

Editorial

This is the seventh issue of the OUSL Journal, the Journal of the Open University of Sri Lanka. It provides OUSL academics and others a platform to publish research and review articles on Distance Education and other discipline based academic work conducted locally and internationally. The articles published in this issue cover research on ODL, Science and Engineering conducted by mainly OUSL academics. This gives a good opportunity for our readers to know some of the research conducted at OUSL and to engage in fruitful discussions and future collaborations.

The first research paper by De Silva and Devendra investigates the needs and expectations of undergraduate students who are following the course unit “English for General Academic Purposes” (EGAP) at The Open University of Sri Lanka. This course is offered to almost all students who need to enhance their core academic English language skills. The findings suggest that students have a wide range of needs, for example, academic, occupational and social needs, which they hope to fulfill by following the EGAP course. This diversity of needs warrant future development and delivery of the EGAP course, taking into consideration the needs of students who are involved in learning a variety of disciplines. Thus, the academic staff in the Department of Language Studies should re-examine the resources and opportunities that are currently available at OUSL (Multimedia, Moodle, OER and Video Conferencing).

Gunawardena and De Silva in their article discuss the impact of temperature and water stress on growth and yield parameters of chilli. Results suggest that the temperature stress affects the plant height, branches, canopy diameter, fruit weight, fruit diameter and number of fruits per plant. Reduction in harvest due to temperature stress can be overcome by watering during growing period.

Estimation of groundwater recharge, particularly in dry regions, is important for the management of scarce water resources. Recharge rate depends on factors such as precipitation, temperature and evapotranspiration. C. S. De Silva, in a theoretical paper, simulates the potential groundwater recharge in the Jaffna Peninsula of Sri Lanka using HYDRUS-1D model. It was pointed out that the simulated potential groundwater recharge in this area is about 42 cm.

Nupearachchi and Perera, in their paper, study dielectric properties of composite films made from tin(IV) oxide and magnesium oxide. 10% of MgO in the SnO₂/MgO composite showed a high impedance which is in two orders of magnitude higher than pure MgO, probably due to the confinement of electrons in quantum well structure formed by a layer of MgO around SnO₂ particles. These composite films may find applications in devices such as capacitors and thin film transistors.

The research paper titled “overhead pedestrian crossings: economic evaluation through vehicle operating cost and travel time savings” presents a study carried out at the main entrance to the Sri Lanka Institute of Information Technology at Malabe to minimize the disturbance of traffic flow along the Malabe-Kaduwela road. Introduction of an overhead pedestrians’ crossing at this location is proposed to minimize the vehicle-pedestrian conflict and to create a uniform traffic flow along the road.

The review by Shyama Weerakoon on “introducing herbicide resistant crops (HRCs) to Sri Lanka” deals with the pros and cons of cultivating HRCs, although, in some developed countries, a limited number of HRCs have been commercialized. Breeding of HRCs is proposed as a measure to relieve the constraints associated with herbicides. Farmers were benefited by cultivating HRCs, though there are many concerns about health risks and environmental impacts. A comprehensive study is vital to fully assess the potential benefits and adverse consequences before introducing HRCs to Sri Lanka.

In addition, this issue includes the Convocation Address-2014 made by Professor Som Naidu titled “Looking Back Looking Forward: The Invention and Reinvention of Distance Education” which reflects on the field of distance education, its journey since 1980 and its role in the future.

We welcome your suggestions for further improvement of this journal. We are looking forward to publishing your current research findings in our next issue.

Professor K. Sarath D. Perera

Editor-in-Chief