



UPSAA

University of Peradeniya Science Alumni Association

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2016/17

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Message From the President



It is with great pleasure that I write this message for the second issue of the UPSAA Newsletter. First of all let me thank the executive committee and particularly the Secretary of UPSAA, Dr. Hemalika Abeyesundara for continuing this important task.

You may know that we have established the University of Peradeniya Science Alumni Association (UPSAA) in 2009. The main objective of the Association is to communicate with and bring value to the Alumni of the Faculty of Science of the University of Peradeniya and to support actively and financially, the achievement of the goals of the Faculty.

As pointed out in the previous Newsletter by Professor B.S.B. Karunaratne, the former President of UPSAA, we currently have a membership of only about 450. However, the total number of graduates who received degrees from our faculty during last 50 years is more than 15,000. We are striving to increase our membership to at least 800 by the end of this year. All our former Graduates of the Faculty of Science are kindly invited to become Members of the Association.

We earnestly request our present members to encourage former faculty batch mates/friends to become members of our association. We kindly request you to introduce at least one new member to our association so we can double our membership by the end of this year.

Prof. H.M.N. Bandara,
President, UPSAA.

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UPSAA –Mission

The mission of The Association is to communicate with and bring value to the Alumni of the faculty of Science of the University of Peradeniya and to support actively and financially.

Message From the President *cntd...*

Last year we established an online message sharing system with electronic display monitors for the Faculty of Science, in particular to pass messages to the students from the Deans office. Our aim is to expand this facility by providing one display panel to each department / building. The executive committee has decided to provide funds to the Faculty to install another screen shortly.

Other activities planned to be implemented this year include (i) Organizing a talk for the undergraduates on Personality building and soft skill development. (ii) A three-day trip to Jaffna in December (iii) A book donation programme to a school in a remote area (iv) Initiating a scholarship program for needy students in the faculty.

I have no doubt that UPSAA Newsletter will provide an ideal platform for our members to provide feedback and ideas on various aspects related to the objectives of our Association. We solicit your cooperation to accomplish the objectives of UPSAA. Thank you.

Prof. H.M.N. Bandara

President, UPSAA

UPSAA Year Plan 2016/17

	Event	Month	Organizer
1	Raffle Draw ticket sale, Raffle draw and musical evening	July-September	Fund Raising Committee
2	Guest Talk	July	Alumni Outreach Committee
3	Newsletter- 2nd Issue of the year	August	Dr. H.T.K. Abeyesundara
4	Organizing a talk on developing soft skills to 3 rd and 4 th year students before the industrial day.	August	Alumni Outreach Committee
5	One day trip to a deprived school and hand over donations	November	Alumni Relations Officer, Dr. W.D. Chandrasena
6	Three day trip to Jaffna	December	EXCO Committee
7	AGM lunch and appreciation for senior members	March	EXCO Committee
	Raising membership during University events and Faculty events	Throughout the year	EXCO Committee
	Selling T shirts/mugs and other find sponsors	Throughout the year	EXCO Committee

We appreciate your fullest support in all the above events.....

World Trends in Science Education

Science plays a vital role, as it focuses on meeting basic human needs by providing the necessary knowledge and skill to advance diverse fields such as: agriculture, medicine, manufacturing industries (e.g., polymer, glass, steel, electronics, stationery, paints, dyes etc.), and transportation. As every sphere of life has been revolutionised by science, the advances in science impact on everybody. Hence, science understanding is an increasingly precious resource throughout the world (Aschbacher, Li, & Roth, 2010). As science underpins the development of technology, we cannot expect technology to continue to develop without science.

Significance of Science Education

One of the most significant characteristics of science is the changing nature of knowledge. Science knowledge is contestable; it is forever revised, refined, and extended as new evidence arises (Ferrari, 2011). Aschbacher, Roth, and Li (2010) state understanding concepts and principles in science is a more and more valuable practice and experience throughout the world. According to Franklin (2013), “If you want significant facts, interesting facts, useful facts, believable facts, go to science” (p. 31).

International Declines in Science Enrolments

In spite of the importance of science education throughout the world, the percentage of school students studying science is alarmingly low (Hannover & Kessels, 2004; Birrell, Edwards, Dobson, & Smith, 2005). There is an international decline in the number of students studying science, especially in developed countries such as the United States of America (U.S. Department of Education, 2006), the United Kingdom (Schoon, 2001), Australia (Wood, 2004; Hassan, 2008) and Germany (Roeder & Gruehn, 1997). This has resulted in a lack of available expertise to fill science positions and thus endangers economic supremacy in a competitive and rapidly-changing world. However, the situation in many developing countries is not very pathetic as above though students still need some motivation.

According to past research the decline in science enrolments is related to students’ motivation, academic abilities, and teaching methods (Hassan & Treagust, 2003). Especially, students’ intrinsic motivation is a significant factor in students’ achievement and aspirations in science (Chandrasena, Craven, Tracey, & Dillon, 2015). Thus, it is suggested to enhance students’ interest towards science through appropriate approaches and practices.

Use of Self-Determination Theory in Science Classes

Self-determination theory (SDT) is a macro theory of human motivation and personality that concerns people's inherent growth tendencies and innate psychological needs. SDT focuses on the degree to which an individual's behaviour is self-motivated and self-determined. The Self-determination theory suggests providing students with autonomy support than controlling their behaviour.

Key studies that led to emergence of SDT included research on intrinsic motivation. Intrinsic motivation refers to initiating an activity for its own sake because it is interesting and satisfying in itself, as opposed to doing an activity to obtain an external goal (extrinsic motivation). Thus, science students’ intrinsic motivation has to be developed through suitable methods and activities to empower students to become life-long learners.

By Dr. W. D. Chandrasena
*Senior Lecturer, Science Education Unit,
Faculty of Science, University of Peradeniya*

From UPSAA Annual General Meeting 2016



The AGM 2016 was held on 26th of March at the Science Faculty premises.

The chief guest was **Mr. Sarath Rajapakse**, chairman of Star Fortune (Pvt.) Ltd.

Prof. Upul Dissanayake, the Vice Chancellor of University of Peradeniya was the guest of honor. P

Science alumni Prof. A. Wickramasinghe (Dean/Science) and Prof. Namal Priyantha (Director/PGIS) attended the ceremony as special invitees. Around fifty alumni participated the event this year.

The AGM was followed by a fellowship dinner and raffle draw at PGIS rooftop.

UPSAA Announcements

- **Donations to primary school children and one day trip to Hanguranke-tha and Nuwaraeliya.**
- **Initiating Needy Students Scholarship Fund.**
- **Three day trip to Jaffna (9th-11th December, 2016)**

Please use the following link and give us your opinion

<https://goo.gl/forms/jqo7dmaJxU6P5Ako2>

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<http://sci.pdn.ac.lk/alumni/publications/>