

## **Report of the R&D and Journal Club of Science for the academic year 2020-2021**

*A brief report of the activities of Journal Club of Science for the academic year 2020-2021 is given below;* The Journal Club of Science comprises of the faculty belonging to Departments of Mathematics, Statistics, Chemistry, Physics, Zoology, Botany, Food Science and Quality Control, Family and Community Science and Computer Science of the college. The main purpose of this club is to introduce science faculty members and interested students to the world of scientific publications and to familiarize them with world class journals. Every month each department arranges talks by experts on specific relevant topics and there will be a question answer session so that everyone gets a chance to clear their queries from the expert itself. The journal club have so far conducted 8 online sessions in this academic year. The details of the expert sessions conducted by the journal club are as follows,

<b>Date</b>	<b>Speaker</b>	<b>Department</b>	<b>Title</b>
23-6-2020	Ms. Praseetha P.S.	FACS	Early Developmental Stimulation
30-6-2020	Ms. Priya Thomas	Zoology	Ecology of Tadpoles
7-7-2020	Ms. Anju Annette Cherian	FSQC	Food Safety
11-8-2020	Ms. Divya S.	Computer Science	Equipping the classroom for online learning
27-10-2020	Ms. Sharon Mary Xavier	FACS	Consumer Education
10-11-2020	Ms. Indu Abraham	FACS	Assessment of nutritional status in Human nutrition
12-1-2021	Mr. Stephy Thomas	Statistics	Time series analysis using R
23-2-2021	Mr. Liju Alex	Mathematics	The R– Index Of Some Graphs

### **PUBLICATION DETAILS OF SCIENCE FACULTY DURING 2020-2021**

MATHEMATICS- Mr. Liju Alex, The R– Index Of Some Graphs, Proceedings of IAM, V.9, N.2, 2020, pp.119-125

Mr. Liju Alex, Some degree based topological indices of a generalized F sums of a graph, Electronic Journal of Mathematical Analysis and Applications (EJMAA), Vol. 9(1) Jan. 2021, pp. 91-111

CHEMISTRY - Dr. Radhika S. Degradation of endocrine disruptors using modified TiO<sub>2</sub> nanorods under sunlight, Indian Journal of Advances 8(4), 140-149, 2020.

COMPUTER SCIENCE- Ms. Ansmol George- published a paper entitled “On minimum resolving energy of a graph” in Aegaeum Journal, Vol 8, Issue 5, 2020.

Ms. Ansmol George- published a paper entitled “The minimum resolving energy of a graph” in International Journal of Mathematics and its applications, Vol 8, 2020, 239-246.

ZOOLOGY- Ms. Priya Thomas published a mini review on the Ecology of Tadpoles in the journal “Science and Society”, ISSN 0973-0206, Volume 18, Issue1.

BOTANY- Vandana P. Nair, Parvathy AJ, FTIR Spectroscopic studies on *Strobilanthes Ciliatus* Nees (Bremek), in Gyanshauryam, International, Scientific Referred Journal.

Vandana P. Nair, Akhila S Viswan, Ethnobotanical knowledge of Mannan Tribe in Selected region of Kovimala, Idukki Distict, in International Journal of Innovative Science and Research technology.

Antu Mariya Jose, Vaishnavi A and Aswathy A. (2020). Anti-mitotic activity of aqueous leaf extracts of *Azadirachta indica* A. Juss. and *Simarouba glauca* DC. on *Allium cepa* L. root tips. *Journal of pharmacognosy and Phytochemistry*. 9(5):485-489.

Antu Mariya Jose and Divya Surendran. (2020). Comparative allelopathic effect of *Syzygium aromaticum* and *Myristica fragrans* on seed germination of *Amaranthus cruentus*. *Journal of Advanced Scientific Research*. 11(4): 347-349.

Antu Mariya Jose, Arya Gopi and Febamol Shaji (2020). Allelopathic effect of aqueous leaf extracts of two invasive plants (*Chromolaena odorata* (L.) R.M. King & H. Rob. and *Sphagneticola trilobata* (L.) Pruski) on seed germination of *Amaranthus cruentus* L. *Journal of Advanced Scientific Research*. 11(4) suppl 9 : 198- 201.

Archana G Nair and Sindrella Philip (2020). Allelopathic effect of *Azadirachta indica* A. Juss and *Mikania micrantha* Kunth. leaf extracts on seed germination of *Amaranthus spinosus* L. *Journal of Advanced Scientific Research*. 11(3): 334-337.

Archana G Nair and Anjana A. (2020). Allelopathic effect of *Lantana camara* L. and *Tectona grandis* L.F. leaf extracts on seed germination of *Amaranthus spinosus* L. *Journal of Advanced Scientific Research*. 11 suppl 5: 198-200.