

# SBOA SCHOOL AND JUNIOR COLLEGE

## CARS

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Message From Secretary and Correspondent

Dear Friends,

The idea for starting a Centre for Excellence which has been now named as CARS (Centre for Advanced Research and Studies) came from an interaction with the school children at our Ernakulum school. One boy suggested we should have an innovators club. When this idea was shared with Dr.Arun Razza who is an alumnus of our Coimbatore school he was jumping like Issac Newton. This led to many interaction with teachers and students and today we are launching CARS. This will be unique club in the school system. I don't think any school has a similar Centre for Excellence. IIT Madras has one.



Last 2 years our children had been participating in Kidovators competition, competing with children from eight states and the school has got runner up trophy for innovation. Many of our children have excelled in Robotics and some children have also developed mobile app. Through CARS we are providing plenty of opportunities for children to excel and innovate. CARS will have Centre for Excellence in Robotics, Electronics, Mathematics, Physics, Chemistry, Biology, Arts and many other skill in which students want to excel. There will be periodic interaction with scientist, technocrats, innovators in different fields and I am sure we will be able to produce more scientists and innovators who will change the course of the country and the world. I am grateful to the Department of Computer Science, the Teachers and the students who have taken this initiative forward. I acknowledge by debt and gratitude Dr.Arun Raaza the main brain behind this venture. *Let us innovate, Let us Excel and Let us change the future for the betterment of humanity.*

**Mr.Thomas Franco Rajendra Dev**

## Message from Correspondent

Good education in Schools is a vital preparation for advanced learning in later life. In India, education, today is job oriented and there is a need to change the way Schools look at it. It does not mean that the school curriculum does not need to set explicit goals for the development of the knowledge of students. The social, economic, scientific and technological changes that sweeps the world need to be assimilated into the School education system. It is the responsibility of Schools to kindle the thinking process and develop scientific temper among children which will help the nation progress.

SBOA School and Junior College, ever as the catalyst has taken the right step forward to take the students of the School into new horizons by establishing the Centre for Advance Research and Studies. The Centre will surely help the students enhance their skills, equip them with diverse abilities and realize their potential to reach greater heights and build an advanced Nation. I extend my warm greetings for the success of the students who will benefit from this Centre.

**Mr. T.Senthi Kumar**



## Message from Principal,

I am happy that SBOA School and Junior College is ready to usher the great idea "CARS" – a Centre for Advanced Research and Studies. When the world judges a student's capability on the marks which he scores in the exam, a centre for those whose mind have ideas, queries and is never satisfied without a proof, who could never top the list of the so called high achievers, here is a place to replace an empty mind with an open one. Great Scientists did not discover by going in the oft tread path, instead keeping an



open mind, observation and the courage to question to form a hypothesis. When ideas or doubts formulate in the mind, an expert to give a helping hand will open an avenue to move forward. In CARS, you are given the golden opportunities to try your ideas and hypothesis. Mere cramming of knowledge to reproduce in an examination is history. CARS is opening the doors to those who are creative, inquisitive and innovative. Students, opportunity does not knock twice, neither will talent develop unless it is nurtured. Your query "where can I develop my inner thoughts, where can I meet people with the same wavelength", all are solved. Make use of this knowledge bank where you will be surely navigated to the banks of your dream realization.

**Mrs. Radhika Unni**

## Message from Chairman, CARS

I first wanted to thank Mr. Thomas Franco Rajendra Dev, Secretary and Correspondent, SBIOA Educational Trust and the SBIOA management for giving me this opportunity to chair "Centre for Advanced Research and Studies". The aim of the CARS is to cultivate research culture in the mind of students. Students will be given intro on how to do research in their interested fields and will know on Patent, IEEE, Publications, ToT etc. Also the students will be having hands on training right from basic electronics, motorized robotics etc to latest emerging technologies like Smart Automation, Augmented Reality, Surgical Robots etc. I urge entire student and staff community to be part of CARS and indulge themselves on research thus contributing to publications, ToT and Patents. This is first of its kind in schools which will not only improve the student's skills but will also contribute for the growth of our Nation by young bright minds of students.

**Dr. Arun Raaza**

**Director, Research and Development  
VELS University, Chennai**



# WHY CARS?

Next time you have an IDEA! Question it, ask for proof and ask out loud. The CARS team will listen to you. Knowledge knows no boundaries. Then why limit it to the classrooms? The answer to this question is the Centre for Advanced Research and Studies. This new venture by SBIOA Educational Trust is to instill in the young minds a thirst for innovation in a field of their interest. Students with creative ideas and who have a mind to put in extra time and effort without sacrificing their studies consistently can enroll themselves with parent's consent. Guidance will be given by professionals from the respective fields.

**Mrs. V. A. Suraja, Assistant Headmistress**

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## INNOVATION

A great education is born out of innovation. It is measured by how many lives have been transformed, how many ideas have been raised and how many discoveries have been made. Innovation, to me is finding something of value to society through research that ultimately solves a problem and changes the way one might have previously received the problem. With this stated, innovation is the reason why we can be thankful for many new connivances of the 21st century.

True innovation hasn't stopped short of raising questions, but also develops solutions and summons the courage to change for the greater good. It is the magic pixie of our age. It doesn't actually require a team of savants. It happens in a context in which people want to improve what they do. 'People who care innovate'.

Steve Jobs wonderfully enumerates innovation by saying, **'Innovation is the difference between a leader and a follower'**. So, let's all innovate and make a difference to the world around us.

**Mirthullah Ramkumar, XII E**

**"Whether or not you can observe a thing depends upon the theory you use. It is the theory which decides what can be observed" - Albert Einstein**

Innovation and discoveries aren't radioactive to have a half-life whose scope begins and ends in the span of the three hours of the social science exam, but are the fruits of a whole hearted, deeply rooted, burning desire of the mind and soul to create something that will revolutionize history, science and life as we know it.

In this dog-eat-dog world, the only way to survive is through transformation, which in turn can only stem from innovation. Innovation is what distinguishes a leader from a follower. But that tiniest hope and flash of brilliance that sparks an innovation? That spark is a voiceless, hapless emotion that can easily be lost amidst grades and report cards. So the need to cherish and cultivate this talent is growing with every passing day.

They say that the best way to predict the future is to innovate it. And this innovation is in desperate need of a platform to showcase its talent. It is a student who is going to rule the world, it is a student who is going to inherit the world and it is a student who is going to safeguard the future of this world. Hence, the student, whilst he/she is still one, before they are lost in the blind-leads-the-blind race up the corporate ladder, should not only be asked, but encouraged to step outside the box and colour outside the lines. After all, it is the lone yellow amidst a field of green that gets the most attention.

**"Innovation opportunities do not come with the tempest but with the rustling of the breeze" - Peter Drucker.**

They say that opportunity knocks the door only once, well the odds of you ever having this kind of platform is even rarer, so friends, think, innovate and exploit the opportunities given to the fullest, because those who succeed aren't those who by-heart history, but are those who restructure it.

**Divya Murali, XII B**

# ACTION PLAN FOR ACADEMIC YEAR 2015-16

1. Basics of Robotics
2. Motion Controlled Robot
3. Fire Fighting Robot
4. Mobile Controlled Combat Robot
5. Basics of Electronics
6. Basics of Automation
7. Bluetooth Controlled Home Automation
8. GSM Controlled Home Automation
9. Basic and Smart Phone Applications for Home automation
10. Sensor Integrations
11. Beam Steering Antennas

