

# **NEWSLETTER**



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

**OREPA**

**OREPA-SC 2017  
OCTOBER**

**INTRODUCING A NEW INITIATIVE FROM OREPA-SC >>  
**INDUSTRIAL INSIGHTS  
PROGRAM****

With the new term of OREPA, there comes a brand-new program that plans to revolutionize the membership experience for the OREPA Student Chapter members. This new program, which is aptly called Industrial Insights, plans to take the young undergraduates who are members of OREPA Student Chapter and hope to give them an opportunity to learn more about their respective industries and gain valuable insights for their future career. [Page 2](#)



# THIS SEPTEMBER



## THE ANNUAL ROYAL-THOMIAN WATER POLO ENCOUNTER DR. R. L. HAYMAN TROPHY

### SLIIT JOINS OREPA

An induction of undergraduates of Sri Lanka Institute of Information Technology, to OREPA Student Chapter was held on 7th July 2017 at Sri Lanka Institute of Information Technology. The focus of the event was to introduce OREPA and its culture to the old Royalist undergraduates at SLIIT who are interested in joining OREPA as active members. The session was conducted by the members of OREPA Student Chapter Executive Committee.

The introduction to OREPA was conducted by Mr. Bhanuka Abeygoonawardana, President of OREPA Student Chapter followed by a session on professional relationships at OREPA by Mr. Sithira Weerathunga, Secretary of OREPA Student Chapter and a session on OREPA events by Mr. Anju Cheran, Director of Event Management of OREPA Student Chapter. The event has a record number of participation from all the old Royalists at SLIIT and the enthusiasm shown was inspirational. We look forward to a successful term with our brothers at SLIIT to work hand in hand to contribute to our alma mater, Royal College.



>>>THE COVER STORY

# INDUSTRIAL INSIGHTS PROGRAM

A NEW INITIATIVE FROM OREPA-SC

*A brain child of OREPA Public Relations team, this project is different from most of the other ongoing projects as it is more related to the undergraduate members and to develop their membership experience to a meaningful maximum. In the words of the organizing committee,*

*"Project 'Industrial Insights' focuses on creating relationships with the engineering and related undergraduates and the Royalists who are working in the engineering field."*

The program started with an initial survey among the old Royalist undergraduates about what they expect from an industrial insights program. Based on the survey conducted, the program was announced to be a mentoring based program that plans to build relationships between the undergraduates and Royalists engaged in professional engineering practice and help them network and develop a good rapport.

In doing this, the current project has already approached engineers and professionals from the industry and after some discussions have created a group of mentors who are willing to take in different undergraduates in different fields of study and give them a chance to see what is new in their respective industries and what they need to do to prepare for the industry. For a more hands-on approach, the groups of 5 - 8 undergraduates are assigned to a single mentor. The project is planned such that the advisor and the undergraduates are to meet at least once a month. The advisor and the undergraduates are to meet



to meet at least once a month. The advisor-undergraduate teams are given full autonomy on how the meeting date are set and the meeting content if the goals of the guidelines provided are observed. OREPA Student Chapter has planned to monitor the process for a minimum of four-month period from the start of session, continuously getting feedback from both the advisors and the undergraduates to make the entire process smooth and effective. OREPA encourages the students to

develop positive relationships between the advisors and develop a better personal network. OREPA believes by creating this kind of a relationship the undergraduates can gain a lot of industrial exposure and knowledge which seems to be lacking in the current university system. Further this strengthens the bond between the Royalists and helps to build a sustainable professional community, which in turn will support the goals OREPA has towards the betterment within Royal College and beyond.

## Happened so far

The project was launched into action on the 29th July 2017, at the Royal College Union Skills Center, where a special introductory session was held for all the undergraduates who have registered in the industrial insights program.

The event had the participation of some of the mentors and some industry professionals as well. The event consisted of three introductory sessions, on Career Selection and Decision Making by Mr. Vihangun Ariyaratne, on Developing a Killer CV by Mr. Danula Eranjith and on Corporate Culture and Importance of Networking and Relationship Management by Mr. Akila Shan Udage, which gave the students a foundation on how to approach the industry and how to nourish in the competitive and ever-changing culture. The undergraduates were introduced to their respective mentors after the session.

# OLYMPIAD

## '17

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.

Nurturing the mathematical talent at a younger age 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.

### Why invest in Mathematics Olympiad?

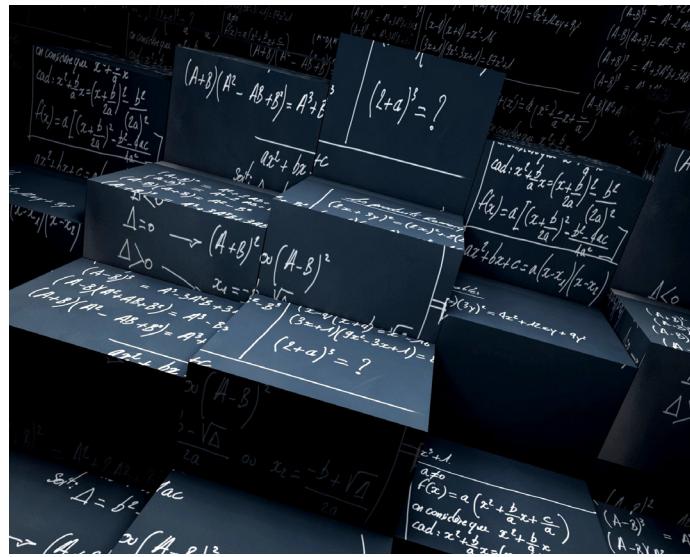
Mathematical Olympiad Competitions are what provide those exceptional students the platform to display their skills and compete with other exceptional students and to hone their mathematical knowledge and skills. This helps the students develop even more beneficial attributes to their academic as a cause of exposure to an academic environment and tough competition.

### Project Olympiad '17

From the inception, OREPA has taken key role in helping mathematical education at Royal College in any way we can. One of the key projects undertaken by OREPA in this regard was the Olympiad Training Program which re-introduced the young students of Royal College with Mathematics Olympiad competition with the intention of making them aware of how to get involved and how to achieve best in their selections and other competitions. Olympiad project, which started as a small training and preparation program for the Sri Lanka Mathematics Competition and Sri Lanka Mathematics Challenge Competition, which were conducted by Sri Lanka Olympiad Mathematics Foundation, has now grown into a large-scale project with an extended set of milestones and goals over the last three years.

The 2017 version of Olympiad program is a three-phase program. The initial phase of the program is to be consisted of a recognition program for the students who have achieved success at the earlier editions of Olympiad competitions including the International Mathematical Olympiad 2016 and 2017.

This event is planned to be held in mid October at Royal College with the participation of the award winners and academic staff and other invitees. The award winners have been already shortlisted and the award acquisition process is already underway for this phase



The second phase of the program, is a skills development program aimed for the students from Grade 6 to Grade 10. This phase is intended to introduce the students to the basic concepts relevant to the Mathematical Olympiads and how to face a mathematical competition of that caliber. The student selection process for the program is already underway and the final student list and the program outline is to be drawn as soon as the selection process is over. For the skills development program, 25 students is to be selected based on their achievement in the initial selection paper. The selection paper is to be made available to all students, and those interested can attempt it and submit it within the set deadline. The selected students from this exam are to have a training session after school once every two weeks during the duration of the project where they will be introduced to the basics of problem solving, number theory, combinatorics and geometry as well as some simple algebra. The sessions will be conducted with the help of university undergraduates and students who have participated at the International Mathematical Olympiad before.

The next phase of the Olympiad program, the advanced training program is a specially designed training regarding the Sri Lanka Mathematics Competition which is the basic selection competition for International Mathematics Olympiad team from Sri Lanka. This phase is planned to span from February to March 2018, covering the basic concepts and conducting necessary paper discussion regarding the Sri Lanka Mathematics Competition which will be held on April 2018.

# ACADEMIC GUIDANCE

*Advanced Level examination is one of the most competitive examinations faced by a student during his schooling life. Each year, a record number of students fail to achieve their maximum potential, mainly due to a lack of motivation and inadequate guidance in their academics. To address this issue, OREPA launched the academic guidance program with the help of old Royalist undergraduates who shared the passion of helping the brothers at the school.*

A MAN'S PRIDE  
CAN BE  
HIS  
DOWNFALL,  
AND HE  
NEEDS TO  
LEARN  
WHEN TO  
TURN  
TO OTHERS  
FOR  
SUPPORT  
AND GUIDANCE.



## Project Academic Guidance

Project Academic Guidance is a program tailored for the Advanced Level students in the Physical Science and Bio Science streams at Royal College. For the past few years, OREPA has actively participated in the development of student academic experience at Royal College with the Academic Guidance program. Academic Guidance has provided students with study sessions and workshops covering content from over 30 past papers and number of model papers and has also provided assistance for the students in learning the practical content required for the examination.

For the year 2017, Project Academic Guidance is planned to start in mid October and is planned to span till May 2018 covering a large portion of the content in science streams. The project is to be conducted by old Royalists undergraduates from university intake years 2017, 2016 and 2015 with batch 2017 taking the key role of active guidance process. This is to ensure that the syllabi and the knowledge of the undergraduates are compatible with the student requirement.



## What's new

With an extended vision of ensuring success of every aspiring young student, at AL examinations and paving them a path to achieve their higher education dreams, Academic Guidance program takes a new turn this year with an introduction of a new partnership and a more mobile approach to learning with the use of online platform partner Siplo.lk. With the guidance of Dr. Chandana Gamage, OREPA Student Chapter has currently established an initial arrangement with Siplo.lk which would allow the students involved in the Academic Guidance program to pursue their studies through the online portal at their own disposal allowing a much more dynamic learning environment for the students with better access and freedom. We may see more of this new incorporation as soon as every aspect of the collaboration is finalized.

In addition to the usual Physical Science Stream subjects, this year's Academic Guidance program is to include assistance in Bio Science subjects. This is to be achieved with the assistance of representatives from Colombo Medical Faculty.

# MIND GUIDES

*For youngsters, a proper guidance is one of the most important aspects in their life. Positive guidance is important for a student at the critical moments of his life to ensure that the student can find the suitable path for himself. Advanced Level, being one of the important milestones in a student's life, proper guidance at this junction could setup a successful path for the student.*

To provide a better guidance for the Advanced Level students in the Physical Science stream of Royal College, OREPA established one of its signature projects, the mentoring program which provides motivation and positive guidance to the students. With the year 2017, the next generation of OREPA mentoring programs is back in action. The project this year plans to introduce a set of brand new plans and concepts that would take the mentoring and guidance to the next level.

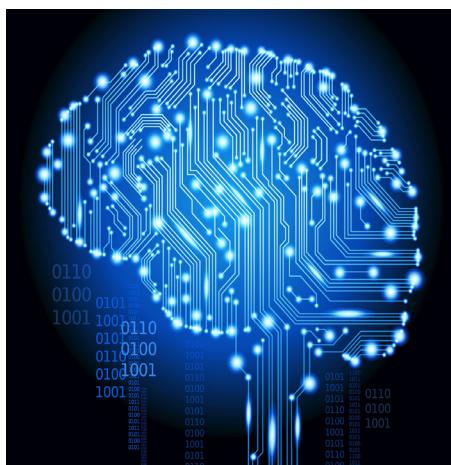


*Mr. Panchal Abeysinghe , Mr. Charitha Lokuge and Mr. Pamod Alwis addressing the gathering*

## Project Mind Guides

Targeting the Advanced Level students in Physical Science stream, the program intends to create a positive environment for the AL students to learn from their seniors. With the new outlook, Mind Guides is mainly focused on creating interactions among the young Royalists and the undergraduates who have recently passed out from Royal College to give the students a positive attitude towards success in their ALs. Rather than focusing on the academic activities, Mind Guide turns its focus on activities that are more developing student mentality and that may help the students achieve much better results in their academic endeavors.

The students for the mentoring program have been selected by Mind Guides project team in collaboration with the academic staff of AL Physical Science section based on the term test held on April 2017, with the mark sheets of the entire section normalized and ranked into one unit. Based on the shortlisting criteria 72 students were selected for the Mind Guides program. The students are to be assigned to the selected mentors with two students for each mentor. This is to enable the students a more hands on and personal relationship with the mentors.



**"NO VALID PLANS  
FOR THE FUTURE  
CAN BE  
MADE BY THOSE  
WHO HAVE NO  
CAPACITY FOR  
LIVING NOW"**



To make sure that there is a good rapport between the students and the mentors, mentors were selected from undergraduates with university entrance years 2016 and 2017. This approach is to make sure that the mentors are current with the student culture including syllabi and other extra-curricular school activities that may have improved over time.



## Happened so far

The initial training and motivational session for the volunteered students to be trained as mentors was held on 23rd July 2017 at Royal College Union Skills Center. Under the guidance of the three young leaders in the industry, Mr. Panchal Abeysinghe who is a Project Assistant of Project NUCIFERA of Nestlé, Mr. Charitha Lokuge who is a Project Engineer at GLIDE (Pvt) LTD and Mr. Pamod Alwis who is a Resident Engineer at NCD Consultants (Pvt) Ltd. The program introduced the



*A colleague is sharing his experiences*

undergraduate mentors to the aspects of developing interpersonal relationships, aspects of being a mentor and a role model for others and how to have meaningful personal interactions with the mentees and many other important aspects of being a good mentor. The session was conducted in a more practical outlook allowing the undergraduate mentors an opportunity to observe and learn what they should add to themselves and where they should improve. The initial

session was quoted to be a remarkable success.

As the initial training session is now completed and the mentors are ready, the next step in action is to introduce the students and mentors with each other and continue their interactions and positive guidance. The students and the undergraduate mentors are to meet starting from the start of October 2017 with a continual guidance for the students selected for the mentoring program up until the Advanced Level exami-



*Mr. Panchal Abeysinghe with fellow Royalists*

# CREATIVITY ENHANCEMENT PROGRAM

## Innovations and OREPA

Creativity and innovation are the essence of human evolution. The base of all sciences and engineering is the application of the aspects of innovation and creativity. Being an association of professional engineers, OREPA has always been a keen advocate regarding developing creativity and has provided a flair for innovation among the school children. Throughout the years, OREPA has undertaken various approaches in promoting an innovative culture inside Royal College. Creativity Enhancement Program, is the next step the Student Chapter of OREPA has taken in developing an innovative student community.



Eng. Heminda Jayaweera shaping the future

## Project Creativity Enhancement

Creativity enhancement program is planned with four goals that are mainly in relation to the robotics and innovative technological trends. The program plans to introduce robotic technologies to the students of Royal College and increase their interest and knowledge in robotics. In a world of automation, OREPA hopes to put the young Royalists in the driver's seat. At the same time, another important part of the program is to introduce new and innovative technologies to Royal College.

**“DANCE ABOVE THE SURFACE OF THE WORLD. LET YOUR THOUGHTS LIFT YOU INTO CREATIVITY THAT IS NOT HAMPERED BY OPINION.”**

The program which is already underway, consists of a group of lectures and workshops. The program is divided into two different sections, one section on innovation and the other section on robotics. We have joined hand in hand with the Young Inventors' Club and Eng. Heminda Jayaweera to help the students to help develop a flair in innovation. The different phases of the program will be covering emerging new fields in engineering and positive attitude towards innovation. The project plans to introduce, important concepts related with, Lateral Thinking, Creativity, Brainstorming and Design Thinking with how to apply those concepts in a practical scenario to get the creativity and innovation to the highest potential.



Design Thinking

Creativity

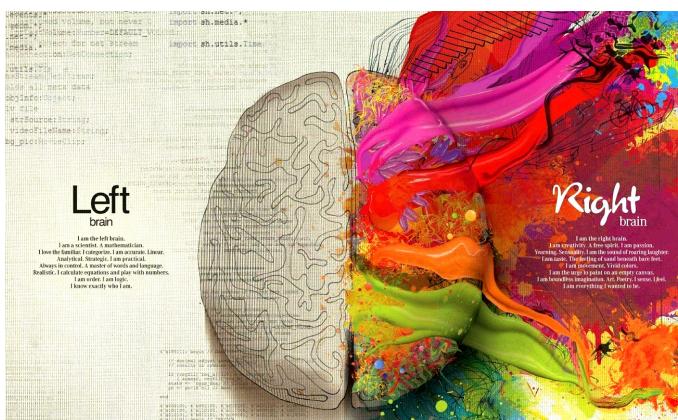
Behavior Problems

Lateral Thinking



Robotics Program is scheduled to start in mid October. It is to be conducted at the Main Computer Lab with the support from the Royal College Computer Society. The robotic program plans to introduce computer programming to young Royalists with the use of Scratch programming language and introduce electronic design concepts with the use of Arduino and Arduino IDE. Taking robotics development another step further, the program plans to introduce the youngsters to new computer systems

with Raspberry Pi and other similar 'system on a chip' development kits to enable them to further extend their boundaries. The students are given an opportunity to develop their own robots with the knowledge they have gained. To give the project a more competitive outtake, there is a plan in motion to organize a competition for the students where they can develop robots and pitch their robots against each other and have fun while learning.



**"CREATIVE THINKING  
INSPIRES IDEAS.  
IDEAS INSPIRE  
CHANGE."**

BARBARA JANUSZKIEWICZ

## The first step

The launching session of the innovation program was held at the Royal College Union on 31st July 2017 with the participation of the Principal of Royal College along with the members of the academic staff, and young Royalists and OREPA members. The students were introduced to the concept of innovation and what would be offered through the Creativity Enhancement program and how they can get the maximum out of the project. They were also introduced to the basic timeline and the expected goals of the project and how they would benefit the students. Overall, the event was a success in introducing the students to the project and on developing the project base.

## Executive Committee 2016/2017



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"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 becoming 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;  
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**OREPA-SC I7/I8**  
**NEWSLETTER**

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