

The logo for OREPA (Old Royalists Engineering Professionals' Association) is located in the top right corner. It consists of the word "OREPA" in a bold, yellow, sans-serif font, enclosed within a blue rectangular border with a thin yellow inner line.

OREPA

NEWSLETTER

WELCOME TO THE NEWSLETTER OF
OLD ROYALISTS ENGINEERING PROFESSIONALS' ASSOCIATION

NEW SOCIAL MEDIA
PLATFORM FOR
OREPA MEMBERS

INTERVIEW WITH
DR. GAJABA
KALUARACHCHI

11TH EDITION
2020 - DECEMBER

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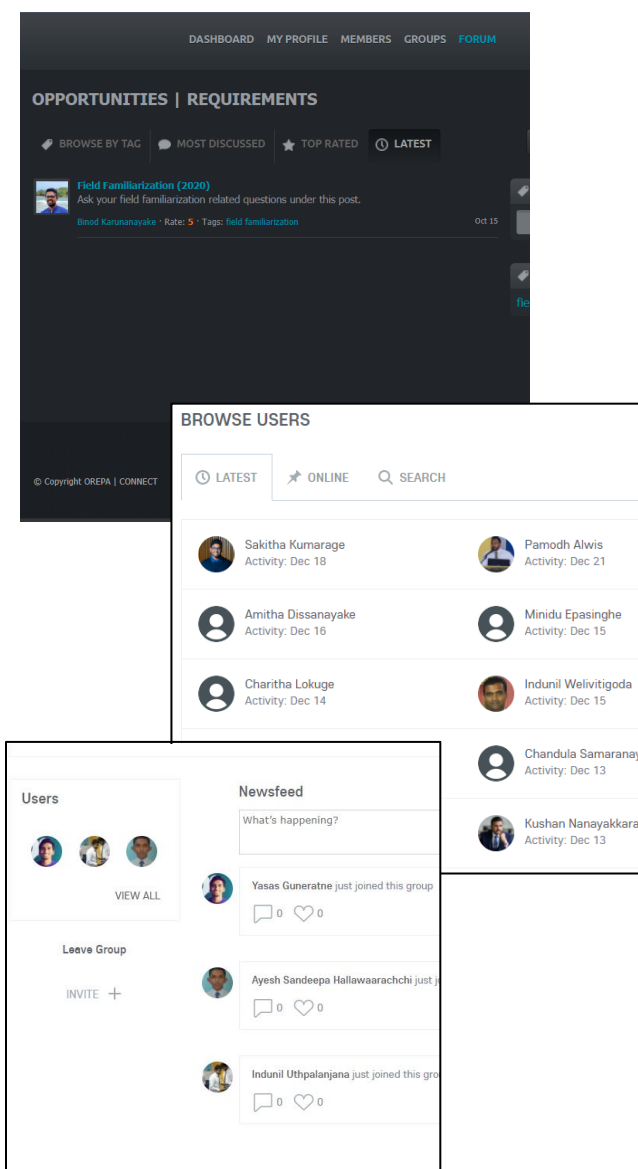


OREPA Connect which was launched in June 2020 is the social networking platform tailor made for Royalists from all the generations to build up their professional career. The platform will serve to bridge the gap between different groups of old Royalists and students. Young Royalists will get the opportunity to identify new career paths and build up their professionalism and professionals can also identify outstanding individuals from their college via the platform and carry out successful projects. This initiative is also useful in carrying out projects targeting the development of the college.

OREPA Connect currently has a user base of 55 members and targets 500 members across all generations by mid-2021. The platform provides Forums for Royalists to actively engage in discussions and be informed about the new trends in the industry. Using the Opportunities Feed, professionals can provide new opportunities and students can grab them. This is not only a professionalism oriented platform, it also helps all the Royalists to get in touch with their peers whom they have been longing to meet via Groups. Similar to any other social networking platform OREPA Connect also provides adding friends and chatting facilities

The infrastructure of OREPA Connect is built on Oxwall, which is an open source, customizable social networking platform. The platform is targeting to integrate cross-platform compatibility and further improve the user experience and user interface to meet modern design guidelines.

Dulanka Karunasena





Mind Guides

The main focus of this project is to uplift the confidence, morale and skill of A/L Physical Science section student. The target group are the students who have the potential to score higher grades, but still has a chance to miss out University opportunities.

The project targets to increase the no. of students passing out to universities for engineering studies by 20%. So, they have selected a group of 100 students with the expectation of 60%- 70% success rate. Students are provided with advices and learning techniques while building up their morale by their mentors. Subject matters are also discussed according to the necessity of the students.

Several platforms are used by mentors to stay connected with their mentees deliver their content. WhatsApp, Zoom, Skype and e-mail are some such mediums.

Currently mentor-mentee meetups are on a hold due to the pandemic situation, but as soon as the dangers subside physical meetups will also be arranged.

Yasas Guneratne

A portrait of Dr. Gajaba Kaluarachchi, a man with short dark hair and glasses, wearing a light-colored striped shirt. He is looking directly at the camera with a slight smile. The background is a blurred indoor setting.

An Interview with **Dr. Gajaba Kaluarachchi**

He is an Old Royalist of 2010 Group and is a lecturer at the Engineering Faculty of University of Sri Jayewardenepura. Through this interview we like to share the experience of Dr Gajaba Kaluarachchi and his innovations.

To begin with, could you give us a bit of an introduction to yourself, the way you see Mr. R. K. D. G. Kaluarachchi?

I am Civil Engineer R.K Dulana Gajaba Kaluarachchi. I see myself as an enthusiastic individual who likes to venture into new and challenging cognitive domains. My researches are a part of it. I keep on probing the experimental spheres that I can deeply dive into and speculate on. Also, I am an inventor who likes to explore and invent innovations tracing untrodden cognitive realms, in quest of experimentations. I am a lecturer who likes to share both my acquired and learned knowledge and experience with my fellow students. I also prefer to introduce myself as a keen sportsman and a young artist as I have manifested my skills and abilities in respective sectors with many achievements and commitments.

Many of us are fond of reminiscing on the glory days at the college. Are there any such memories you'd like to share with us?

During the time I spent in my great alma mater, Royal College, I broadened up my horizons with a repertoire of dexterities in both academic and extra-curricular activities. I was awarded with so many academic achievements such as interschool quiz championships, achievements for mathematics competitions, art competitions, Sinhala literature competitions etc. In addition to that I got myself ahead for my sportsmanship which was awarded with all island first place in badminton consecutively in the years of 2005, 2006, 2007 and 2008. Also, I won Royal colours as well as national colours for badminton. Along with badminton achievements I also received awards for athletics for long jump, high jump and long-distance running events.

All these achievements would not have been possible if I didn't receive the invaluable advices and guidance from my great mother Royal. My wonderful Royal College is the place I glorify with my whole heart. I am certainly fond of reminiscing the enjoyable days I spent at my great alma mater as I glorified my great Royal College with all the above-mentioned achievements.

After leaving through the Boake Gate, what were the checkpoints on your road to where you are now?

My chapter from the departure through the Boake gates to where I stand now, is written successfully due to the strong startup I had from my great Royal College. I obtained the best GPA placing the best results in VC list and Deans list in all four years during my university life and I also emerged the batch top. One of the milestones of my life is "Emerging Civil Engineer Award" which was granted to me

by Institute of Civil Engineers Sri Lanka and Institute of Civil Engineers United Kingdom. The traditions, customs and guidance I received from my great mother Royal uplifted me to wonderful positions with remarkable achievements at all stages of my life. I continued playing badminton during my university life where I represented Sri Lanka in various international competitions. My name was placed in Sri Lanka national badminton rankings as I was fortunate enough to establish myself with the strong start up, I had during my wonderful school life in which I received greater guidance. I excelled myself securing championship in interuniversity staff badminton tournaments in the consecutive years of 2017,2018 and 2019. My great mother Royal is the brimming inspiration behind my success.

Focusing on the latest invention of yours, I must say, it is a very timely device. Could you share with us the vision that enabled you to create this?

Precisely I also would like to deem my invention a timely device and the vision which led me to unveil my innovation, is also weaved by the strands of timely requisites which staged my innovative urge at a chaotic pandemic crisis. Also, my vision from the very beginning is colored by humanistic implications which meant to

facilitate humans in need. After a considerable time period of study which projected on means of facing the COVID-19 pandemic ,my vision enabled me to design my invention. My vision that led to divulge this invention incorporates many societal, clinical and economical spheres. More importantly, all my objectives in creating my invention of sensitivity face mask, are staged on a visionary platform of prospering my country in all possible ways. It was my sole objective to render my country the recognition of my invention. Therefore, I took all possible efforts to obtain required materials to produce the face mask in Sri Lanka.

The functions of the mask, as I've been led to believe, could be useful on diagnosing many physical symptoms of a person. Would you please elaborate these functions and applications?

My invention projects not only on COVID-19 virus but also it looks into any viral infection which is at its basic stage. In elaborating major functions and applications of the face mask I am referring to, it casts limelight on some significant factors like temperature, pH value and chemical composition of phlegm flux and saliva and the individual's other symptomatic factors that changes with the time. Application relates the above-mentioned factors and their changes with sensitive

colour indicators that specify each situation. Above all when considering the specialties of my invention, all the relevant parts that conjointly form the mask could be separately used according to the requirement or else it is possible for the user to wear the facemask with all its components collectively as a whole. In addition to that it automatically informs the distance that individual keeps with others around, using a colour indicator. The automaticity and multitask functioning apparently highlight the invented face mask from other casual face masks. It is economical in the sense that it concurrently performs multiple tasks. It is of societal importance since individuals themselves can keep track on their physical symptoms while keeping the required social distance.

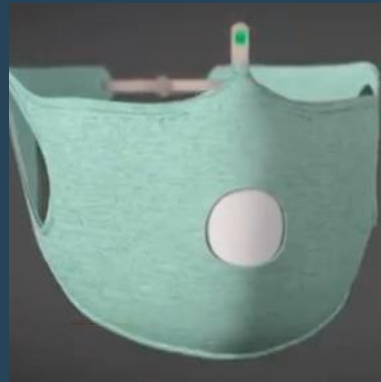
In addition to this latest achievement, what other inventions are there under your name?

In addition to the facemask with sensitive indicators, I invented a chemical paste which can be used in the construction field to treat developed wall cracks and some applications which I further developed to apply in the respective fields of sports and automobile. Added to the above innovations, I invented several machines which can be applied in the field of construction such as tiling machine, plastering machine and the machines I

invented in the field of medicine are physical parameter measuring equipment and chemical parameter measuring equipment. Along with the above-mentioned inventions I have invented several other machines which could be utilized in day-to-day chores.

Is there any advice that you would like to share with your audience today? Any tips from experience to newcomers?

I would like to share some of my views with the ambitious audience to broaden their scopes of knowledge and to acquire a range of dexterities in their aspired fields. It is not the matter of discipline that you are in, but it is the matter of being a unique personality within the stream you selected. Believe in yourselves and wisely win all the difficulties and hardships you face. These difficulties and hardships you face would guide you to top positions. Take up the challenges and face them wisely. Be honest and be patient! It will take you up to very beautiful destinations. Write your own life story which has a well-established content page and well-defined chapters along with a memorable ending. Plan your days and manage your time to acquire your goals. I wish you all the very best and all success to make your wonderful families, our wonderful Royal and our wonderful island Sri Lanka proud!

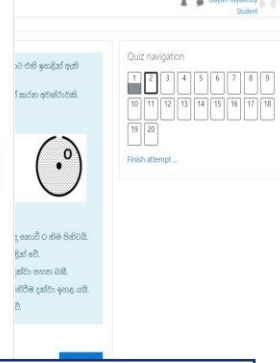
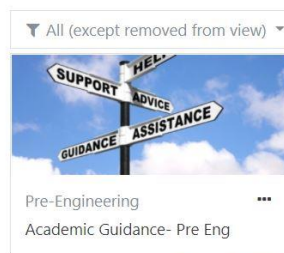


Interviewed and Written by: Dharmanuwan Senanayake

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x = 10
print("x" * x)
for i in range(x-2):
    print("x" + " " * (x-2))
print("x" * x)

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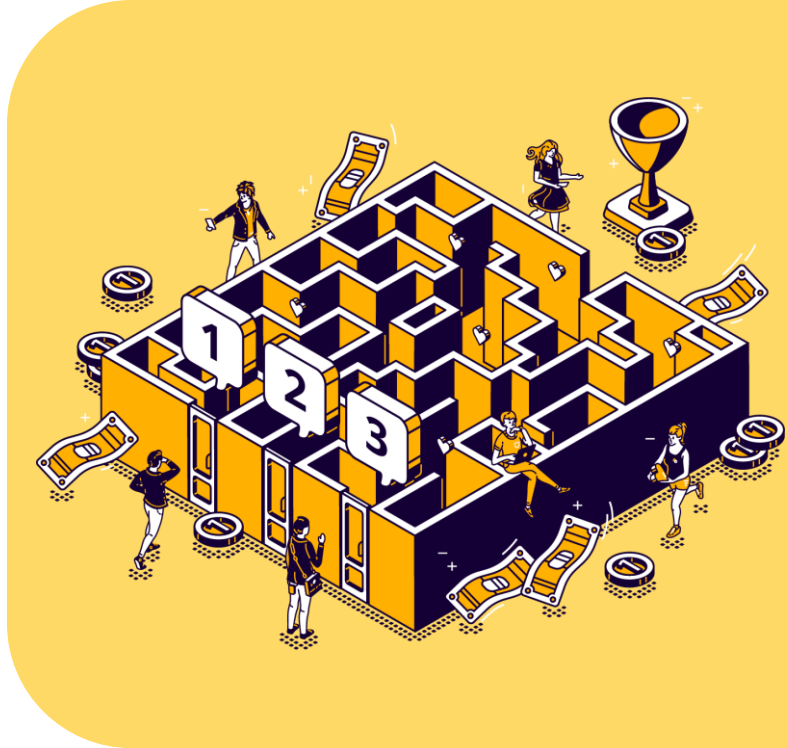
LEARNING MANAGEMENT SYSTEM

OREPA LMS was initiated by OREPA Student Chapter with the aim of providing an extra guidance to G.C.E. A/L students at Royal College. Currently the Learning Management System provides facilities mainly for the G.C.E. Advanced Level Physical Science & Bio Science stream students.

Observing the current user base, it shows promising development of this system. Over 540 students and 45 teachers have registered and are using this portal for their and teaching learning process. OPERA LMS proves useful in distant learning under circumstances like COVID-19 pandemic incident.

The Developers are hoping to introduce a separate section for accessing and downloading school past term test papers. Also new feature has been proposed to provide support for after A/L students who have been selected or willing to do engineering in their pre-engineering learning. Lessons on topics such as Python programming language, MATLAB and solid works will be made available as they are some of the basics that any engineering undergraduate will have to learn.

It is evident that OREPA LMS will continuously try to evolve and upgrade into providing new and better features to its future users.



Field Familiarization

After being selected to the university under an Engineering course, the main decision that an undergraduate must make is his field selection. Many undergraduates struggle to find their suitable field due to lack of knowledge and misinformation about these fields. That is why OREPA organized a field familiarization webinar to guide young Royalist into finding their real interests by arming them with the necessary information

The webinar was conducted on 15th October 2020 with the participation of forty-five 1st year Royalists. 8 resource persons joined this session from the fields of Biomedical, Electronic, Material, Computer Science, Civil, Mechanical, Chemical and Electrical Engineering.

The session proceeded for 2 hours where initially the professionals successively explained about the nature of their respective fields and what type of experience the undergraduates could expect. Finally, the session was concluded with an interactive Q and A session.

It could be noted that the session was a success by the positive feedback given by the students

A Glance at 2020

Major Projects Conducted by OREPA for the year 2020

Academic Guidance

A project initiated to support the Royalists with their first semester at the faculty of engineering of University of Moratuwa.

OREPA CONNECT

OREPA CONNECT is a virtual platform where the members of OREPA can find and connect with each other

Pathway to Engineering

A novel project aimed at providing guidance for young Royalists who have just finished their O/L examination

Field Familiarization

OREPA aims to guide the Engineering freshers to make the right decision in selecting their desired department at the university

Mind Guides

Mind Guides is OREPA's student mentoring program organized for advanced level students.

OREPA LMS

An online learning platform dedicated for A/L students of Royal College

OREPA Newsletter

OREPA Newsletter serves as the primary source of communication between OREPA officials and its stakeholders

Industrial Insights

OREPA Student Chapter focuses on initiating a good connection between engineering undergraduates and OREPA members who are working in different fields of engineering

Engineers in Industry

Engineers in industry is a project done in collaboration with OREPA Main body. The objective of the project is to build a discussion among engineers, undergraduates and the general public on trending Engineering topics.

A repeating pattern of stylized snowflakes or starbursts in yellow and blue on a dark blue background. The snowflakes are composed of lines and small circles radiating from a central point.

Happy New Year!

Best Wishes From

OREPA

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To view our previous Newsletters, visit our
official website



<https://orepa.lk/newsletter/>

“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. This professional newsletter provides news on our projects, events and achievements to promote sustainability and youth empowerment within and beyond Royal College.”

Please send your thoughts and insights to empower our initiatives;

OREPA Student Chapter – Editorial Board

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