

EDUCATION

Lakshmi School , Madurai, India	2024-Present
♦ <i>Indian School Certificate, Grade 12.</i>	
♦ <i>Indian Certificate of Secondary Education, Grade 10.</i>	2023
Plaksha University , Chandigarh, India	2024
♦ <i>Young Technology Scholars Program.</i>	
University of California, San Diego , Division of Extension Studies, San Diego, CA	2023
♦ <i>Premium Research and Publication Program, 3 credits.</i>	

STANDARDIZED TESTS AND APs

♦ AP Examinations: Psychology – 5, Calculus AB – 5, Mechanics – 5	2024
♦ IELTS: Overall band 8	2024
♦ SAT: Total – 1530, Math – 790, English – 740	2023

ACADEMIC HONORS AND AWARDS

Lakshmi School

♦ General Proficiency Award in Grade 11.	2024
♦ Topped the Class in Grade 11 in English, Mathematics and Chemistry.	2024
♦ Subject Award for scoring 100% in 3 subjects (History, Geography, English Literature) in ICSE Grade 10 Board Examinations.	2023
♦ General Proficiency Award in Grades 6,7,8,9. (Award was not given in Grade 10.)	2019 – 2022

International

♦ Gold Crest Awardee for ‘Building a functional prototype of a biogas plant’.	2024
♦ AP Scholar Award.	2024
♦ Certificate of Distinction for performance in Hypatia Contest (Maths) University of Waterloo.	2024
♦ Certificate of Distinction for performance in Avogadro Contest (Chemistry) University of Waterloo.	2024
♦ Certificate of Distinction for performance in Sir Isaac Newton Contest (Physics) University of Waterloo.	2024
♦ Selected for representing Indian team at Indian Youth Physics Championship.	2024
♦ Certificate of Distinction for performance in International Chemistry Quiz, Royal Australian Chemical Institute.	
♦ Semi-finalist in the Global Climate Science Olympiad (one of the youngest contestants).	2022

Indian

♦ Gold Scholar Award awarded by Educational Initiatives Pvt. Ltd. for being in top 100 ranks in India.	2020
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LEADERSHIP INITIATIVES

Sundaram Climate Institute (SCI), Madurai, Intern; Waste Picker Survey	2021-2024
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SCI works on climate adaptation, specifically waste and water, and bases its influential policy prescriptions on extensive field data.

- ♦ Led the study on waste pickers that surveyed 22 waste pickers in Madurai to understand the realities of the most vulnerable in the waste ecosystem.
- ♦ Ideated, created and exhibited a series ‘Can you see me?’, aimed at highlighting bad living and working conditions of waste pickers. This was launched by India’s climate leaders in an event attended by over a thousand people and raised USD 6000 for waste picker welfare.
- ♦ Participated in multi-year waste and water survey, studying urban mismanaged solid waste in India.
- ♦ Developed two prototypes of a biogas digester that could be made from off-the-shelf components and was small enough to fit inside a home and be powered by food waste.

School Captain, Lakshmi School; Anti-Bullying Campaign	2024
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- ♦ Led an anti-bullying campaign across the entire school to create awareness and provide redressal mechanisms to affected students.
- ♦ Developed a questionnaire to target the interventions.
- ♦ Liaised with psychologists, academics, teachers in formulating this campaign
- ♦ Leveraged diverse means (art competition, posters, skit, speeches, guest lectures) to maximise impact.

CHEMISTRY AND CLEAN ENERGY RESEARCH AND EXPERIENCES

Research:

2023-2024

‘Hydrogen Production from Wastewater using Microorganisms’ published in The National High School Journal of Science (NHSJS, www.nhsjs.com)

- ♦ Authored and published research paper mentored by a PhD student from Cambridge University, UK.
- ♦ Conducted extensive literature survey to understand state of play in biohydrogen production, including pathways, substrates.

- ♦ Compared the advantages and disadvantages of different pathways, including cost of production, substrate(s) used and maximum hydrogen yield.
- ♦ Compared different substrates for producing hydrogen by suitable pathway, hydrogen yield, ideal pH levels and microflora.
- ♦ Interviewed academics, industry experts and undertook site visits to understand the working of current systems and incorporate real world considerations.
- ♦ Summarized findings into state of biohydrogen production in India.
- ♦ Paper underwent double-blind peer review, and after incorporating reviewer suggestions was published.

Fuel Cell Design and Optimization

- ♦ Authored research paper mentored by a Post-Doctoral Research Associate at Oxford University, UK
- ♦ Studied why fuel cells are critical in meeting global energy demand.
- ♦ Compared existing technologies of solid oxide and microbial fuel cells – specifically design, construction, materials used and their limitations.
- ♦ Paper is currently undergoing finalization and will be submitted to international journals.

Student Quality Circles (SQC)

2019-2022

The global SQC movement, begun in 1999, features small groups of students using scientific and analytical methods to identify and solve problems. Teams from all over the world compete annually at the International convention.

- ♦ Vice-Captain, School team 'Fitness Fanatics' that reached the International Convention on SQC Global finals.
- ♦ Participated in Global Finals of the contest at Kathmandu, Nepal. (No team was declared winner that year).
- ♦ Won the regional convention at South India level.
- ♦ Won the inter-school convention at the Madurai city level.
- ♦ Won the school-level convention.

2022

2021

2020

2019

Internships:

Carbon Masters, Bengaluru, India (www.carbonmasters.co.uk)

2024

Carbon Masters is a climate-tech startup that converts food waste into pressurized bioCNG and biofertilizer.

Design intern under Mr. Som Narayan, Founder

- ♦ Built a working prototype of a bio-gas reactor from scratch.
- ♦ Prototype helped Carbon Masters team overcome technical issues such as foaming and bad odor in the digester.

Online Courses:

University of California, San Diego Introduction to Algae

2024

Observerships:

2024

Dattatreya Textiles, Madurai, India (www.dattatreyatextiles.com)

With an annual turnover of 10 million, this company manufactures and sells high quality yarn internationally

- ♦ Understood function of sewage treatment plant handling effluents from company's cafeteria and washrooms.
- ♦ Studied the design and functioning of the anaerobic plant that is used to handle around the approximately 5 KLD (Kilo-litres per day) effluent that is generated.

Kudankulam Nuclear Power Plant, Tirunelveli, India

India's largest nuclear reactor (6000 MW power-generation capacity), using Russian-designed, water-moderated and cooled reactors.

- ♦ Observed the mechanism by which energy is generated from Uranium
- ♦ Studied the critical parameters of the plant, including the high safety standards in place.

EXTRA CURRICULAR ACHIEVEMENTS

Art

2013-Present

- ♦ Collection of my works titled, "Can you See me?" highlighting pathetic living conditions of waste pickers. Raised around USD6000 at a public charity event to fund charitable projects targeted at waste pickers
- ♦ My painting "Home in the Himalayas", of the Potala Palace was appreciated by the Dalai Lama.
- ♦ My painting "Water", that portrays the reality of fresh-water crises in India, was warmly received by the 'Water Man of India', Dr. Rajendra Singh.
- ♦ Attended immersive art workshop organized by Paresh Maity, one of India's leading artists
- ♦ Consistently chosen to paint for the school in their talent days

2024

2024

2021

2024

2017-2024

Thespian

2015-2024

- ♦ Lead Actor, Julius Caesar.
- ♦ Lead Actor, Role of Manohar Devadas, Madurai Heroes- Life of Manohar Devadas.
- ♦ Lead Actor, Mr. Brown in Annual Day.

COMPUTER PROGRAMMING

- ♦ Familiar with Java Programming and Visual Basic 6.0
- ♦ Obtained Oracle Certified Java Programmer Certification

2021-Present

2022

INTERESTS

- ♦ Car-lover, keyboard-player and epicurean.