

Department of Biological & Environmental Science

N V Patel College of Pure & Applied Sciences

(Academic Report From January 19 to Jan 20)

➤ **Individual advancement :**

1. Dr Rita Kumar was invited as Chief Guest at Grow Well Nursing Academy, Anand on 30th June 2019
2. Dr Rita Kumar was invited as resource person in Orientation Program for training of Anand Dist teachers for Participation in National Children Science Conference 2019 organised by Community Science Centre, S P Uni, V V Nagar
3. Dr. Rita N Kumar worked as Judge on 28.8.2019 for NVPAS WDC organized activity of Group Discussion on the topic 'Feminism and women's rights'
4. Dr Rita N Kumar invited as Judge by WDC of ISTAR on 4th Sept 2019 for various competitions- Elocution/ Poster presentation
5. Dr.Susmita Sahoo was invited as Jury member in National children science congress, Gujarat Vidyapith on 28-29th november, 2019
6. Dr.Susmita Sahoo was invited as Resource person in Vacation training programme on Bioresources for school children at Science city,Gandhinagar on 13th April, 2019

➤ **New Research Projects:**

- Minor Project "Documentation of traditional knowledge and grassroots innovation from remote villages of Narmada district" was granted to Rita Kumar by National Innovation Foundation, Gandhinagar for a period of six months, worth Rs. 1, 50,000/- (December 2018 to May 2019) which was successfully completed and technical report submitted

Under the leadership of Dr Rita Kumar for this NIF sponsored student project, team of 52 students and 3 staff members participated. The students were taken to field work by her for three days (12 to 14th Feb 2019) in Narmada district. The students had good opportunity to experience Dry Deciduous Forests of Narmada dist. They worked in 5 teams with Leader -teacher/Research scholar and covered the villages. The students carried out the survey and documentation of Traditional knowledge of rural/ tribal communities focusing the use of plants as cure of diseases and innovative practices in health care/ agriculture. They systematically documented the details as per given questionnaires and prepared soft copies, audio visuals and report. The Work was sponsored by National Innovation Foundation. It was great learning experience and exposure to scientific methodologies for field work for undergraduate students.

➤ **Articles/Papers published in Academic Journals:**

| Author | Title | Name of Journal | Year |
|--|--|--|------|
| DharitriRamanlal Rita N Kuamr Rashmi Thakkar | To evaluate biochemical changes and phytoremediation potential of <i>Ameranthus viridis</i> under Lead and Zinc stress | International Journal of basic and applied research | 2019 |
| DharitriRamanlal Rita N Kuamr | Plant and their magnificent indoor air purifying attributes | Everyman's Science | 2019 |
| Shefali Patel, Susmita Sahoo | Preliminary study on phytoplankton biodiversity and water quality in estuary of auaranga, par and damanganga rivers, valsad, gujarat | Proceedings of 11th national science symposium, 3rd february, 2019 | 2019 |
| Shefali Patel, Susmita Sahoo | A review: a clock work of phytoplankton in aquatic ecosystem | International journal of research and analytical reviews | 2019 |
| Harvi A. Patel Susmita Sahoo | Accumulation of Heavy metals by aquatic macrophytes in Rakhodiya Lake, Valsad, Gujarat, India | International journal of basic and applied research | 2019 |

➤ **Industrial consultancy provided by teachers/departments : Nil**

➤ **Name of the fellowships/honors/Recognition/Awards/Any other outstanding achievement of the Teachers**

○ **Under guidance of Dr Rita N Kumar , Ph.D. students Enrolled (02)**

Ms Dhara Desai and Mr Neel Talati have been selected for Ph D under guidance of Dr Rita N Kumar and registered through SICART (23.09.2019)

○ **Under guidance of Dr Rita N Kumar , Ph.D. students Completed (03)**

Ms Mansi Banker completed her Ph D viva on 14th August 2019 and received notification of Completion of PhD in Env. Science from Sardar Patel Uni.

Ms PayalVinod Parmar completed her Ph D Viva Voce exam on 3rd Sept 2019 and received notification of Completion of Ph D in Env.Science from Sardar Patel Uni

Ms Annie has submitted her Ph D thesis and her Viva voce exam is scheduled in January 2020

- **Under the Guidance of Dr Susmita Sahoo**
Ms Harvi received the UGC scholarship

➤ **State/National/International level Seminars / Conference / Workshops / Refresher Course/ Orientation Course/Symposia attended by the Teachers.**

| Sr. No. | Faculty Name | Date | Details |
|---------|---|--|---|
| 1 | Rashmi Thakkar Dharitri Ramanlal | 11th Feb at Sardar Patel University | Current trends in Biological sciences III (National) |
| 2 | Dr Rita N Kumar Dr Susmita Sahoo Dr Isha Desai Dr Ami Patel Dr Usha Verma | 14 March 2019 | Invited talk by Swami Akhilanandji On "Women's multidimensional role in life" Organised by WDC-CVM (Local) |
| 3 | Rashmi Thakkar Dharitri Ramanlal | 4th June 2019 at Sardar Patel University | Symposium on Environment (Local) |
| 4 | Rita Kumar Rashmi Thakkar Dhara Desai Dharitri Ramanlal | 5 & 6th August 2019 | International Conference on Climate Change :Impacts Management -CCIM2019 (International) |
| 5 | Susmita Sahoo Shefali Patel | 07-03-2019 to 09-03-2019 | Microbiome research: understanding the diversity to improve plant, animal, human & environmental health, uka tarsadiya uni., Bardoli (National) |
| 6 | Susmita Sahoo Shefali Patel | 02-03-2019 | Biological tools for sustainable environment (National) |
| 7 | Susmita Sahoo | 11-02-2019 | Current trends in biological sciences (national) |
| 8 | Shefali S. Patel, Susmita Sahoo | 03-02-2019 | 11 th national science symposium-2019 on recent trends in science and technology |
| 9 | Dr Shahoo | 18 & 19 Nov'19 | attended workshop on Env't., Forestry and Climate change as Dr Trainee –Globe at Indira Paryavaran Bhavan, Delhi |
| 10 | Dr Rita Kumar Rashmi Thakkar Dharitri Ramanlal | 16 & 17 January 2020 | National Conference on Recent trends in Biosciences and Environmental Science |

➤ **Extra-curricular programmes**

A. Alumni Talk :

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| Alumni of ES Dept, NVPAS were invited to deliver talks to T Y B Sc Env Science Students | <ol style="list-style-type: none"> 1. JayeshMakwana (08.07.2019) 2. Mr Harsh Patel (12.07.2019) 3. Ms RupalMangukiya from U S (19.7.2019) 4. PiyushDholariya (30.07.2019) 5. Ms ReemaJagirdar (17.8.2019) 6. ShradhhaVadgama (06.09.2019) 7. Abhinav Mehta (16.12.2019) |
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B. Dissertation Work (2018-19) Current academic year, the 6th Sem students carry out the Project work under the guidance of faculty and submit thesis

| Faculty | Project | T Y 6 th semester Students |
|--------------------|---|---|
| Dr. Rita Kumar | To evaluate Phytoremediation Potential of two weedy species | Steve, Ekta, Ansh, Dhruvit, Prachi |
| Dr. Susmita Sahoo | Survey of wetlands in Valsaddist.with special reference to Macrophytes | Donali, Maithili, Priya, Pratipal, Satyajeet |
| Dr. Isha Desai | Avifaunal Diversity of wetland aroundV V nagar | Twinkal, Disha, Kevin, Ruchita, Chirag |
| Dr Ami Patel | Noise Pollution | Lovely, Tulsi, Arpit, Vineet |
| Ms. Rashmi Thakkar | Treatability studies of ground water of selected sites | Nidhi Joshi, Shivam, Jalpa, Bhumika, Lalita |
| Ms Dhara Desai | An assessment of Mangrove ecosystem from selected coastal area | Pranali, Praisys, Mrudang, Dip, NidhiParmar |
| Mr.NeelTalati | Current status of Marsh Crocodile with physico chemical characteristics of selected wetlands of Gujarat | Pruthviraj, Priyanka, Nidhi Patel, Krupa P, Harsh |
| Ms.Hetal Shah | Biochemical quality assessment of Whey based Pineapple (Ananas comosus) beverages | Raj, Riten, Mansi, Krupa G, Bhavya |
| Ms.Kesha Shah | Improvement of nutritive values and biochemical comparisons of buttermilk by using diff probiotic bact. | Roshni, Rimpal, Vrutti,Hardik, Keyur |

C. Two day Faculty Development Program

As IQAC and NAAC Coordinator, Dr R N Kumar organised two day Faculty Development Program for the faculty members working in institution since last 5 or less years. The Hon. Secretary CVM **Dr S G Patel** presided over the inauguration session. The Program was held on **13th and 14th June 2019** where 23 staff members took part in program. The Heads of Department and few senior staff members worked as Resource persons.

D. Student Induction Program

The student induction Program was organised in two phases, first for students of F Y B.Sc on **17.6.19** and then for F Y BCA and B.Sc CA & IT on **1.7.2019** at NVPAS Auditorium where the students were made aware about various academic practices and activities of Institution by 9 Heads/ Portfolio owners. They were informed regarding general overall working by Principal Dr Bakshi and about NAAC by Dr Kumar while Dr Archana Shah spoke about Madhyastha Samiti working, Dr B P Patel about Exam system, Dr Shveta Joshi about WDC, Girls Hostel and Counselling system, Ms Shreya about Library and Comp Dept, Dr Tejas Thakkar about Boys Hostel &NSS, Dr Ami Patel about NCC & PT and Dr Kartik Jagtap about English subject.

E. Seminar Presentation :

- For students of T Y B Sc, the **seminar presentation** is carried out in 5th Semester itself.
- The students are allotted seminar topic, mentor name and seminar schedule in beginning of term.
- Seminar presentation takes place on every Monday 4.30 pm to 6.00 pm throughout the term as per schedule where max 4 students make presentation each time.
- Seminar presentation is attended by all T Y students and dept staff members
- The evaluation is made by departmental teaching staff as per given criteria and submitted. An average grade is considered final and is given due weight age in examination

F. Certificate Course :

A certificate course on 'Organic Farming' was undertaken by dept during this academic term. The course of 30 hrs was designed and was announced. Total 27 students from FY/SY and TY B Sc. registered for the same. The certificate course was inaugurated on **18th July 2019**. The course is run in evening hours after college hours. Weekly 4 hours classes are conducted. As part of this, the students were taken to visit the Organic Farm of Shri. Sarvadaman Patel at Karamsad where they got practical exposure of learned theory of Organic farming

G. Invited talk:

It was arranged by dept on **28th June 2019** for students where **Shri Suneet Dabke, Concept Biotech, Baroda** delivered a talk on "Opportunities in Waste Management and its Challenges". He emphasized on waste segregation and its proper treatment and revenue generation by recycling of waste.

H. Tree Plantation (4th July 2019):

The Nature Club, Carbon Foot Print Club and Eco club of NVPAS in association with VNC jointly organized tree plantation program during Van Mahotsav in First week of July. Dr Mehta, Deputy Director, GEER Foundation , Dr Milan Rajyaguru, Deputy Conservator of Forests, Anand Division and VNC Managing Trustee Shri Dhaval Patel remained present as invited guests. The students enthusiastically carried out the plantation program in Library campus. The horticultural crops such as Jamun, Jamfal, Sitafal, Shetur were planted. The students had also prepared banners showing the importance of trees

I. Tiger Day celebration:

It was held by Nature Club of NVPAS on Monday, **29th July 2019**. Dr Susmita Sahoo, Ex Officio of Nature Club conducted Poster making competition on this occasion. The Secretary Ms.Maithili and active members worked hard to make the program a success

J. Industrial/ Educational Visit:

The students of S Y and T Y B Sc were taken to academic visit . They visited Tissue culture Laboratory at Santokpura, Borsad on 3rd August 2019 followed by visit to Lingda fish farm and then Visit to Poultry Farm

K. Student Participation in Competition:

- **Mr Ansh Gupta**, the SY B Sc student of Env Science participated in inter collegiate competition held at University and won the First position in Badminton sports
- **Mr Darshit Shah,-** B.Sc Env Sci student also took part in World Environment day Symposium and won Best Presentation Prize in U G student category. The event was organised by Community centre of S P Uni.

L. Carbon Foot Print Club:

The CFP club carried out Quiz programme on **30.12.29** for college students. Students from First year to third year with different specialisation took part. The quiz was based on the theme of “The world of Carbon”. The five teams were Graphite, Diamond, Q Carbon, Charcoal and Fullerene. There were four rounds comprising multiple choice, visual, rapid fire etc. The winner team was ‘charcoal’ followed by ‘Graphite’ and ‘Fullerene’. The audience was also intermittently asked questions and encouraged by chocolates.

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