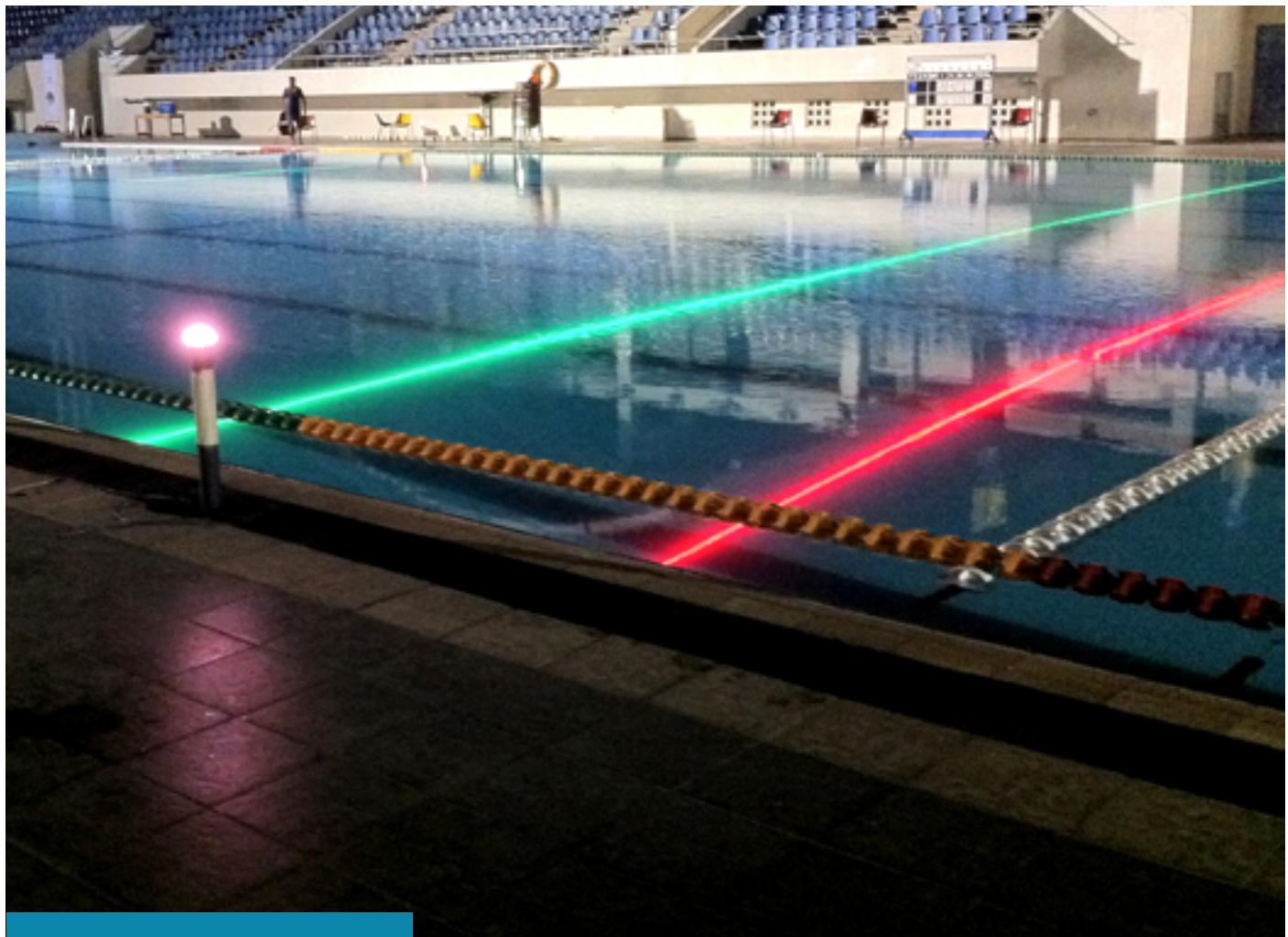


NEWSLETTER



**WELCOME TO THE
NEWSLETTER OF
OLD ROYALISTS
ENGINEERING
PROFESSIONALS'
ASSOCIATION
STUDENT
CHAPTER**

OREPA

**OREPA-SC 2016
OCTOBER**

SRI LANKA'S FIRST WATER POLO VISUAL SYSTEM

Hayman's Trophy Encounter

The Sri Lanka's first Water Polo Visual System which was developed by a group of young undergraduates who are currently studying at University of Moratuwa and Kothalawala Defense University. Page 1



Page 5



Page 9

THE COVER STORY >>

WATER POLO VISUAL SYSTEM FOR DR. R. L. HAYMAN TROPHY

A heated battle in a cold pool of water...cries of cheers and tension mingling with the breeze...vibrant streaks of luminous light piercing through the depths of water...critical decisions of the referees given with pinpoint accuracy...

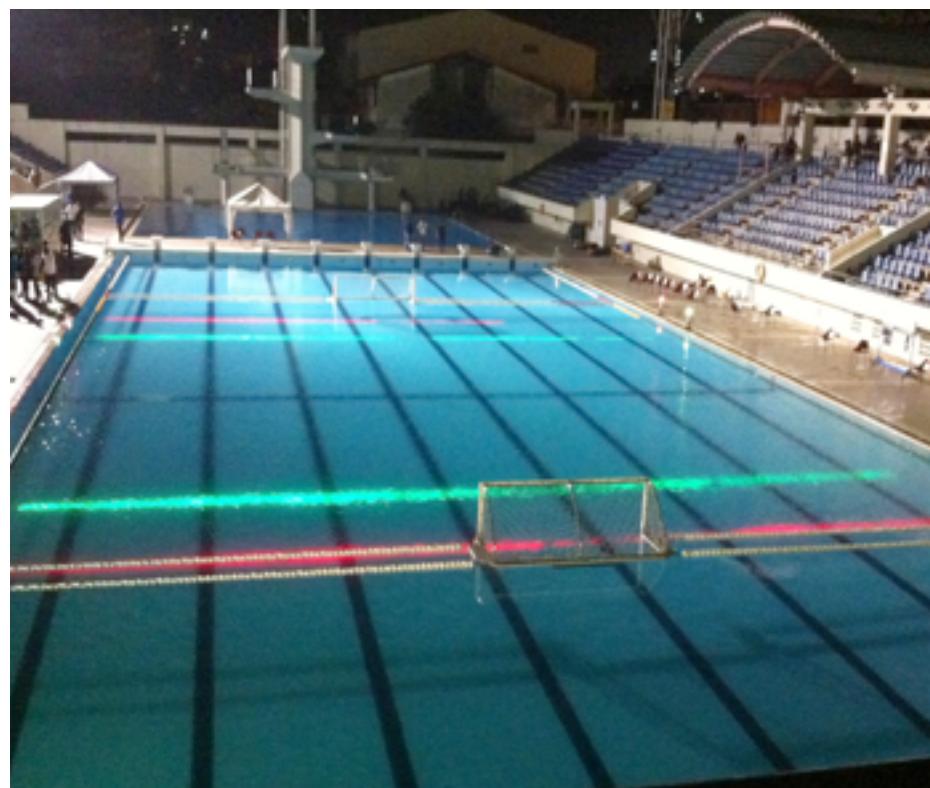
If your imagination takes you to an Olympic water polo event, it is a misapprehension. Why? Because it was a glimpse of one of the best highlighted events on the Royal College Calendar, Dr. R.L Hayman Trophy. The biggest water polo encounter of the island has just raised its standards into the Olympic realm.

Inspired by the visual system that was implemented in the London Olympics 2012, the undergraduates of the OREPA Student Chapter have introduced the first ever Water Polo Visual System in Sri Lanka, in order to address a timely need of the Dr. R. L. Hayman Trophy. This system aids the referees in accurate and precise decision-making, which has a massive impact on the gameplay and its final result.

The water polo visual system features a LED Embedded System, which provides clear visual demarcations of the specific areas of water polo match rules inside and outside the pool such as the lines indicating 2m, 5m boundaries from the floating goal, the re-entry area and the goals. The LED markers update the athletes, referees, judges, the audience and the television viewers on the progress of the game, providing a better sporting experience for all these parties.

DR. R. L. HAYMAN TROPHY

This spectacular system was designed by the creative minds of the OREPA's undergraduates from University of Moratuwa and Kothalawala Defence University, showcasing their enormous potential. It is expected that this technology will be eventually employed in all the national level water polo encounters, reaching on par with the international standards. The OREPA Student Chapter will continue its work on enhancing the system further and on several similar projects, yet again proving that novelty is the passion of the Royalists.



STUDENT MENTORING PROGRAM

WHAT IS MENTORING?

Mentoring is a one-to-one, non-judgemental relationship in which an individual voluntarily gives time to support and encourage another. This is typically developed at a time of transition in the mentee's life, and lasts for a significant and sustained period of time.

Old Royalists Engineering Professionals' Association (OREPA) students' chapter is conducting this Student Mentoring Programme to help our fellow Royalists. The mentoring partnership is a structured one-to-one relationship that focuses on the needs of the mentored participant or mentee. As such, mentoring may be described as the process of 'walking along beside' someone with the aim of helping that Royalist achieve their potential.



Mr.Panchal Abeysinghe and Mr.Poorna Molligoda are conducting a session

Process of mentoring

We planned this mentoring session for 10 weeks as below.

Getting to know
Time management
Relationships
Interactive activity
One to one mentoring
Who are you?
Personality Development
Career Guidance
Introduction to a life long journey

Week 1
Week 2
Week 3&4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10



Mr.Pansilu Pitigalaarachchi with fellow Royalists



Progress

We planned a training session and a motivational session for mentors those who are doing mentoring. By conducting these programs, our main goal was to improve the mentoring ability of the mentor and the qualities that required in a mentor.

And we also expected to increase the motivational energy within the mentor.

Mr. Panchal Abeysinghe

Mr. Poorna Molligoda

Mr. Pansilu Pitigalaarachchi

ACADEMIC GUIDANCE

The Academic guidance program was initiated by Old Royalists Engineering Professionals' Association (OREPA) Student Chapter in order to enhance the knowledge and wisdom of Advanced Level students of Royal College and help them to succeed in A/L examination.

Initiation of Royal College Online Resources Centre (RCORC), an E-Learning Portal for the College is the next step of academic guidance program of OREPA SC in collaboration with Royal College Prefects' Council 2015/2016.



Development of the web portal is currently being processed by a team of Computer Science Undergraduates. Content of the Online Resources Centre will be provided by College Prefects. Development process was started in early August and hope to finish within November 2016.

Main features of the E-learning portal are given below.



EDUCATION IS THE
MOST POWERFUL
WEAPON WHICH YOU
CAN USE TO CHANGE
THE WORLD.

-NELSON MANDELA-

Teachers

1. Add past papers (with a particular subject, term and year)
2. Add lab demonstration videos (with a particular subject and a title)
3. Answer questions
4. Add, update, delete a post in general feed

Students

1. View past papers
2. View videos
3. General feed with tweets embedded
4. Discussion forum to ask, view and comment on questions

Admin

1. Add users (with authentication and authorization)
2. Update users and password resetting

After the launch of web portal also OREPA will provide any assistance regarding Online Resources Centre and the Prefects' Council will handle the administration of web portal.

GREEN TO GREENER

Green to Greener is a step-up of the project "Green Initiatives" that took place in 2014 & 2015. The Green project successfully did an audit on the daily accumulation of the waste in our school and the results were surprisingly higher than expected.

Therefore the Green to Greener project is initiated to find solutions to reduce the waste accumulation and to manage the waste in the most optimum way, within Royal College.

In the path from Green to Greener we use the 4R concept as our guideline.



Refuse

The First Step of the project will be to make the Primary Section a Polythene Free Zone. Therefore we are encouraging the students to use substitutes for polythene such as paper, cloth etc. Since it's separated from the rest of the school premises we hope it will be easier to implement the concept in the primary section.

This step will consist 3 parts

The awareness program for the teachers of the primary section

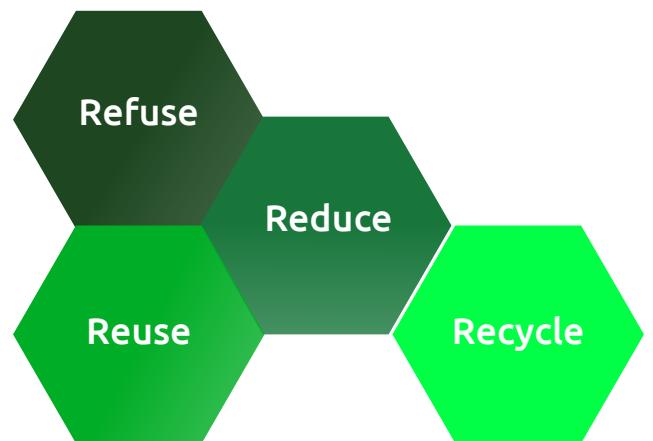
The awareness program for the parents

Class wise discussion and daily evaluation

Reduce

The second Step of the project will be to manage the garbage collecting and disposing methods in school. According to the audit, we have found that the waste management and collection is inefficient and that they are not being managed properly.

Therefore we hope to come up with an optimum plan for the waste collection as the 1st part of the 2nd step. An audit will be taken place to analyze the current procedure and we're hoping to finalize the new procedure by December, which will be initiated from January onwards.



THE PROPER USE OF SCIENCE IS
NOT TO CONQUER NATURE BUT TO
LIVE IN IT

The first step is already started as the school started for the new term in September.

OLYMPIAD '16

A PROJECT BY OREPA TO INSPIRE THE YOUNG MATHEMATICIANS AT ROYAL COLLEGE

Mathematics plays a massive role in every single sphere of learning and industry today. Its significance in unravelling the myriad enigmas of our world cannot be simply put to word. Thus nurturing the mathematical talent at College is indeed one worthy task.

Each year we see exceptional students turning into outstanding mathematicians as they display their talents through new developments and research. Discovering these talents is crucial for the progress of the world.

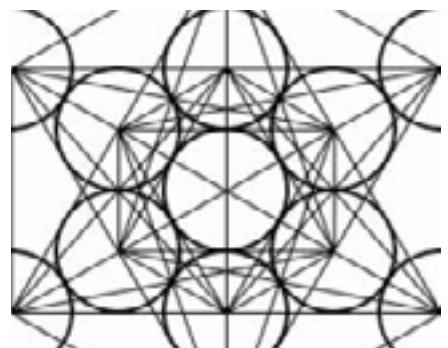
Mathematical Olympiad Competitions are what provide those exceptional students the platform to display their skills and compete with students on equal levels of intelligence from around the world. This allows them to not only develop their abilities but also sharpens their thinking patterns as a whole and improves their capabilities in school related studies. So far every student involved in Olympiad at school has been placed within the top 20 ranks at the GCE ALs and have displayed much academic excellence. It is clear that Olympiad is important for Royal College to keep producing those exceptional academics.



Dr Chathura De Silva addressing at the award ceremony.

OREPA aims to contribute towards this cause in a two-fold manner; firstly through the identification and training of talented and interested students, and secondly through the motivation of those students to perform at their optimum level.

In line with the latter motive, an awards ceremony was held on the 22nd of July 2016 at the Royal College Union Skills Centre Auditorium to felicitate all College students who had represented Sri Lanka at International Level Olympiad Competitions. This event was organized in collaboration with the Prefects' Council of Royal College.



Award Ceremony

The award ceremony took place under the presence of Dr. Chatura De Silva, Head of the Department of Computer Science and Engineering at the University of Moratuwa as the Chief Guest for the evening. The event was also graced by the College Principal, Mr B. A. Abeyratne and OREPA representative Mr D. Vithana. Past pupils from the Old Royalists Engineering Professionals Associated (OREPA) who took the initiative of organizing this event along with the College Prefects' Council were also present at the occasion.





Dr Chathura De Silva giving awards to young talents.

Eight talented young Royalists who had represented Sri Lanka at a number of international Olympiad competitions were recognized at this award ceremony.

Shenal S. Santush

Ruwimal Y. Patiraja

W. M. D. Sandil S. Ranasinghe

W. M. D. Kanchana N. Ranasinghe

Ayusha S. Fonseka

Manuth B. Perera

W. M. S. A. B. Wickramasinghe

Sithija A. Kotuwewatta

The event was a success with much appraisal from all parties involved.

**"NATURE IS
WRITTEN IN
MATHEMATICAL
LANGUAGE."**

-GALILEO GALILEI-

The Future >>>

The next two projects for the year 2016/2017 are aimed at developing talent among the student community. The first will be a workshop for all grade six students followed by a test. The purpose of this initiative is to identify new talent as well as to provide sufficient exposure to students at a younger age. The second will be continuous training session for upper-school students targeting the National Mathematical Olympiad competitions.

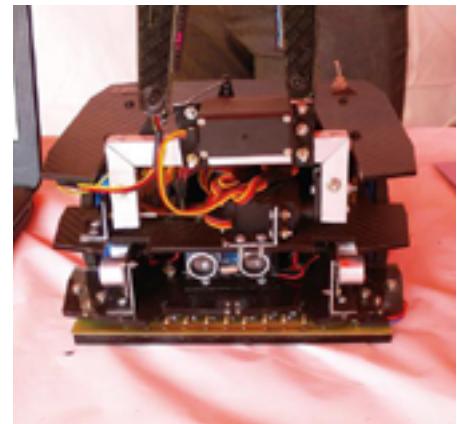
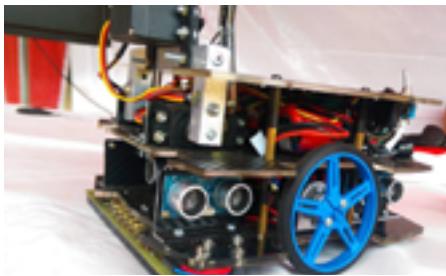
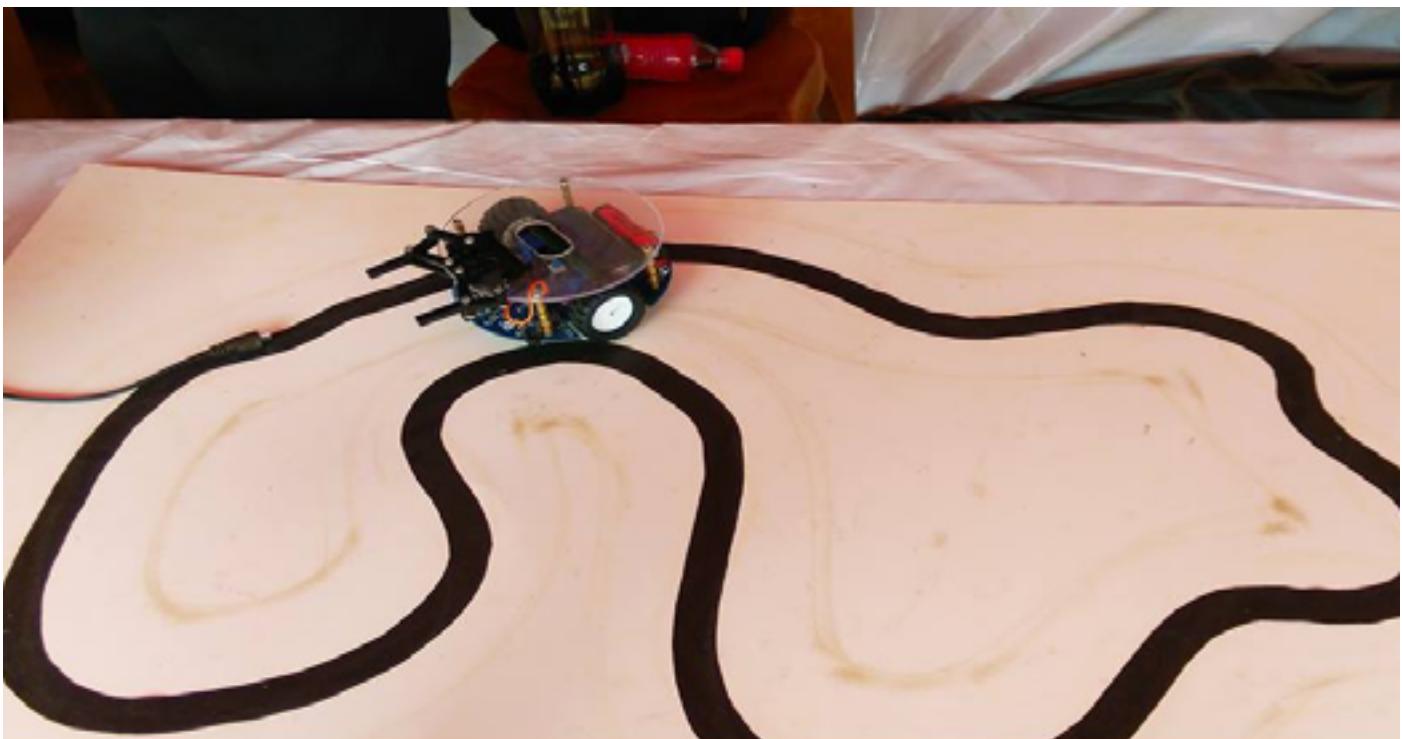
The workshop will mainly include an informative and motivational lecture by an eminent mathematician followed by presentations from students who have formerly represented the country at International Olympiad Competitions. Also the selected students from grade six will be provided a training during the continuous training session.

The training sessions will take place in the month of February. The national level competition takes place annually around the month of April and this series of training sessions will be aimed at that competition.



Principal B.A.Aberathne addressing at the award ceremony

INNOVATION



Due to the heavy workload, it seems that students have lost their interest in creating new things. Old Royalists Engineering Professionals' Association (OREPA) students' chapter has planned several projects in order to enhance the innovation within the students' community in Royal College.

Progress

We put-up a stall from OREPA, in the Future'16 exhibition which was organized by the Young inventors' club of Royal College. The stall featured many exciting projects including the LED transceiver, Arduino development kit, maze solving robot etc.

The students were inspired by familiarizing themselves with these projects. Further, judging of the exhibition was also performed by the members of OREPA.

Assisting the Young Inventors Club in organizing the annual exhibition

Organizing a tech-talk on "Emerging Technologies"

Mentoring Program

Joint session on electronics with Robotics Committee

Planned activities

The tech-talk on "Emerging Technologies" is planned to be held in the near future, in order to provide the tech enthusiasts within the student community, a sound understanding about the cutting-edge technologies used in the tech world.

The mentoring program will be held for guiding the students with new ideas to make them a reality.

The joint sessions will be organized in order to give the students a clear idea about the fundamentals in designing a simple electronic circuit by themselves.

ENERGY AUDIT REPORT

Old Royalists Engineering Professionals' Association (OREPA) students' chapter is conducting an energy audit at Royal College. The objective of this Preliminary Energy Audit is to assess the viability of implementing an energy efficiency upgrade to Royal College.

Due to the large number of buildings and equipment, the total energy bill for the college is somewhat high, but there is a possibility that a large portion of this amount is due to inefficient equipment and the unnecessary usage.

Audit Process

The audit is done in three main stages.

Audit

**Analyzing the results of
the audit**

Report

Progress

The first stage of the project is currently in progress. We have taken the details of grade 6, 7, 9 and all the hostels. And we are currently analysing the data that we obtained and see whether we can improve the efficiency of those buildings. This will take several months to analyse since we have to collect energy consumption data of each building over a time period.

TODAY'S WASTAGE IS TOMORROW'S SHORTAGE.



Planned activities

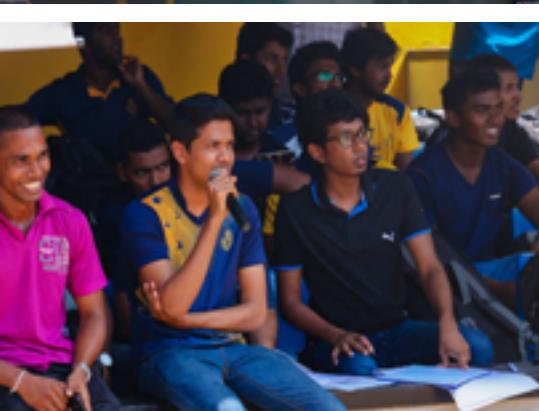
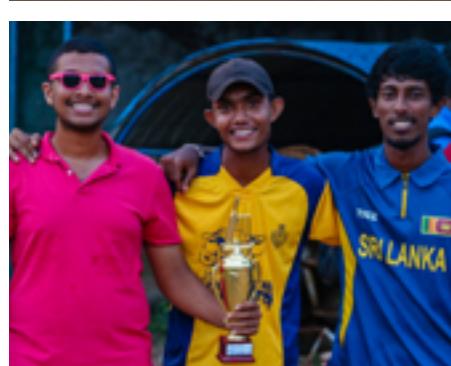
We are hoping to proceed to the other grades and areas in the school within next two months and complete the audit process. Then we can start the second phase of our project. We are hoping to present the report in the end of January.





OREPA SPORTS DAY 2016







A LITTLE MOMENT

With Sumudu Tharanga Herath

On your road up to this point, what things helped you and what commitments you had to make to reach here?

My parents provided me with everything to their potential. There were some things that they could not provide me with due to several shortcomings. That was the key to motivation behind all of these achievements.

You and Samawath are friends since the school days. Was there a competitive rivalry between you two and did it help in any way to achieve what you have achieved?

I had no competition with anyone. Comparison is not my thing.

Apart from being the best in your respective department, you were quite dynamic in extracurricular activities too. Could you tell us a little bit about what you have done and your achievements outside the lecture room?

I was the batch representative for four semesters at the University. I also held the positions of Assistant Treasurer, Director Professional Development and Vice President of Rotaract Club of University of Moratuwa. I was a former Treasurer at OREPA Student Chapter. I participated in sports events as much as I could.

How were your involvements with Royal College and OREPA in your years as an undergraduate?

Honestly speaking, I could not engage in many activities in OREPA, even though I was the Treasurer for the year 2015/16, but I am looking forward to contribute more in the times to come.

Could you tell us a little bit about your plans for the future?

I have already chosen research as the field to engage in time to come. It might take turns in the future depending on the options I have. But most probably I will settle being a lecturer as well as an established researcher at University of Moratuwa.

Being a decorated Royalist, how do you see yourselves in the future in regards to Royal College and OREPA.

I would like to work closely with OREPA main body depending on the active nature of it. And of course if the need arises, I would like to lead any project or coordinate any event.

What can you say to the youngsters who are eager to walk in your paths?

Convert weaknesses and opportunities to strengths and never compare yourself to any other because you are one unique person of mankind.

First of all, congratulations on your achievement. Could you first tell us a little bit about your success story?

Thank you. I wouldn't say it was a miracle happened overnight. It was a collective effort with many stakeholder participation and dedication and I am happy to be in this level by now. I would recall the day I became island second at GCE A/L as one of the turning points of my life. Then, I became the Sri Lankan prize winner for Enterprise Strategic of CIMA and in Corporate Reporting of ACCA examinations, I became the Sri Lankan price winner and world number 7. While doing all those work, I was able to successfully continue with my university work. I believe in "multi-dimensional success", where I always look to live a balanced life in terms of academics, sports, aesthetics, clubs and societies etc. These things assisted me to become the Most Outstanding Student of the faculty of Engineering of University of Moratuwa.

Coming in to the university, did you have any plans as to what you would do in the university? How did you prepare yourselves for the university academic life?

Not really. But, I had one thing out of many to achieve during my university life, that was to engage in extra-curricular work which I could not engage much during my school time. Academic life wasn't stressful as one would say, but doesn't mean you can work overnight to get good grades. On a humble note, I should say that I had a good track record in my academics from A/Ls and that helped me to prepare for my academics with less effort, but it was all about team work when it comes to academic or any other activity which made things easier than expected.

A LITTLE MOMENT

With Kasun Samavath Mallawarachchi

First of all, congratulations on your achievement. Could you first tell us a little bit about your success story?

When I first entered the class M2 at Royal College, I was just an ordinary student. During the two years at my advanced level class, my life transformed completely. I left the class as the Island 4th in AL exam, and I was able to maintain that same momentum at the university which led to the gold medal for the highest GPA in Chemical and Process Engineering.

Coming in to the university, did you have any plans as to what you would do in the university? How did you prepare yourselves for the university academic life?

When I first entered the class M2 in Royal College, I was just an ordinary student. But within those two years, my life transformed completely. I left the AL class as the Island 4th in AL exam, and I was able to maintain that same momentum in the university and obtain the gold medal for the highest GPA in Chemical and Process Engineering.

On your road up to this point, what things helped you and what commitments you had to make to reach here?

Mainly I am grateful for support of my parents, without whom I would not be here today. In addition, my teachers, friends and relations also were greatly helpful to me. Excelling at A/L was a tough challenge which required many sacrifices. I had to fully focus on my studies during the two years of A/L. Ultimately all those sacrifices proved worthwhile.

You and Sumudu are friends since the school days. Was there a competitive rivalry between you two and did it help in any way to achieve what you have achieved?

There may have been a small rivalry, but more importantly we were best of friends. We never hesitated to encourage each other or help each other in academic matters.



Congratulations!



Kasun Samavath Malliarachchi

Gold Medal for the Chemical and Process Engineering Graduand who has obtained the highest overall GPA of 3.8 or above at the B.Sc. Engineering Honours Degree examinations

Sumudu Tharanga Herath

Gold Medal for The Most Outstanding Graduand of the Faculty of Engineering, University of Moratuwa & Gold Medal for the Civil Engineering graduand with the highest GPA

Apart from being the best at your respective departments, you were quite dynamic in extracurricular activities too. Could you tell us a little bit about what you have done and your achievements outside the lecture room?

My main extracurricular activities are concerned with the Gavel Club, where I served as the Secretary in 2015/16. I was also the project chair in All Island Best Gavel Speaker contest in 2016. I also served as the student representative of Department of Chemical and Process Engineering for the year 2012/13, where I hosted multiple events including "Yaye Padura" and "CPE Sports Fiesta"

How were your involvements with Royal College and OREPA in your years as an undergraduate?

I was a member of OREPA Student Scholar team.

Could you tell us a little bit about your plans for the future?

My immediate plan is to pursue a PhD in Bio Chemical Engineering. On the long term, I would like to work in the research and development sector in Pharmaceuticals and Bio Products industry.

Being a decorated Royalist, how do you see yourselves in the future with regards to Royal College and OREPA?

I would be always ready to help the future students in Royal College, by sharing my experiences with young students, supporting OREPA projects and providing guidance and inspiration to the students.

What can you say to the youngsters who are eager to walk in your paths?

Every great person was once an ordinary person. All it takes to achieve excellence at anything is the passion towards what you do, and the unending commitment.

Executive Committee 2016/2017

OREPA-SC 16/17

NEWSLETTER

Editor

Buddhi Abeysuriya

Assistant Editors

Kanchana Ruwanpathirana

Vinoj Jayasundara

Content Quality

Development

Abishek Mapa

News Letter Design

Pasindu Kanchana

Web Technologies

& OREPA Marketing

Janaka Chathuranga

Tharaka Ranatunga

Yasas Gunaratne



Pamodh Alwis
President



Sakitha Kumarage
Vice President



Abishek Mapa
Secretary



Tharindu Kumarage
Director College Affairs



Bhanuka Abeygunawardane
Director Membership



Sithira Weeratunga
Director Public Relations



Dehan Vithana
Treasure



Vindula Jayawardene
Director College Affairs



Ashen Gamage
Director Marketing



Surath Gajanayake
Director Events

"OREPA, as a host of technical experts in many facets of engineering and related fields, opens up a reservoir of knowledge, technical expertise and material support in the fields of engineering, architecture and related fields for the benefit of the students and the youth. OREPA is looking forward to become a key stakeholder of the Royal College and the community, continuously working towards the betterment of our society. This Professional Newsletter provides news on our projects, events, innovations and achievements to promote sustainability, new innovations and youth empowerment within and beyond Royal College."

Please send your thoughts and insights to empower our initiatives;
OREPA Student Chapter - Editorial Board
orepa.newsletter@gmail.com