

GETA Young Scientist Program

GETA YOUNG SCIENTIST PROGRAM

Grooming Student Innovators for the Nation

The Prime Minister called for a commitment for Viksit Bharat by 2047. A key success factor in achieving that vision is becoming Atmanirbhar Bharat, i.e., self-reliant India. To become self-reliant, we need indigenous products and solutions. Research and Innovation are the basis for indigenous products. Educational Institutes should sow the seeds for research. Young minds of students are the best opportunity to nurture Innovation. Some foundational work is already happening in this space. However, for a country of 140 Crore people, the quantum as well as quality of Innovation is not adequate to realize the dream of Viksit Bharat.

GETA Service Trust launched **GETA Young Scientist Program (GYS Program)** to contribute to Innovation growth. It is the brainchild of Murali Valiveti, an Educator and Philanthropist. *The mission is to groom one in every 1000 high school students influenced by this program to become an Innovator.*

GYS Program itself innovates on ways and means of achieving this mission. Works on raising Science Temper among students. Promotes awareness on Innovation concepts, approaches, training programs, competitions, and events. Builds platforms for Knowledge sharing. Conducts National Contests and Awards Events for High School Students as well as Teachers on Problem Identification, Solution Design, Articulation, and Project Presentation.

Launched in January 2022, there have been over a dozen initiatives so far in three years. Major ones are briefed below. More than 62,000 students took part in 450+ events from, at least, 22 States. It is a long journey ahead.

GYS Wednesday Science Quizzes Online

To raise the Science Temper among students, there is a persistent effort in the form of Online Science Quizzes. A Quiz is published every week on Wednesdays at 7 PM promptly. Completely Online. 25 multiple choice questions with pictures and animations on the syllabus of 6th to 10th grades to be answered in 20 minutes. A digital certificate is emailed if one scores 60% or more and physical certificates are couriered to toppers each week. Cash vouchers are gifted to the best performers every month. Launched on 26 January 2022, over 45,000 quizzes were taken from all over the Country in 160 weeks and more than 14,000 digital certificates were issued to Students.



GYS CHARAKA SCIENCE MEDAL

A National Online Quiz Contest

Every 50 weeks, there is a Mega Science Quiz to win the GYS Charaka Science Medal. Conducted in two phases where the preliminary round is an online multiple choice quiz of up to 100 questions followed by a Live Quiz of the Finalists. It is a great fun to watch the fumes, anxiety, and close contests among the students. Winners are felicitated with Trophies, Certificates, and Cash Awards.

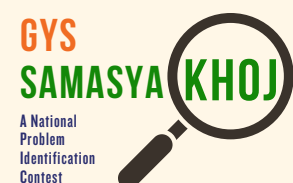
Many students are intelligent, but poor in articulation. To succeed in life, presentation is an important skill. GYS Talks is a platform similar to



the popular TED Talks, but for Indian High School Students on topics related to Science, Innovation, and Aspirations. Regular National Contests are conducted online as Elocution or Video submissions. They are published on the GYS Talks YouTube Channel. GYS Talks platform is also open to Teachers and Educators.

GYS Swaminadhan Science Day Talent Test

28th February is celebrated as *Science Day* in India. GYS Program avails it as an opportunity to encourage Teachers and Students advancing on Innovation efforts. National contests are organized under the brand *GYS Swaminadhan Science Day Talent Tests*. To make it interesting, the nature of the Contest varies from year to year, but is related to STEM and Innovation. Trophies, Certificates, and Cash Awards are given to winning students and, in some contexts, Teachers too.



To innovate, there should be a problem, a need or an opportunity clearly understood. Samasya Khoj is a national contest to

nurture the habit of *observation and problem definition*. The contest is just on the problem description, not solving it. Intent is that repeated practice of identifying and narrating problems accelerates the opportunity for useful innovation. Problem definition includes a few parameters like where it happens, number of people affected, frequency of occurrence, whether there is a life threat, etc. This contest is intended to run every often for frequent attempts. Good efforts are encouraged with Mementos, Certificates, and Cash Awards.

experienced Panellists from Academia and Industry evaluate the Ideas and Innovations on parameters like genuineness, newness, potential for productization, and quality of submission. Trophies, Certificates, and lucrative Cash Awards are handed-over in an Annual Event. Guide Teachers of winning projects are also rewarded in Avishkar. An Awards Booklet is published each year presenting successful Innovations.

Teachers are the Nation Builders. Student Innovation is possible only under the Guidance of Teachers. So, it is vital to recognize and motivate Teachers that go



beyond books to train as well as encourage Students to Innovate. GYS Guru Puraskar Awards competition is organized around the Teacher's Day every year felicitating talent as well as enthusiasm in Teachers. Written Essays, Video Essays, Online Debates, are a few methods adopted. Recognitions include Trophies, Certificates, and Cash Awards, typically by the hands of a Celebrity.



Science Clubs in Educational Institutions have been a practice for ages. GETA Young Scientist Talent Clubs, in short, GYST Clubs are yet another

platform in High Schools where students get information to their fingertips. Announcements and schedules on Science & Innovation Competitions, Events, Materials, and Projects are shared with GYST Club Members regularly. Seminars, Workshops, Science Exhibitions, Science & STEM Lab Visits, Industrial Visits, Intra and Inter-Club Contests are facilitated for GYST Clubs.



The pinnacle of all efforts of GETA Young Scientist Program is *GYS Avishkar Awards* where **we bring out Innovations** themselves. Students from 6th to 12th standards take part in this National Online Science Projects Competition every year. While entries are submitted from over 22 States in India,

**INNOVATION
LEADS TO
ATMANIRBHAR BHARAT**

GYS Innovation Knowledge Base

Knowledge is power. GYS Program Team compiled details on over **8200 Student Innovation Projects** into a Knowledge Base. Publicly available projects information on Winners and participants in National Level Exhibitions are collected and made available to everyone in an easily accessible Telegram Channel. Competitions like GYS Avishkar, INSPIRE MANAK, NCSC, IGNITE, NIF Grassroots Innovation Fests are covered. By going through these projects, Teachers and Students get an understanding on what kind of Ideas and Innovations are happening in the Country. In fact, **they provide inspiration** to new ideas for further Innovation.

GYS Digital Library

Library is a place of knowledge and wisdom. GYS Program Team collects Science and Innovation related articles, infographics, books and magazines available in the public domain for free access. They are easily accessible on a Telegram Channel. Teachers and Students can search for content, view, read, print, or download.

The Great Indian Scientists Series

Bharat is a country of ancient wisdom, a land of Great Rishis, Gurus, Mathematicians, and Scientists. There were age-old contributions from Charaka, Aryabhatta, Bhaskara, Agastya, Kanada kind of Rishis and Gurus. Modern day too offered eminent personalities like Vikram Sarabhai, Har Gobind Khorana, Shanti Swarup Bhatnagar, M Visvesvarayya, SN Bose, JC Bose, CV Raman, and the list goes on.

GYS Team takes pride in compiling works of these Great Indian Scientists in the form of Quick-read Infographics, Flyers, YouTube Playlists, and runs exclusive Talent Tests. The objective of this series is to present such Role Models to be a wonderful source of Inspiration to the younger generation.

GYS YouTube Playlists

Many a time, students look for guidance on competitions and events. GYS Program Team made life pretty easy. There are very rich Playlists for Students and Teachers alike. Someone wants to know about Vidyadhi Vignan Manthan (VVM), someone else is searching for INSPIRE MANAK projects, and yet another student is curious about National Children's Science Congress (NCSC). Teachers are assisted with Tools, Techniques, and Concepts related to Student Innovations. **20 GYS YouTube Playlists** are available on competitions and themes like these. New entries are searched for and added to these Playlists every week. It is like all cooked food is ready on a platter. Saves time.

GETA Young Scientist Channel

YouTube Channels are pretty popular and helpful these days. GYS Program features a comprehensive coverage of videos on Innovation and Science Projects. All the noteworthy presentations from GYS Avishkar, GYS Talks, GYS Guru Puraskar, etc. are uploaded here. From time to time, GYS Team provides guidance on Winning Science Competitions. Live coverage of the GYS Program Events is available on this Channel. GYS YouTube Channel is a treasure of Playlists too.

GYS Social Media Channels

Today is the age of Social Media. Facebook, Instagram, X (Twitter), WhatsApp, YouTube, and you name it. GYS Program regularly publishes announcements and information on these Channels. Messages cover Science and Innovation Contests, Events, Material Sources, and Links to Reference Sites. In the first two years of the GYS Program, over 65 lakh messages were pushed through on these Channels. Once registered with the GYS Program, updates are sent on WhatsApp to the Student number directly.