## Water Analysis report (2019-2020)

## **Organized by the Department of Chemistry**

The academic year 2019-20 was a revamping year for the water analysis unit. Several samples came to our laboratory for testing after the flood and related issues. We purchased a new water quality analyzer on 2<sup>nd</sup> February, 2022 when our old unit was damaged in flood on 15<sup>th</sup> August, 2018. The new instrument was purchased by utilizing the DBT-STAR College funding scheme. We have repaired the old water analyzer instrument and are using a micro controller based SYSTRONICS brand water analyser unit.

In order to provide life skills to the students in the Department of Chemistry, we are giving training in water analysis. Water purity is essential for our good health. Whether our water causes illness, stains on plumbing, scaly deposits, or a bad taste, a water analysis identifies the problem and enables us to make knowledgeable decisions about water treatment. The department is conducting water analysis for local areas of Chalakudy.

Dr. Santhosh Paul was given the guidance for this programme. Thirty eight third year B.Sc chemistry students actively participated in this analysis and twenty five water samples were analysed during this year.



list of students has participated in this activity is given below.

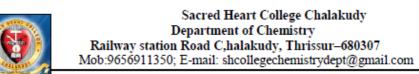
HEART

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	e			
(01)	Aleena Rose Jacob			
2	Amritha K. S			
3	Angel			
4	Anju T.B			
5	Anlin George P			
6	Ann MariyaShaji			
7	Ann Mariya Thomas			
8/04	AnnmerlinCheriyan			
9	Ansa Antony			
10	Archana S			
11	AnuSanthosh			
12	Dhanya George			
13	FathimaNusra T P			
14	GayathriUnnikrishnan			
15	Gracy Simon			
16	Harsha M S			
17	Heffty Jose			
18	IndhuPrasanan			

19	Irene Johny
20	Jensy Joy
21	Jesmy Jose
22	Jewel M Shaji
23	Jismol M S
24	Keerthi Joseph
25	Krishna Rajesh
26	Krishna Suresh A
27	Manju S Nair
28	Neenu Maria Thankachan
29	Pooja N P
30	RighaBabu
31	Risna P R
32	SajithaBarvin S
33	Shiya Johnson
34	Soniya Johnson
35	Sreebhavya C handran
36	Sreekutty K S
37	Viniya T V
38	Vrinda B
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Sample certificate is given below

LIGHT SHINES IN DARKNESS



## Water Quality Analysis

Date of Collection:10/07/2017 Name: Source:well water Date of testing:10/07/2017

Ref: IS: 10500

No.	Parameters	Unit	Desirable limit	Permissible limit	Observed value
1	Ammonium	ppm	0.2	0.5	0.5
2	P <sup>H</sup>	6.5-8.5			5.64
3	Alkalinity (Total)	ppm	200	600	30
4	Calcium Hardness	ppm	75	200	35
5	Total hardness (in terms of CaCO <sub>3</sub> )	ppm	300 - 600		470
6	Chloride	ppm	250	1000	40
7	Fluoride	ppm	1	1.5	Nil
8	Iron	ppm	0.3	1	Nil
9	Residual chlorine	ppm	0.2	1	Nil
10	Nitrate	ppm	45		5
11	Nitrite	ppm	0.5	1	0.5
12	Phosphate	ppm	5	5	Nil
13	Conductivity	μS	2500 μS		227
14	Salinity	ppt	1 x 10 <sup>8</sup>		-
15	Total dissolved solids	ppm	500	2000	Nil
16	Turbidity	NTU		10	-
17	Ecoli/colifrm bacteria				present

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Technician/in-charge