

# UNIVERSITY OF CALICUT

(IQAC)

INFORMATION FOR

ACADEMIC AND ADMINISTRATIVE AUDIT OF THE DEPARTMENT

Year: 2020 - 21

(Provide information for last five years from 2016-17 to 2020-21)

1. Name of the Department : **Department of Environmental Science**
2. Year of establishment : **2015**
3. Courses offered : **M.Sc. Environmental Science**

Year	PG	M. Phil	Ph.D.	Others
2016-17	<b>M.Sc.</b>	-	-	-
2017-18	<b>M.Sc.</b>	-	-	-
2018-19	<b>M.Sc.</b>	-	-	-
2019-20	<b>M.Sc.</b>	-	-	-
2020-21	<b>M.Sc.</b>	-	-	-

4. Courses introduced during last 5 years: **M.Sc. programme in Environmental Science**
5. Does the department have Academic flexibility? If yes since when? **Yes (from 2015)**
6. Interdisciplinary programs offered and departments involved: **Programme is interdisciplinary and students can have access to all science departments for fulfilling their course requirements.**
7. Courses conducted in collaboration with other universities and Institutions: **Nil**
8. Details of programmes discontinued, if any, with reasons: **Nil**
9. Examination System: Annual/ Semester/Choice Based Credit System/ Credit and Grading system/ any other system, specify: **Choice based credit system**
10. Participation of the department in the curriculum development for courses offered by the Departments: **Yes**
11. Does the department have different syllabus than the one used by university for PG courses? **Yes, different syllabus**
12. Number of teaching posts sanctioned, filled and vacant.

Designation	Sanctioned	Filled	Filled under CAS
Professor	-	-	
Associate Professor	-	-	
Assistant Professor*	4	3	
<b>Total</b>	<b>4</b>	<b>3</b>	

\*on contract

13. Faculty profile with name, qualification, designation, experience, nature of appointment (confirmed/ probation/temporary):

a) Appointed on Government Sanctioned Post.

Name	Designation	Qualifications	Teaching/Research Experience	Nature of appointment,.
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

b) Appointed from University Fund (Ad-hoc/Guest/contract Faculty).

Name	Designation	Qualifications	Teaching/Research Experience	Nature of appointment,.
Dr. Rathy M.C.	Assistant Professor	M.E.M, M.Phil, Ph.D.	Teaching	On contract
Dr. T.R. Shanthi	Assistant Professor	M.E.M, M.Phil, Ph.D.	Teaching	On contract
Ms. Shamili V.K.	Assistant Professor	M.Sc, M.Phil	Teaching	On contract
Dr. Sabna.V	Assistant Professor	M.Sc, Ph.D.	Teaching	On contract
Ms. Jashitha.A	Assistant Professor	M.Sc	Teaching	On contract
Dr. Leya Thomas	Assistant Professor	M.Sc, Ph.D.	Teaching	On contract

14. List of Visiting Fellows/Teachers, Adjunct and Emeritus Professors, (for last 5 years).

Dr. C.C. Harilal (Professor), Division of Environmental Science, Department of Botany, University of Calicut officiating as Coordinator, Department of Environmental Science, University of Calicut

15. Percentage of classes taken by temporary/visiting faculty (programme- wise information): **NIL**

16. Programme-wise Student Teacher Ratio: (Average of 5 Years): **14:1**

17. Number of academic support staff (technical) and administrative staff sanctioned, filled and vacant:

Sr. No.	Posts	Sanctioned posts	Filled	Actual
1	Laboratory Assistant	-	-	-
2	Clerk (office)	1	1	
3	Laboratory Attendant	-	-	-
4	Peon	-	-	-
5	Other	-	-	-

18. Thrust areas of research as identified by the department: **Resource analysis, Environmental Impact Assessment, Remote Sensing and GIS, Disaster Management, Environmental Biotechnology.**

19. Information about research grants, projects completed and ongoing during the period of last 4 years.

a) From National funding agencies (like UGC, CSIR, DST, DBT etc): **NIL**

Sr. No.	Name of the Principle Investigator (CO-investigator)	Title of the Project	Funding Agency, Duration & date of sanction	Amount (in Lakh)	Remarks if any
-	-	-	-	-	-
-	-	-	-	-	-

b) From International funding agencies: **NIL**

Sr. No.	Name of the Principle Investigator (CO-investigator)	Title of the Project	Funding Agency, Duration & date of sanction	Amount (in Lacs)	Remarks if any
-	-	-	-	-	-

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20. Funds received at Departmental level through DST-FIST; CSIR, UGC-SAP/CAS, DAE, DBT, BRNS, ICSSR, AICTE, etc : **NIL**

Scheme and Funding Agency	Non- Recurring	Recurring	Project Fellow	Total
-	-	-	-	-
-	-	-	-	-

21. Research facilities available in the department and recognition received, if any? **NIL**

22. Special research laboratories sponsored by / created by industry or corporate bodies. **NIL**

23. Publications:

Sr. No.	Papers published in peer reviewed journals	Monographs, Books, Chapters in books	Citations	h-index	Impact factor range/Average Impact factor
1		Ponnani Kole Wetlands: Problems and Prospects- Inventory on the avian fauna associated with Ponnani Kole Wetlands of Kerala-Dr. Rathy.M.C	-	-	Nil

2		<p>Ponnani Kole Wetlands: Problems and Prospects- Surveillance on the quality of water from Ponnani kole wetland of Kerala- Dr.T.R.Shanthi</p>	-	-	Nil
3		<p>Muhammad Dilshad, P.P. and Harilal C.C. Change detection in land cover using Remote Sensing and GIS techniques – A case study of Ponnani Kole Wetland, Kerala. (2019). PONNANI KOLE WETLANDS - Problems and Prospects (ISBN: 978-81-935133-3- 0), Published by Gregor Mendel Foundation, University of Calicut, P. 07 – 15.</p>	-	-	Nil

1	<a href="#"><u>Ajayan K.V., Shamna P., Haritha D.S. and Harilal C C. Fatty acid profile and metal composition of seaweeds from three locations of the continental shelf of Kerala coast, India. (2021). Regional Studies in Marine Science (Elsevier), 45 (11): 101864, DOI: 10.1016/j.rsma.2021.101864</u></a>	-	-	-	<b>(IF: 1.183)</b>
2	<a href="#"><u>Ajayan, K.V., Athira, N.K. and Harilal C.C. A novel method for the release of viable single cells from Botryococcus braunii (Race B) colony using iodine treatment (2020) Algal Research 48:101924 (Elsevier) DOI: 10.1016/j.algal.2020.101924</u></a>		-	-	<b>(IF: 4.008)</b>
3	<a href="#"><u>Ajayan K.V., Anjula, K., Syamasurya A.P. and Harilal C.C. Energy efficient technology for enhanced growth and lipid production in Chlamydomonas reinhardtii through additional reflector coated LED photobioreactor. Biochemical Engineering Journal (Elsevier) 144 (2019) 81-88</u></a>		5	-	<b>(IF: 3.475)</b>
4	<a href="#"><u>Ajayan K.V., P.S. Manaswini and C.C. Harilal (2018) Effect of nitrate and phosphate levels on biochemical contents and fatty acid methyl esters profile of Monoraphidium contortum (Thuret). Eco Chronicle (ISSN: 0973-4155) Vol. 13, No. 2. June, 2018.</u></a>		-	-	<b>Nil</b>

5	<u>Anjana T.P. and Harilal C.C.</u> <u>RESPONSES OF SELECTED TREE SPECIES TO ELEVATED LEVELS OF CARBONDIOXIDE, Eco Chronicle Vol. 13 (2019), ISSN: 0973-4155</u>		-	-	<u>Nil</u>
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24. Details of patents filed & granted and income generated: **NIL**

25. Consultancy services provided, name of the teacher/s and income generated: **NIL**

Sr. No.	Year	Name of the teacher	Nature of consultancy	Funds generated (In Lakh)
-	-	-	-	-
-	-	-	-	-

26. Details of teachers invited as resource persons for Refresher courses, Orientation courses, Seminars, Workshops, Conferences at national and international levels. **NIL**

27. Details of teachers participated in Refresher courses, Orientation courses, Seminars, Workshops, Conferences at national and international levels. (participant, presented paper, chaired the session)- **NIL**

28. Participation of teachers in various academic activities as members of committees at University level, State level, National level, International level bodies. (give details)

Dr. T.R. Shanthi – Coordinator, NAAC, Department of Environmental Sciences, University of Calicut

Ms. Shamili V.K. – Coordinator, Alumni Committee, Department of Environmental Sciences, University of Calicut

Dr. Rathy M.C. Convener, Students Grievance Committee, Department of Environmental Science, University of Calicut

29. Details of teachers appointed/nominated on Editorial Boards at university, state, national and international levels-**NIL**

30. Awards / Prizes and recognitions received by teachers at university, state, national and international level- **NIL**

31. Awards and Prizes received by students at university, state, national and international level:

**Mohammed Dilshad P.P., Best paper award at Centre for Water Resources Development and Management on World wetland day (2/2/2021)**

**32. Details of Seminars/ Conferences/Workshops organized at university, state, national and international level and the source of funding with details:**

<b>Name of Conference/ Seminars / Workshops</b>	<b>Funding agency</b>	<b>No. of Participants</b>	<b>University/State/National/ International</b>	<b>Dates</b>
<b>Odonate diversity - field level activities</b>	<b>Departmental fund</b>	<b>50</b>	<b>University</b>	<b>06-02-2020</b>
<b>Mountain day commemoration programme</b>	<b>Departmental fund</b>	<b>65</b>	<b>University</b>	<b>11-12-2021</b>
<b>Geological functioning of wetlands</b>	<b>Departmental fund</b>	<b>40</b>	<b>University</b>	<b>02-02-2021</b>
<b>Talk on Microbial Diversity</b>	<b>Departmental fund</b>	<b>73</b>	<b>University</b>	<b>22-05-2021</b>
<b>Eco friendly technologies</b>	<b>Departmental fund</b>	<b>50</b>	<b>University</b>	<b>05-06-2021</b>

**33. Student profile programme-wise at PG**

<b>PG</b>	<b>Applications Received</b>	<b>No. of students Admitted</b>	<b>Seats Available</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>	<b>Year</b>
<b>2015-2017</b>	<b>120</b>	<b>11</b>	<b>20</b>	<b>3</b>	<b>8</b>	<b>11</b>	<b>2015</b>
<b>2016-2018</b>	<b>128</b>	<b>20</b>	<b>20</b>	<b>2</b>	<b>18</b>	<b>20</b>	<b>2016</b>
<b>2017-2019</b>	<b>1200</b>	<b>20</b>	<b>20</b>	<b>2</b>	<b>18</b>	<b>20</b>	<b>2017</b>
<b>2018-2020</b>	<b>180</b>	<b>20</b>	<b>20</b>	<b>2</b>	<b>18</b>	<b>20</b>	<b>2018</b>
<b>2019-2021</b>	<b>176</b>	<b>20</b>	<b>20</b>	<b>3</b>	<b>17</b>	<b>20</b>	<b>2019</b>
<b>2020 - 2022</b>	<b>1231</b>	<b>20</b>	<b>20</b>	<b>0</b>	<b>20</b>	<b>20</b>	<b>2020</b>



**34. Year-wise results of students at PG:**

PG	Year	Appeared	Passed	Pass %	Grade %			
					O	A	B	C
Environmental Science	2015-17	11	11	100%		70%	30%	
Environmental Science	2016-18	20	20	100%		75%	25%	
Environmental Science	2017-19	19	19	100%		70%	30%	
Environmental Science	2018-2020	18	18	100%		75%	25%	

**35. Information about M. Phil. programme: NIL**

Year	Applications Received	No. of students admitted	Male	Female	Total
-	-	-	-	-	-
-	-	-	-	-	-

**36. Information about Ph. D. programme : NIL**

Year	Applications Received	No. of students admitted	Male	Female	Total
-	-	-	-	-	-
-	-	-	-	-	-

**37. Number of students awarded M.Phil., Ph.D ,Degree :Nil**

Year	M.Phil	Ph.D.	Male	Female	Total
-	-	-	-	-	-
-	-	-	-	-	-

**38. Diversity of Students : (Year-wise)**

Name of the Programme	% of students from the same university	% of students from other universities within the State	% of students from universities outside the State	% of students from other countries
<b>UG</b>	-	-	-	-
<b>PG</b>	<b>70%</b>	<b>28%</b>	<b>2%</b>	<b>NIL</b>
<b>M. Phil.</b>	-	-	-	-
<b>Ph. D.</b>	-	-	-	-

39. Number of students cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give Category wise data.

Year	MPSC/UPSC	NET/SET	GATE	Other Exams	Total
<b>2016</b>	-		-	<b>PSC exam-1 IELTS-2</b>	<b>3</b>
<b>2017</b>	-	<b>1</b>	-	-	<b>1</b>
<b>2018</b>	-	<b>3</b>	-	-	<b>3</b>
<b>2019</b>	-	<b>2</b>	-	-	<b>2</b>
<b>2020</b>	-	<b>1</b>	-	-	<b>1</b>

40. Student progression/ placement record: Number/ percentage of students proceeded for higher studies Number/percentage of students placed:

Year	% proceeded for higher studies		% of students placed
	UG to PG	PG to Ph.D./ M. Phil	
<b>2017</b>	-	<b>20%</b>	<b>15%</b>
<b>2018</b>	-	<b>20%</b>	<b>25%</b>
<b>2019</b>	-	<b>25%</b>	<b>28%</b>
<b>2020</b>	-	<b>40%</b>	<b>30%</b>

**41. Diversity of Faculty:**

Teaching faculty	%
from the same university	-
from other universities within the State	100%
from other States	-
from outside the country	

**42. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. / D.Lit.: 4**

**43. Present details of departmental infrastructural & other facilities with regard to**

- a) Central Library Books and Journals, etc., relevant to Department :
- b) Departmental Library (books, journals etc.) : 102 books
- c) Computers and Internet facilities for staff : Internet facility is available for staff
- d) Total number of class rooms : 5
- e) Class rooms with ICT facility : 5
- f) Students' laboratory : 14
- g) Research laboratories : 0
- h) Seminar Hall : 1
- i) Smart class room : 0
- j) Any other facility LCDs, : 1

**44. List of post-doctoral students and Research Associates -NIL**

a) Post-doctoral. students- NIL

Sr. No.	Name of the Faculty	Post-doctoral Students	Research Topic
1	-	-	-
2	-	-	-

b) Research Associates-NIL

Sr. No.	Name of the Faculty	Research Associates	Research Topic
1	-	-	-
2	-	-	-

**45. Number of post graduate students getting financial assistance from the university/state / central government - 42 students**

**46. Curricular Aspects:**

a) Does the faculty take initiative in curriculum development process? **YES**

b) Is curriculum suitable to make students globally competitive in the

Subject? If yes, substantiate

**The curriculum is inclusive of topics like resource conservation, sustainable development, biodiversity conservation, climate change, pollution management, environmental planning and policies, which are significant in a global perspective**

c) Does the department offer program with sufficient no. of electives options-**YES**

d) While framing curriculum, is feed-back taken from stakeholder's viz. Students/Alumni/Parents/Employers considered? **Feedback obtained from Students, alumni and teachers.**

e) What is the frequency of curriculum revision? (3/4/5 years or more) **4 years**

f) Does the curriculum have emerging thrust areas, including interdisciplinary areas? (If yes, elaborate). **Yes. The Curriculum has emerging thrust areas like Water resource analysis, Air quality analysis, Soil analysis, Remote Sensing and GIS applications, Environmental Impact Assessments, Biodiversity documentation and applied areas like Environmental Biotechnology. The topics covered are mostly of interdisciplinary nature.**

#### 47. Teaching-Learning, Evaluation.

1) Number of teachers preparing & following Academic Teaching plan -**3 teachers**

2) How many teachers use the following teaching methods?

a) Interactive lecture method using blackboard, Group discussions, Problem solving, Seminars. **All the 3 teachers**

b) Use ICT methods to support lectures –**All the 3 teachers**

3) Does the Department have Peer review processes? If yes, are the suggestions effectively used to improve the teaching quality?- **Yes the peer review process is conducted yearly and the suggestions are used to improve the quality of teaching**

4) Does the department have any mechanism to ensure that entire syllabus is completed? **Departmental Council meetings are held periodically to assess the extent of syllabus completed and the effectiveness of teaching learning process.**

5) Do you offer Bridge/Remedial courses? If yes, Give details. **Yes. The M.Sc. programme in Environmental Science is an interdisciplinary one, with intake of students from physical / chemical and biological sciences. Bridge courses are offered in the first semester to bring students from various disciplines to get acquaintance with basic concepts of Ecology and Environmental Sciences.**

6) What is the method for conducting internal evaluation? **Students are frequently given field works, assignments, seminars and will be monitored through an internal evaluation mechanism.**

**48. Teacher Performance:**

1) Whether the performance of the teacher assessed by the students? **Yes, through an online portal of the University**

If yes, are the feedback reports analysed and suggestions communicated to teachers? - **Yes**

2) Number of teachers getting a) Very Good \_\_\_\_ b) Good **\_\_3\_\_**  
c) Average \_\_\_\_\_ remarks from students.

3) Whether suggestion boxes are kept in the department to get suggestions from students on infrastructural facilities available in the department- **YES**

4) Are the suggestions received from students used for improvement of Facilities-**YES**

5) Do teachers submit Self-Appraisal Reports? Are these reports appraised by HOD and forwarded to the university with comments-**Yes, appraisal of teachers performance by the students and HoD are mandatory for the renewal of contract period of the Teachers.**

6) What is the individual faculty wise h index?

**Dr. Shanthi T.R. : Nil**

**Dr. Rathy M.C. : 3**

**Ms. Shamili V.K. : Nil**

**Dr. Sabna V : Nil**

**Dr. Leya Thomas : 23**

**Ms. Jashitha A : Nil**

7) Give details of “beyond syllabus scholarly activities” of the department-

- **Field visits to ecologically important areas**
- **Organising Awareness Campaigns for students and general public in the areas of Energy Conservation and the use of Biopesticides / Insecticides and sustainable agricultural practices**
- **Undertaking Resource Analysis, Environmental Audits and advocacy for Local Panchayats and educational institutions**
- **Preparation of project proposals for rain water and runoff water harvesting for Calicut University campus for ensuring sustainability in water resources**

- Undertaking drinking water quality assessment and advocacy for local populace and Soil quality analysis for farmers of the nearby areas
49. List the distinguished alumni of the department (maximum 10): Nil
50. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.
- Seminar on Odonate diversity and field level biodiversity assessment activities-Vivek Chandran, Member, Odonate Society of Kerala
  - Geological functioning of wetlands- Dr. Arun Kumar, Department of Geology, M.E.S College, Ponnani
  - Microbial Diversity of extreme habitats- Dr. A. A. Mohamed Hatha, Professor, Department of Microbiology, Marine biology and Biotechnology, Cochin University of Science and Technology
  - Eco friendly technologies-Dr. V. Kumaresan, Associate Professor, K. M. Government institute for post graduate studies and research, Pondichery
51. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored? By periodic analysis of OBE components envisaged in the syllabus.
52. Highlight the Special facilities (if, any) of the Department. Water quality testing facility, Soil analysis facility.
53. Highlight the unique features of the department. Conducting an interdisciplinary programme in a priority area of global significance; Conducting resource analysis and EIA studies and offering advocacy on various aspects of Environmental Audits; convening awareness programmes on environmental conservation and resource management.
54. State the Innovative practices adopted in the department. Participation of students and faculty members in extension activities. Energy Conservation Awareness Campaigns are organised, targeting general public and members of self-help group. Environmental Audits and feasibility studies are undertaken for the installation of runoff and rain water harvesting in the campus for ensuring sustainability in water resources, Water quality assessments are undertaken for existing water resources within the campus.
55. Highlight the participation of students and faculty in extension activities.

I) Energy conservation awareness campaign ECAC

Name of Scheme – ECAC

Organising agency - Energy Management centre ,Govt of Kerala .

Students were engaged in the distribution of awareness material within the campus and outside.

Programme held : Vallikkunnu and Velimukku Panchayat community hall of Malappuram

Target group : general public and members of self-help group.

**II) Science Day programme - Water quality analysis**

**Name of Scheme – SHASTRAYAN**

**Date 9/03/2018 to 10/03/2018**

**9**

**No of Participants -45**

**III) World Wetland programme – Seminar and Workshop**

**Date 17/October/2019**

**No of Participants -40**

**Name of Scheme – SWAK**

**Organising agency : State wetland Authority of Kerala IV) Students Participated in Biodiversity registry preparation of Thenhipalam Gramapanchayath**

**56. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.**

- **Strengths:**
  - **Qualified / experienced faculty members from multi-disciplinary areas of Environmental Sciences**
  - **Offering provision for students from heterogeneous science groups to deal with a science subject of contemporary significance**
  - **Provision for interdisciplinary academic activities, encompassing allied science disciplines**
  - **Providing job oriented, skilled based courses, offering employability to job aspirants**
- **Weaknesses:**
  - **Present functioning of the department in self-finance stream and thereby lack of provision for the appointment of regular faculty members**
  - **Lack of recognition as a research centre**
  - **Intake of students with a higher fee structure than that of government aided courses**
- **Opportunities:**
  - **To function as an aided department in the University of Calicut**
  - **To offer M.Phil./ Ph.D. and specialized programmes in Environmental Sciences**
  - **To undertake research projects in innovative areas, funded by state, national and international agencies**
- **Challenges:**

- **To undertake research and development activities in highly prioritized areas of environmental sciences**
- **To establish international collaborations with leading organizations in priority areas**

**57.Future plans of the department:**

- **Long term plans - To convert the department into a “Centre for Excellence” in Environmental Studies and Research**
- a. **Short term plans – to convert the department into an aided one and to initiate more academic programmes in the immediate future.**

**Declaration by the Head of the Department/Institution:**

**I am aware that the above information provided by the department will be validated by the AAA committee during the visit.**

**Head of Department  
Prof. (Dr) C.C. Harilal  
Course Coordinator / Head  
Department of Environmental Science  
University of Calicut**

**Date:  
25/06/2021**



### **Format for preparing the faculty profile:**

(Provide the information for last five years from 2016-17 to 2020-21)

1. Name of the faculty : Dr. SABNA V.
2. Name of the Department : Dept. of Environmental Science
3. Educational qualifications : M. Sc. Environmental Technology,  
Ph. D. Environmental Engineering,  
UGC –NET- JRF and Lectureship
4. Present position : NIL
5. Address for correspondence : PULLAT PARAMBIL HOUSE, THIRUNNAVAYA P.O.,  
MALAPPURAM DT. 676301
6. E-mail and contact number : sabnavv@gmail.com
7. Specialization : Wastewater Treatment
8. Total teaching experience : 4 years
9. Courses taught : M.Sc. Environmental Science  
Physical Process In The Environment,  
Remote Sensing and GIS  
Hydrology  
Statistics  
Environmental Engineering  
Environmental Chemistry  
  
M. A/ M.Sc. Environmental Studies  
Environmental Geology  
Energy and Environment  
Environmental Impact Assessment and Disaster  
Management  
Environmental Laws  
Environmental Philosophy  
Sustainable Urbanization  
Environmental Biotechnology and Toxicology
10. Research experience : 7 years
11. Major research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI. : Nil

12. Minor research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI.: Nil
13. Number of students awarded Ph.D. degree: Name of the student, topic of research, date of registration, date of declaration of Ph.D. degree.: NA
14. Number of students registered for Ph.D. degree: Name of the student, topic of research, date of registration.: NA
15. Provide information as indicated in 11 and 12 above.: NA
16. Participation in conferences, symposia, seminars and workshops: International, national, state or university level, attended. Presented paper, chaired session. Resource person.

#### PAPERS PRESENTED IN CONFERENCES

Sl. No.	Title of the paper	Name of the conference	Authors	Date and year
1	Manganese dioxide nanoparticles for the oxidative degradation of methyl orange	International Online Conference on Sustainable Technologies in Water Treatment and Desalination (STWTD-2020), Dept. of Chemical Engineering, National Institute of Technology Calicut	V. Sabna, Santosh G. Thampi, and S. Chandrakaran	18 <sup>th</sup> – 19 <sup>th</sup> Dec 2020
2	An investigation on the oxidative degradation of crystal violet using needle like MnO <sub>2</sub> nanostructures	28 <sup>th</sup> Kerala Science Congress, University of Calicut	V. Sabna, Santosh G. Thampi, and S. Chandrakaran	28 <sup>th</sup> – 29 <sup>th</sup> Jan 2016
3	Fabrication and characterization of functionalized multiwalled carbon nanotubes/ polysulphone nanocomposite membrane	24 <sup>th</sup> Swadeshi Science Congress, Thunchath Ezhuthachan Malayalam University, Tirur.	V. Sabna, Santosh G. Thampi, and S. Chandrakaran	6 <sup>th</sup> – 8 <sup>th</sup> Nov 2014

4	Manganese dioxide nanoparticles for the oxidative degradation of rhodamine B	International Conference on Water, Energy and Environment (ICWEE), College of Engineering, American University of Sharjah, Sharjah, UAE	V. Sabna, Santosh G. Thampi, and S. Chandrakaran	28 <sup>th</sup> Feb – 2 <sup>nd</sup> March 2017
5	Application of different isotherm models for equilibrium sorption of crystal violet onto functionalized multi-walled carbon nanotubes	International Conference on Energy, Environment, Materials, and Safety (ICEEMS'14)	V. Sabna, Santosh G. Thampi, and S. Chandrakaran	10 <sup>th</sup> – 12 <sup>th</sup> Dec 2014
6	Crystal Violet Adsorption on Functionalised Multi-walled Carbon Nanotubes: Kinetic And Equilibrium Studies	International Conference on Advanced Functional Materials (ICAFM)	V. Sabna, Santosh G. Thampi, and S. Chandrakaran	19 <sup>th</sup> – 21 <sup>st</sup> Feb 2014
7	Functionalisation of Multiwalled Carbon Nanotubes	International Conference on Green Technology for Environmental Pollution Prevention and Control (ICGTEPC 2014)	V. Sabna, Santosh G. Thampi, and S. Chandrakaran	27 <sup>th</sup> – 29 <sup>th</sup> Sept 2013
8	Carbon nanotubes for desalination of water	International Conference & Exhibition on Water, Wastewater & Isotope Hydrology (ICE-WWISH-2013)	V. Sabna, Santosh G. Thampi, and S. Chandrakaran	25 <sup>th</sup> -28 <sup>th</sup> July 2013
9	Study on the leaching of Mercury from the Compact Fluorescent Lamps to the soil by Anodic Stripping Voltammetry	Young Environmental Researchers Conference, Centre for Water Resources Development and Management, Kozhikode, Kerala, India.	P. S. Harikumar, Amit Dhruvan, Sabna V, Babitha	22 <sup>nd</sup> – 23 <sup>rd</sup> March 2010

#### CONFERENCES ATTENDED:

- International conference on advances in materials and techniques for infrastructure development (AMTID 2011), Dept. of Civil Engineering, National Institute of Technology Calicut, Kozhikode, Kerala, 28 – 30<sup>th</sup> Sept 2011.

## **SEMINARS ATTENDED**

- Seminar on ‘Appropriate Technology for Sustainable Development’ organized by the Centre for Rural Development and Appropriate Technology, Kochi 22 held on 29<sup>th</sup> Sept 2007
- Seminar on ‘Environment and Human Health’ held at School of Environmental Studies, CUSAT organized by Rajiv Gandhi Centre for Contemporary Studies, CUSAT on 10<sup>th</sup> October, 2006.
- Lecture Seminar On Contemporary Studies held at School of Environmental Studies, organized by Rajiv Gandhi Center for Contemporary Studies, CUSAT on 19<sup>th</sup> Jan 2007
- Seminar on ‘Viable Technologies for Livelihood Enhancement’ held at School of Environmental Studies, Kochi organized by Rajiv Gandhi Center for Contemporary Studies, CUSAT on 8<sup>th</sup> Feb 2007.
- National Seminar on Soil, Water and crop management for higher productivity of Spices, CWRDM, Kozhikode, Kerala, 11-12<sup>th</sup> Feb 2010.
- National Seminar on Intellectual Property and Digital Rights Management, Education Technology and Library, NITC, Kozhikode, Patent Information Centre, KSCSTE, Kerala, 26 – 27<sup>th</sup> Nov 2010.
- Three Days National Seminar on Sustainable Development and Environmental Challenges, Thunjath Ezhuthachan Malayalam University, Tirur, 8<sup>th</sup> to 9<sup>th</sup> June 2016.

## **TRAINING PROGRAMMES ATTENDED**

- Career Advancement Program for Scientists/Academicians Training of Scientists, Technologists and Academicians with Special Focus on Women, Centre for Water Resources Development and Management, Kozhikode, Kerala, India 15<sup>th</sup> July 2011.
- TEQUIP II Sponsored Short Term Training Program on Environmental Forensics, Department of Civil Engineering, National Institute of Technology Calicut, Kozhikode, Kerala, India
- Instruments for Environmental Quality Assessment (IEQA-2015), Department of Civil Engineering, National Institute of Technology Calicut, Kozhikode, Kerala, India

## **WORKSHOPS ATTENDED**

- Workshop on Research Methodology, Writing Practices and Language Skills, Central Water Analysis Laboratory (CWAL), Centre for Water Resources Development and Management, Kozhikode, Kerala, 04 – 05<sup>th</sup> March 2011.
- National Workshop on Multivariate Analysis using SPSS and Spreadsheets, School of Management Studies, National Institute of Science and Technology Calicut, Kerala, 30<sup>th</sup> January to 1<sup>st</sup> February 2014.
- Workshop on Spectroscopy: Instrumentation and Applications, Applied Optics and Instrumentation Group, School of Nano Science and Technology, National Institute of Technology Calicut, Kerala, 11<sup>th</sup> January, 2014.

- TEQUIP II Sponsored National Workshop on Water, Air and Soil: Sampling and Analysis (WASSA-2014), Department of Civil Engineering, National Institute of Technology Calicut.

17. Innovative processes developed in teaching and learning.: NA

18. Participation in curricular development: NA

19. Participation in co-curricular and extra-curricular activities. : NA

20. Refresher and Orientation courses attended: NA

21. Examination /Evaluation reforms initiated: NA

22. Publication of research papers: in peer reviewed journals, non-peer reviewed journals, conference proceedings, impact factors, citations, h-index. Numbers in SCOPUS.

Sl. No.	Title	Published in	Year	Journal / Conference Proceedings	Citations	ISSN / ISBN No.	h-index	Impact Factor	Scopus Indexed	Authors
1	Adsorptive removal of cationic and anionic dyes using graphene oxide	Water Science and Technology, 78 (4), 732-742	2018	Journal	3	0273-1223	25	1.638	Yes	V. Sabna, Santosh G. Thampi, and S. Chandrakaran
2	Degradation of rhodamine B with manganese dioxide nanorods	Journal of Water and Health, 16 (5), 846 - 856	2018	Journal	3	1477-8920	59	1.349	Yes	V. Sabna, Santosh G. Thampi, and S. Chandrakaran

3	Adsorption of crystal violet onto functionalised multi-walled carbon nanotubes: equilibrium and kinetic studies	Ecotoxicology and Environmental Safety, 134 (2), 390 – 397	2016	<b>Journal</b>	59	0147-6513	129	4.872	Yes	V. Sabna, Santosh. G. Thampi, and S. Chandrakaran
4	Water and Sediment Quality Assessment of a Multipurpose Reservoir in India	Journal of Environmental Science and Engineering, 4(2), 1-8	2010	<b>Journal</b>	--	1934-8932	--	Peer reviewed	No	P. S. Harikumar, Moly A, Sabna V
5	Study on the leaching of mercury from compact fluorescent lamps using stripping voltammetry	Journal of Toxicology and Environmental Health Sciences, 3(1), 8 – 13	2011	<b>Journal</b>	--	2006-9820	--	Peer reviewed	No	P. S. Harikumar, Amit Dhruvan, Sabna V, Babitha
6	An investigation on the oxidative degradation of crystal violet using needle like MnO <sub>2</sub> nanostructures	28 <sup>th</sup> Kerala Science Congress	2016	<b>Conference Proceedings</b>	-	--	NA	NA	No	Joint V. Sabna, S. G. Thampi, and S. Chandrakaran

7	Fabrication and characterization of functionalized multiwalled carbon nanotubes/polysulphonate nanocomposite membrane	24 <sup>th</sup> Swadeshi Science Congress	2014	<b>Conference Proceedings</b>	-	978-81-928129-2-2	NA	NA	No	Joint <b>V. Sabna, S. G. Thampi, and S. Chandrakaran</b>
8	Manganese dioxide nanoparticles for the oxidative degradation of rhodamine B	International Conference on Water, Energy and Environment (ICWEE), Sharjah	2017	<b>Conference Proceedings</b>	-	--	NA	NA	No	Joint <b>V. Sabna, S. G. Thampi, and S. Chandrakaran</b>
9	Application of different isotherm models for equilibrium sorption of crystal violet onto functionalized multi-walled carbon nanotubes	International Conference on Energy, Environment, Materials, and Safety (ICEEM S'14)	2014	<b>Conference Proceedings</b>	-	978-93-80095-58-5	NA	NA	No	<b>V. Sabna, S. G. Thampi, and S. Chandrakaran</b>

10	Carbon nanotubes for desalination of water	International Conference & Exhibition on Water, Wastewater & Isotope Hydrology (ICE-WWISH-2013)	2013	Conference Proceedings	-	--	NA	NA	No	V. Sabna, S. G. Thampi, and S. Chandrakaran
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23. Books published: with ISBN No., Without ISBN No., Chapters in books. : NIL

24. Patents Applied/Granted: National. International, commercialized: NIL

25. Consultancy services provided and revenue generated: NIL

26. Conferences ,seminars, symposia and workshops organized as convener/coordinator: NIL

27. Number of collaborations: NIL

28. Awards /recognitions received: International, National, State, University level.

Note: If necessary for Item No. 11 and 12 provide information in Enclosure-I, for 13, 14 and 15 Enclosure- II, for 16 Enclosure-III, for 22 and 23 Enclosure- IV and so on.

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### **Format for preparing the faculty profile:**

(Provide the information for last five years from 2016-17 to 2020-21)

1. Name of the faculty: Jashitha A
2. Name of the Department: Department of Environmental Science
3. Educational qualifications: Msc Environmental Studies
4. Present position: Asst prof on contract 2015-18
5. Address for correspondence: Aluvingal House 598 Ayyappan kandi parambu ,Kolathara 673655 Kozhikode Dist



6. E-mail and contact number: [jashitha85@gmail.com](mailto:jashitha85@gmail.com) , 9605165877
7. Specialization: Nil
8. Total teaching experience: 4 year
9. Courses taught: Msc Environmental Science
10. Research experience: Nil
11. Major research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI - Nil
12. Minor research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI. - Nil
13. Number of students awarded Ph.D. degree: Name of the student, topic of research, date of registration, date of declaration of Ph.D. degree. - Nil
14. Number of students registered for Ph.D. degree: Name of the student, topic of research, date of registration. - Nil
15. Provide information as indicated in 11 and 12 above. - Nil
16. Participation in conferences, symposia, seminars and workshops: International, national, state or university level, attended. Presented paper, chaired session. Resource person. - Nil
17. Innovative processes developed in teaching and learning - Nil
18. Participation in curricular development: - Nil
19. Participation in co-curricular and extra-curricular activities - Nil
20. Refresher and Orientation courses attended: - Nil
21. Examination /Evaluation reforms initiated: - Nil
22. Publication of research papers: in peer reviewed journals, non-peer reviewed journals, conference proceedings, impact factors, citations, h-index. Numbers in SCOPUS - Nil
23. Books published: with ISBN No., Without ISBN No., Chapters in books - Nil
24. Patents Applied/Granted: National. International, commercialized: - Nil
25. Consultancy services provided and revenue generated: - Nil
26. Conferences ,seminars, symposia and workshops organized as convener/coordinator: - Nil
27. Number of collaborations:- Nil
28. Awards /recognitions received: International, National, State, University level- Nil

Note: If necessary for Item No. 11 and 12 provide information in Enclosure-I, for 13, 14 and 15 Enclosure-II, for 16 Enclosure-III, for 22 and 23 Enclosure- IV and so on.

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### **Format for preparing the faculty profile:**

(Provide the information for last five years from 2016-17 to 2020-21)

1. Name of the faculty: Dr. Leya Thomas
2. Name of the Department: Department of Environmental Science
3. Educational qualifications: M.Sc; PhD
4. Present position: NA
5. Address for correspondence: St.Antonys Cottage,P.O.Thoyakkavu,Pin-680513
6. E-mail and contact number: layam31@gmail.com, 9656880421
7. Specialization: Environmental Biotechnology
8. Total teaching experience: 3 years
9. Courses taught: Environmental Science
10. Research experience: 5 years
11. Major research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI -Nil
12. Minor research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI. -Nil
13. Number of students awarded Ph.D. degree: Name of the student, topic of research, date of registration, date of declaration of Ph.D. degree. -Nil
14. Number of students registered for Ph.D. degree: Name of the student, topic of research, date of registration. -Nil
15. Provide information as indicated in 11 and 12 above.-Nil
16. Participation in conferences, symposia, seminars and workshops: International, national, state or university level, attended. Presented paper, chaired session. Resource person. -Nil
17. Innovative processes developed in teaching and learning -Nil
18. Participation in curricular development:-Nil
19. Participation in co-curricular and extra-curricular activities.-Nil

20. Refresher and Orientation courses attended: -Nil
21. Examination /Evaluation reforms initiated: -Nil
22. Publication of research papers: in peer reviewed journals, non-peer reviewed journals, conference proceedings, impact factors, citations, h-index. Numbers in SCOPUS. -Nil
23. Books published: with ISBN No., Without ISBN No., Chapters in books. -Nil
24. Patents Applied/Granted: National. International, commercialized:-Nil
25. Consultancy services provided and revenue generated:-Nil
26. Conferences ,seminars, symposia and workshops organized as convener/coordinator:-Nil
27. Number of collaborations:-Nil
28. Awards /recognitions received: International, National, State, University level. -Nil

Note: If necessary for Item No. 11 and 12 provide information in Enclosure-I, for 13, 14 and 15 Enclosure-II, for 16 Enclosure-III, for 22 and 23 Enclosure- IV and so on.

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### **Format for preparing the faculty profile:**

(Provide the information for last five years from 2016-17 to 2020-21)

1. Name of the faculty: **Dr.T.R.Shanthi**
2. Name of the Department: Department of Environmental Science
3. Educational qualifications: M.E.M, M.Phil., Ph.D.
4. Present position: Assistant Professor (on contract), Department of Environmental Science, University of Calicut.
5. Address for correspondence: Nandanam, Near Perumanpura Temple, Perumanna
6. E-mail and contact number: [shanthifa@yahoo.com](mailto:shanthifa@yahoo.com), 9567965522
7. Specialization: Environmental Science
8. Total teaching experience: 10 years
9. Courses taught: Environmental Science
10. Research experience: Nil

11. Major research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI- Nil
12. Minor research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI- Nil
13. Number of students awarded Ph.D. degree: Name of the student, topic of research, date of registration, date of declaration of Ph.D. degree - Nil
14. Number of students registered for Ph.D. degree: Name of the student, topic of research, date of registration- Nil
15. Provide information as indicated in 11 and 12 above.
16. Participation in conferences, symposia, seminars and workshops: International, national, state or university level, attended. Presented paper, chaired session. Resource person- Nil
17. Innovative processes developed in teaching and learning- Nil
18. Participation in curricular development: Nil
19. Participation in co-curricular and extra-curricular activities- Nil
20. Refresher and Orientation courses attended: Nil
21. Examination /Evaluation reforms initiated: Nil
22. Publication of research papers: in peer reviewed journals, non-peer reviewed journals, conference proceedings, impact factors, citations, h-index. Numbers in SCOPUS.-NIL
23. Books published: with ISBN No., Without ISBN No., Chapters in books.
  1. Hasna.P.V.P and Shanthi.T.R (2019). Surveillance on the quality of water from Ponnani kole wetland of Kerala, Ponnani Kole Wetlands: Problems and Prospects (30-42), Gregor Mendel Foundation. ISBN NO: 978-81-935133-3-0.
  2. Shanthi,T.R, M. Vasanthi, and A. A. Mohamed Hatha (2021). Bioremediation of Lindane-Contaminated Soil and Water Ecosystems: A Review, Organic pollutants- Toxicity and solutions (207-227), ISBN 978-3-030-72440-5.
25. Patents Applied/Granted: National. International, commercialized: Nil
26. Consultancy services provided and revenue generated: Nil
27. Conferences ,seminars, symposia and workshops organized as convener/coordinator: Nil
28. Number of collaborations: Nil
29. Awards /recognitions received: International, National, State, University level. Nil

Note: If necessary for Item No. 11 and 12 provide information in Enclosure-I, for 13, 14 and 15 Enclosure-II, for 16 Enclosure-III, for 22 and 23 Enclosure- IV and so on.

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**Format for preparing the faculty profile:**

(Provide the information for last five years from 2016-17 to 2020-21)

1. Name of the faculty: SHAMILI. V. K
2. Name of the Department: DEPARTMENT OF ENVIRONMENTAL SCIENCE
3. Educational qualifications: M.Phil
4. Present position: ASSISTANT PROFESSOR ON CONTARCT
5. Address for correspondence: SHAMILI. V. K  
POOTHARA HOUSE  
KANDANASSERY POST  
GURUVAYOOR  
THRISSUR DST - 680102
6. E-mail and contact number: [shamili.vk@gmail.com](mailto:shamili.vk@gmail.com) Mob No - 9744648733
7. Specialization: ENVIRONMENTAL SCIENCE
8. Total teaching experience: 9 YEARS
9. Courses taught: ENVIRONMENTAL SCIENCE
10. Research experience: - Nil
11. Major research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI. - Nil
12. Minor research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI. - Nil
13. Number of students awarded Ph.D. degree: Name of the student, topic of research, date of registration, date of declaration of Ph.D. degree. - Nil
14. Number of students registered for Ph.D. degree: Name of the student, topic of research, date of registration. - Nil
15. Provide information as indicated in 11 and 12 above.

16. Participation in conferences, symposia, seminars and workshops: International, national, state or university level, attended. Presented paper, chaired session. Resource person. - Presented a paper on LAKE 2012 National Conference
17. Innovative processes developed in teaching and learning. Nil
18. Participation in curricular development: Nil
19. Participation in co-curricular and extra-curricular activities. Nil
20. Refresher and Orientation courses attended: Nil
21. Examination /Evaluation reforms initiated:
22. Publication of research papers: in peer reviewed journals, non-peer reviewed journals, conference proceedings, impact factors, citations, h-index. Numbers in SCOPUS. Nil
23. Books published: with ISBN No., Without ISBN No., Chapters in books. Nil
24. Patents Applied/Granted: National. International, commercialized: Nil
25. Consultancy services provided and revenue generated: Nil
26. Conferences ,seminars, symposia and workshops organized as convener/coordinator: Nil
27. Number of collaborations: Nil
28. Awards /recognitions received: International, National, State, University level.

Note: If necessary for Item No. 11 and 12 provide information in Enclosure-I, for 13, 14 and 15 Enclosure- II, for 16 Enclosure-III, for 22 and 23 Enclosure- IV and so on.

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### **Format for preparing the faculty profile:**

(Provide the information for last five years from 2016-17 to 2020-21)

1. Name of the faculty: **Dr.RATHY M C**
2. Name of the Department: Department of Environmental Science
3. Educational qualifications: M.Sc; M.Phil; PhD
4. Present position: Assistant Professor (On Contract)
5. Address for correspondence: “Krishna”, Ayinippully (H), Maruthayoor Post,Pavaratty,Thrissur-68057
6. E-mail and contact number: racutty03@gmail.com ; 9446032670

7. Specialization: Environmental Toxicology ; Environmental pollution
8. Total teaching experience: 3 years 6 month
9. Courses taught: Environmental Science
10. Research experience: 5 years
11. Major research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI. -Nil
12. Minor research projects completed: Title of the project, Date of sanction and Duration, Grant received, Funding agency. PI or Co-PI- Nil
13. Number of students awarded Ph.D. degree: Name of the student, topic of research, date of registration, date of declaration of Ph.D. degree - Nil
14. Number of students registered for Ph.D. degree: Name of the student, topic of research, date of registration -Nil
15. Provide information as indicated in 11 and 12 above-Nil
16. Participation in conferences, symposia, seminars and workshops: International, national, state or university level, attended. Presented paper, chaired session. Resource person -Nil
17. Innovative processes developed in teaching and learning-Nil
18. Participation in curricular development: Nil
19. Participation in co-curricular and extra-curricular activities Nil
20. Refresher and Orientation courses attended: Nil
21. Examination /Evaluation reforms initiated:Nil
22. Publication of research papers: in peer reviewed journals, non-peer reviewed journals, conference proceedings, impact factors, citations, h-index. Numbers in SCOPUS Nil
23. Books published: with ISBN No., Without ISBN No., Chapters in books Nil
24. Patents Applied/Granted: National. International, commercialized:Nil
25. Consultancy services provided and revenue generated:Nil
26. Conferences ,seminars, symposia and workshops organized as convener/coordinator:Nil
27. Number of collaborations:Nil
28. Awards /recognitions received: International, National, State, University level-Nil

Note: If necessary for Item No. 11 and 12 provide information in Enclosure-I, for 13, 14 and 15 Enclosure-II, for 16 Enclosure-III, for 22 and 23 Enclosure- IV and so on.

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**Enclosure-III**

Training Programme on ENVIRONMENT MANAGEMENT Basics and Approaches at the School of Environmental Sciences, Mahatma Gandhi University during 27-30 November 2018.

**Enclosure-IV**

Arya, V. and Rathy, M.C. (2019) Inventory on the Avian diversity associated with Ponnani Kole Wetland, Kerala. PONNANI KOLE WETLANDS – Problems and Prospects ISBN: 978-81-935133-3-0, Gregor Mendel Foundation, University of Calicut