

# Message from the Virector

The Indian Institute of Science (IISc) was conceived and founded in Bangalore by Shri Jamsetji Nusserwanji Tata, whose birthday on the 3<sup>rd</sup> of March is celebrated in IISc as Founder's Day. The 28<sup>th</sup> of February is celebrated all across India as the National Science Day to commemorate the anniversary of the discovery of the Raman Effect, whose discoverer, Sir C V Raman, was a Director of IISc.



Prof. Anurag Kumar Director, IISc

It is in conjunction with these days that, each year, IISc holds an Open Day during which its portals are open for the public to observe first-hand the activities of the Institute. This year again, the Institute welcomes you on Saturday, the 29th of February, to Explore, Experience, and Enjoy the wonders of scientific and technological research and innovation in IISc.



# Open Vay 2020

# Biological Sciences

### **Biochemistry (BC)**





The Department of Biochemistry was established in the year 1921 and is the oldest biochemistry department in India and Asia. Nearly 850 students have graduated from this department thus far and many of them have assumed leadership positions in academia and industries. The Department has been carrying out research in frontier areas of biochemistry and molecular biology for the past 100 years. We are celebrating the Centenary of the department this year. An exhibition highlighting past and current research activities as well as historical aspects about the department will be on display in the department for the Open Day on February 29, 2020.

### Centre for Ecological Sciences (CES)

- Exhibits: Photography exhibit, live exhibits, specimen exhibits
- Games on predator-prey interactions, sexual selection, bird and frog calls, toxin evolution, ecosystems, etc.
- Nature documentary
- Tree walk on IISc campus
- Treasure hunt

### Centre for Infectious Disease Research (CIDR)

- Display posters on various infectious diseases of relevance at present
- Display of posters on Important work in CIDR
- Display of infected and normal small animals used in research on Infectious Diseases
- Relay of video on the working practices in a BSL3 lab
- Microscopy

### **Centre for Neuroscience (CNS)**



#### **Demonstrations:**

- · Mind-gym
- Human Brain anatomy
- Ames windows Illusion
- Luminance Illusion
- Endless wormholeLaser cavity
- Demonstration of Optogenetics
- A learning related task
- A hologram presentation (3-D presentation of neuron, spikes, etc.)

- The Cockroach Dance
- · You will do as I do
- Visualizing neural spikes in cockroaches
- · Stimulate your brain TMS Demo
- Attention please Covert attention task
- Cognitive workout Brain-Machine Interface
- · Genie in the bottle
- · Citizens of the city of Brain
- Motor learning
- Emotion
- · Olfaction/Chemosensation



#### Posters:

- Neurodegenerative disorders and Alzheimer's disease
- · How do we pay attention
- · How do we move
- · How does the brain develop
- How do evolutionarily conserved molecular building blocks from fruit flies also make a system as complex as a mouse brain
- How do neurons communicate with each other and how this machinery is built at a molecular level
- How do we remember and how do we forget
- How do we see objects
- Posters detailing the largescale population studies being undertaken by CBR and CNS to study neurodegenerative diseases in India

### Molecular Biophysics Unit (MBU)

- Demonstration of X-ray diffraction by protein crystals
- Visualizing protein 3D structures in Virtual Reality (VR)
- Cryo-electron microscopy for visualizing protein
- Crossword, Pictionary and Jumbled words
- · Physical models of biomolecules
- Intro to protein structure and NMR
- · Interface of chemistry and biology
- · Neuron model
- · Protein Origami
- · Lego blocks of amino acids
- · Model of protein structure
- · Sighting the crystal

### Microbiology & Cell Biology (MCB)

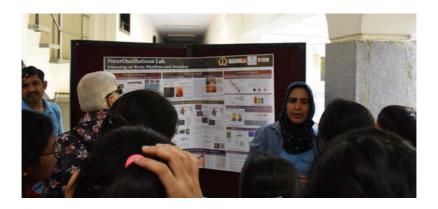
- Cell Biology group- Cell division, transportation of proteins and other material inside a cell shall be displayed/demonstrated
- Cancer biology- Posters and models will be used to demonstrate the formation, spread and treatment of cancer
- Virology- Life cycle of viruses such as HIV, HCV and Influenza in the human body will be shown through posters
- Immunology
- Plant Biology- Display of Genetic mutants and variants to understand how plants grow, make leaves and flowers
- Animal models- Display of experimental animal models used for various studies like mice – cancer biology, C. elegans (worms) – developmental biology, Guinea pig – infection biology, Rabbits – Biochemistry. The studies will be explained with the help of a poster

- Microbiology Display of different kinds of bacteria and fungus along with the related posters
- Molecular Biology- Visualization of DNA and experiment with modified DNA/genes
- · Sponsored Company stall (if any)

# Molecular Reproduction, Development and Genetics (MRDG)

Posters showcasing the scientific research being carried out in the department and the research questions being addressed within our laboratories

will be displayed. In keeping with the diversity of research interests within our department, six student-teams will put together displays centered around cancer, developmental biology, genetics, cell signaling, reproductive biology and structural biology. The models/static displays (cells, plates, cultures etc.) will be complemented with video displays as well. We will also allocate students to organize interactive games for the incoming visitors, and to help with waste management.





# Chemical Sciences

### Inorganic & Physical Chemistry (IPC)

- Disappearing Paper Glass
- · Let me analyse your finger-marks!
- · Create a motor
- Colourful solutions party
- · Virtual molecule building
- · Gel formation from polymers
- · Soap fuelled boat
- · Painting with light
- · Fountain in a flask
- Instant snow
- · Chemical nebulae
- Tree of salts
- Liquid wires
- · Electric train

### Materials Research Centre (MRC)

- Isolation of DNA from strawberry
- Patient specific implant by additive manufacturing
- · Electroplating of Copper
- · Thirsty Candle
- Tesla Coil Experiment
- · Line/color following Car
- Chemiluminescence
- Phosphorescence
- Sea-water battery
- Zn-ion battery
- · Organic light-emitting diodes
- Nanomaterial-based colorimetric sensors

#### NMR Research Centre

- · Inside of a Superconducting Magnet
- · Molecular Fingerprints
- Imaging the human body
- Predicting Disease in Advance
- Finding Adulteration in food
- · Catching Fake Medicines

#### Organic Chemistry (OC)

- H<sub>2</sub>-Balloon
- · Bleeding Vegetables/Burning Ice
- Iodine Crakers
- Fireball in hand/Gun cotton
- Turning Cu into gold
- · Dancing Sodium
- Thermochromic System & Solvatochromism
- Cabbage pH color change
- Borax glue
- Magic mud or NEW or Chemiluminescence
- MB-Sugar color change
- Nylon experiment

# Solid State and Structural Chemistry Unit (SSCU)

- · Chemical traffic light
- Instant snow
- · Elephant toothpaste
- · Magic milk
- Tvndall effect
- Electricity from potato
- · Preparation of nylon and rayon
- · Dry ice colour show
- · Golden rain
- Jumping Ring
- · Young's double slit experiment

# Electrical, Electronics and Computer Gciences

### Computer Science & Automation (CSA)

#### **Interactive Demos**

- · Reinforcement Learning
- Hacking
- Data Visualization
- · Bits and Bytes

#### **Lab Demos**

#### Quizzes

- · Quiz for students from class 6 to 9
- Quiz for students from class 9 to 12
- · Quiz for college students
- · Quiz open to everyone

#### Competitions

- Coding Competitions
- Machine Learning Competitions
- Hackathons
- · Brain Teasers

### **Expert Advice**

- Theoretical Computer Science
- Graphics & Visualization
- Artificial Intelligence
- Computer System Architecture
- Systems & Security

# **Electrical Communication Engineering** (ECE)

A talk on Inverse design in nanophotonics by student Preetam Kumar for BTech level audience

One Quiz on basic optics/general **2 Sessions:** 

**OPAQ1** – School level: 30 mins (forenoon) **OPAQ4** - College level: 30 mins (afternoon)

 Demonstration of detection and localisation of drones using Milli-

- Meter wave Radar
- Machine Learning project to be displayed
- Low-light image processing
- Quality analysis of HDR images
- Real-time face recognition and emotion classification
- Illustration of DeepFake GANs
- 5G is here: live view transmission



- Remo driving: What does it take to make it work
- Beam it! Communicating at mmWave frequencies
- High-speed visible light communications
- Demonstration of Basic Optics and Visible Light Communication
- Kruskal's trick
- A coin trick
- Premo

### Electrical Engineering (EE)

- Glaucoma diagnostics on the smartphone
- Time and pitch scaling of speech
- Spectrum Works -- An assortment of various Image Processing demos
- Power electronic converters and components

- Applications of power electronic converters
- · Electro-mechanical energy conversion
- Electromagnetic levitation
- Tesla coil/ wireless power flow
- How fast can you learn a new language?
- Decoding the brain for speech tasks
- Recognizing speech in noisy environments
- Using voice as your password
- Can you detect speaker changes as good as my model?
- Electromagnetic Launchers
- · Electromagnetic Manufacturing
- Bidirectional Visitor Counter with automatic room light control
- · FPGA for Image Quality Improvement
- Breathing and Heart rate monitoring system
- Automatic Ambulance Detection in Traffic lights
- Visual Illusion
- Text-Summary geneation by machines
- Controlling music using your body signal (EMG or EOG)
- Breathing and heart rate synchronization pattern
- Coordinated and networked robotics
- Real time neural style transfer demonstration
- · Guess the sketch!

### Electronic Systems Engineering (ESE)

- Solve a Bin Packing problem
- Watch a demo of the Central Limit Theorem using National Instruments' LabView Virtual Instrumentation
- Solve a Travelling Salesman problem
- Learn about Internet security: Cross-site scripting, SQL injection and phishing attacks
- Experience a silicon retina and use of machine learning for emotion recognition
- Take a window tour of a class 1000 clean room for biomedical applications
- · Watch a demo of 3D printing
- · Learn about a smart windshield
- Watch Tabby an open-source vehicle platform – in action
- Know about the NPTEL programme
- Learn about hardware acceleration for deep reinforcement learning

# Interdisciplinary Research

# Centre For BioSystems Science And Engineering (BSSE)



- · Ready, Set, Infect!
- · The polyps say Peekaboo!
- · Let's house our cells
- All packed and ready to go!
- · Made (exclusively) for each other
- A Sangam of genes and circuits
- · Your thoughts can move (a robot :P)!



### Safety Stall Ideas:

· Let me PPE you!

How quickly can you wear the PPE in the right order? Accept our challenge to win goodies!

· There is a glove for everything!

A game to identify the right kind of glove for the right kind of chemical. Choose the wrong glove, and you might lose your finger! Just kidding- or maybe not.

### Plan your exit wisely!

A game to identify the correct fire exit in the structure. Take a look at the building and place its exits (the tubes). Some exits will lead back into the building and some will lead out of the building. The player has to select only the one that leads out of the building along with other fire exit criterion.

# Centre for Nanoscience & Engineering (CeNSE)

- Remote Control Light/Lamp
- Audio Signal Transmission using Optics
- Arduino Based Trafffic Light using LED
- CO<sub>2</sub> Sensor Breath Checking with display
- PM 2.5 Sensor Pollution using Agarbathi with LED/Display
- Periscope, Kaleidoscope
- Shocking coil
- Magic fountain and magic water
- IOT-based monitoring system
- Logic gates
- · Staircase lighting
- · Wind energy, hydro power energy
- Smart lamp
- · Pressure pillow
- Optical waveguide & total internal reflection
- Thermal imaging
- Solar car race
- Punching bag
- Meter to nanometer posters
- · Acoustic levitation
- Quiz

### Centre for infrastructure, Sustainable Transportation and Urban Planning (CiSTUP)

- · Traffic Game
- Ouiz
- · Traffic Models display
- Puzzles

#### Computational and Data Sciences (CDS)

- Lab Demos
- Poster display
- Talk by experts
- Quizzes
- · Puzzles and Fun Games

# Interdisciplinary Centre for Energy Research (ICER)

Energy and combustion related demonstration and posters

### Interdisciplinary Centre for Water Research (ICWaR)

#### **CLEAN WATER AND SANITATION**

#### **POSTERS**

- Natural Wastewater Treatment Techniques
- Groundwater processes from an Indian perspective
- Indian Monsoon and Low-Pressure Systems: Hydroponics -- Conserving water, developing nature
- Urban Flood Model for Bangalore City
- Water and Sanitation for all: Ensuring Availability and Sustainable Management

#### **MODELS**

- Infiltration and porous pavement use for sanitation and flood reduction
- · Eco Toilet
- Urban Flood Model for Bangalore City
- Remote sensing working model

#### **GAMES:**

Let us have some fun with water. From tornado in a bottle to conductivity of water, things we do every day but never thought of why they are happening. Let us learn through games. A gaming zone for both adults and children to learn some backs and trick the 'Water'

# Robert Bosch Centre for Cyber-Physical Systems (RBCCPS)

- Learn to Walk: Dynamic Locomotion in Quadruped Robots via Reinforcement Learning
- Smart Materials Step up to Light up
- Smart Factory Demo IIOT
- Drone port with Charging Pad



- · Videos of how the 3D printer works
- Display of Posters

## Supercomputer Education and Research Centre (SERC)

SERC is the country's leading supercomputing centre and hosts SahasraT, the largest supercomputer for academic research.

Following are the highlights for Open Day

 SERC Museum of Computer Hardware Archives!

- Posters on History of Computer Devices and Supercomputing Applications
- Presentations, Demos and Videos on Supercomputing for Science, Engineering & Society, Inside a Supercomputer Centre
- Fun Quiz on Supercomputing



Indian Institute of Science brings to you, the  $4^{th}$  edition of the most popular event on Open Day for kids – Kids Zone 2020.

Kids Zone is a platform for basic school level science experiments (most relevant to 6th std. onwards) demonstrated by IISc students from different departments under one roof. It was one of the most popular events of previous three Open Days. It's a collective effort to intrigue curiosity in young minds.

Last year 20 departments came together with around 60 experiments. Lots of kids in and around Bangalore have visited KZ. Every year it's getting better and bigger. We invite kids to visit KZ and enjoy the fun of science.

Date: 29<sup>th</sup> Feb 2020 | Timing: 9:30 AM to 4:30 PM | Venue: Near Old Aerospace Building Contact us: kidszoneiisc@gmail.com

For more info, visit: https://sites.google.com/view/science-for-rural-india/kids-zone

# Mechanical Sciences

### Aerospace Engineering (AE)

- Hypersonic Wind Tunnel Facility
- · Ultrasound in Inspection of Structures



- Computer Simulation of Material Fracture
- · Materials with Memory
- · Design of Composite Structures



- · Static Display of UAV Models
- Flow Instabilities, Transition & Turbulence
- Damage Tolerance Analysis
- Micromechanical Analysis
- · Aeroservoelastic Interactions
- · Advanced Composite Manufacturing
- Shock Waves and Hypersonics

# Centre for Atmospheric and Oceanic Sciences (CAOS)

- Tornado tube
- · Cloud in a bottle
- · Einstein's tea leaves experiment
- · Chaos in a system

- Vortices in fluids
- Stratified fluid
- · Heron's fountain
- Posters and videos on Atmosphere, Ocean and Climate
- · Climate Ouiz

#### Centre for Earth Sciences (CEaS)

Rocks and Minerals Pavilion: Showcasing of Gem Stones, Ophiolite sequence with rock samples: Thin section observation with multi-headed microscope

- · Fossil Pavilion: Cretaceous Fossils
- · Fossil hunt
- · Geophysics Pavilion
- Demonstration of rock rheology
- A cool display of the evolutionary history of life on Earth
- Demonstration of different geological features such as folds, faults, etc. on a desktop
- Farth Science movies

### Chemical Engineering (CE)

- The Kaye effect
- The liquid-coiling effect
- Reynolds dilatancy
- · Flow of sand through a standpipe
- · Bernoullli principle
- Flow of water from an unvented bottle; friction
- Magic water and Magic coin
- Natural selection
- Droplet formation
- Floating Maglev train
- · Heron's Fountain
- Nitinol wire memory
- · Pattern in granular material
- Heat Engine Equipment (thermodynamics laws)

- Atomic and molecular level of macroscopic behaviour
- · Coloring flames
- · Kelvin Thunderstorm
- Fun with Microscopes
- · Paper based thio-cyanide sensor
- Micro-fluidic diagnostics expo-2020
- Sequential flow assembly using Electro-magnetic valves

### Civil Engineering (CiE)

Poster Presentation on Structural Engineering

#### **Demonstrations:**

- Shake Table
- RTS
- Dymanimics lab experiments ( 5 demos )
- Fatique lab
- · Biaxial testing
- · UTM with split furnace
- · Walk in chamber
- · Post tension facility
- AE monitoring system

### **Geotechnical Engineering**

Poster presentation on non-destructive seismic methods

#### **Demonstrations**

### Water Resources and Environmental Engineering

- Posters; Simulation of Flood routing, Seepage in Dam and flow into porous media
- · Demonstration of Smart Water Lab
- Model of Photogrammetry 3D scanner and Rubber Dam

### **Transportation Systems Engineering:**

- Watch simulation of vehicles moving across co-ordinated signals
- Highways in the sky!! Discover how traffic of airplanes is managed for Indian sky

- Learn how crowd can be controlled in religious events
- Understand how smart city will govern urban mobility
- Learn how transportation impacts your quality of life
- · Group activities
- Ouizzes & riddles

### JRD Tata Memorial Library

- Library tour
- An exhibit displaying library services and holdings
- An exhibit displaying major online resources subscribed by IISc
- An exhibit displaying ORCID service
- An exhibit displaying most prolific authors of IISc
- An exhibit displaying top publications of IISc
- PPT based demonstration about the library, ePrints@IISc, and etd@IISc
- · Quiz competition for school children

# Centre for Product Design and Manufacturing (CPDM)

- Annual Design Show RIPPLES
- Cocoon Smart Sleep System
- KiX A micro-mobility device
- Predictive Analysis of Machines –
  For structural health monitoring
- Crookonomics Interactive game on corruption and honesty
- · Baby Pram for Street Vendors
- Design mock-ups, Scaled models
- Live demonstrations
- · Exhibition of various installations
- Design exhibition by students
- Exclusive CPDM merchandise store
- Hands on Creative Experience
- Smart Factory

- Pre-cast stair case
- Filler slab roof
- · Ferro-cement precast chajja
- Stabilized earth block
- · Biomass gasification unit
- Waste water treatment reactor
- · Bio-methanation potential system
- Biogas methanation reactors
- Biogas plant
- · Videos on sanitation
- DIY system Roshni
- · BiPV system and real time data
- Demonstration on panel life
- · Sustainable manufacturing
- Smart buildings
- Clean-E-Rat prototype
- · Plasma activated water
- Plasma ball
- Plasma medicine and hygiene
- · Water treatment
- Impellers
- Aero loop test rig
- Submersible pump test rig
- Closed loop hydro turbine test rig
- Lab scale bioreactor
- Bicover system for landfill gas emission control
- Water purification and defluorination
- Composite and masonry structures
- Aquatic biodiversity studies and waste water treatment
- ASTRA Ole 2 + 1

# Divecha Centre for Climate Change (DCCC)

- IR absorption by CO<sub>2</sub>: greenhouse effect demonstration
- Laser beam propagation through the atmosphere: effects of scattering and turbulence
- Real time measurement of black carbon particles

Real time, size segregated measurement of aerosols

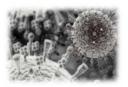


- Simple experiment to show the influence of surface heating on vertical wind
- Simple experiment to show the inefficiency of incandescent lamps
- Water Quality testing
- · Rocks and mineral
- · Plants, soil erosion & Climate change
- Posters
- Application of drones for effective pesticide spraying
- · Physics of Greenhouse effect
- · Aerosol instrumentation
- · Geogenic contamination in ground water
- · Water quality: Holistic approach
- General understanding of ground water
- · 20 kW PV System at Library
  - Geomorphology of glaciers
- Dynamical aspects of monsoon climate change during the 21<sup>st</sup> century
- · Himalayan glaciers
- Interdisciplinarity of climate climate change research and action
- · Soil erosion
- · QUIZ "Whether you know weather"
- Glaciology quiz



### Materials Engineering (ME)

- Quiz Competitions
- Posters and demonstrations on various materials from non-Newtonian fluids to metallic foams to super alloys to live bacteria





 Learn about electron microscopy, instant ice-cream and bouncy balls, bullet-proof materials, solar cells and more

### **Mechanical Engineering**

- · Beams that can bend it like Beckham
- Want to build a house on Moon? Get Space Bricks here!
- Stand-At-Ease Chair for Elderly
- Breaking Views: Fun with Fracture
- · Cool Boiling
- Research Showcase
- Chronicles of Mechanical Engineering Department
- · Competitions & Fun Games
- "Who wants to be a Mechanical Engineer" Quiz

# Physical and Mathematical Sciences

### Centre for Cryogenic Technology (CCT)

- · Magnetic levitation
- · Resistance vs temperature
- · Boyle's law
- Charles law
- · Gay-Lussac's law
- Vortex tube air separator
- Change of properties of materials at cryogenic temperatures

# Instrumentation and Applied Physics (IAP)

Glass blowing sessions

Gravitational waves

Quantum computation

Machine learning in physics

 Poster and demos from different labs of the department

### Centre for High Energy Physics (CHEP)

Posters on the following topics:

- Detector physics
- Standard Model
- Black Holes
- · Gravitational waves
- Dark matter and Dark energy
- · Quantum information
- · String Theory/Holography

#### and short videos on:

- I HC
- IceCube experiment





- Quiz for kids and fun games like Rubik's Cube, and Cards, etc
- Video demonstration of our department activities
- Stereo Vision and Smartphone based Microscope

#### **Mathematics (MATH)**

- · Quiz Session
- Pictionary
- · Panel Discussion
- · Games and Demonstrations
- Short Talks by Professors/Students
- Screenings

### **Physics (PHY)**

- Anti-theft scanner
- · Levitation of magnetic spinning top
- Measurement of speed of light using microwave oven
- Conservation of electromagnetic angular momentum
- Eddy current brakes
- · Gravitational Lens

- Telsa coil
- Light and shadows
- Stroboscopic effect
- Sand Pool
- Ferrofluid
- Maglev train
- Angular momentum
- · Standing waves using sand particles
- Thermoelectric windmill
  - LED in liquid nitrogen
  - Lenz's law
- Touch me not circuit
- · Gas flow sensor
- Models from ISRO
- · Electrical Theremin
- · Mercury Precession
- Tidal Locking

# **Undergraduate Program**

Venue: Old Physics Building (OPB)

### Find if you can:

Camouflage is a very well-known phenomenon by which animals can hide themselves from being seen. This can be achieved either by crypsis (blending self with the background) or by mimesis (disguising them as something else). We have designed a game in which a participant will be shown a series of pictures of animals camouflaged for a small amount of time (say for 30 sec). Participant has to spot the animal and identify. For each picture shown, there will be 4 options given and participant needs to identify animal based on these options. A participant will be a winner if he/she can identify more than 90% of the pictures.

### **Natural Selection demonstration:**

Natural Selection enables evolution of species. There are several examples that have demonstrated evolution of species. Perhaps one of the most discussed examples of frequency dependent selection is Biston betularia (Peppered Moth). We will demonstrate how a particular morph gets selected owing to soot deposition on trees because of industrial revolution. We will use black and white moths on a background of black and white paper. A participant has to pick up as many as they can in a very short time. These will be treated as 'predated' individuals. The remaining will be doubled in the next iteration representing 'reproduction' and many such iterations will ensure selection of a particular type.

#### Display of invertebrate collection:

We have been maintaining a few invertebrates as dry preserved specimens collected from IISc campus. This collection will be displayed, and visitors will be told about faunal diversity of IISc, how specimens are preserved and details of taxonomic studies.

#### Adaptive radiation:

Darwin Finches are known to have radiated from its common ancestor due to differences in their feeding habits and differences in their beak structures. We will demonstrate this using different types of forceps and different seeds. There will be a competition between two participants. Each participant has to pick up the maximum number of seeds in given time using given type of forceps. A person picking more types of seeds and more

number of seeds will be a survivor and a winner.

#### Viewing of tardigrades:

A simple demonstration of live tardigrades under a compound microscope. Tardigrades are known for their extreme resilience and that is why everyone is always excited to see a live tardigrade.

#### Pond water sample examination:

A life of microscopic creatures is an absolute delight to study and observe. We will show various freshwater life forms and their behavior: feeding behavior of rotifers, moving patterns of copepods, springing movement of Vorticella and many more. With the help of compound microscopes, participants will be able to view some remarkable phenomena.

### **National Institute of Advanced Studies (NIAS)**

Visit the Faculty Block at National Institute of Advanced Studies to see live projects of school students attending the NIAS Advanced Learning Centres:

- Measuring noise pollution
- · Drone for farmers
- · Smart stick for the visually impaired
- · Sleep pattern research
- · Voice controlled vehicle
- · Disorders of the adrenaline gland
- Floating waste cleaner
- CO<sub>2</sub> to Oxygen converter
- Effect of music ragas on human brain

... and more

Take part in exciting challenges:

- Rapid Chess
- Fast Cubing
- Math Blitz

... and more

Learn about NIAS Education for the Gifted and Talented children:

- How to join a NIAS Advanced Learning Centre?
- How to make your school a NIAS Advanced Learning Centre?
- What goes on at an ALC?
  and more

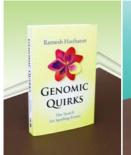
### **IIScPress**

Visit IIScPress stall to buy gifts and souvenirs of IISc. **Location:** Main Building & near Centre for Neuroscience (CNS)















## Science Gallery Bengaluru (SGB)

Science Gallery Bengaluru (SGB) is a dynamic new space for engaging young adults at the interface between the natural and human sciences and the arts, through a roster of experimental spaces, exhibitions, educational workshops, training programmes, and public events.

SGB is being developed with the founding support of the Government of Karnataka and its academic partners - Indian Institute of Science, National Centre for Biological Sciences and Srishti Institute of Art, Design and Technology. It is a member of the Global Science Gallery Network pioneered by Trinity College Dublin.

The Science Gallery Bengaluru building is coming up on Bellary road and will be open to visitors in 2021. It houses a pioneering public laboratory complex, public engagement spaces and community spaces, encouraging everyone to engage with science in interesting ways.

### About the Exhibit at IISc Open Day

Title of the Work: Munsell Richter Artist Name: JENIFER WIGHTMAN

When water microbes become artists: These living landscapes, presented like the Gerhard Richter colour chart, are made of samples of mud collected from ten water bodies across Bengaluru. As the microbes in the mud photosynthesize pigments, we are exposed to the process of growth and decay of different species of bacteria within this finite ecosystem, with change in populations observed through waves of colour.

# Study at IISc

How to study at IISc? To know about criteria, eligibility and list of courses taught at IISc, visit the Admissions Enquiry stall at the Main Building











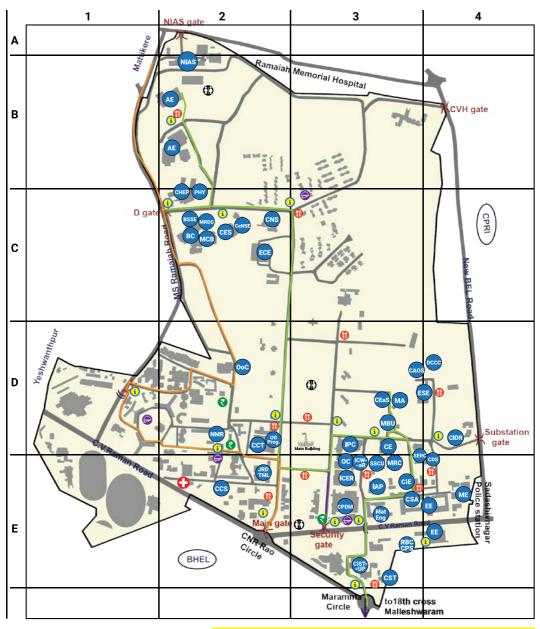








Pictures courtesy: IISc Photography Club and K G Haridasan



i Help Desk i Food Stall Bio Toilets

BIOLOGICAL SCIENCES Cel	erospace En entre for Atr entre for Ear nemical Eng
Civit	vil Engineer RD Tata Men entre for Pro entre for Su- vecha Centr aterials Eng echanical E
Inorganic & Physical Chemistry (IPC)	HYSICAL AN entre for Cry entre for Hig strumentati athematics nysics (PHY
Computer Science & Automation (CSA)	STAURANT esara (Veg & akruthi(Veg rvam Comp tva (Veg &
Centre for Nanoscience & Engineering (CeNSE)	EALTH CENT IM anara Bank ate Bank of

MECHANICAL SCIENCES	
Aerospace Engineering (AE) ——————————	- 2B
Centre for Atmospheric and Oceanic Sciences (CAOS)	
Centre for Earth Sciences (CEaS) —————————	- 3D
Chemical Engineering (CE) ————————————————————————————————————	- 3D
Civil Engineering (CiE)	3E,4E
JRD Tata Memorial Library ———————————————————————————————————	- 3E
Centre for Product Design and Manufacturing (CPDM) ————	
Centre for Sustainable Technologies (CST) ——————	
Divecha Centre for Climate Change (DCCC) —————————	- 4D
Materials Engineering (Mat Eng)	- 3E - 4F
Mechanical Engineering (ME)	- 4E
PHYSICAL AND MATHEMATICAL SCIENCES	
Centre for Cryogenic Technology (CCT) ——————	- 2D
Centre for High Energy Physics (CHEP) — — — — — — — — — — — — — — — — — — —	
Instrumentation and Applied Physics (IAP) ——————	- 3E
Mathematics (MATH)	- 3D
Physics (PHY)	2B,2C
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RESTAURANTS	
Nesara (Veg & Non Veg)	- 2D
Prakruthi(Veg) —————————————	- 3E
Sarvam Complex (Veg & Non Veg) — — — — — — — — — — — — — — — — — — —	- 1D
Tatva (Veg & Non Veg)	- 3C
HEALTH CENTRE	2E
ATM	
Canara Bank	2D.3E
State Bank of India ————————————————————————————————————	
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**Credits:** 

Office of Communications (OoC), IISc



### **EMERGENCY CONTACT:**

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22932390 / 91649-58467

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