# MEET THE STATE FINALISTS

## SCIENCE PROJECTS




Project Title: Journey Through Space: An Innovative Solar System Project

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| Name of Students | Bhuvan K T & Preetham R |
| School | Kodagu Vidyalaya Opportunity School, Madikeri, Kodagu |
| Group | ID Group |
| Grade | 8th |
| Project Description | The students created the solar system model, gaining an understanding of the sequence of planets and their relative positions. |
| Project Goal | Through the theme of the solar system, children could explore basic concepts such as the planets, the sun, the moon, and their movements in a simple and engaging manner. |
| Mentoring support | “Over the two-week mentoring period, the team transformed their solar model into a dynamic, interactive display with added lighting. The final outcome was absolutely brilliant.” |
| Highlights | The model is well done. This project sparked curiosity about space, promote scientific thinking, and made learning of both the students enjoyable and meaningful. The next day of the ILAP State Finals, Students visited Planetarium in Bengaluru organized by Seva-in-Action was the best positive reinforcement for the students & mentor teacher in relation to their ILAP project. |




## Project Title: Working Model of the Human Heart

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| Name of Students | Spandana Prakash Byali & Vaishnavi Amit Borade |
| School | Shree Ramana Maharishi Academy for the Blind, Bengaluru |
| Group | VI Group |
| Grade | 8th |
| Project Description | The students developed a working model of the human heart with a locally available material and demonstrated how the heart pumps blood continuously throughout the body. |
| Project Goal | Through this working model of the human heart, students aimed to effectively demonstrates circulation using syringes, tubes, and coloured water to represent the four chambers. |
| Mentoring support | The mentor facilitated interaction with a medical expert, enabling students to ask insightful questions about heart functioning. Guidance strengthened their understanding, resulting in an exceptional model supported by clear and confident explanations. |
| Highlights | Both students demonstrated the mechanism of human heart effectively by using their model.<br><br>Great presentation. Both participants spoke very well. They answered our questions with a lot of enthusiasm. |




## Project Title: Carbon dioxide Purifier using Algae

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| Name of Students | Anvesh K.H & Mayuri K |
| School | Vivekananda English medium School, Putturu, Dakshina Kannada |
| Group | CP |
| Grade | 10th |
| Project Description | Students developed a carbon purifier model using chlorella algae in place of chemical filters which absorbs carbon dioxide and convert it into oxygen and biomass through photosynthesis. |
| Project Goal | To develop a sustainable, eco-friendly solution that utilizes natural biological processes—particularly photosynthesis—to improve environmental quality (such as air or water purification), while reducing reliance on chemical-based methods. |
| Mentoring support | "During the mentoring period, students deepened their understanding of Arduino and circuit sensors, finishing with much stronger clarity on their project." |
| Highlights | This project adopts an interdisciplinary approach, integrating biology, environmental science, and engineering design. It leverages natural biological processes—specifically photosynthesis—in place of conventional chemical filtration methods. |



**Project Title:**
**Water Tank Alarm**

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| Name of Students | Chintana Hegde & Tanushree |
| School | Mahadeva Bhat Kurse Deaf Children School, Sirsi |
| Group | HI |
| Grade | 7th |
| Project Description | Students developed a functional water tank alarm system using a sensor to detect when the tank reaches full capacity, triggering an alert to prevent overflow. |
| Project Goal | To design and develop a sensor-based water tank alarm system that detects when the tank reaches full capacity and demonstrated how it automatically triggers an alert to prevent overflow, thereby conserving water and promoting efficient water usage. |
| Mentoring support | “The team—students and teacher—were highly receptive to feedback, refining their presentation through practice and even experimenting with a sensor to enhance the model. By the end, their presentation was crisp, engaging, and fun.” |
| Highlights | Students incorporated the concept of zero waste by utilizing overflow water to grow plants at ground level.<br>They have good knowledge, in terms of model & were able to answer the questions posed to them well. |




## Project Title: Solar Panel & Wind Mill

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| Name of Students | Dhanyatha P.R & Bhanupriya |
| School | Parents Assn of mentally challenged children(R), Manasa Special School, Tumkur |
| Group | ID |
| Grade | Secondary |
| Project Description | Students developed a model that demonstrates environmentally friendly, clean, and renewable energy sources—specifically solar panels and windmills—for electricity generation, and demonstrated how this energy can be effectively utilized within the community for daily consumption. |
| Project Goal | To develop a model demonstrating solar and wind energy generation and their effective use for clean, sustainable electricity in daily community life. |
| Mentoring support | “The students began with a good model, but incorrect circuits. Within a week, they refined it into an accurate solar and windmill model using shared reference videos. The final version was effectively powered by light and airflow.” |
| Highlights | Students had their first opportunity to engage in project-based learning and successfully qualified as State Finalists.<br><br>Great Project – very innovative and great energy by the students |




## Project Title: The Mechanism of the Human Ear how the ear helps us in hearing and balance

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| Name of Students | Vinayak M Piddappanavar & Dhanush D Lamani |
| School | Sri B D Tatti(A)Memorial Charitable Trust Residential School for Hearing Impairment, Laxmeshwar, Gadag Dist. |
| Group | HI |
| Grade | 9th |
| Project Description | Students developed a clear understanding of the structure and functions of the human ear by creating a model illustrating its three main parts. They demonstrated the specific functions of each part using sign language and actions. Additionally, they prepared posters and visual graphics for wall display to enhance understanding. |
| Project Goal | To develop a model of the human ear that demonstrates its three main parts and their functions, supported by visual aids and interactive presentation methods to enhance understanding. |
| Mentoring support | The mentor supported students in developing a detailed and well-structured exhibit. Their clear, patient explanations of the ear's mechanisms reflected strong conceptual understanding and effective presentation skills. |
| Highlights | Students were actively involved in making the models, and even added their own touches to the model like the lights etc. They seem very enthusiastic about learning and sharing. |



**Project Title: Organic fertilizer and organic farming**

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| Name of Students | Sagar U & Prajwal G. |
| School | Navachetana residential school for mentallychallenged children, Soraba, Shimoga Dist. |
| Group | ID |
| Grade | Pre-vocational |
| Project Description | Drawing on their practical experience at school, students developed a model demonstrating sustainable organic farming techniques by using vermicomposting and cow dung for promoting eco-friendly agriculture. |
| Project Goal | To develop a model demonstrating sustainable organic farming practices by promoting the use of nutrient-rich organic alternatives, such as vermicomposting and cow dung, in place of chemical fertilizers for maintaining a healthy environment. |
| Mentoring support | The mentor supported the team in narrowing down multiple ideas to focus on the most feasible and impactful ones. Students were also introduced to appropriate scientific terminology to enhance the clarity and quality of their presentation. |
| Highlights | Good Project. They have presented their project well in the State Finals. |



## Project Title: The Volcano Experiment

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| Name of Students | Adithya Ram & Tejas M |
| School | Spastics Society of Karnataka, Indiranagar, Bengaluru |
| Group | CP |
| Grade | 6th |
| Project Description | The volcano experiment demonstrates the chemical reaction between an acid (vinegar) and a base (baking soda), which produces carbon dioxide gas, resulting in a fizzing and foaming effect. |
| Project Goal | To demonstrate the chemical reaction between an acid and a base, highlighting the production of carbon dioxide gas and its observable effects such as fizzing and foaming. |
| Mentoring support | The mentor worked closely with the team to strengthen their understanding of the experimental process and underlying scientific concepts. Students demonstrated enthusiasm and were able to clearly explain the steps and the science behind the experiment. |
| Highlights | A first-time effort by the team.<br>Students displayed great enthusiasm during their presentation.<br>The children actively engaged in the experiment and thoroughly enjoyed the learning experience. |




## Project Title: Earthquake Alert Model

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| Name of Students | Varshitha & Keerthi S |
| School | Shristi Special Academy, Jattipalya, Channenahalli, Bengaluru |
| Group | ID |
| Grade | Pre-vocational |
| Project Description | This project demonstrates a simple earthquake alarm system designed to detect vibrations during seismic activity. The model uses a suspended metal ball or pendulum that moves when vibrations occur. When the ball comes into contact with a metal ring, it completes an electrical circuit, triggering a buzzer that provides an early warning signal. |
| Project Goal | To develop a simple earthquake alarm system that detects vibrations and provides an early warning through an automatic buzzer alert. |
| Mentoring support | Students were guided to clearly present the underlying scientific principle—circuit completion due to tremors triggering a buzzer. Cross-questioning helped them deepen their understanding and prepare effectively for audience queries |
| Highlights | The working model was pretty good and creative. They made good use of charts and posters, Clear in what they were sharing. |