GUBS ACTIVITIES 2010-2011

Fifth Refresher Course in Environmental Studies

The fifth Refresher Course in Environmental Studies was conducted by the Department of Botany during 31st May-2010 to 21st June 2010 under the aegis of Academic Staff College. The participants (28) came from different disciplines and colleges of several universities of Gujarat. Co-ordinated by Professor Yogesh T. Jasrai, Head, Department of Botany, the course was inaugurated by Dr. B. A. Prajapati, Vice-Chancellor, Veer Narmad South Gujarat University. Surat. The course- being truly multidisciplinary in nature, generated a lot of interest among the participants. The participants were comfortable in spite of the extreme heat of the summer because the course was conducted in the air-

conditioned Botany Auditorium at the Department of Botany. Lectures on various aspects of the environment like effect of solar radiation, urban ecosystem management, environment conservation. environment impact assessment and sustainable environment, environmental safety etc. were delivered by learned experienced faculty from different universities. Besides this, the participants also got an exposure to the basics of internet and methods of effective online searching by the learned faculty members from the computer science department. In addition to the regular lectures, the participants got an opportunity to display their knowledge and creativity during the interactive session wherein environment science based games were arranged for them.

In the Valedictory function held on 21 June 2010, the Chief Guest, Vice Chancellor, Dr. Parimal H. Trivedi addressed the participants and appreciated the interaction they had as part the learning experience during the course. The participants praised the efforts put in by the staff members of the Department of Botany. They also thanked Dr. Trivedi for providing them an opportunity to interact with learned faculty during the course.

GPSC Examination (Preliminary) for ACF-RFO

Department of Botany organized special lectures for general planning and preparation of this important examination (which is being conducted after 18 years). Shri. S. J. Pandit. Assistant Conservator of Forests, Forest Department, Government of Gujarat, on 14th March, 2010 explained the nitty-gritty for preparation and successfully passing the preliminary examination for the post of Range Forest Officer (RFO) and Assistant Conservator of Forests (ACF) to be conducted on Sunday, May. 2010 by the Forest Department, Government of Gujarat through Gujarat Public Service Commission. He also briefed the students about the job requirements and the challenges thereof. The students had an interactive session with Shri. Pandit as they clarified their doubts to strengthen

their preparations for the forthcoming examination. The Deputy Collector of Baroda, Shri Pankai Aundhia also conducted a similar exercise for the benefit of our students on 14th March, 2010.

Student Activities:

Ms Vira Dhanuk and Ms. Gopi Vyas from M Sc Bioinformatics-Part I stood Second and Third respectively in the School of Sciences among the students who took the Annual Examination (M Sc Part I) held in May 2010.

SAVE - Lecture Series

The Department has initiated The Scientific Ambience for Vocation Encouragement Lecture Series (SAVE - Lecture Series). Inaugurating the event, Honorable Vice Chancellor, Dr. Parimal H. Trivedi expressed confidence that such vibrant interactions with experts can ignite the passion of learning in the young minds. The inaugural lecture on **MYCORRHIZAL** BIOTECHNOLOGY was delivered by Dr. Ajit Varma, Director-General, Amity Institute of Microbial Technology (AIMT), Vice Chairman, Amity Science, Technology and Innovation Foundation (ASTIF) on Thursday, 21st October- 2010, at the Botany Auditorium. Dr. Varma's exhaustive biodata and impressive list of publications spoke volumes about his expertise on the subject. His knowledge and passion for research was evident from the number of projects he had completed and the ones he was still working on. He introduced the topic in a very student friendly manner using eye catchy animations to highlight the good and the bad microbes. He successfully generated a lot of interest among the students by illustrating the whole exercises for identification of mycorrhiza in the

deserts of Rajasthan.

Dr. Varma's presentation had a lot of beautiful slides of Ladakh where they had done experiments with different vegetable saplings with the mycorrhiza namely, *Piriformospora indica*. The results showed that the yield increased many-fold and in spite of the adverse conditions for growth, mycorrhizal association seemed to help a diverse set of plants in more than one ways. After the lecture Dr. Varma interacted with the students and the staff members in a very informal manner. He displayed a lot of humbleness in accepting suggestions from faculty members and students. In fact, he even expressed his readiness in coming once again to our University and take a full fledged Lecture cum demonstration schedule on mycorrhizal biotechnology. He also invited the faculty members and students to Amity University to work with him.



The Students and staff members from the Department participated in the National Symposium on Medicinal Plants: A Promising Resource of the Country at Veer Narmad South Gujarat University, Surat on 9-10 June, 2010. They were accompanied by Dr. Archana Mankad and Dr. Himanshu Pandya.

The symposium coincided with retirement function of Prof. M. H. Parabia, the then Head of the Biosciences Department, Veer Narmad South Gujarat University, Surat and one who has been a regular visitor to this department as an Examiner, Resource Person for not only different workshops but also under the UGC-Academic Exchange Programme. His humbleness, knowledge and expertise has earned him both name and fame among botanists across the country.

Gujarat University Botanical Society:

The Inaugural function of Gujarat University Botanical Society (GUBS) for the year 2010-11 was held on Friday, 27th August-2010.The President of the function, Dr. B. V. Patel, Dean, Science Faculty blessed the gathering with his words of wisdom, The Chief Guest, Shri. Bharat Pathak, IFS and Director Gujarat Ecological Education and Research (GEER) Foundation, Gandhinagar expressed his pleasure and extended all possible involvement of the GEER Foundation in the society's development. This year Dr. Hitesh A. Solanki is the Staff-in-charge and would co-ordinate the activities with the students.



Dignitories on the dias : Ms. Deepika Chandawat, President-GUBS Jasrai, Patron-GUBS, Shri Bharat Pathak, Chief Guest, Dr. Bald President of the function, Ms. Sandhya Verma, Vice President-GUBS

The event was marked with the coronation of the office bearers of GUBS and the class captains with badges by the chief guest. It was also a day when the freshers were formally welcomed by the seniors with a lot of enthusiasm and love. Dr. Yogesh Jasrai, Professor-Head and Patron - GUBS, motivated the students and expressed confidence in the new team and asserted that they display exemplary team spirit and leadership.

Dr.Hitesh A. Solanki wrote a chapter titled **Study of Coastal Water Quality through Space Technology** in the book titled Environmental Pollution Causes, mitigation and Recycling edited by P.C. Trivedi and published by Pointer Publishers, Jaipur.

Dr. Hitesh A. Solanki delivered an invited talk on **Climate Change and its burden on earth** during a Seminar organized by Gaints group and International Society of Research on Civilization Disease and Environment (ISRCDE) at Modasa in June, 2010.

Dr. Archana Mankad delivered a guest lecture during a seminar **on Penicillinthe wonder drug** by Gujarat Science City, working under the aegis of the Department of Science & Technology, Government of Gujarat, on 6th August-2010 to mark the birth anniversary of Sir Alexander Flemming.

Scientific and Educational Tales to Unearth (SETU) The Staff and Students of this department participated in the celebrations for the completion of 60 years of the establishment of Gujarat University on Tuesday, 23rd November, 2010. The day is normally celebrated as the University Sthapana Din each year but this year the events were grand. Alongside, to mark the day, Dr. Yogesh Jasrai announced the inception of Scientific and Educational Tales to Unearth (SETU), a Department of Botany initiative to create awareness of the

environment through audio visual medium. Dr. Jasrai explained that short films made by various agencies, institutions, NGOs, or even students would be screened on the first and the third Saturday at 12.00 noon and all those who were interested could join. This would be followed by interaction and deliberations apropos to the theme of the film. The first screening was done on 23 November, 2010 in the afternoon. During this session two films namely Forests and Biodiversity produced by The Energy and Resources Institute (TERI) were screened. The film on Forests showcased the significance and utility of forests. The nonwood forest produce and its economic contribution was demonstrated. The film also highlighted the need for conservation and reforestation. The screening was followed with responses from students. They shared learning experiences of their visit to forest areas. In Kerala for instance, the forest department has established Eco Clubs with the local communities living in the forest. The locals are given the responsibility of not only to take care of the forests and its produce but also serve the visitors with eco-friendly food. They would benefit from the sale of the produce which is also co-ordinated by

the forest department. In this way Kerala government is promoting ecotourism. The film on Biodiversity showcased the significance and need to conserve the biodiversity of our country. Our country has several forest areas and diverse ecozones that harbour priceless biodiversity. Anthropogenic pressures, deforestation, habitat loss, pollution are some of the reasons for the gradual loss of biodiversity. But it is still not late, we need to act now and take care of these essential natural resource. The students were sensitized towards the significance of biodiversity through this audiovisual medium. The message was loud and clear that we need to do something now or it would be too late. We definitely cannot afford to loose any species due to lack of vision.

The staff and a large number of students of the department actively participated in the UGC sponsored State level Seminar on Innovative approaches to Biological Sciences: Recent Perspectives on Monday, 3rd January-2011 organized by J. & J. College of Science, Nadiad and Gujarat University Botanical

Society (GUBS), Ahmedabad. Mr. Saumya Patel, Research Scholar from Bioinformatics won the second prize in Poster Presentation in Plant Sciences category. Prof. Yogesh Jasrai delivered an invited lecture on **Emerging and innovative approaches to good life: in light of plants.** The seminar provided a good platform for the young researchers to present their research findings and benefit from valuable interactions with experts.

Save the Bird Campaign: This was initiated by the Department of Botany during Uttarayan with a large number of students taking a pledge on the lawns of the School of Sciences. Students vowed to take care so as to not hurt the birds. The students took a vow for not to fly kites early in the morning or late in the evening and not to use chinese thread. Students agreed to send the SMSs to one and all they know including friends and relatives. The Bird helpline numbers 079-65248188, 9376144559 / 9725003122 were given to all to help any injured bird. The informal meet gained a lot of momentum with the esteemed presence and support of our Honorable Vice Chancellor, Dr. Parimal H. Trivedi. The meet was well attended by the staff and the students from the School of Sciences. The Department of Botany students displayed their commitment to the cause in the form of various large colourful placards to convey the message in the strongest possible manner. The meet was co-ordinated with the support of Mr. Kartik Sastry, Assistant Co-ordinator, Bird Conservation Society, Gujarat, and was also attended by Dr. Parag Devdi from Bombay Natural History Society (BNHS) engaged in Save Vulture programmes and Mr.Aditya Roy. Dr. Devdi overviewed the need to Save the Birds especially on Uttarayan day and gave some useful and practical guidelines to the kite lovers so that they may enjoy the festival as well as take care of the birds. Mr. Aditya Roy, Zoologist, demonstrated the careful handling of an injured bird and the first aid that can be given.



UDAAN-2011:

The Department of Botany Students and Staff actively participated in the Udaan 2011 celebrations. Dr. Himanshu A. Pandya was invited as a Judge for one of the singing competitions during Talent Hunt.

Minaxi Lalit Science Test:

The Science students from various colleges and departments of Gujarat University appeared for the state level Minaxi Lalit Science Test on 30th January-2011. A total of 516 students took the test this year. The whole event was co-ordinated by Dr. Archana Mankad for PG Departments and colleges affiliated with the Gujarat University, Ahmedabad. The State- Level co-ordination was led by Dr. Yogesh T. Jasrai.

Distinguished Visitor:

Prof. S. K. Sawhney from Department of Botany, Delhi University visited this Department on Friday, 4th February-2011. He interacted with the students. He addressed the students and enlightened them about modern developments in the field of Plant Sciences including his research interests and major breakthroughs in the field of Plant Physiology. The latest research involved in Anesthetic agents in plants and their biochemistry generated a lot of excitement among the students.

Minaxi Lalit Science Ouiz:

The Minaxi Lalit Science Quiz on Climate Change was held on 17th February-2011. Six Selected teams participated in the Quiz which comprised of two rounds, first - the question and second - the visual round.The team from M. Sc.

Climate Change Impacts Management Semester III bagged the first Prize while the team from M. Sc. Botany Part II bagged the second prize.

National Conference:

Dr.H.A.Solanki chaired a session during the UGC sponsored National Conference on **Role of Taxonomy in Biodiversity Management and Human Welfare** at Palanpur on 29th January, 2011.

Dr. H. A. Solanki was invited as a Judge by GUJCOST for the State Level Science Club Competition organized at the Science city on 28th February, 2011. The theme of the year 2010 was International year of Biodiversity and about 1000 science clubs from all over Gujarat presented their scientific activities at the

district level and winners amongst them participated at the State Level Science Club Competition on 28^{ti} February,2011.

Student Participation:

Ms. Dhara Patel won the first prize for oral presentation in the theme Plant Systematic while and Ms. Deepika Chandawat won the second prize for her oral presentation in the theme Ethnobiology and Medicinal Flora during the UGC sponsored National Conference on Role of Taxonomy in Biodiversity Management and Human Welfare at Palanpur on 29th January, 2011.

Mr. Milan Chandarana, Research Scholar, won the first prize for his oral presentation titled Arbuscular Mycorrhiza from two major grasslands of Gujarat at XXV Gujarat Science Congress organized by Gujarat Council of Science and Technology (GUJCOST) and Gujarat University during 26-27th February, 2011 at The Science City, Ahmedabad.

Mr. Saumya Patel, Research Scholar, won

1. The First Prize in Poster Presentation competition at XXV Gujarat Science Congress organized by Gujarat Council of Science and Technology (GUJCOST) and Gujarat University during 26-27th February, 2011 at The Science City, Ahmedabad;

2. The First Prize in Poster Presentation competition at Vignan Parishad -2011 at Gujarat University, Ahmedabad on 8th January,2011;

3. The Second Prize in Poster Presentation competition at a State Level Seminar on Bioinformatics and Data Mining at Navsari Agricultural University during March,

4. The Second Prize in Poster Presentation competition at a State Level Seminar on Innovative Approaches to Biological Sciences: A recent Perspective at Nadiad during 24-25th January, 2011;

5. A cash Prize in Poster Presentation competition at a State Level Seminar

on Current laboratory Techniques in Cancer Research at Ahmedabad in March 2011.

A seminar on Census Operations-2011 was organized by the Department of Botany on 2nd February-2011. Dr. B. V. Patel, Dean, Faculty of Science,

inaugurated the seminar which is not merely a head count but a socio-economic survey that would enable researchers to create a comprehensive database for better planning and development. Dr. R. K. Sharma from the Directorate of Census Operations in Gujarat and Prof. G. T. Jani from the Sociology Department were invited as the resource persons. The seminar highlighted the need, use and the structure of such operations. A population census is the total process of collecting, compiling, tabulating, evaluating, analyzing and publishing or otherwise disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well-delimited part of a country. The legal provisions and the state government's role in the whole exercise was also explained. The whole Operation would be done in two phases: first phase would involve house listing and has been completed with the assistance of a large number of enumerators and supervisors, while the second phase would involve

population enumeration which would also include houseless population such as hawkers and beggars.

Dr.Y.T.Jasrai Professor and Head Department of Botany