Personalized medicine

CONTACT: Dr. Dinesh S. M: 9844490637

dineshmgowda1-sbas@dsu.edu.in

Event 10

1. FISH OUT OF WATER

MENTOR: Dr. Pradipta Banerjee, Assistant Professor

INTRODUCTION:

How much fish do you think are cultured per year in Karnataka? Fish has to be cultured or caught, then packed and sent to other geographical location. However fish needs to be processed during packaging and this produces an enormous amount of waste, including bones, skin and scale. The Indian Government has tried various measures to manage this waste by introducing concepts like making boards and feed out of fish waste. In spite of the measures taken, fish culturing industry waste is increasing on a yearly basis. The major challenge is to identify a recycling technique to utilize the entire waste for the betterment of mankind.

2. THE TASTE OF FOOD

MENTOR: Dr. Pradipta Banerjee, Assistant Professor

INTRODUCTION:

How do we digest food? We may eat paneer, chicken or a healthy side dish of salad. But it should be remembered that it heads up to the same digestive tract. The digestive system has an array of enzymes for breaking even the toughest food. Here, we will be discussing on how these amazing enzymes, designed by millions of years of evolution, have learnt to recognize food and break it down. More interestingly, we can come up with models for enzyme assisted food breakdown.

CONTACT: Dr. Pradipta Banerjee, Assistant Professor

Mob: 9886429261, pradipta.banerjee@dsu.edu.in



Event 11

1. CAN PLANTS EMIT LIGHT?

MENTOR: Dr. Sinjitha .S. Nambiar

INTRODUCTION:

Plant cells can be transfected with plasmids containing luciferase gene from fireflies that causes them to emit light. This insertion of the luciferase gene should be at a position on the plant genome that is not detrimental to the survival of the plant. These cells should be tested for their ability to emit light.

2. IS IT POSSIBLE FOR ANIMALS TO SURVIVE WITHOUT EATING?

MENTOR: Dr. Sinjitha .S. Nambiar

INTRODUCTION:

Animal cells can be transfected with plasmids containing photosynthetic genes in such a way that the survival of the animal cell is not threatened. These cells should then be tested for their food producing ability in the presence of sunlight. The survival of these cells in the absence of any external source of nutrition is then assessed.

CONTACT:

Dr. Sinjitha .S. Nambiar, M.Sc, M.Phil, Ph.D
Assistant Professor,
Phone no. 8722637989, Email- sinjitha@dsu.edu.in

Event 12

MICRO-FACTORIES: PROMISE FOR FUTURE

MENTOR: Dr. Archana S. Rao

INTRODUCTION:

Can we imagine a world without micro organisms? "Micro" means tiny/small. Micro organisms are those unseen to naked eyes. Microscopes are the eyes to see this diverse, colourful, highly active microbial world. What are these micro organisms doing? Why are they important? These questions generate curiosity to a great extent.

Through this project we will try to find out some micro organisms which play a role in day-to-day life. From your kitchen to the astronaut's food in space; Yummy stuffs like curd, paneer, cheese, batter for idli and dosa are products of microbial activity. Preparation of medicines, vaccines, detergents, drinks, clothes, leather products, colour production, aroma production etc. involves these micro organisms. Bioluminescence, biofuels, microbial memory can transform earth in near future.

There are micro organisms causing various diseases in plants, animals and humans. Again antagonistic micro organisms can be used for control of these diseases. Our whole body is filled with micro organisms which makes us what we are!! Yes. Then what not?

If you want to explore this micro world, you are welcome.

CONTACT:

Dr. Archana S. Rao , 9611494919, archanasrao@dsu.edu.in

Event 13

INTRODUCTION TO MACHINE LEARNING

MENTOR: Dr. Sanjay Chitnis

INTRODUCTION:

Today AI and machine learning is increasingly being used in products around us. This session will demystify how machine intelligence works. Students will build one machine learning project using Python and Tensorflow.

ACTIVITY PLANNED FOR THE PROJECT:

1. Understand basics of AI and Machine Learning
2. Introduction to Python and Tensorflow APIs
3. Build a small machine learning project

PLAN FOR THE THREE DAYS OF TALENT SEARCH EVENT:

- DAY -1 : a) Training on Basics of AI and Machine Learning
b) Introduction to Python and Tensorflow APIs
DAY-2: Forming teams, work on a small Machine Learning Project with existing dataset and Code. First get the Code working and then modify the code to add new innovative features.
DAY -3: Demonstration of the project, prize distribution.

On completion of this workshop the student will be able to understand how machine learning works.

HIGHLIGHTS:

Students will get exposure to Tensorflow framework from Google for Machine Learning.

CONTACT:

Dr. Sanjay Chitnis. Dayananda Sagar University
Ph.No. +91- 0886379597, director-ie@dsu.edu.in



Event 14

TRAINING ON ACCOUNTING BITS

MENTORS: Dr. Punith Cariappa & Prof. Janani Ravinagarajan

INTRODUCTION:

Accountants are not mathematicians. Accountants are not bean counters. They just are the people who know the style to record, measure and communicate financial information. Accountants are the most logical, rational and organized individuals in the business world!

Learn the accounting bit from us! We make you corporate fit!

During the course of the event, fundamentals of accounting, journal entry, ledger accounts and final accounts participants will be trained with hands-on sessions. Logics of system based accounting training. Comprehensive exposure to various accounting systems will be provided to enable the students level up to understand the technical side of accounting in the real world.

CONTENTS:

- Fundamentals of accounts
- Journal entry made easy
- Ledger Accounts
- Company Final Accounts
- Logics

ACTIVITIES:

- Accounting Quiz (60 mins)
- Record it in style! - An approach building game(60 mins)
- Logic Tonic - Fast paced accounting logic test (30 mins)

CONTACT:

Prof. Janani Ravinagarajan, +91 9789773637, jananiravinag@dsu.edu.in

Event 15

CAN WE LEAD TO YOUR BLUE OCEAN? UNDERSTANDING ENTREPRENEURSHIP.

MENTORS: Dr. Anitha & Prof. Janani Ravinagarajan

INTRODUCTION:

India boasts of Kiran Mazumdar Shah, Ritesh Agarwal - we need many more, Will you be the next?

When you realize - Salary is an underestimated monthly payment. You are born to celebrate profits!

Entrepreneurship is not a profession; it is a way of life which allows you to make mistakes, learn and evolve. What is "that" which could shape you as an entrepreneur? Undermine the power that is hidden. Take a deeper dig and find your blue ocean to sail through to resolve a problem or to make something easy for human kind.

CONTENTS:

- Story of Entrepreneurship
- Bringing out the creativity
- What drives innovation?
- Components of a Business Model

ACTIVITIES:

- Puzzles to explore the creativity and innovativeness in you (30 minutes)
- Storyboarding (30 minutes)

CONTACT:

Prof. Anitha N, Email: dranitha-socm@dsu.edu.in, Contact Number: +91 9943993307

Event 16

INDIA IS SHORT OF BILLIONAIRES! CAN WE COUNT ON YOU TO BE THE NEXT?

MENTORS: Prof. Janani Ravinagarajan

INTRODUCTION:

Is the Stock Market a nightmare? Finance - a puzzle and Insurance - a grey area? We will help you to explore and become successful; do you have it in you?

Financial securities and the avenues of investment will be briefed upon. Technical analysis and trends in the market will be summarized. Students will be trained to understand the market reaction to the trending news.

On completion of the event, students will be exposed to stock market simulation. They will be connected to the real market with virtual money enabling them to transact and skill up to make a trade in the market.

Count on us and get counted as the nation's business leaders !

ACTIVITIES:

- Quiz (30 mins)
- Stock market simulation (60 mins)
- Meme the Market (60 mins)

DAY-1: Concepts and techniques

DAY- 2 & 3: Quiz, Simulation and Meme the Market

CONTACT:

Prof. Janani Ravinagarajan, +91 9789773637, jananiravinag@dsu.edu.in

Event 17

PRODUCT LAUNCH- UNBOX THERAPY

MENTOR: Prof. Andria Mendez

INTRODUCTION:

Do you want to buy something today? Your options are more!
Do you want to create something new? Your opportunities are ample!
But what will work?
How well can you launch your product?

Come show us what you can do to think out of the box in this era where cell phones are launched with the help of Internet of Things and Artificial Intelligence.

Let this be Your Unbox Therapy!

ACTIVITIES:

- Preliminary Round (Duration 90mins)
- Over Nighter (Task will be posted overnight and deliverables are expected in the morning)
- Semi-Final (Duration 120mins)
- Finale (Duration 60mins)

All the rounds will have case based questions to be solved within the given time, deliverables have to be in form of a power-point presentations, audio visual files and on-spot presentations.

RULE:

Team of three (participants cannot be part of any other event.)

CONTACT: Prof. Andria Mendez

Email : andria-socm@dsu.edu.in / 8971258150

Event 18

YOUR MOM IS THE BEST MANAGER

MENTOR: Prof. Anusha, Prof. Andria Mendez

INTRODUCTION:

Dare to Compete?

Did you ever know that the best manager in the world is at your home? Yes, she is none other than your mom.
Here we are giving you an opportunity to be better than the best. So come stand out from the crowd to show us your leadership qualities.

The stage is set. Get ready to hustle and get your hands dirty in the tussle! Embark on the biggest, most prized journey on a quest to become the Best Manager.

ACTIVITIES:

DAY- 1: Preliminary Round (Duration 90 mins) -
Over Nighter (Task will be posted over night and deliverables are expected in the morning) - Day 1 night
DAY- 2: Semi-Final (Duration 120 mins)
DAY -3: Finale (Duration 60 mins)

RULE:

Individual participation

CONTACT:

Prof. Anusha & Prof. Andria Mendez /
Email : anusha-socm@dsu.edu.in, andria-socm@dsu.edu.in
Contact Number : +91 8951863323, 8971258150

Event 19

WORKSHOP ON AEROMODELLING

MENTORS:

Prof. G.K. Suryanarayana, & Mr. Kartik, Aerospace Engineering

INTRODUCTION:

Aeromodelling is the activity of making aircraft models on your own. Doing these projects on your own gives you a sense of achievement and excitement while improving your engineering skills. This workshop covers basic principles of aerodynamics, aircraft motions, aircraft structure and control surfaces. You will be trained on different modeling techniques like paper cutting, origami and glider making. Teams will be created with 4-5 members and raw materials & tools are supplied to make wooden gliders and test them for flying ability.

On completions of this workshop students will be able to :

- Understand the basics of aerodynamics, aircraft structure and control surfaces
- Apply the understanding by making models
- Developing team spirit
- Creating interest in aircraft design

ACTIVITIES:

DAY- 1: Theory and paper models
DAY -2:Glider Making and testing
DAY -3: Competition and Exhibition

CONTACT:

a. Prof. G.K. Suryanarayana, Professor, Aerospace Engineering, 94498 39050 / surya-ae@dsu.edu.in
b. Mr. Kartik, / Teaching Assistant, Aerospace Engineering 8147467135 / kartik-ae@dsu.edu.in

Event 20

BIG DATA ANALYTICS USING SPARK IN R

MENTORS:

Prof. Jasma Balasangameshwara, Prof. Pramod TC, Prof. Ravi Kiran K, Prof. Suparna HS, Prof. Ramandeep Kaur, Prof. Jyothi Angadi

INTRODUCTION:

Big Data Analytics examines large amounts of data to uncover hidden patterns & valuable correlations. The learning path of this program offers a foundation on some basic methods & latest tools to spark your analytical skills.

ACTIVITY PLANNED FOR THE PROJECT:

Demonstration on usage of Apache Spark will be given to students during the event. The activity includes tutorial classes with hands on experience. There can be 3 students per batch and maximum of 10 batches.

PLAN FOR THE THREE DAYS OF TALENT SEARCH EVENT:

The 3-days event will provide an intense and focused experience to students.

DAY- 1 : Tutorial class on Apache Spark.

DAY -2 : Hands-On experience on Big Data processing.

DAY -3: Competition to perform basic analytics on a real-time Big Dataset.

HIGHLIGHT:

Students will learn to :

- Setup a local instance of Apache Spark
- Copy datasets to local standalone cluster
- Perform basic analytics on Big Data sets

CONTACT:

Prof. Jasma Balasangameshwara/Prof. Pramod TC/Prof. Ravi Kiran K, jasma.b-ct@dsu.edu.in, tcpramod-ct@dsu.edu.in, ravikirank-cse@dsu.edu.in , 7667677891, 8861505918



Event 21

ARTIFICIAL INTELLIGENCE IN COMPUTER GRAPHICS

MENTORS:

Dr. Reeja S.R, Prof.Aiswariya Milan K, Prof.Ankita Singhai

INTRODUCTION:

Artificial Intelligence helps in constructing intelligent systems that can operate autonomously, learn from experiences, & solve complex problems. The training covers various possibilities of using Artificial Intelligence techniques in different areas of Computer Graphics. Artificial intelligence (AI) in computer games covers the behaviour and decision-making process of game-playing opponents. Use of Artificial Intelligence can greatly improve Computer Graphics results in scene modelling and visualization. It also introduces the selection of suitable intelligent algorithms for the generation; display and manipulation of graphical images from 2 and 3-dimensional object models.

ACTIVITIES:

DAY-1: Introduction to OpenGL and Game Designing in OpenGL

DAY-2: Introduction to AI and Game Designing using AI algorithm

DAY-3: Project Design using AI in OpenGL

CONTACT:

Dr. Reeja S.R, Department of CSE, DSU,reeja-cse@dsu.edu.in
 Prof.Aiswariya Milan K, Department of CSE, DSU,aiswariya-cse@dsu.edu.in/ 8095741342
 Prof.Ankita Singhai, Department of CSE, DSU,ankita-cse@dsu.edu.in





Event 22

DEVELOPMENT OF SHEET METAL MODEL FOR STRUCTURAL APPLICATIONS USING FUSION 360

MENTORS: Dr Saravanabavan, Prof Vinay M S, Prof Shashidhara L C, Prof Abhijith N

INTRODUCTION:

Sheet metal work has its own significance in engineering. Many products fulfill the household needs, decoration work and various engineering articles are produced from sheet metals. The indispensable engineering articles made of sheet metal find their application in agriculture, building construction, house hold, offices, laboratories, shop equipment, heating, air conditioning, transportation, decorative work, toys and many other such areas.

The fabrication of metal structures involve four essential stages: measuring and marking out, preparation of the material for fabrication, forming processes and the assembly of the materials. Tools such as measuring tools, marking tools, cutting tools, forming tools and joining tools will be provided to students for making a design project. Demonstration and hands-on-experience in metal shaping skills will be given to students

ACTIVITY:

DAY- 1: Training on Autodesk Fusion 360 commands

DAY- 2: Preparation of 2D drawing and 3D modeling

DAY- 3: Fabrication of sheet metal parts in workshop laboratory

CONTACT:

Dr. Saravanabavan -9986149613, Prof. Vinay M S -9980191175, Prof. Shashidhara L.C- 9353265250 Prof. Abhijith N-9740384379, saran-bav-me@dsu.edu.in



Event 23

HANDS ON ROBOTICS WORKSHOP

MENTOR:

Dr P. Vivekananda Shanmuganathan

INTRODUCTION:

The Robotics Workshop is conceived to give basic hands-on introduction to Robotics for school students. It is proposed to introduce free and affordable tools for the workshop so that the participants can continue working on conceptual robotics and low-cost prototyping of their concept robots.

ACTIVITIES:

The workshop is proposed to be conducted in three levels:

Level 1: Modeling and Motion Simulation using AutoDesk Fusion 360

Level 2: Making Conceptual and Physical Models

Level 3: Demo with Functional Prototypes

Focus will be on Levels 1 and 2. Demo will be given for Level 3. Activities for the three days will be split based on these levels, and on the final day, the students will come up with their own conceptual robot model using the CAD software and make the physical model of the same.

DAY -1: Modeling and Motion Simulation using AutoDesk Fusion 360

The free cloud-based computer-aided design (CAD) application AutoDesk Fusion 360 will be used for building CAD models of industrial and other popular robot configurations. Participants can play around with the models for graphical simulation of robot motions and will be encouraged to prepare posters / videos of their work.

DAY -2: Making Conceptual and Physical Models

The participants will have to make physical prototypes of robots using card boards, thus visualizing industrial robots.

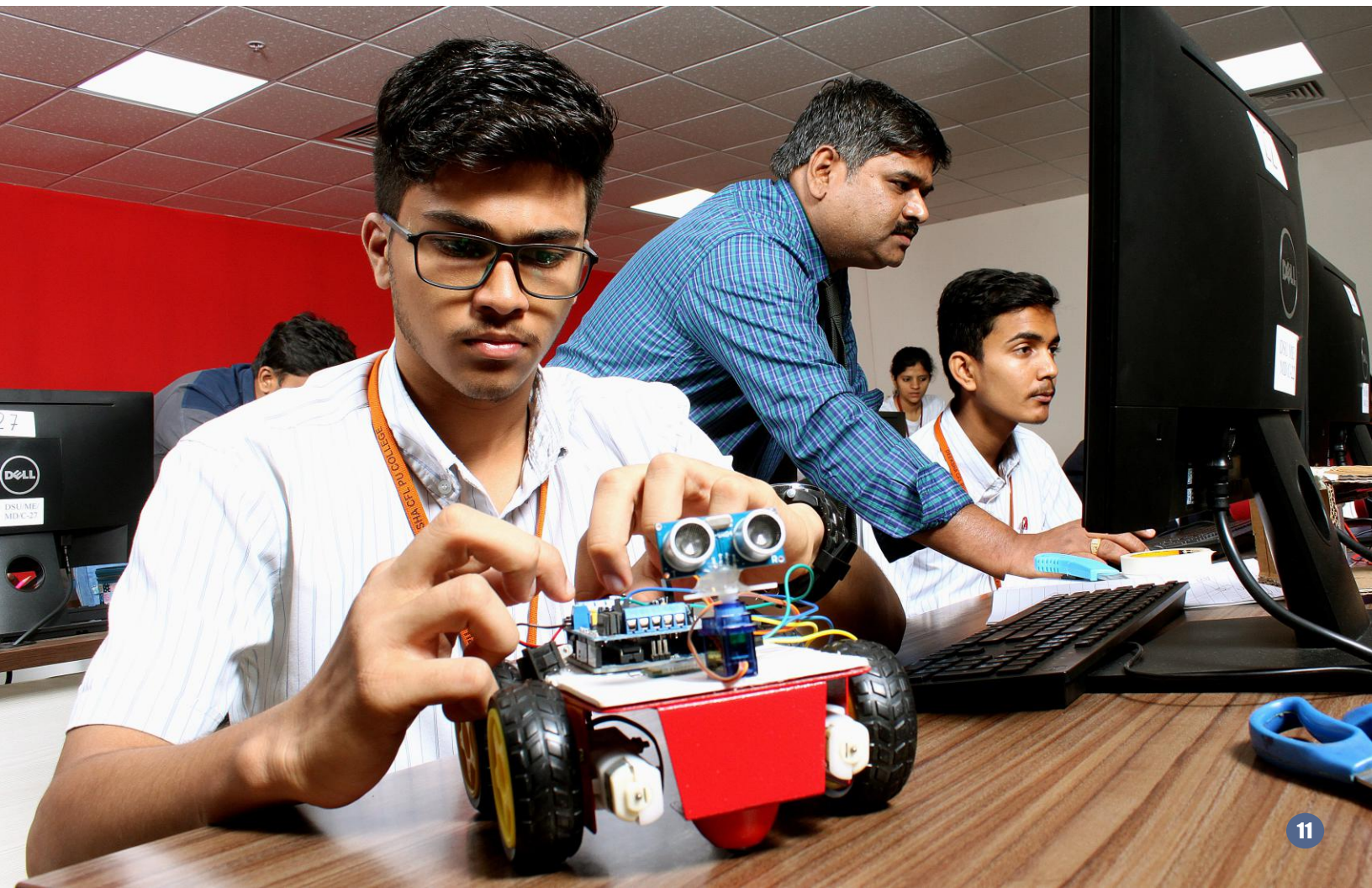
DAY -3: Demo with Functional Prototypes

Development of functional robots with electronic control is the aim. Low cost servo motors and affordable controller boards will be used for robot motion and control. Mechanical structure of the robot will be made using cardboards and other sturdier material such as plywood or readily available metallic links.

CONTACT :

Dr. P Vivekananda Shanmuganathan

Email: viveks-me@dsu.edu.in / Phone: 9486062923 / 8867184655



Event 24

FUN WITH PHYSICS

MENTOR: Baishali G.

INTRODUCTION:

This project aims to bring in an element of fun in Physics, to overcome low interest or lack of excitement in this subject, among a few students. While some students find difficulty in grasping certain concepts, others start fearing the subject. In this push and pull, often the beauty of Physics is lost. The “Fun With Physics” event is designed for young minds to get a feel of the beauty of Physics through some simple experiments and fun projects.

In this event, students from class 9 and 10 will participate on making projects involving simple principles of Physics. In the first day, students will be trained to do the projects hands on, 2nd day they have to do some innovative project of their own, which they will showcase in the exhibition on the 3rd day. The total number of participants is limited to twenty. For making the projects some electronic components and stationary materials are needed which are listed below:

Electronic components: LED, Battery, Cooper tape, resistors.

Stationaries: Chart paper, Sketch Pens, adhesive tape,

Prize: Prizes for the 1st, 2nd and 3rd positions.

ACTIVITY PLANNED FOR THE PROJECT:

1. A few concepts of Physics is required for building the models
2. Motivating and encouraging students for making the models with help of the mentors
3. Come up with their own innovative idea for making a project for exhibition
4. Discuss the idea with the mentor about the feasibility
5. Make the model
6. Prepare posters for easy explanation of the concept

PLAN FOR THE THREE DAYS OF TALENT SEARCH EVENT

DAY-1: Students will make some fun projects hands-on. Mentor will help them to execute the projects.

DAY-2: Students will come up with their own creative projects based on the training they received in the first day.

Discuss their ideas with the mentor and make the projects ready. Students will prepare the posters to be displayed along with their projects on the exhibition day.

DAY-3: The students will exhibit their projects in the exhibition. They will use the posters for explaining the concepts to the audience.

On completion of this workshop the student will be able to enjoy the beauty of the subject and will have a clear understanding of certain concepts of Physics.



MAIN HIGHLIGHTS:

Paper Circuits Using Graphite.

CONTACT:

Dr. Baishali, Dept of Physics, DSU, Ph. 9663367927 / baishaligarai-phy@dsu.edu.in

Event 25

GEOMETRIC ORIGAMI WORKSHOP

MENTORS:

Dr. Sunanda Saha, Ms. Shubha Javagal and Mr. Mahesh Udupa

INTRODUCTION:

Modular Origami is a technique that can be used to build some pretty interesting and impressive models of mathematical objects. In modular origami, you combine multiple units folded from single pieces of paper into more complicated forms. As for Plato who believed that Geometry existed before creation, an enhancement on this will be done to students with a talk on Geometry, Platonic solids and origami of Platonic solids.

ACTIVITY PLANNED FOR THE PROJECT:

As activity and competition, students will be taught and guided thoroughly to make a few origami of Platonic solids, from which they have to gain knowledge and use their skills to construct a more complicated Platonic solid from what they have learnt.

PLAN FOR THE THREE DAYS OF TALENT SEARCH EVENT:

The first 2-days are an intense and focused experience in which students learn Origami in general and specifically the geometry involved with it.

DAY -1: will be an introduction and tutorial class on Geometry and Origami.

DAY -2: will be hands on experience as they will be challenged to construct platonic solids.

HIGHLIGHT :

- Introduction to origami and geometry
- Understanding of Platonic Solids
- Using paper-folds, starting off with basic Platonic Solids
- Will gain Visualization power when they will be asked to do it themselves

CONTACT:

Dr. Sunanda Saha, sunanda-math@dsu.edu.in, 8971939565
Prof Shubha Javagal-8105176460

Event 26

SCIENCE QUIZ

MENTORS: Dr. Yogesh Kallegowda, Dr. Ashoka, Dr. Sunanda Saha

INTRODUCTION:

Test your knowledge of science facts and applications of scientific principles by taking our quiz challenge based on the syllabus of Class XI and Class XII (Physics, Mathematics and Chemistry).

a) Mathematics

Complex Numbers and Quadratic Equations, Matrices and Determinants, Limits, Continuity and Differentiability, Integral Calculus, Trigonometry.

b) Physics

Units and Measurements, Laws of Motion, Waves and Oscillations, Electrostatics, Current Electricity, Optics.

C) Chemistry

Atomic Structure, Electrochemistry, Organic Chemistry, Chemical Bonding, Chemical Energetics

ACTIVITY PLANNED FOR THE PROJECT:

Preliminary Round (Duration: 60 minutes) Final Round (Duration: 30 minutes) Both Preliminary and Final Round will have the following sub-rounds: -

- a) Subject Question Round b) Audio Visual Round c) Rapid Fire Round

CONTACT: Dr. Yogesh Kalegowda, 8762040113, yogesh-phy@dsu.edu.in

Dr. Ashoka S, 9620213754, ashok-chem@dsu.edu.in

Dr. Sunanda Saha, 8971939565, sunanda-math@dsu.edu.in

Event 27

SUDOKU SOLVER BE THE FIRST TO SOLVE IT!..

MENTOR : Dr. Abeda S. Dodamani and Dr. Deepika T

INTRODUCTION:

Not only mathematicians, anybody can think logically to solve the bricks. The more you think logically the more left brain will be utilized. For instance SUDOKU is one of the ways to build our logical thinking and reasoning. The name Sudoku more correctly comes from Japan and consists of the Japanese characters Su (meaning 'number') and Doku (meaning 'single') but it was not invented in Japan. Sudoku was originated in Switzerland and then travelled to Japan through America.

The origin of Sudoku can be tracked down back to 1782 with the Swiss mathematician Leonhard Euler. He introduced a famous problem on a grid: the officer problem. Six regiments with six officers with distinct ranks are considered. The problem consists of placing the 36 officers into a 6×6 square. Each cell of the square contains one officer. In each line and in each column, every regiment and every rank is represented. Euler suspected that it was an unsolvable problem but could not prove it. This result was only proved in 1901 by the French mathematician Gaston Tarry. The constraint preventing the repetition of some elements in the grid, is the link with Sudoku. In both cases, we are faced with a particular Latin square. Want to know more about it just wait!

CONTENTS:

- Beginner level SUDOKU solving
- Easy level SUDOKU Solving
- Medium Level SUDOKU Solving
- Tricky Level SUDOKU Solving

ACTIVITIES:

DAY-1: Teaching the technique to solve the SUDOKU for all the levels (60-120 min)

DAY-2: Conducting Test on Solving SUDOKU at different level.

DAY-3: Final Competition to the previous day winners

CONTACT :

Dr. Abeda S. Dodamani --+91-9535748201,
abeda-math@dsu.edu.in

Dr. Deepika T.+91-9886822388 deepika-maths@dsu.edu.in

Event 28

HANDS ON TRAINING ON SEPARATION OF ORGANIC COMPONENTS (THIN LAYER CHROMATOGRAPHY)

MENTOR: Dr. V. Srinivasa Murthy

INTRODUCTION:

Chromatography is a technique employed for the separation of organic components in a mixture using suitable mobile phase. Usually before going for separation by using column, one has to identify the number of components present in it by a technique called thin layer chromatography (TLC). This is the preliminary identification for the completion of the reaction or to identify the number of components. The concept of chromatography has been introduced in higher education because of its prime requirement in pharma, food, agricultural industries. The main objective is to teach the basic principles of TLC and its utilization in separating the organic components. The following ideas are required to be performed in the experiment: 1. Knowledge on polarity of the solvent. 2. Type of stationary phase utilized in the column chromatography

Once TLC is complete for the expected activity, it is then purified by column chromatography to obtain individual components to examine their importance in various chemical activities. The techniques employed in pharma industry, agrochemicals, petrochemical refineries for the purification of organic compounds will be inculcated in a simplified manner and in shorter duration.

On completion of this workshop the student will have knowledge about staining reagents utilized to identify the functionality present in the moiety exploring its uniqueness in the molecule. They will also know the polarity of the solvent chosen and the techniques utilized to separate the organic mixture by column chromatography.

NUMBER OF PARTICIPANTS:

It is a team event and three to four students from Class XI/XII would participate as a team.

ACTIVITIES:

First two days would involve training and third day will be participation/competition for the separation of compounds from the given mixture.

CONTACT:

Dr. V. Srinivasa Murthy, Email-id: vsmurthy-chem@dsu.edu.in
Contact No: 9844604892

Event 29

MODELLING INTEGRATED CIRCUITS USING MENTOR GRAPHICS TOOL SUITE

MENTORS:

Dr. Pushpa Mala S, Mrs. Shwetha M P & Mr. Darshan Halliyavar

INTRODUCTION:

Integrated circuit design, or IC design, is a subset of Electronics Engineering, encompassing the particular logic and circuit design techniques required to design integrated circuits, or ICs. ICs consist of miniaturized electronic components built into an electrical network on a monolithic semiconductor substrate by photolithography. IC design can be divided into the broad categories of digital and analog IC design. Digital IC design is to produce components such as microprocessors, FPGAs, memories (RAM, ROM, and flash) and digital ASICs. Analog IC design also has specializations in power IC design and RF IC design. Analog IC design is used in the design of op-amps, linear regulators, phase locked loops, oscillators and active filters.

ACTIVITY PLANNED FOR THE PROJECT:

The integrated circuit (IC) development process starts with defining product requirements, progresses through architectural definition, implementation, and final product.

An introduction to the various components during the IC Design Flow is given. The activity includes tutorials and hands on experience using Mentor Graphics.

ACTIVITIES:

The three-days event is intense and focused on IC Design techniques

DAY -1: Tutorials and Hands on Experience towards Semi custom design flow

DAY -2: Tutorials and Hands on Experience towards Full custom design flow

DAY -3: Design Competition

HIGHLIGHTS:

- Understand the IC Process Flow and the Design Strategy.
- Code simple digital circuits in Verilog HDL, simulate and synthesize the design.
- Model the schematic and layout design for simple digital circuits.

CONTACT:

Dr. Pushpa Mala S
pushpa.mala-ece@dsu.edu.in/+91-9986911191

Event 30

PLAYING WITH DATA USING PYTHON

MENTORS:

Dr Shaila S.G, Dr Vasanthi Kumari & Prof. Pooja

INTRODUCTION:

On the 1st day of the event, a brief introduction is given about Artificial Intelligent (AI) and Machine Learning (ML). It focuses on the need of Python for developing the applications of AI and ML in real world. The event focuses on the basics of Python programming, the features and advantages when compared with other programming languages. On the next day of the event, students learn some of the Python packages such as Numpy, Scipy, Matplotlib, Pandas, etc. On third day students will develop certain applications using Python and its packages.

ACTIVITIES:

1. Understand what is machine learning, Tutorial on basic Python code
2. Tutorial on Python libraries (NUMPY, SCIPY, PANDAS, MATPLOTLIB) to perform tasks, learn some simple machine learning algorithm to classify any image
3. Develop some applications using Python and its packages.

CONTACT:

Dr. Shaila S.G, Dr. Vasanthi Kumari P & Prof Pooja
shaila-cse@dsu.edu.in, vasanthi-bca@dsu.edu.in, 8884560635

Event 31

Talk Time

Mentor: Renuka Phadnis

INTRODUCTION:

So you have it in you to stir a crowd with your words? And you believe your words can make a difference to the world around you? So take a shot. Speak. Explain. Enthrall. And captivate a waiting crowd with your oratory skills.

FORMAT:

- Participants will draw a chit carrying a topic (Mainly current events)
- Participants will then be given a minute to prepare before they take the stage
- They get two minutes of time to speak about the topic. Plus, another two minutes to take the jury/audience questions

Participants may change their topic before they go upon the stage. But if they do, they will not be given time to prepare.

RULES:

- This is a solo event
- Use of profanity is not allowed
- Speakers will be judged on content and presentation

CONTACT: Renuka Phadnis (9900135657) Assistant Professor, CJMC. phadnis.renuka@gmail.com

Event 32

SHOOT AND WRITE

MENTOR :Rashmi Gaur

INTRODUCTION:

Telling stories through pictures is no simple task. Display your ability to freeze the right frames and complement them with the perfect words. So click and caption. And let the spotlight fall on you.

RULES:

- Each team will have two members
- Participants will be given two hours to hunt for the perfect shot and caption it
- The theme will be given at the start of the competition
- Participants will have to click pictures with their mobile phones
- Photographs cannot be cropped
- No photo-editing will be allowed

CONTACT: Renuka Phadnis (9900135657) Assistant Professor, CJMC. phadnis.renuka@gmail.com

Event 33

QUIZ CRAFT

Mentor: Meghana H R

INTRODUCTION:

A lot is happening around you! How much do you know? How much can you recall? How many words can you spell correctly? And how many can you define or describe? Get your grey cells working. Discover the winner in you.

FORMAT:

- Each team will have two members
- Preliminary round will consist of MCQs
- Top three teams will move into the next round
- The finals will consist of five segments, each uniquely different from the other

RULES:

- Mobile phones are not allowed
- No prompting or external help allowed
- Participants will lose marks if they are prompted for answers

CONTACT:

Renuka Phadnis (9900135657) Assistant Professor, CJMC.
phadnis.renuka@gmail.com



Event 34

QUALITY OF MILK WE CONSUME

MENTORS: Mr. AR Mahesh

INTRODUCTION:

The most essential and highly used multi-nutrient fluid and a primary source of nutrition for humans is MILK. It contains about 80% of proteins which is most essential for the growth of a child. This project includes determination of the quality of the milk used and also determining the amount of Milk protein which is in abundant concentration. The study deals with the precipitation of proteins from the various milk samples such as cow milk, goat milk, buffalo milk, powdered milk and various brands of milk available in the market and report the same.

On completion of the workshop, students will be able to:

- Understand the composition and importance of Milk
- Perform various quality tests
- Determine and report the best type of milk humans can consume

ACTIVITIES:

DAY -1: Introduction to milk and milk products

DAY -2: Demonstration of various chemical tests to determine the quality of milk

DAY -3: Performing the given task and presenting the report

CONTACT:

Mr. AR Mahesh ,Department of Pharmaceutical Chemistry
College of Pharmaceutical Sciences,
E-Mail: mahesh-sps@dsu.edu.in / 8892941706

Event 35

SEPARATION AND IDENTIFICATION OF ALKALOIDS BY THIN LAYER CHROMATOGRAPHY

MENTORS: Dr.V.Murugan, Dr.K.B.Premakumari, Chelsea P

INTRODUCTION:

Chromatography is defined as a method of separating a mixture of components into individual components using two different phases such as stationary and a mobile phase. The separation is based on adsorption that is based on their affinity towards the stationary phase. The component with less affinity will travel fast and the one which has more affinity towards the stationary phase will travel slow.

ACTIVITY:

Alkaloids samples are spotted on the TLC plate
Stationary Phase: Precoated TLC plates
Mobile phase: Ethylacetate: Methanol: Water (10:13.5:10)
Detection: Iodine chamber.

On completion of the workshop the students will be able to understand:

- Definition of Chromatography
- Thin Layer Chromatography-Principle
- How to carry out TLC
- Applications

CONTACT:

Dr. Premakumari KB; Assistant Professor, 9739856416, prematenny@gmail.com, College of Pharmaceutical Sciences, DSU.

Event 36

TO ASSESS THE EFFECT OF DRUGS ON BEHAVIORAL OR COGNITIVE CHANGES IN MICE OR RATS

ABSTRACT:

Drugs are substances that cause changes in physiology or psychology on consumption. The action of drugs on brain or central nervous system is still a complex process to understand. But there are several methods to evaluate these actions on the central nervous system, with the help of these assessments we could predict the basic action of drugs or chemicals on behavioral and cognitive functions in animals during early stages of drug testing.

MENTORS :

Bhagyasree JM, Mob: +91-7624957552
bhagyasreemunirathnam@gmail.com
Dr. Krishna Das MS, Mob: +91-8921823561
krishnadas.madhu77@gmail.com

Event 37

ACIDITY? REMEDY IN A FEW SECONDS

ABSTRACT:

Acidity is a very common condition affecting most of us. This condition is characterized by heartburn felt around the lower chest area, which is caused by the stomach acid flowing back up into the food pipe. Get relief, effervescent granules are prescribed which acts in a few seconds. Effervescent granules are the specially prepared solid dosage form of medicament, meant for internal use. They contain a medicament mixed with citric acid, tartaric acid and sodium bicarbonate. Sometimes saccharin or sucrose may be added as sweetening agent.

HIGHLIGHTS:

Before administration, the desired quantity of granules is dissolved in water, the acid and bicarbonate react together producing effervescence (carbon dioxide) that mask the bitter and saline taste of drug and also used to ease too much gas in the stomach, within seconds.

ACTIVITY PLANNED :

Demo to students on mode of action of effervescent granules
Practical exposure to students on formulation of effervescent granules

MENTOR:

Shravya Lakshmi S, e-mail – shravyacs1993@gmail.com, Contact No. 9686408607
Suma Varghese, e-mail – annavrgs17@gmail.com, Contact No. 7012291284

Event 38

ISOLATION AND IDENTIFICATION OF STARCH FROM NATURAL SOURCES

MENTOR: Dr. P. Sivakamisundari; Dr. Shanaz Banu

INTRODUCTION:

Starch is an important polysaccharide found in plant sources. The microscopic appearance of starch is in the form of granules. It is typical for the individual starch grains. They differ in size depending on the source from which they are isolated. Starch is insoluble in water and rapidly settles at the bottom.

ACTIVITY PLANNED FOR THE WORK:

Peel a raw Potato/ Ginger/ Tapioca and cut into small pieces. Homogenize with sufficient quantity of water. The homogenate is filtered through a muslin cloth to remove the particles. The compact mass of starch is isolated and dried.

IDENTIFICATION:

The starch granules are suspended in a drop of water and observed under microscope. A small quantity of test solution is acidified with dilute HCl, then 2 drops of Iodine solution is added. Formation of blue colour indicates the presence of starch.

CONTACT:

Dr. P. Sivakamisundari, 8050580730
sivakamiponnusamy77@gmail.com
Dr. Shanaz Banu, 9945640087
shanaz2906@gmail.com





Rewards @ DSU Talent Search 2019

Total Cash Prize: Rupees Five Lakhs

- Certificates and cash prizes to top five teams
- Partner Companies to support further development of the initial Idea/Concept to reach advanced levels
- Support to seek a Mentor
- Preference in facilitating setting up of a Company to pursue the project to reach next levels including the last stage-of-Go To Markets
- Participation certificates to all participating teams/ individuals
- Preference in admission to B.Tech programme in Computer Science & Entrepreneurship at DSU

Note:

1. In all the above activities Jury would look for originality, innovation and presentation style to list winners among participants
2. Jury decision would be final and binding on all participants
3. Organizers reserve the right to modify the structure of the programme, without notice



A Grateful Thanks!

Greetings!

The DSU Talent Search 2019, is now in its fifth year:

A significant achievement made possible through support from the DSU Management/ faculty and its leadership

And the Managements & Principals, faculty & students of participating Schools/PU Colleges from the State and elsewhere.

The event now scheduled on: 12th, 13th and 14th November, 2019 is bigger than its previous versions with close to 39 events covering a wide range of topics catering to a student community representing diverse interests.

Help from the corporate sector is too large to be expressed in words; proving that industry and academia do work in tandem. A dozen MNCs supporting the Innovation Labs in DSU is significant and unique, nationally.

The youth of this nation, now has the best platform to innovate in an academic campus that is regarded as the most modern and futuristic. DSU is supported by accomplished faculty - always willing to collaborate in pursuit of innovation and disruptive solutions - with outcomes leading to entrepreneurship and new employment opportunities.

These efforts are a strong indication of DSU responding to the need for India to become a manufacturing economy: the Innovation Labs supported by industry and the Startup Village being the first steps in furtherance of a bigger vision.

Impressed by this great move of DSU, NITI Aayog is supporting a DSU application to set up the Atal Innovation Centre (AIC) under the Atal Innovation Mission (AIM); ranking DSU among: AISER-Pune, IIT-Delhi and other premier institutions in the country.

DSU's initiatives receive recognition and support from across the nation's borders: Arizona State University (ASU) ranked No. 1, (ahead of MIT and Stanford) in Innovation would now support DSU in its new initiatives.

The DSU Talent Search also provide for partnerships with Schools and Plus 2 Colleges. One of them being students while still in school can now experience life in a University.

Teachers aspiring to develop their career path through professional development could now plan to pursue a Master's degree at DSU and participate in the Train The Teacher program offered by DSU.

Schools and Plus Two Colleges across the nation are invited to make best use of these great opportunities.

Best regards,

Prof R. Janardhan

Pro Vice Chancellor- Dayananda Sagar University
and

Senior Executive Vice President

Dayananda Sagar Institutions, Shavige Malleswara Hills

Kumaraswamy Layout

Bangalore-560 078.

Mobile +91 98440 74091 / Office + 91 80-42161759

www.dsu.edu.in | www.dayanandasagar.edu





For any assistance / clarifications please contact :

Departments of CSE & CT

Dept Coordinator :

Dr.Rajesh (CSE) rajesh-cse@dsu.edu.in 9591664668
 Dr.Jasma (CST) jasma.b-ct@dsu.edu.in 9886019686

- 1) Shamanth N (shamanth-cse@dsu.edu.in / 8698239095)
- 2) Nandini K (nandini-cse@dsu.edu.in / 9110257767)
- 3) Aishwarya Milan (aiswariya-cse@dsu.edu.in / 8095741342)
- 4) Krunali Varthak (krunali-cse@dsu.edu.in / 8149707902)
- 5) Vijin Justin (vijin-cse@dsu.edu.in / 8452070346)
- 6) Gaurav Kumar (gaurav-cse@dsu.edu.in / 9964291601)
- 7) Raman Deep Kaur (ramandeep-ct@dsu.edu.in / 9592971231)
- 8) Supanra (suparna-ct@dsu.edu.in / 8277644015)

Department of Mech Engg

Dept Coordinator :

Dr Sarvanabavan: 99861 49613

- 1) Chethan T G (chetan-me@dsu.edu.in / 7550988978)
- 2) Abhijith N (abhijith-cvl@dsu.edu.in / 9740384379)
- 3) Ravitej Y P (ravitej-me@dsu.edu.in / 8095509412)
- 4) Abhilash O (abhilash-me@dsu.edu.in / 8660689614)
- 5) Vinay M S (vinay-me@dsu.edu.in / 9980191175)

Department of ECE

Dept Coordinator :

Nandininandini-ece@dsu.edu.in / 9481845366

- 1) Sharan Basavarajshaan.ec023@gmail.com / 9480752542
- 2) Puneethpuneeth-ece@dsu.edu.in / 9480708543
- 3) Shwethashwetha-ece@dsu.edu.in / 9110629957
- 4) Darshandarshan-ece@dsu.edu.in / 9449397731

Department of Aerospace Engg

Dept Coordinator :

Dr.Suryanarayana GKsurya-ae@dsu.edu.in / 9449839050

- 1) Karthikkartik-ae@dsu.edu.in / 8147467135
- 2) Srinathsrinath-ae@dsu.edu.in / 7349193935

Department of Sciences

Dept Coordinator:

Dr.Abeda Dodamani abeda-math@dsu.edu.in / 9535478201

- 1) Dr.Monika Singh (monica-eng@dsu.edu.in / 9535481330)
- 2) Meera Rao (meerarao-eng@dsu.edu.in / 9980157626)
- 3) Dr.Srinivasa Murthy (vsmurthy-chem@dsu.edu.in / 9844604892)

Invitation for registrations:

Teams of 3-5 students may be sent from each school/college. A maximum of 2 batches of students under both the Junior and Senior categories would be accepted for registration from each school. Interested schools and PU Colleges are requested to send entries latest by 9th November, 2019.

NO ENTRY FEE

Submission of entries: Entry may please be forwarded by the respective school/college Principal
to: dsutalentsearch@dsu.edu.in / janardhan.dsi@gmail.com

For more details/clarifications
Please call: +91 80 42161759
Visit us: www.dsu.edu.in



**DAYANANDA SAGAR
UNIVERSITY**

www.dsu.edu.in
email-info@dsu.edu.in



Campus 1 : Shavige Malleshwara Hills, Kumaraswamy Layout,
Bengaluru-560078 Ph : + 91 88843 99668 / 69

Campus 3 : Kudlu Gate, Hosur Main Road, Bengaluru-560068
Ph : 080 490 92 924 / 080-49092926