



ANNUAL REPORT 2010-2011

ACHARYA NARENDRA DEV COLLEGE
...beyond the classroom



Contents

	Page No.
1. FOSS and OER initiatives	02
2. Infrastructure	07
3. Special Grants/ Assistance Received	09
4. Achievements, Scholarships and Aid	10
5. Students Achievements	15
6. Achievements of the Faculty	16
7. Research Projects	23
8. College Activities	27
9. Departmental Activities	30
10. Society/Committee Report	36
11. Add-on Courses	48
<i>Annexure</i>	49





ANNUAL REPORT 2010-2011

Savithri Singh

Principal, Acharya Narendra Dev College

It is with very mixed feelings that I present this Annual Report for the session 2010-2011. The session 2010-11 represents an academic year which saw many structural changes in the academic calendar and changes in the curriculum of its various teaching programmes due to switch to a semester mode. Acharya Narendra Dev College, as other colleges having Science in the University, faced a tumultuous start to the new session with most permanent teachers not cooperating in the Admission process, leading to poor quality and quantity of admissions. Due to the resentment among teachers because of the introduction of the Semester System, the year was characterised by disturbance in the teaching learning process through the first half. Our college being primarily a 'Science College' having 14 Science courses was maximally affected due to this negative atmosphere.

Yet, somehow, through part coercion, part persuasion and some cooperation we were able to somehow complete the syllabus by the end of the first Semester. Despite all this posturing by the teachers, it must be recorded here that several of our teachers were part of the committees that designed the new semester syllabi. The students were the worst off due to this turmoil and the Principal suffered more than her share of the problems.

A disturbed first half meant also that several regular activities of the college did not take place as scheduled. Yet, because of a tradition of hard work and commitment we overcame all this and more - the year though not comparable to the previous years, did see many much consolidation of the infrastructural facilities and building-up of capacities to provide a intellectually challenging academic environment to the students.

The college has continued to take small but sure strides to build, create and provide better facilities and opportunities to its academic community. In true quintessential spirit, teaching in the college has progressed beyond the classroom and into the realm of development of high quality didactic skills by moving to the next level of academics including hands-on workshops, e-learning content development, participation in issues of international significance.

The college adopted the by-line 'beyond the classroom' a few years back. Today it is not a mere rhetoric or an ornate by-line but a mission. The mission of the college is to develop a new breed of creative graduates, expert in their discipline, but with a thorough understanding of how innovation can rapidly



convert knowledge, ideas and inventions into products, services and policies for economic and social benefit.

It is the College's unstinted conviction that the hard work put in during the academic year would herald a better tomorrow and various concerted efforts made in this regard are enumerated in the pages to come.

1. FOSS and OER initiatives

The institution firmly believes in the adoption of Free/Open Source Softwares as an instrument of inclusive digital education and breaking the shackles of restrictive licensing policies in education. Since 2007, over the years ANDC has taken pioneering steps to promote FOSS in education and creation and propagation of Open Education Resources (OERs). In affirmation of our conviction in the 'Open' culture, which in nutshell means benefitting all by sharing, we worked to consolidate the earlier efforts. The various programmes organized in 2010-11 in the furtherance of this objective are listed:

1. Application of Free/Open Source Software (FOSS) in Science Teaching and Research

Acharya Narendra Dev College in association with NRCFOSS (National Resource Centre for Free and Open Source Software) organized a two-day workshop (April 14 - 15, 2010) on Application of Free and Open Source Softwares in Science Teaching and Research. NRCFOSS is an initiative of the Department of Information Technology, Ministry of Communications & Information Technology, Government of India. The workshop aimed to acquaint and train the participants to the various generic and discipline specific free and open source softwares which finds application in Science teaching and research. Besides a general introduction on FOSS and linux, the workshop consisted of parallel sessions for specific applications of these tools in Physical, Mathematical, Chemical and Biological Sciences.

2. FOSS: Awareness and Possibilities

This Seminar was conducted by Acharya Narendra Dev College in association with NRCFOSS, Anna University, Chennai at University of Delhi, South Campus on April 16, 2010. Teachers from several colleges of the University from all streams - Science, Social Sciences, Humanities as well as Commerce - participated.

3. Easy Now Techniques: Workshop on Multimedia Content Development

Easy now which is collection of mainly software that enables easy conversion of content into econtent is being promoted by CEMCA. Over the last two years the association with ANDC has resulted in more and more open source software being identified within the package. This workshop was conducted for



teachers across colleges of DU from May 4-7, 2010. The workshop was attended by 14 faculty members from various colleges of University of Delhi as well as three from Amity School of Engineering & Technology, Amity University, Noida. The participants were taught various techniques to produce educational content in the four delivery modes namely, textual, audio, video and streaming slide show. At the end of the workshop each participant presented one small lecture in different delivery modes.

4. Introduction to Linux platform and Open Softwares

The Computer Science Department of the college having switched to Linux in most of its laboratories finds it essential to orient the first year students to the FOSS paradigm. Hence a one day workshop was organized for these first year students in October 2010. They were introduced to Linux platform and Open Softwares by eminent speakers Mr. Satyaakam Goswami and Mr. Gora Mohanty (FOSS enthusiasts). FOSS is relevant and important in education institutions because access to the source code of the programs allow students to explore internals of complex systems and hence acquire a deeper understanding of what they study. They were also taken through the installation process and were encouraged to join the ANDC Linux users egroup.

5. Spoken Tutorials

The FOSS Club of Acharya Narendra Dev college organized a talk on Spoken Tutorials by Professor Kannan M. Moudgalya from IIT Bombay on January 24, 2011. Professor Moudgalya is passionate about his project - 'Spoken Tutorial' which is the initiative of the 'Talk to a Teacher' activity of the National Mission of Education through Information and Communication Technology (NMEICT), launched by the Ministry of Human Resource Development, Government of India. The tutorial is meant to be used as a self study tool. The Professor gave a demonstration on "How to create a spoken tutorial on Scilab". He motivated students to write scripts to create spoken tutorials on open source tools. Two major modules, one on Java Script and the other on 'Health Care Information System's were initiated in collaboration.

6. Web development using PHP and Drupal

A brief session on PHP was conducted on March 15, 2011 in the college where Mr. Neeraj Narayan, Senior software developer, Huawei technologies Pvt. Ltd, Bengaluru explained how PHP works. It involved hands-on sessions on creating, managing and publishing content on the web. On March 16, 2011, the workshop engaged the participants in the introduction of the open source DRUPAL, the Content Management System by Mr. Tarun Sharma, Scientific Assistant, Department of Computer Science and Manpreet Anand Singh, a second year student of B. Sc (H) Computer Science. It concluded with hands-on



sessions related to installation of WAMP Server followed by working on DRUPAL. The audience found the concept very interesting and was able to appreciate the immense potential of FOSS.

7. Open 2011

With the primary focus on generating interest and creating awareness about the availability of OPEN source resources for expanding the foundations of education amongst academia, Acharya Narendra Dev College organized an International Conference 'Open paradigms in Education - OPEN 2011' at India International Centre, New Delhi from 31 January to 2 February, 2011. It was an attempt to blend open source soft skills with knowledge modules with the idea to expose educators to the importance of open access to learning opportunities by sharing knowledge and learning resources.

The conference was in line with the initiatives taken by Government of India to promote open educational resources that are freely available and those that invite educationists in the country to use, reuse, adapt and share their collective wisdom for the benefit of every learner. Various portals have been created for providing unique opportunities to educators to access and share educational materials through collaborative work and projects.

The conference had seven sessions based on different themes; Authoring Tools, Empowering Teachers, Open Education and Licensing, Skill Development and FOSS, Content Creation and Consolidation, Success Stories and Future Aspects.

Tan Sri Emeritus Professor Gajaraj Dhanarajan, one of the world's leading advocates and experts on Open and Distance Learning who has been actively involved in the creation of Distance education Institution across the Anglophone world was invited from Malaysia as the Chief Guest and Keynote Speaker of the conference.

The speakers from diverse fields delivered the talk during the conference and mesmerized the gathering with their thoughts and views. These included two more International speakers from Commonwealth Asian Countries; Mr. Chamindra De Silva from Sri Lanka and Mr. Colin Charles, a Linux enthusiast from Malaysia. Other speakers included Professor C. N. Krishnan (NRCFOSS, Anna University); Dr. Savithri Singh (Principal ANDC and Vice-Chair, Wikieducator Community Council); Mr. Subhash Kumar (Faculty ANDC); Dr. Neeti Misra (Faculty ANDC); Mr. Ravi Kant Sharma (CSDS, Sarai, Delhi); Mr. Pavan Duggal (Advocate, Supreme Court); Ms. Anadana Kapur, (Media Practitioner and expert on Copyrights), Mr. Abhishek Nandakumar (student, UDSC; used Drupal for development of ANDC Website); Dr. Sanjeev Singh (Faculty, IIC, UDSC); Dr. Dinesh Abrol (Scientist, NISTADS); Professor Kannan



Moudgalya (Spoken Tutorials, IIT Mumbai); Dr. Andrew Lynn (OSDD project, faculty, JNU); Mr. Pranesh Prakash (Lawyer, CIS, Bengaluru); Dr. Ravi Totaja (Faculty, ANDC); Dr. Sarita Kumar (Faculty ANDC); Mr. Chidambaram Kollengode (Nokia, Bengaluru) and Professor KR Srivathsan (PVC, IGNOU).

The conference was attended by 91 participants - teachers, students and other academicians - from various Institutions and Colleges of the University of Delhi. The participants interacted with the speakers with great enthusiasm sharing their views and vision not only during and after the talks but also in the networking breaks. Huge amount of information was shared between the esteemed speakers and the delegates. The conference was a great success and the college aims to organize a number of more such conferences in future.

8. Scilab and its Applications

MATLAB, a proprietary software has been introduced in the new semester scheme of the B. Sc. (Honours) Electronics course. This software is quite expensive and is beyond the scope of purchase of colleges teaching this course. ANDC suggested the use of open source Scilab as an alternative to this proprietary software. The Department of Electronics of the college, with Dr. Amit Garg as Convener, organized a hands-on workshop on Scilab in collaboration with FOSSEE Group, IIT Mumbai, on March 10 -11, 2011 for the college teachers of University of Delhi. Thirty nine teachers and some Ph.D research scholars participated. The workshop was inaugurated by Prof. Avinashi Kapoor, Head, Department of Electronic Science, University of Delhi, South Campus. The participants showed an enthusiastic response during the workshop and also suggested that in future such workshops be of longer duration. An online assessment exam was conducted on the second day of the workshop to assess the understanding level of the participants.

9. Taking 'Wikieducator' beyond

With almost 70 per cent of teachers in ANDC having been exposed to the Open Educational resource - Wikieducator - and several who have contributed content to the site, many of us are now involved in taking this beyond the college, even beyond the University to various parts of the country. ANDC Principal and faculty have conducted workshops on Wikieducator at Uttarakhand Open University (UOU), Haldwani (June 14-16, 2010), Teerthankar University, Moradabad (September 3-9, 2010), Guwahati University (December 2-5, 2010) and Institute of Distance Education, Mumbai University (February 24-26, 2011). We have also been invited to expose trainees to Wikieducator at several workshops at NCERT.

10. Easynow makes eContent development easy

The Principal Dr. Savithri Singh and Dr Neeti Misra attended an advanced TOT



(training of trainers) workshop at Penang, Malaysia in June 2010. Neeti, almost immediately got an opportunity to practice what was taught at a workshop at D. Net, Dhaka in December. She also presented a paper on her experiences with easynow at the Pan Commonwealth Forum PCF 6 Conference in Cochin.

11. Introduction to Computer Basics - Course for Freshers

It has been observed that many new-entrants lack basic computational skills which can enable them to take advantage of the massive IT infrastructure provided by the college. Since several freshers do not have any exposure to computers and also because the college believes in students using the Linux partition of the computers in the Web Centre, on the Orientation Day students were asked to give in their names in case they wanted to be trained for the basic Computer Skills. Like every year the IT committee conducted a 7-day Basic Computer Training Programme for the new entrants of the college (August 20 - 26, 2010) in a hands-on mode. These were facilitated by senior students who volunteered to take the freshers through their paces.

12. <http://andcollege.du.ac.in> - The College Website

The college was fed up with the vicarious behaviour of the vendor of the college website - updating of the website was never as per our requirement but depended on the availability and moods of the vendor. We decided to take things in our own hands - This was possible because of the quality of our students and the fact that the college pushes for open source. We put out a call for volunteers for developing the college website - a team of three students was formed and they worked hard over two months early last summer and completed the job.

We decided to use the open source 'Content Management System - DRUPAL for the website - the choice was only really between Drupal and Joomla. We also decided to give administrative control to as many people as possible - one faculty member from each Department was asked to attend a 2-day workshop - it was voluntary - conducted by these students who took them through the paces and made them competent to update their own Departmental pages as and when required. We had to find innovative solutions to enable us to upload the hundreds of photographs we wanted there - we got around the server space limitation (DU provides restricted space) by uploading photographs at a open site and embedding it in the website. We plan to do this for videos too. Though two of the original team have graduated the website is still being maintained in-house with the help of students and a Scientific Assistant. We are very proud of the college website.



COLOPHON

Content Customization, Optimization and Data Entry

Abhishek Nandakumar, Amit Bhardwaj (both B.Sc (Hons.) Computer Science VI Semester) and Manpreet Singh Anand (B.Sc.(Hons.) Computer Science II Semester)

Development and Theme Design

Abhishek Nandakumar

On the Desktop

This website has been setup and is managed using Free and Open Source Software powering all the computers in the college. The GNU/Linux workstations include Ubuntu and Fedora nodes that are connected using the university's network. The text, in its entirety, was authored on OpenOffice while code was edited on the text-editors available on each Linux installation out-of-the-box.

On the Server

The website is hosted on the University's Red Hat servers - shared access to Apache, MySQL and PHP.

Content and media is published through Drupal - an open source content management system. This instance of Drupal is powered by many excellent plugins including Gallery Assist, WYSIWYG - TinyMCE, Events and GMAP.

Web Standards

This website validates as W3C-compliant XHTML 1.0 Strict. It has been tested to work on modern web browsers including Google Chrome, Mozilla Firefox, Apple Safari and Opera. It also renders correctly on mobile variants of WebKit including the iPhone OS, Android and Symbian web browsers.

2. INFRASTRUCTURE

Library

The Library is key to the academic activities of any college - three years back we shifted the Library from the semi-permanent structures to a spacious hall; and this year in a very innovative move we horizontally divided the Library hall to double the space - this resulted in more reading room space, creation of a research wing as dedicated space for Ph.D students and faculty and a new Web Centre where the 80 Computers and two servers provided by the University have been housed. This also provided us with an opportunity to upgrade and aircondition the Library. I'm sure the students and staff will be happy about this change. The Directorate of Higher Education has to be thanked for providing the funding and support required for this very major task.

A special emphasis of the college has been to equip the college library with large number of textbooks and reference books, keeping in mind the changes in curriculum of the courses being run in the college and expansion in the enrollment of students. The college library has been fortunate to receive generous grants under various heads in the current academic year. This has enabled the library to add 2,300 additional books in the current academic year thus bringing the total number of books in the library to 22,600.



IT Infrastructure

Having mentioned the computers provided by the University, it would be apt here also to talk of the WiFi connectivity provided by the University - We are indeed grateful to the University for this largesse. The college now has internet connectivity through Optical Fibre Cables (OFC) as well as through the R. F (Radio Frequency) network. The installation of Wi-fi network with WiMAX capability in the college campus has also been accomplished. This has the potential to take the teaching-learning programmes in the college to a level hitherto untraversed. The Wifi has been enabled just this week.

A new Web Facility has been set up in the newly constructed additional floor of the Library Annexe. It is an airconditioned facility which hosts 80 web enabled computers and two servers that have been provided by the University of Delhi. The computers of the two WFCs (Web Facilitation Centres) have been upgraded with new softwares like Tally, Scilab, Multisim etc.

Besides the 80 computers provided by the University the college is also procuring additional 49 computer to augment the IT infrastructure for teaching-learning and information delivery. The number of computers in the college now stand at a healthy number of 259. This number is besides those utilized for library and administration. All these works were coordinated by the IT Committee.

Construction of additional Laboratories

With the increase in the number of students due to implementation of OBC reservation, and being a primarily Science college, Laboratory space became a major constraint. Not only did we need more laboratory space we needed it immediately - there could be no quicker solution than portacabin laboratories, and we adopted them. Last year we had commissioned four portacabin classrooms. Two laboratories were constructed for students of Life Sciences and Physical Sciences and were equipped with the required instruments, equipments, glassware and chemicals. We are grateful to the Directorate of higher education for their continued support.

After the comprehensive refurbishing of two Chemistry laboratories last year we have started the construction of two more chemistry laboratories as also a classroom for the Department - These are being constructed at the old location of the Canteen. The canteens were moved to bamboo structures last year thanks to Professor Dinesh Singh, then Director, South Campus.

More Power to us

In order to satisfy the ever increasing power requirement due to the teaching laboratories and expanding infrastructure, the college had taken the initiative to boost the electrical load from a mere 58 KVA to a whopping 200 KVA making



it future-ready. A new block to house the electric sub-station exclusively for the college coupled with a new H. T. Transformer had been constructed and we are in the process of getting the redistribution and rewiring in place.

We already have a 125KV generator backup - we are adding another Gen set of the same capacity so that we can continue uninterrupted during power cuts or any breakdown.

We never stop requiring scientific equipments

The college continues to make available state-of art scientific equipments in furtherance of its objective to increase the standards of teaching and research for its students and faculty. The department of Biomedical Science got a Microplate Reader (ELISA) and now, is also a proud owner of a Double Beam UV VIS Spectrophotometer. The department of Chemistry added to its inventory of equipment a modern Vacum pump, a UV chamber and a heating gun. It is also procuring a Crushed ice maker (90L) and a Mini Rotary Flask Shaker. With the purchase of modern microscopes - 20 Binocular MS24 Magnus, 20 Binocular CHI Olympus and 40 Compound HSA - the experimental potential of the Life sciences labs have gone up a notch further. It is expected that these additional equipments will promote precise and novel experimentation in the college.

The college constant endeavour to increase the academic facilities and utilities conducive for a better environment for teaching and learning has led to creation of additional infrastructure in the form of a double storey structure near the canteen block which is envisaged to house classrooms and laboratories. A new toilet block near the semi-permanent structures has also become operational this year to meet the needs of increased enrollment of students.

3. SPECIAL GRANTS / ASSISTANCE RECEIVED

Grants released by the Directorate of Higher Education to PWD for Infrastructural works in the college (01.04.2010 onwards)

S.No.	Name of the work	Amount sanctioned (Rs.)
1.	Providing and fixing of False ceiling, tiling and replacement of windows.	29,06,077/-
2.	Repairing and Improvement of college campus roads.	18,23,700/-
3.	Renovation of Electrical Installations, main cubical panel board, fittings in main building.	16,17,000/-
4.	Renovation of Security lights.	9,66,000/-



5.	Installation of 125 KVA DG set	10,88,200/-
6.	Termite Treatment	10,13,129/-
	Grand Total	94,14,106/-

Non-recurring Grants received from (01.03.2010 onwards)

S.No.	Sanctioning Authority	Amount Sanctioned (Rs.)
1.	Directorate of Higher Education	Rs. 40,00,000/-
2.	UGC (merged Scheme XI Plan Grant)	Rs. 23,42,000/-

S.No.	Head	Amount (Rs.)
1.	Non-recurring grant in General Account	7,25,000/-
2.	Recurring grant in General Account	5,00,000/-
3.	University Development Fund	5,00,000/-
4.	Self-finance courses (BMS & computer Science)(Society Account)	50,000/- + 50,000/- = 1,00,000/-
5.	Book Bank (Society Account)	2,00,000/-
	Grand Total	20,25,000/-

4. ACHIEVEMENTS, SCHOLARSHIPS and AID

Meritorious positions in the university

Merit positions in the annual university examination besides encouraging the student also provides a strong motivation to all students and faculty to strive harder to excel academically. A number of university positions have been bagged by the students of the college in the annual examinations 2010.

Positions in Delhi University

S.No.	Name of Student	Course	Position
1.	Vandana Raghavan	B.Sc. (H) BMS III	Third
2.	Preeti Kumari	B.Sc. Applied Life Sc. III	Second

Positions in UDSC

S.No.	Name of Student	Course	Position
1.	Rachna Tripathi	B.Sc. Physical Science I	Third



2.	Neha Singh	B.Sc. Physical Science II	Third
3.	Mandeep Karan	B.Sc. App.Physical Science II	Third
4.	Neeraj Kumar Singh	B.Sc. Life Science III	Third
5.	Laxita Bisht	B.Sc. App. Life Science I	First
6.	Shalu Singh Chauhan	B.Sc. App. Life Science I	Second
7.	Amit Kumar	B.Sc.(H) Chemistry I	Second
8.	Manoj Thakur	B.Sc.(H) Botany III	Third
9.	Sonu Gupta	B.Sc.(H) Computer Science II	First
10.	Poonam Negi	B.Sc. App. Life Science I	Third
11.	Kismat Raj Vishwakarma	PGDCA	First
12.	Anjali Singh	PGDCA	Second

Scholarships and Fellowships

The scholastic merit of the students in the college is recognized by the number of scholarships / fellowships that they have been receiving from various agencies including the college over the years. This year too the tradition continues.

Science Meritorious Award

This award is given by university of Delhi to meritorious students securing a high percentage in the annual Examination in the form of books worth Rs. 800. Mr. Amit Kumar of B.Sc.(H) Chemistry II was the proud recipient of this award for the year 2010-11.

List of students who have got scholarships from outside the college:

S.No.	Name	Course	Scholarship and agency	Amount (Rs.)
1.	Lakshami Yadav	B.Sc. (H) Biomedical Sciences - II	Merit scholarship to SC/ST/OBC/Min., Govt. of NCT of Delhi	4830/-
2.	Mr. Vijay	B.Sc. (H) Chemistry- II	Science Meritorious Award, University of Delhi.	800/- (2009-10)
3.	Ms. Ankita Ray	B.Sc. (H) Zoology-II	- do -	800/- (2009-10)
4.	Mr. Amit Kumar	B.Sc. (H) Chemistry Part II	- do -	800/- (2010-11)
5.	Mr. Vipin Kumar Gupta	B.Sc. (H) Physics- I	Scholarship by Dr. B. K. Anand Benevolent Trust, New Delhi.	5000



List of students who have got scholarships from the college:

D. C. Arora Scholarship

(a) Meritorious Category

S. No.	Name	Course	Amount
1.	Ms. Keerti Kaumydee Dixit	B.Sc. (H) Zoology II	6000/-
2.	Rashmi Komal	B.Sc. (H) Biomedical Science I	6000/-

(b) Disadvantaged Category

S. No.	Name	Course	Amount
1.	Anupama Kumari	B.Sc. (H) Biomedical Science I	6000/-

Teena Gupta Memorial Scholarship

S. No.	Name	Course	Amount
1.	Rahul Panday	B.Sc. Physical Science (Computer Science) I	6000/-
2.	Praveen	B.Sc. (H) Electronics I	6000/-
3.	Nitish Kr. Mallick	B.Sc. (H) Electronics Part II	6000/-
4.	Nitin Bhatia	B.Sc. (H) Electronics III	6000/-

Shri Sultan Chand Scholarship Endowment

An Endowment fund in the name of Shri Sultan Chand, has been instituted from the academic year 2010-11. Out of the interest derived, one Scholarship of the value of Rs. 3500/- per year shall be awarded to Second topper of final year students of Commerce based on their performance in the second year annual university examinations. In the current academic year 2010/11 Mr. Shashikant Patil of B.Com(H) III received this scholarship from the Society funds.

On the basis of performance in the CBSE examinations, Shabnam of B. Com (H) II has been awarded a scholarship of Rs 10000/- per annum under the Central Scheme of Scholarship for college and university students by the Department of Higher education, Ministry of HRD, Government of India.

ANDC has been one of the participating colleges of Delhi University in the Youth Empowerment Scholarship Scheme, which is an initiative of Just



Careers - Magazine for MBA aspirants. Under this scheme seven students have received fee waivers for pursuing MBA at the Rai Business School, New Delhi. While 4 of them have received 100 % fee waiver, two 75 % waiver and one has got 50 % fee waiver under the category of paid seat.

Student Aid Fund

Our 'Student Aid Fund' is really for students - The college supports a large number of students by this fund. Financial Aid provided is in the form of 100% Fee waiver plus Rs. 500/- monthly stipend, 50% fee waiver and facility of Book-Grant to needy students.

LIST OF STUDENT AID FUND (SAF) AWARDEES

S. No.	Name of the Student	Course	Assistance given
1.	Amresh Kumar Chaturvedi	B.Sc. (H) Physics I	Full Fee Waiver (Except Security Deposit) & Stipend of Rs. 500/- p.m. For 1 months.
2.	Amit Kumar Chaturvedi	B.Sc. (H) Chemistry II	Full Fee Waiver (Except Security Deposit) & Stipend of Rs. 500/- p.m. For 1 months.
3.	Ms. Anupama	B.Sc. (H) Biomedical Sci. I	Full Fee waiver (Except Security Deposit)
4.	Gyan Prakash Dwivedi	B.Sc. (H) Botany II	- do -
5.	Pinki Sharma Chaturvedi	B.Sc. (H) Mathematics	Full Fee Waiver (Except Security Deposit) & Stipend of Rs. 500/- p.m. For 1 months.
6.	Ravi Kumar	B.Sc. (H) Chemistry II	Full Fee waiver (Except Security Deposit)
7.	Raman Kumar Chaturvedi	B.Sc. (H) Mathematics II	Full Fee Waiver (Except Security Deposit) & Stipend of Rs. 500/- p.m. For 1 months.
8.	Vishal Kumar Chaturvedi	B.Sc. (H) Chemistry II	Full Fee Waiver (Except Security Deposit) & Stipend of Rs. 500/- p.m. For 1 months.



9.	Nidhi Yadav	B.Sc. (H) Mathematics I	50% Fee waiver (Except Security Deposit) & stipend of Rs. 500/- p.m. for 10 Months.
10.	Rohit Kumar Shakya	B.Sc. (H) Computer Sci. I	50% Fee waiver (Except Security Deposit) & stipend of Rs. 500/- p.m. for 10 Months.
11.	Shailendra Singh	B.Sc. (H) Computer Sci. II	50% Fee waiver (Except Security Deposit) & stipend of Rs. 500/- p.m. for 10 Months.
12.	Krishna Pal Singh	B.Sc. (H) Mathematics I	50% Fee waiver (Except Security Deposit) & stipend of Rs. 500/- p.m. for 10 Months.
13.	Ashish Kumar	B.Sc. (H) Chemistry II	50% Fee waiver (Except Security Deposit)
14.	Akash Verma	B.Sc. (H) Electronics I	- do -
15.	D. Thangkhong Haokip	B.Sc. (H) Zoology I	- do -
16.	Chandan Kumar	B.Sc. (Prog.) APS II	- do -
17.	Ankita Sharma	B.Sc. (H) Zoology I	Stipend of Rs. 500/- p.m. For ten months
18.	Divya Kant Sarvan	B.Sc. Physical Sci. I	Stipend of Rs. 500/- p.m. For ten months
19.	Manisha Kumar Jha	B.Sc. Life Science I	- do -
20.	Pradeep Gupta	B.Sc. Life Science II	- do -
21.	Priyanka	B.Sc. (H) Computer Sci I	- do -
22.	Sanyam Gupta	B.Sc. (H) Mathematics II	- do -
23.	Vidhushi Khurana	B.Sc. (H) Computer Sci. I	- do -
24.	Vipendra Kumar	B.Sc. Life Sciences II	- do -
25.	Vipin Kumar Gupta	B.Sc. (H) Physics I	- do -
26.	Zameer Khan	B.Sc. (H) Electronics II	- do -
27.	Yogendra Singh	B.Sc. (H) Computer Sci. I	- do -
28.	Chandan Raj	B.Sc. (H) Mathematics II	- do -
29.	Arti Malik	B.Sc. (H) Zoology II	Aid from the Book Bank
30.	Jyoti	B.Sc. (H) Zoology I	- do -
31.	Navneet	B.Sc. (H) Physics I	- do -
32.	Pooja	B.Sc. (H) Zoology I	- do -



33.	Priyanshu Kr. Chauhan	B.Sc. (H) Physics I	- do -
34.	Ranjeet	B.Sc. (H) Botany I	- do -
35.	Ravi Kumar	B.Sc. (H) Computer Sci. I	- do -
36.	Ritesh Kumar	B.Sc. (H) Computer Sci. I	- do -
37.	Sanjay Kumar	B.Sc. (H) Electronics II	- do -

Besides the above, under the pioneering "earn-while-you-learn" programme, students coming from a disadvantaged background have been given an opportunity to fund their education. This is a small step the college indulges in to take forward its vision of inclusive education.

5. STUDENTS' ACHIEVEMENTS

The by-line of the college - 'beyond the classroom' continues to pay dividend to the students community of the college in so far as the students have been successful in breaking the shackles of classroom teaching and excelling themselves in various fields.

It gives me immense pride to inform you that Ms. Nikita Ahuja of B. Sc (H) Mathematics III was selected by the Ministry of Sports and Youth Affairs, Government of India to represent India in a five-member delegation at an important and prestigious international event - the SAARC Youth Summit held in Islamabad between 28th -30th September, 2010.

A five-minute documentary titled 'An Observer' was produced by a group of students of the college and entered in an International contest. This is a youth video festival focussing on migration, diversity and social inclusion organized by United Nations Alliance of Civilizations (UNAOC) and the International Organization for Migration (IOM) with the support of many international partners. For this film Mr. Raghuraman of B.Com (H) II has won the prestigious Dr. R. Sreedher Award for the best cinematography in the Plural + Chinh India Kids Film Festival.

Abhay Pratap Singh, Sahil Batra and Gokul Nair of the Department of Zoology have published a research article on "Impact of partherium sp. Leaf extract on the fecundity, fertility and behavioural response of A.aegypti" in Parasitology Research DOI: 10.1007/s00436-010-2126-1.

Raghvendra and Abhay Pratap Singh have won 3rd prize in Poster presentation in National Symposium on "Biodiversity, Biotechnology and Man: Interdependence and future challenges" held at Lansdowne, Uttarakhand from 26th to 28th March, 2010.



Gokul Nair presented a paper on "Spatial repellency and contact irritating response of female *Aedes aegyptii* to the leaf extracts of parthenium species in different solvents" at the 3rd International Conference on Parthenium, IARI, New Delhi, 8-10th December, 2010.

Avdesh Kumar Singh, Zamer Khan and Deepak Joshi of B.Sc(H) Electronics- Part II won consolation prize for their poster on Polarization studies in a computer based laboratory in the poster competition during Workshop on Optics organized by Rajguru College of Applied Science and IIT Delhi Student Chapter of OSA - The Optical Society, 3rd March 2011.

Pratik Chakravarty of B. Sc (H) Electronics II has been recommended under the Officer's travel grant to attend Optical Engineering + Applications (SPIE Optics + Photonics) conference to be held from 21-25 August 2011 at San Diego Convention Center, San Diego, California, USA. He will be presenting a paper on Laser based study of geometrical optics at school level in the conference.

6. ACHIEVEMENTS OF THE FACULTY

The success of a college, and the delivery of its strategic objectives, cannot be attained without its key resource - its faculty.

While continuing my administrative responsibilities and being a facilitator of good education to my best abilities, I also believe in personally contributing to academics in diverse ways. I strongly believe in and am convinced that FOSS and OER can play a major role in Education and am keen to propagate this message not only to this college, but to all educational institutions in India and abroad.

In this pursuit I participated in the planning meeting of 'Project WikiLabs' at the Homi Bhabha Centre for Science Education, TIFR, Mumbai just a few days back (April 2-3, 2011). My close collaboration with CEMCA, Commonwealth of Learning, allows me to pursue my mission of propagation of FOSS and OER aggressively. I have coordinated workshops on Open Educational Resources (OERs) - at the Institute of Distance and Open Learning, Mumbai University and at Department of Computer Science, Teerthankar University, Moradabad, both in collaboration with CEMCA. Believing in 'Education-sans boundaries and Limitations' I was able to take in the concept of OER to the eastern end of India. In association with NRCFOSS, Anna University, I conducted a workshop on 'FOSS and OER' in the Department of Computer Science, Guwahati University early this year.

I have not only encouraged organization of activities in the college in the furtherance of these concepts, but also actively participated in them. I was the Chairperson, Organizing Committee, International Conference on "Open Paradigms in Education (OPEN 2011)" held at India International Center, New Delhi early this year. This Conference presented to the world, how a college could contribute educational paradigms globally after successful experiments with



FOSS, Wikieducator and OERs. I have been able to provide the leadership to ANDC, which continuously propagates these novel concepts in education by organizing a series of workshops and seminars for the students, faculty and the academia in general - Workshop on 'Applications of Free/Open Source Software in Science Teaching & Research' and Seminar - 'FOSS: Awareness and Possibilities' at University of Delhi, South Campus.

I do take keen interest in adoption of technology including web tools for mass dissemination of knowledge, which is socially inclusive, economically viable and quality regulated, almost to the level of being labelled an evangelist. I was invited to talk on 'Open Educational Resources (OERs)' and 'Quality Assurance through Multimedia Learning Materials (QAMLM)' at the Refresher Course in Chemistry organized by Centre for Professional Development in Higher Education (CPDHE), University of Delhi.

In recent years the 'Easy Now' platform has provided me a means of promoting the adoption of technology for the development of educational content. I participated in the CEMCA 'Training of Trainers (ToT) Advanced EasyNow Trainers' Workshop to provide Educational Support to Online Learning', at the Wawasan Open University, Penang, Malaysia in June 2010. I have been invited to be a member of the Reviewing Panel for the Third International Conference on e-Learning, Universiti Teknologi MARA (UiTM), Malaysia for the conference in November 2011. Due to this interest in use of technology in education I have been a Resource Person in several Workshops on ICT in Education conducted by the Central Institute of Educational Technology (CIET), NCERT. My involvement in propagating the adoption of technology in education has resulted my name being included in the Standing Committee on E-Learning & Open Schooling created for Quality Improvement in Schools of Haryana, Board of School Education, Government of Haryana.

Maybe because of my involvement with Science education over a long period, I have been invited to be on committees that decide the policy formulations for secondary and senior secondary school education. I am a Member, Departmental Advisory Board, Department of Teacher Education and Extension, National Council of Educational Research and Training (NCERT) and a Member of Committee for Development of Textbook on Pedagogy of Science for B. Ed., Departments of Education in Science and Mathematics (DESM), NCERT. Due to my experience in school curriculum design I was invited to the Core Committee in Science and Mathematics representing the Department of Education in Science and Mathematics (DESM), NCERT for developing Core Syllabus in Biology Class XI and XII (January 21, 2011). I was also a Resource Person in the Training Programme on Biology at Secondary and Higher Secondary level, North East Regional Institute of Education of the NCERT, Shillong in February 2011 and was a Subject Expert in



the Live TV programme "Examinational Helpline for class XII Biology students" for the Central Institute of Educational Technology (CIET), NCERT (February 10, 2011).

I believe that science should be taught in an holistic and integrative manner - I was hence invited to be a Member of the Organising Committee for a Workshop on 'Dealing with Evolution in the Classroom: Evolutionary perspective in Modern Biological Teaching and Research' at the Homi Bhabha Centre for Science Education, TIFR, Mumbai (April 1-2, 2011). I love interacting with school teachers and do not miss any opportunity to do so - whether as Judge in "Science in Sports" at the Science Exhibition at Modern School, Vasant Vihar, New Delhi (July 30, 2010) or as Chief Guest to the Farewell Candlelight Ceremony at St. Thomas Girls Higher Secondary School, my alma-mater, New Delhi (January 28, 2011).

In order to ensure a continuum between the secondary and tertiary education we need to interact with schools - I hence, offered to conduct the Workshop 'Orientation of master trainers in the laboratory techniques and practical work in biology at higher secondary stage' at Acharya Narendra Dev College, for the NCERT (February 25 - 27, 2010). I was also invited to chair a Technical Session titled "Teaching Science to Young Children" in the workshop - Exploring Environment - Learning Science for teachers organized by the Delhi Public School Society, New Delhi (November 10, 2010) and delivered a Keynote Address at this event on "Textbook Development : Concerns and Challenges" that reflected the emerging paradigms in science education.

I was very glad that my experience in Science and Biology education was recognised by Homi Bhabha Centre for Science Education, Tata Institute of Fundamental Research (TIFR), Mumbai who appointed me a evaluator of a Ph.D. Thesis in Education.

My administrative assignments in the current session include appointment as Member, UGC Representative, Governing Body of Government Science College, Raipur, Chhattisgarh (from 2007-08 for 5 years), Member, Advisory Committee, Department of Hindi Medium Implementation, University of Delhi (2008-2010), and Member, Admission committee, Faculty of Maths, University of Delhi (2011).

The last academic year was watershed moment for recognition of faculty members of the college by the University for having rendered yeoman service to the society. This year too brought recognition of ANDC teachers at various levels.

Dr. Sarita Kumar, Department of Zoology has been selected for 'Meritorious Teacher Award' by Directorate of Higher Education, Govt. of NCT of Delhi. Member Secretary of the OPEN 2011, Sarita was a Facilitator of the OER Workshop organized at the Institute of Distance and Open Learning, Mumbai, from 24th to 26th February, 2011. Dr. Kumar has presented and published several research papers in this academic year (details in the Annexure). Besides being PI of research project, she also has a DST Entrepreneurship Development Project,



under IEDC, entitled 'Identification and formulation of products from weed extracts exhibiting anti-mosquito potential' sanctioned to her. She had also published several books for class IX and X. She had been Resource person in the programme entitled 'Orientation of Masters Trainers of ST Category of NCR for Activity-based Science Teaching at Upper primary stage' conducted by NCERT. In collaboration with ILL, she had written e- chapters for Life Science II year. She is also on the editorial board of several International Journals. She is also part of the teams deputed by NCERT for the Development of Source Book on Assessment at Science at Upper Primary Stage and the book 'Exemplar problems in Science' for Classes VIII. She has also worked as an expert in the review of Course material for OBE 'A' level in the subject of EVS, NIOS in March 23 -23, 2010.

Dr. Sunita Hooda (Department of Chemistry), Dr. Sarita Kumar (Department of Zoology) and Dr. Urmi Bajpai (Department of Biomedical Sciences) have been recognized by the Board of Research Studies, University of Delhi as independent supervisors to guide Ph.D. students of the University. Dr. Monisha Khanna, Department of Zoology and Dr. Vibha Gaur, Department of Computer Science had been recognised earlier as research guides and are guiding research scholars for their Ph. D degrees.

Dr. Ram Kumar was an invited Professor Université Littoral, France in May-June 2010. He gave a plenary lecture on "Copepods as determinants of biodiversity in freshwater and marine ecosystems: a comparative overview" during the National Symposium on Biodiversity, Biotechnology and Man: Interdependence and future challenges. He has also published research articles in scientific journals of high impact factors. Dr. Ram Kumar delivered a invited seminar each at the University of Littoral, France and at University of Science and Technology, Lille-1, France and details of the same are incorporated in the Annexure to this report. He has collaboration with Université Littoral, National Taiwan Ocean University Taiwan, Australian Rivers Institute, Griffith University for research purpose. He also participated the Seine River Estuary to the Atlantic Ocean Cruise (May 22-26, 2010) in the team of Prof. Sâmi Suissi of the Université de Lille-1 Sciences et Technologies; CNRS - UMR 8187. He is away on study leave as Post Doctoral Fellow at Taiwan at the moment.

Dr. Monisha Khanna has been registered as a guide by the University of Delhi and this year she has also registered one student for Ph.D. She was also coordinator and Resource Person for the Summer Training Workshop (May 15 - August 10 2010) for students on "Polyphasic characterization of actinomycetes and analysis of their antimicrobial potential". She has presented and published several research papers in this academic year.

Dr. Ravi Toteja has authored a book "Text Book of Biotechnology" for undergraduates. He had attended and organized several workshops in this



academic year. He had been a Resource person for the "Training Programme on Media Studies" by CIET (NCERT). He has also authored two e-chapters on Immunology in collaboration with ILLI. He is also Coordinator for writing chapters for ILLI on Immunology curriculum of B.Sc. Zoology Honors.

Dr. Neeti Misra, Department of Chemistry participated as an expert in a workshop "Generate Content using EasyNow", conducted by D. Net, Dhaka, Bangladesh in collaboration with CEMCA, New Delhi at D. Net, Dhaka in December 6 - 9, 2010.

Dr. Urmi Bajpai, Department of Biomedical Science was invited by organisers of KVPY (Kishor Vaigyanik Protsahan Yojna) for a session on examination pattern for the prestigious fellowship at IISER Pune (26-27 July, 2010). She was also the resource person for a workshop for the school teachers teaching biology and biotechnology, organised by Modern School, Vasant Vihar, New Delhi (28 August, 2010).

Dr. Amit Garg is on the Editorial Reviewer Board of Computer Application in Engineering Education published by John Wiley & Sons and The Science Education Review (SER), Australia. He is also a member of the International Scientific and Program Committee, International Conference on Applications of Optics and Photonics, May 3-7, 2011, Braga, Portugal.

Dr. Ravneet Kaur, Department of Electronics is one of the Reviewers of Journal of Electrical and Electronics Engineering Research (JEEER).

Ms. Shalu Mahajan, Department of commerce has been involved in writing e-lessons for Institute for Life Long Learning (ILLI), University of Delhi for the B. Com (H)-I year paper of Business Organization and Management.

Dr. Vibha Gaur, Assistant Professor, Department of Computer Science and Mr. Sanjay Vohra, Placement Officer participated in the Faculty Entrepreneurship Development Programmes (FDP) conducted by National Foundation of Indian Engineers (NAFEN), Delhi and EDI Ahmedabad respectively.

Dr. Monica Misra has been elected as the AC member of the recently conducted elections for Academic Council of the University of Delhi.

The faculty of the college is in a constant pursuit to upgrade their knowledge of their respective disciplines. One of the vital aspect of this endeavour is to obtain the coveted doctorate degree. This year too five faculty members received their Ph. D degrees.

List of teachers awarded Ph. D degree in the year 2010-2011

S. No.	Name	Title
1.	Dr. Sona Pranav Kumar	Analysis Modeling and Simulation of AlGaIn/GaN Modulation Doped Field Effect Transistor.
2.	Dr. Sharanjit Kaur	Leveraging Grid as a Synopsis for Mining Data Streams.



3.	Dr. Dinesh Kumar Arya	Synthesis of Nitrogen and Sulphur containing novel Bio active Hetrocycles.
4.	Dr. Roopesh Tehri	Studies on Chaos Control and Chaos Indicators in Dynamical Systems.
5.	Dr. Gagan Dhawan	Novel Methods for the synthesis of Oligonucleotides and their modified analogs.

The college is a facilitator in the value-addition to the academic profile of its faculty members. It makes available study leave or duty leave to its teachers for pursuing Ph. D degree or Post-Doctoral studies. In the current academic year study leave was sanctioned to the following teachers:

1.	Mr. Sandeep Kumar Goel	Ph. D	Department of Commerce and Business Studies, Jamia Millia Islamia
2.	Mr. Ranjeet Singh	Ph. D.	Department of Physics, IIT Delhi.
3.	Ms. Sunita Narang	Ph. D.	Faculty of Management Studies, University of Delhi
4.	Ms. Preeti Marwahai	Ph. D.	Department of Computer Science, University of Delhi
5.	Dr. Ram Kumar	Post-Doctoral Research	National Taiwan Ocean University, Taiwan.
6.	Mr. Gagan Dhawan	Master's course in Bioinformatics (Duty Leave) Sponsored by the University of Delhi	College of Science and Engineering, School of Biological Sciences, University of Edinburgh, U.K.

Workshops

The college conducts several workshops every year. This year too we conducted workshops on FOSS, Linux, Open Source software, Drupal, PHP details of which are already give. The Electronics Department conducted a workshop on Holography - Details under the Departmental activities. Besides these, the following workshop was conducted in summer last year:



Polyphasic characterization of actinomycetes and analysis of their antimicrobial potential (June 4 - August 6, 2010)

Acharya Narendra Dev College organized a two-month (June 4 - August 6, 2010) long summer training for 6 students of B.Sc (H) (Zoology Part II), B.Tech (Biotechnology), B.Sc. (Medical Biotechnology) and M.Sc. (Toxicology) in the Instrumentation Lab. The Co-ordinator for this Workshop was Dr. Monisha Khanna, Associate Professor, Department of Zoology.

The trainees got a hands-on experience in the following techniques:

1. Introduction to Biology of Actinomycetes: Preparation of culture media, and maintenance of strains.
2. Biochemical studies on isolates and their morphological identification using light and phase contrast microscopy.
3. Isolation of genomic DNA by large and small scale methods.
4. Agarose gel electrophoresis of DNA samples.
5. PCR Amplification of 16S rRNA gene using universal primers.
6. Elution of amplified DNA fragment using Gel Extraction Kits.
7. Extraction of bioactive compounds from culture extracts for secondary screening.
8. Determination of minimum inhibitory concentration (MIC) of the antibiotic compounds.
9. Identification of bioactive components in culture extracts using thin layer chromatography (TLC).
10. Identification of bioactive fractions by Bioautography.
11. Spectrophotometric analyses of the active extracts.

The students maintained scientific lab records of their day-to-day activity. They also stored the photographic version of the results obtained on the computer, and on the digital camera. Trainees compiled information pertaining to the theory and the principles involved in each experimental protocol and incorporated it into their workbook along with the results obtained. The Summer Training was designed not only with the aim of making the students well-versed in basic molecular biology techniques for Gram Positive bacteria but also to inculcate in them a scientific outlook and to give them a first hand exposure to real research, which would be useful to them in their future academic endeavors.



7. RESEARCH PROJECTS

The college's research strategy encompasses all major academic disciplines and is committed to world class research activities in key areas across all disciplines of science. The faculty's commitment in pursuing research to keep themselves abreast of latest happenings around the world is strongly supported by the institution in providing the wherewithal of research i.e., laboratories augmented with state-of-the-art equipments and a 24-hour power back-up. The state is such that there are no less than seven projects currently running in the college turning the college into a mini research centre. In each of these projects, the college has significant research activities, linked nationally and internationally, building on a cornerstone of inter-disciplinarity to deliver research of global consequence.

S. No.	Name of Faculty (Principal Investigator)	Title of the Project	Period	Funding Agency	Rs. (in Lakhs)
1.	Dr. Urmi Bajpai	Cloning and Expression of Mycobacterium tuberculosis genes	3 years w.e.f 1.5.2010	Council Scientific & Industrial Research (CSIR)	20.0
2.	Dr. Sarita Kumar	Larvicidal Properties of Certain Botanicals against Mosquito larvae - A Alternative for Mosquito Control	3 years w.e.f 1.5. 2009	University Grants Commission (UGC)	10.96
3.	Dr. Amit Garg (Principal Investigator) Mr. Vishal Dhingra & Dr. Savithri Singh (Co-Investigators)	Investigating science Hands-on to promote innovation & research at undergraduate level	3 years w.e.f. 1.2. 2009	University Grants Commission (UGC)	10.54
4.	Dr. Vandana Uberoi (Principal Investigator) Dr. Sunita Hooda & Dr. Geetu Gambhir (Co-Investigators)	Fabrication of new polymer sensors for Environmental Protection.	3 years w.e.f April 2008	University Grants Commission (UGC)	7.57



5.	Dr. Ram Kumar	Evaluation of the potential of cyclopoid as copepod as an effective Bio-control agent for the control of disease vectors.	3 year w.e.f. 1.2. 2008	Indian Council of Medical Research (ICMR)	16.00
6.	Dr. Monisha Khanna	Isolation and characterization of actinomycetes and analysis of their anti-bacterial potential.	3 year w.e.f. 14.08. 2006 Extended for 1 Year	Ministry of Environment and Forests (MOEF)	9.92
7.	Dr. Vikrant Kumar	Metal complexes as anticancer agents : Synthesis, characterization and their tumorigenesis evaluation.	3 year w.e.f April 2010.	Department of Biotechnology, Ministry of Science and Technology	16.11

Dr. Arijit Chowdhuri, Department of Physics is the Co-Investigator in the project titled "Growth and characterization of composite matrices of SnO₂ thin film and nanocatalysts for automotive gas sensors" funded under National Programme on Micro and Smart Systems (NPMASS) by Aeronautical Development Agency (ADA, ISRO), Govt. of India (2010 - 2012) worth Rs. 35.40 lakhs. This project is hosted at the Department of Physics & Astrophysics, University of Delhi.

The project of Dr. Sarita Kumar, Associate Professor, Department of Zoology, aims to explore alternate, simple, environmental safe and sustainable ways of mosquito control since continued usage of synthetic insecticides not only render the disease vectors immune but also inflict adverse effects on the environment. The three species of mosquitoes - *Anopheles stephensi*, *Aedes aegypti* and *Culex quinquefasciatus* - are being cultured under controlled conditions in a dedicated laboratory against which the potential of various phytochemicals are being investigated for their application as mosquitocidal agents. The studies have carried out with various essential oils, e.g., pine oil, cinnamon oil, rosemary oil, citronella oil, basil oil, peppermint oil and celery seed oil, for their larvicidal, adulticidal, repellent and irritancy potential against mosquitoes. Several extracts have been prepared with the different parts of the selected plants and tested for mosquitocidal efficiency. These include extracts from pepper seeds and citrus leaves. Ms. Radhika Warikoo is working as a Project Associate under the project.



Undergraduate students of B.Sc. (H) Zoology are also proactively involved in carrying out curriculum related projects in the laboratory thus gaining valuable hands-on experience. Three research papers and two conference papers have already been published from the research work and two research papers are under publication.

Dr. Vikrant Kumar, Assistant professor, Department of Chemistry has begun his comprehensive investigations on the role of metal complexes as anticancer agents. The proposed highly innovative studies combine synthetic chemistry and biomedical research, so as to improve bio-distribution, specificity and biological recognition for cancer chemotherapy. The study anticipate that the identification of the genetic lesions that are key to the pathogenesis of melanoma, directly linked to a drug target discovery program, will contribute to improved treatment of this disease. This study may also yield valuable information for the development of a new class of anti-cancer drugs. The significant outcome of this project is to develop new synthetic methodologies with the ability to make inexpensive products and preferably, ambient or environmental safety conditions for anti-melanomal applications.

Dr. Urmi Bajpai, Associate Professor, Department of Biomedical Sciences has been selected to be a principal investigator for the CSIR funded Open Source Drug Discovery project on "Cloning and Expression of Mycobacterium tuberculosis genes". The major objective of this mega project is to further the understanding of the biology of the causative organism of tuberculosis, Mycobacterium tuberculosis, and hence to accelerate the discovery of novel drugs for Tuberculosis.

In all, only eight undergraduate colleges were short-listed, from across the country, with which OSDD is engaging in drug discovery activities in the initial phase itself. Acharya Narendra Dev College is one of the eight selected colleges.

The objective of this project is "Cloning and expression of a select number of Mycobacterium tuberculosis genes" and to study the potential of these gene products to be good drug target by investigating their role in pathogenesis. In all, 15 students from the current (2008-2011) B.Sc. (Hons) Biomedical Sciences (final year batch) are participating in the project. Each student is responsible for the cloning and expression of a gene from Mycobacterium tuberculosis H37Rv strain. The genes that are selected for the study are suggested to be the potential drug targets, based on the data mining of the available literature. Each of the student has designed gene-specific primers which were aimed for directional cloning.

So far, the students have cloned 13 genes (by TA cloning) and seven of these genes have been further cloned in pET expression vector. The expression has been confirmed by PAGE analysis. Expression of the remaining six genes is underway. The cloned genes have been sent for sequencing.



Students have worked very hard to meet these targets in a short span of two months of February and March this year. They worked late hours and on holidays, along with attending the classes, which is commendable. Students have performed following techniques to carry out the project:

- Have designed gene-specific primers which were aimed for directional cloning
- Optimised and carried out PCR amplification of the gene
- Agarose Gel Electrophoresis
- TA cloning
- pET (Expression vector) cloning
- Colony PCR
- Plasmid DNA isolation and Restriction digestion of the plasmid DNA
- Extraction of DNA from agarose gel
- IPTG induction and PAGE (Polyacrylamide Gel Electrophoresis) analysis for checking the expression of recombinant protein

Following are the students who are participating in the CSIR-OSDD project:

Amrita Singh, Akhilesh Saraswat, Bharat Bhatt, Aamod Jha, Abhinav Tyagi, Beneeta Kalha, Harsha Rohira, Kartika Vashisth, Preeti Yadav, Rajat Sharma, Ruchika Pokhriyal, Sumit Kinger, Srishti Nanda, Sweety Raj, Vivek Bhardwaj.

Under the tutelage of the ongoing project "Investigating science Hands-on to promote innovation & research at undergraduate level" undergraduate students of different disciplines in the college are being imparted training not only to automate various experiments using computer interfaced sensors but also develop feeling of camaraderie working in groups. Students of electronics, physics, life sciences and chemistry are being encouraged to work in these projects so as to develop skill sets in using advanced data-acquisition tools including LabVIEW and LabQuest. They are being exposed to various pedagogical practices in electronics, physics, chemistry and life sciences using different types of sensors like CO₂ gas sensor, conductivity probes, pH probe, current sensors, light sensors and magnetic field sensors to name a few and that have been instrumental in enhancing their procedural and conceptual understanding. More than 70 students have been enrolled and are working in the project. Within a span of two years, there have been twenty publications in peer reviewed journals and national and International conferences. Students have participated in eight national and international conferences presenting the work done under the project and have published thirteen papers.



8. COLLEGE ACTIVITIES

Acharya Narendra Dev Memorial Lecture

Acharya Narendra Dev was a great patriot and educationist, whom Pandit Jawaharlal Nehru has rightly described as a person rare in mind, spirit and intellect. Every year, the college celebrates the birth anniversary of this great man of rare distinction. This year too a lecture was organized on October 29, 2010 and Professor Anand Kumar from Jawahar Lal Nehru University gave a talk on 'Samaj Nirman Mein Vidyarthiyon Ki Bhumika'. Professor Kumar enthralled the audience with his gripping talk on human values and current social issues. He highlighted the role of women in society and felt that cases of crime against women bring a shame to all of us and students should work towards building a society where there is respect, freedom and safety for women. He also explained the role Acharya Narendra Devji in education and social issues of our country. One of our students Bhanu Pratap Singh, gave a brief outline of the life and highlighted the works of Acharyaji.

SPICMACAY - ANDC Chapter

This society seeks to foster the exchange of traditional Indian values and to generate awareness of the cultural traditions and heritage of India. In order to achieve its goals, ANDC chapter of SPICMACAY organizes concerts, lectures, demonstrations, informal discussions, and seminars. These events are organized by the students under the aegis of the Delhi chapter of SPICMACAY.

This year as part of Virast 2010 series dedicated to Gurudev Rabindranath Tagore and Swami Vivekananda the ANDC chapter of SPICMACAY organized a movie screening, a heritage walk and a classical music concert. The chapter also organized a movie screening of Charlie Chaplins's City Lights and Satyajit Ray's Jalsaghar on October 1, 2010. The students and the faculty of the college enjoyed the cinematographic excellence of these two great directors and specially the comedy in the movie City Lights a lot.

The heritage walk to Humayun's Tomb with Dr. Ramji Narayan on October 23, 2010 was enjoyed by the Principal, about 65 students, 3 faculty members and two visitors. A heritage walk is a guided tour to a place of historical and/or cultural relevance, with an expert. Dr Narayan's exposition of the history and architecture of Humayun's tomb was very informative, educative and inspiring to all the participants of this heritage walk.

The Acharya Narendra Dev College chapter of SPIC MACAY organized a classical music concert on October 27, 2010. The artiste of the programme was the noted Hindustani vocalist, Pandit Sanjeev Abhyankar. Accompanying him on the tabla was Pandit Ram Kumar Mishra and on the harmonium, Sri Tanmay Deo Chake. Pt. Abhyankar mesmerized the faculty members and students present with his recital



of Raag Todi. His explanation of the nuances of the raags and surs left the audience spell bound and wanting for more. On popular demand, Panditji ended his recital with Raag Bhairavi. After the end of the recital, Panditji interacted with the students and staff of the college which left a lasting impression of his expertise, greatness and simplicity in their minds.

Sashakt

Sashakt, the society for welfare of girl students of our college, works towards gender sensitization and empowerment of women. To further this objective, the society organized a lecture by Dr. Nimmi Rastogi, a well-known Gynaecologist on issues concerning the youth of today like use of contraceptives, safe sex, pre-marital sex etc. The session was extremely productive as students were able to clear their doubts and misconceptions.

In view of the fact that Delhi is no longer considered as a safe city for women, the society in collaboration with the Delhi University Student's Union organized Self Defence training classes for a period of 10 days for girl students.

To commemorate the 100th anniversary of International Women's Day, on March 8, 2011 the society organized a Street Play. The play titled "Naari Tere Roop Anek" was successful in sensitizing the students and staff of the college on the role of women in society. Along with this, a poster making competition was also held, the topic being "Women of Today". The students participated with great enthusiasm.

Annual Day

The College celebrated its Annual day on February 25, 2010 in the college premises. Shri Oscar Fernandes, Member of Parliament and Chairman, Parliamentary Standing Committee on HRD, Government of India graced the occasion as the chief guest. Mr. B. P. Singh, Chairperson, Governing body presided the function which began with Dr. Savithri Singh, Principal ANDC presenting the Annual Report 2010. The Annual Report was an exposition of the achievements of students and the faculty in the academic session 2009-10. A major highlight of this report were the series of activities the college indulged in to take academics beyond the confines of classroom in the form of workshops, seminar, projects etc. In his address, Shri Oscar Fernandes underlined the participation of students in nation-building and the role an educational institutions can play towards this objective. The college annual magazine 'Insight 2010' was also released by the esteemed guests on the dias. Professor S. K. Vij, Dean (Students' welfare), University of Delhi was the guest of honour for the Annual Day-2010. He applauded the college for the rapid strides it is taking to emerge as one of the prestigious and coveted college in the University of Delhi. He thanked the college for holding a session of the 'OPEN DAY' of the University. On this occasion, students obtaining meritorious positions in the college and the University in the annual examinations 2009 were felicitated by awards and certificates. The function ended with a vote of thanks



delivered by the staff council secretary Dr. Anju Agrawal.

A musical evening by eminent singer Shri Gulfam Sabri was also organized in the evening. Shri Gufam Sabri, who was accompanied by his renowned brother Ustad Sarwar Sabri entertained the college audience with his melodious Sufiana-Ghazals.

ACCENTURE - The Annual Cultural Festival

Accenture, the annual fest of the college is organized every year with great enthusiasm by the students and the teachers alike. This event offers a unique opportunity to students to showcase their immense talent, besides inculcating in them the spirit of healthy competition. It is a confluence of all performing arts - cultural and literary.

A lot of effort and planning goes into making the programme a success and students work very hard on every aspect of the festival, be it running around for sponsorship, designing and printing of posters, invitation cards and banners, planning various events, and of course, competing in them! All this enhances their organisation skills, which no doubt, will stand them in good stead later in their lives. The event encompasses two days of fun and joy, where students and teachers join hands to make the fest memorable.

Accenture 2011 was held on February 18 - 19, 2011. During these two days, the campus wore a festive look, decorated as it was all over with paper lanterns, kites and rangoli. To complete the picture, there were also stalls offering interesting games and mouth watering snacks, which sold like hot cakes!

The inauguration was followed by a classical dance performance by two budding artists of the college. Over the two days, students, not just from the AND college, but also from other educational institutions from the NCR participated keenly in a range of events, such as Ad-mad, debate, two-minutes-to-fame and face painting. Music and dance events saw intense competition and also showcased the immense talent of the student community. Students also walked down the ramp in a fashion show, sponsored by Biba and Oriflame. The event was a big hit, and it ended with the teachers taking part in the show.

'Bakait', a skit presented by the college students was appreciated by one and all, for the brilliant performances and direction. 'Main hoon kavi', a poetry recital event, provided a platform for emerging poets to present their skills in this area. The students thoroughly enjoyed the performance of the rock band, 'Nasya-Decibel' which belted peppy numbers. One of their compositions, Nagin was a big hit with the audience. The students bid the festival adieu with a JAM session, where they let their hair down and danced to their hearts content. All in all, the event was a rocking success.

Alumni Affairs



The alumni affairs committee kept its date with its yearly schedule of the first Sunday of February and organized the alumni meet cum get-together on February 6, 2011. It was a very well attended event, growing in size and participation with each passing year. The primary objective of the alumni meet was to make the alumni an integral part of the growth of the institution. The meet underlined the significance of enhanced student- faculty-alumni interaction and deliberated upon evolving strategies to strengthen the outreach activities of the college. The meet involved bringing together of many people associated with college at one place, and provide opportunities to renew and make new contacts. A number of games and fun activities were also organised on this occasion.

The alumni was pleasantly surprised to see the progress of the college in terms of its academic achievements and infrastructure. During inauguration, the Vice Principal, Dr Seema Gupta after extending a warm welcome to the alumni, dwelled on the advantages of having a strong alumni association and encouraged them to play a proactive role in taking the college to the next level of achievements. Some of the alumni members reminisced about their stay in the alma-mater and how college life had played an important role in shaping their careers, besides opining about their corporate life and skills required to make a successful career. The valuable suggestions on the future prospects and priorities were cheerfully appreciated by the august gathering in this meet.

Remedial Classes

Remedial classes for SC/ST/OBC/ Minorities students were organized by the college in the academic year 2010-11, under UGC merged Scheme, XI th Plan. These classes benefitted the undergraduate students of B.Sc - Life Sciences, B. Sc (H)-Physics and B. Sc (H) Botany in the above mentioned categories. The classes also included group interactions among the academically weak students and teachers. These classes greatly supplemented the understanding of the students in the various subjects they are studying in their courses. The college hopes to organize greater number of classes in future to benefit greater number of students.

9. DEPARTMENTAL ACTIVITIES

The 'ANDC Experience' extends beyond the curriculum to a rich tapestry of student clubs and societies that equip students for a life of leadership and civic participation.

Department of Biomedical Sciences

CATHEXIS, the society of Biomedical Sciences organized its annual festival on November 18 2010. The endeavor is to choose a scientific theme having contemporary relevance. This year the focus was on GLOBAL WARMING. It is most discussed and debated topic but least understood. The motivation behind the



entire itinerary of Cathexis was to make the common man aware of nuances of global warming and its impending danger.

Two experts of the relevant fields were invited as guest speakers. Dr. K. Vijaya Lakshmi from Development Alternatives emphasized on need for development and conservation being carried in parallel. Title of her talk was: "Climate Change and Ecosystem Degradation-Need for Alternate Thinking". She reminded us of the effect of global warming on our climate, crop production and natural resources and highlighted the efforts of Development Alternatives in the field of alternative energy sources and community activities that can help us save our nature. She also spoke about nature-friendly alternatives to fulfill energy, food and water needs of poor.

Dr. Ashish Pathak, a consultant in a carbon advisory consultancy, delivered a talk titled: "Role of Clean development mechanisms (CDM) in combating the climate change". The lecture covered information on global warming, policies formulated for combating the global warming, CDM, success of CDM, Indian scenario and future challenges for successful implication of CDM. The departmental society brought out its annual magazine BIOMER focusing on the same theme. This year's guest article was titled "Climate and Development" and was contributed by Dr. Sreeja Nair from TERI.

There was screening of an award winning documentary on climate change and Photography exhibition by British Council of India. The exhibition highlighted the expedition to Antarctica. Academics apart, various inter college competitions of students were organized like quiz and poster making. Many colleges participated and the event was a great success.

A team of Students, teaching and non teaching staff of the Department of Biomedical Sciences went to an educational trip (January 15- 22, 2011) to National Institute of Oceanography (NIO) Goa. In the NIO, the team visited the museum and became familiar with various specimens and basic equipments used in marine biology research. Students were briefed with the ongoing research programmes in the NIO via an audio-visual session. Students also visited few beaches and spent time in observing sea shore ecology. On the way to Goa, students became familiar with the geography and flora of central and western India and Western Ghats.

Department of Botany

The Department of Botany organised an excursion to Tirthan Valley (Kullu District, Himachal Pradesh) from October 27 to November 1, 2010. The 45 member team stayed in swiss tents on the banks of the river Tirthan, on the outskirts of the Great Himalayan National Park. The group studied the biodiversity of the area and could get excellent collection for the Botanical study. The students got a chance to see the efforts being done for conservation at Great Himalayan National Park. It was a great hands on experience for the students to observe and study the plants in their



natural habitat. The students also had an opportunity to do some adventure sport of river crossing.

Department of Chemistry

The chemistry department started its new session just after the annual examinations with the students projects during the summer vacations. For the past few years, students who have appeared in the second year examination are given opportunities to work in various research laboratories outside the College. In the year 2009, a few students did their projects in the College itself with encouraging outcomes. This trend has continued during the summer vacations of 2010. Many students from B.Sc. Chemistry (Hons) and B.Sc. Programme Physical Science came forward to do the summer project. Three of these students worked in the labs of Department of Chemistry, University of Delhi. These students and their research topics are

- Vijay Kumar - Synthesis of 13 membered amide based macrocyclic ligand under Dr. Rajeev Gupta
- Jyoti Ahuja and Pooja Attree - To synthesize 3,4-Dihydropyrimidin-2-ones using copper nanoparticle under Dr. S. Majumdar.

Fourteen students worked with the teachers in the college and successfully completed their projects. The following table lists the name of the students with their project title.

Student Name	Course	Project title	Supervisor
Vimmy Suvarna	B.Sc. Chemistry (Hons) - III year	Lead (II)-PVC membrane selective electrode Based on 1-Naphthyl Amine as an ionophore	Dr. Sunita Hooda
Uday Mahajan	B.Sc. Chemistry (Hons) - III year	Glycidyl Methacrylate - Styrene Copolymeric Membrane Sensor for Cu(II) ion	Dr. Sunita Hooda
Pooja, Mamta	B.Sc. Chemistry (Hons) - III year	Preparations of crystals of potassium trioxalatochromate(III) & chromium Complexes- A green way	Dr. Seema Gupta
Ravi Kumar	B.Sc. Chemistry (Hons) - II year	Hydrazones synthesis and its properties	Dr. Seema Gupta
Akriti Jakhmola & Akshay Kalra	B.Sc. Chemistry (Hons) - II year	Nickel (II) PVC Membrane Electrochemical Sensor Based on 2,4,6-Tribromo Phenol As A Novel Ionophore	Dr. Vandana Uberoi, Dr. Sunita Hooda & Dr. Geetu Gambhir



Abhinav Tripathi	B.Sc. Chemistry (Hons) - III year	Synthesis and characterization of N-(4-nitrobenzylidene) aniline	Dr. Vikrant Kumar
Shruti Arora	B.Sc. Chemistry (Hons) - III year	Synthesis and structural elucidation of Schiff's Base Derived from Salicyldehyde and aniline	Dr. Vikrant Kumar
Neeraj Joshi, Ashok Kumar	B.Sc. Chemistry (Hons) - III year	Study the decomposition of hydrogen peroxide at Different temperatures and different amounts of manganese dioxide	Dr. Neeti Misra Dr. Amit Garg (Deptt. of Electronics)
Manorama Kumari	B.Sc. Chemistry (Hons) - II year	Variation of vapour pressure with Temperature for Different liquids'' Under ''Investigating Science hands on Promoting Innovation & research at the Undergraduate level''	Dr. Neeti Mishra Dr. Amit Garg (Deptt. of Electronics)
Neeraj Yasmin	B.Sc. (Prog.)- Physical Science - III year	Removal of heavy toxic metal ions from industrial effluents using tamarind triethyl Amine (TTEA) derivative	Dr. Sunita Hooda Dr. Madhubala Raigar

Many of these students have presented posters and papers on their project work in different institutes. This has increased the confidence level of the students as well as their interest in chemistry.

On the initiative of Dr. Seema Gupta, Associate Professor, Department of Chemistry launched its 'Wall Magazine'. Students are encouraged to contribute to this Wall Magazine. Each week the students choose one interesting topic from chemistry and present a small write up on a white board kept in the department. This is a small beginning to commemorate the international year of chemistry.

The students of the chemistry department also showed their talent in the cricket field when their team lead by Neeraj Joshi of B.Sc. Chemistry (H) III won the intra-college cricket competition.

The chemical society Abhikriya organized its one day festival 'Synergia'. The events included paper presentation, rangoli, poster making, singing competition, dumb charade and screening of a documentary 'The eleventh hour'. The entire event



was planned and conducted by the students with guidance from the Abhikriya convener, Dr. Vandana Uberoi. The students participated with great interest and used this opportunity to showcase their multi-dimensional talents.

The construction of two new chemistry laboratories has also started. On their completion, the department will be able to provide more spacious labs with better facilities to the students in the next session.

Department of Computer Science

The Turing society of Computer Science Department held its annual technical festival "PARADIGMS 2011" on March 12, 2011. This festival was inaugurated by Mr. Rakesh Roshan, Manager, Alacatel Pvt Ltd. With his expansive knowledge in the field related to Mobile Networks, the students had a gala time in soaking themselves with the knowledge in the latest techniques available. The festival was a unique amalgamation of technical and non-technical skills of IT students which included events like Techno speak by Mr. Roshan, 60 seconds to fame, Web Designing, ADMAD, Poster making, Maverick and Quiz.

Department of Electronics

The Society of Photo-Optical Instrumentation Engineers (SPIE), an international society advancing an interdisciplinary approach to the science and application of light, has formally approved University of Delhi at Acharya Narendra Dev College SPIE Student Chapter. The SPIE student chapter was inaugurated on 15th February 2011 by Prof. K.N. Tripathi, Ex-vice chancellor Dr. B.R. Ambedkar University Agra. On this occasion, he unveiled the SPIE student chapter poster and complimented the college on being first to have such a chapter in University of Delhi and wished the chapter a great success. With its establishment, college joins the elite group within India of IITs, IISc, NIITs and DCE where this chapter has been successfully running for years besides more than 150 well established chapters in other countries like USA, UK, Europe, China, Russian Federation and Canada etc. With its establishment, chapter will be entitled to receive Activity Grants, Officer Travel Grant, Visiting Lecturer Program, Collaborative Conference Grant and subscriptions to some of the prestigious SPIE online Journals. Ten students of the department are members for International Society in Photonics "SPIE".

A two day workshop on Digital Holography was also organized from 15 -16 February 2011 with Dr. Amit Garg as the convener. The workshop was attended by 36 students. Eminent speakers like Prof. Kehar Singh and Joby Joseph delivered their invited talks on holography. Hands-on sessions were conducted both in the college and at department of Physics, IIT, Delhi where students successfully recorded the holograms for the first time. The students enthusiastically participated in the workshop and learnt the art of holography.

The students of the department are also involved in number of field activities.



These activities include

1. Noise Level studies : This study report the measurements of noise levels in various regions of Delhi which have been categorized as residential, commercial, industrial and zones near the airport. It has been found that the ambient noise levels in these regions are higher than permissible limits except in the case of industrial zone. The study has made recommendations in a paper (details in Annexure) which can be useful in curbing noise pollution. Twenty one students of the department are involved in noise level measurement studies carried across Delhi.

2. Participation in three day science fair on National Science Day organized by Department of Environment, Govt. of NCT of Delhi at Delhi Hatt, Pitampura. Students from our college presented their various projects at the science exhibition. Four out these students, two from B.Sc (Programme) Life Sciences, IIIrd Year (Abhishek Singh and Gaurav Yadav) and two from B.Sc (H) Electronics 1st year (Nitish Kumar Mallick and Devender Dhawan) presented their project on "Water quality monitoring using sensor based technology". In this kit they measured the amount of calcium ion, nitrate ion, chloride ion and dissolved oxygen in the various samples of the water collected from various places. They also checked the water samples brought by the attendees of the fair.

3. School Extension Activities: These activities have been aimed at promoting hands-on experimental teaching of science for improving the understanding level of students at the school level. Currently it has been observed that there has been a decline in level of pursuing science amongst students starting from senior secondary level. Taking this into account, we have demonstrated some of the innovative experiments in Physics, Chemistry and Biology in schools based on sensors and data acquisition systems so as enhance their curiosity and understanding levels of students thereby fostering the interest of the students towards science. The students involved in the project are Avdesh Kumar Singh, Deepak Joshi, Kanika Sandhu, Pratik Chakravarty, Praveen Kumar, Purnima Wadhawan Vaibhav Sharma and Zameer Khan.

A new course namely B.Sc (Physical Science) with Electronics has been introduced in the department from the current academic session.

Department of Physics

The Department started its computational facility in its main experimental laboratories for its students by acquiring five computers. This facility is exclusively FOSS based and students are encouraged to do all kinds of data analysis of the experiments performed through this facility after providing them adequate training. It also host computers with appropriate software to perform interfaced experiments and project work using the PHOENIX kit provided to the college by the Inter University Accelerator Centre, New Delhi. Dr. Meenu Mohil participated



in the PHOENIX workshop at IUAC, New Delhi and is currently supervising some projects based on it.

Department of Zoology

The academic year 2010-11 has been a very significant one for the Department of Zoology in many ways. Department of Zoology organized its society function on October 28, 2010. Mr. N. Nand Gopal, Scientist in National Institute of Biologicals, Ministry of Health and Family Welfare was invited for the occasion. His area of research is biotherapeutic quality control and molecular diagnostics. He interacted with our students and gave a brilliant lecture on viral biology. The lecture was followed by an intra college Zoology Fest where students from other courses also participated actively in events like Rangoli making, Quiz, Ad mad, Poster making and logo designing competitions.

The Zoological society also organized a lecture on February 11, 2011 in which Dr. Madhu Chopra from Ambedkar Centre for Biomedical Research (ACBR, University of Delhi) was invited. Her research interest are areas in Computational Chemistry and Drug Development. She gave an in depth knowledge about the role of computational biology in virtual drug designing and answered queries from the students and teachers.

Department of Life Sciences

The Life Science Society 'Zoe' had organised its annual society festival on March 25, 2011. Along with the events for students there was a lecture on "Red cell invasion by Plasmodium" by Dr. Deepak Gaur from ICGB. The students were held captive by the steps taken in the fight against malaria. He enthralled us by screening a video film showing the invasion of red blood cells by the parasite. The students in turn kept Dr. Gaur busy answering the multitude of questions emerging from his talk. The students were thrilled to see a noteworthy scientist closer to their age than a senior scientist. They have resolved to keep in touch with the expanding frontiers of research.

10. SOCIETY/COMMITTEE REPORTS

Entrepreneurship Development Cell

In order to promote and encourage young and potential entrepreneurs, Acharya Narendra Dev College has set up an Innovation and Entrepreneurship Development Cell (IEDC) that is sponsored and funded by Department of Science & Technology, Govt. of India in July 2010. The objective of establishing an IEDC is to set up an institutional mechanism to create self-employment opportunities and to convert "job-seekers" into "job-generators". An IEDC trains and empowers the students with knowledge to innovate and start their own enterprise and create jobs for others rather than worrying for their own job. In this facility we make sure



that students interact with industry, learn about the success/failure stories of practicing entrepreneurs, participate in innovative projects, understand government policies and procedures to promote entrepreneurship and know how R & D institutions and other related NGOs are engaged in promoting small and medium scale industries.

To foster entrepreneurial culture among students, IEDC organizes various training programmes like Entrepreneurship Awareness Programmes (EACs), Entrepreneurship Development Programmes (EDPs) and Faculty Development Programmes (FDPs) etc. The basic intent of organizing these entrepreneurship development programmes is to nurture the entrepreneurial qualities of the participants by enlightening them on various aspects of entrepreneurship development. In addition to this, it would initiate the student projects for innovative ideas each year. The outcome of these projects is aimed to bring new products to the market or to develop new methodologies so as to generate/ manufacture existing products in a more cost effective and environment friendly way. By doing so, IEDC at ANDC takes first baby step to bridge the gap between education and industry going forward. IEDC would also establish better linkages with industries, R&D institutions, financial institutions and other related organizations engaged in promoting Small & Medium Enterprises (SMEs) including DST, NSIC, EDI, NIESBUD, MSME etc.

In our endeavor to spread entrepreneurial culture among the academic institutions, IEDC has already organized 4 three days Entrepreneurship Awareness Camps in the premises of ANDC. Spreading out its wings this year, IEDC has also conducted Entrepreneurship Awareness Camps in Deen Dayal Upadhyaya College and Daulat Ram College for Women that shows our immense commitment to promote entrepreneurship among the students of University of Delhi. Each Camp, of 3 days duration, was aimed at creating awareness among students about various facets of entrepreneurship while highlighting the merits of pursuing such a career option. Faculty from various renowned agencies viz. DTU, DST, NIESBUD, MSME, NSIC, DST, IDBI, PNB were invited to motivate young potential entrepreneurs. On the last day of the camps, a factory visit was organized to bring the students in direct touch with practicing entrepreneurs.

To inculcate a culture of innovation, IEDC has also initiated innovative student projects in various disciplines. The four innovative student projects that have been approved and sponsored by DST in 2010-11. Each mentor is paid a sum of Rs 1 lakh for the project of which the students are given Rs 10,000 each, while the mentor is paid Rs 10,000/- and the balance is available as contingency for conduct of the project. It must be noted that these projects have resulted in the undergraduate students publishing papers and presenting them in conferences. The student-projects are as follows:



Project	Teacher Mentor	Students
CASE Tool Box	Dr. Vibha Gaur	Vikash Jha-B.Sc. (H) Comp. Sc. III Arani Adhikari - B.Sc. (H) Comp. Sc. III Manpreet Anand - B.Sc. (H) Comp. Sc. II
Low Cost Glucometer Development	Dr. Amit Garg	Patritosh - B.Sc. (H) Elect. - I Sidharth - B. Sc. (H) Elect. - I Himanshu Bhatt - B.Sc. (H) BMS - II Reema Kathuria - B.Sc. (H) BMS - II
Identification & formulation Of products from Wed extracts Exhibiting anti-Mosquito Potential	Dr. Sarita Kumar	Abhay Pratap Singh - Zoology (H) III Sahil Batra - Zoology (H) III Gokul Nair - Zoology (H) - II
Development of New ecofriendly Natural dyes from potential plant materials for dyeing different textile materials	Mr. Sanjay Vohra	Deepak Verma - B.Sc. Sericulture III Pooja Kumari - B.Sc. Sericulture III Archana Yadav - B.Sc. Sericulture III

Taking note of the growing strength of women in the society, IEDC is also working on empowerment of women in the field of entrepreneurship. IEDC organized a Women Entrepreneurship Development Program (WEDP) w.e.f February 28-March 25, 2011 to encourage and motivate the potential women entrepreneurs. The programme was intended to assist the women to come forward, establish their ventures and become self-dependent and self-reliant and contribute significantly to the economic growth of a country. This program provided a forum to guide and assist prospective entrepreneurs on various aspects such as preparing project reports, obtaining project approvals, loans and facilities from agencies of support system, information on technologies, etc.

The WEDP was inaugurated at Acharya Narendra Dev College on 28th February 2011 by Dr. Neelima Singh Scientist 'C' Dept of Science & Technology in the presence of the Principal, Dr. Savithri Singh. Mr. Shadab Mobin Consultant NEN, Mr. Harish Arora, President Okhla Industrial Estate Association, Dr. Vibha Gaur, and Mr. Sanjay Vohra (Coordinators, IEDC). Twenty four women participants from different walks of life in participated in this programme. The participants came from different parts of the country including Jharkand, Haryana, Andhra



Pradesh, Karnataka Orissa, Bihar and Delhi. Some participants of this programme were from rural background that had ample of raw material available in their province but due to lack of technology and finance, they could do little. So they came with the anticipations of learning the 'how to' so as to convert the raw material to a profitable product/business and thus improve the status and quality of life in these areas.

During the 4-week programme, the participants were exposed to various facets of entrepreneurship including how to select an idea, opportunity identification, various schemes run by Govt. agencies viz. MSME, NSIC, DST and banks to promote women entrepreneurs, the experiences of practicing entrepreneurs, marketing strategies, finance management, business plan, detailed project report and hands on trainings in Food Processing and Nutrition as well as herbal cosmetics. The resource persons from various institutions viz. DST, NIESBUD, DTU, NEN, NSIC, MSME, SBI, DTU, IDBI, KVIC, CSIR, NDRI, FLO were invited to equip the participants with the skills and expertise to start their own enterprises. Various entrepreneurs from Total Solutions, Bennigan's Restaurants, Campusias & NCR Polymers & Chemicals LLP were invited to discuss their stories of success/failure with the participants.

To demonstrate concepts on food processing, some practical sessions on various varieties of sauce and drink-making were organized. The recipes of ready-to-serve (RTS) - Mango, Rose Syrup, Kiwi Cordial and tomato Ketchup were demonstrated in the practical sessions. The practical training was also imparted on preparations of herbal cosmetic products viz. herbal Massage Cream, Glycerin soap, Shampoo, Bubble bath, Pedicure Shampoo, face pack, all purpose cream etc.

During this programme, four industrial visits and one to Exhibition on International Food & Hospitality Fair at Pragati Maidan, New Delhi were also organized. Participants got the opportunity to experience developments and progress achieved in the processed food and hospitality sectors; through ambit of display covering products, technologies and services, and the scope embodied by them for investment and technology up-gradation. At the visit to NSIC, Okhla the participants had an exposure on the infrastructure and other logistic support provided by NSIC for startup entrepreneur. At the visit to the Mother Dairy, one of the India's finest food company in Mangolpuri Industrial Area, they learnt about the state-of-the-art technology, and the use of superior ingredients to offer a wide range of world-class products including brand's fruit pulp, pastes, purees and concentrates. The participants were also taken to a small industry in Food processing, Nandini Enterprises, Karala to give them an exposure of what all are the prerequisites of starting an enterprise.

The valediction function of WEDP organized on March 25, 2011 was presided over by Mr. Neeraj Sharma, Adviser, NSTEDB, Department of Science & Technology, Ms.



Shipra Chatterjee, Director, FICCI Ladies Organization and Mr. Rakesh Mehra, Deputy GM, F & V project, Mother Dairy. The resource persons pointed out that Food industry is one of the potential industry where technology up-gradation is yet to be realized. They acquainted the participants with the potential areas of improvements in food industry. The greatest success of the course was perhaps the fact that it brought together a group of potential women entrepreneurs who were like minded and were excited about starting something of their own. Many potential business ventures were identified and foundations for future course of action were laid during the discussion sessions. The impact of this course will probably be felt much later, as the women entrepreneurs who benefited from this course would blend the opportunities available to them with the theory and practical training imparted in this programme.

Environment society

The Eco Club of our college is an our affirmation to environmental concerns and adoption of healthy practices for sustainable development. In the current session the Eco club organised a day long environment awareness program on February 11, 2011. An intra-College Poster Making competition and "Best Out of Waste" competition, and a street plays were the events organised on this occasion. The events were contested very enthusiastically by the students. There were fifteen students for the poster making competition. Nine teams(of two students each) contested for the best out of waste competition and two teams (of seven members each) for the street play.

Winners were awarded cash prizes. There were a large number of spectators to watch the street plays. Both the plays addressed some of the most burning socio environmental issues like cleanliness, hygiene, pollution etc. The plays were highly appreciated by everyone. On the recommendation of everyone both the teams were awarded Rs.1000/- each as a token of appreciation.

Debating Society

The academic year 2010-2011 started with the formation of 'Polemics' - the debating club of the college. The orientation programme held on September 29, 2010 saw enormous response from the students. In the orientation programme following students were elected as students representatives of the debating club.

- | | |
|----------------------|-------------------------|
| 1. Pranay Moktan | B. Com. (Hons.) I |
| 2. Jyotsana Sharma | B. Sc. (Hons.) Maths II |
| 3. Anudrutta Fouzdar | B.Sc. (Hons.) Maths II |

The club members met regularly to brush up and improve their skills of debating by debating. Various debates were organized by Polemics during the academic year 2010-2011. Some of the topics on which the club debated were



- This house believes that India should let Kashmir go
- This house believes in legalization of mercy killing,
- Common wealth games- a dream or reality

On the occasion of National Voter's Day (January 24, 2011), the debating club organized an intra college debate competition on the topic 'Voting should be made mandatory in our country'. Following students won the prizes:

- | | |
|---------------------|-------------------------|
| • Amit Jain | B. Com. (Hons.) I |
| • Jyotsana Sharma | B. Sc. (Hons.) Maths II |
| • Gaurav Chaturvedi | B. Com. (Hons.) I |

During the College Cultural Fest-ACCENTURE (February 19, 2011), inter-college debate was organized on the topic "Corruption, the abuse of public power for private gain, cannot be eradicated".

The formation of the debating society and its activities throughout the year has already producing the welcome results in the debating circle of the University. During the academic year the club members participated in various inter college debate competitions in other colleges. In the inter- university debate competition organized by Delhi College of Arts and Commerce, New Delhi the ANDC team was declared the best team with Pranay Moktan of B. Com. (Hons.) II yr bagging the I prize and Amrita Chakrobarty of B. Com. (Hons.) II yr getting the II prize. The ANDC team consisting of Khairun Nisaa, B. Sc. (H) BMS I and Tanushvi Mahajan B. Sc. (H) BMS I debated on the topic "Should Euthanasia be legalized ?" and won the running trophy for the best team in Debate Competition held at Kalindi College in the Annual Fest - "Lehrein 2011".

Dramatics

The Dramatics society of the Acharya Narendra Dev College went up a notch further in its evolution when, this year for the first time it had its professional formal theatrical production. For the formal production of the play Sau Mein Laga Dhaga..., Mr Ajay Manchanda was appointed as director of the play. Twenty three students from the different streams were selected after the audition which was held in college premises. There was a great enthusiasm in the students from the start as it was for the first time that theatre is taking place in the college. The rehearsals for the play were held in college premises. The students were trained rigorously for one month.

The play was staged at Shri Ram Centre auditorium. Entry for the play was through passes/invitation cards. It was well attended by many known personalities from National School of Drama like Mr Rewati Saran Sharma and Mr. Vipin Handa. The chairman of the governing body of the college, Mr. B.P. Singh and many other members of the governing body also graced the occasion and enjoyed the



theatrical production. Faculty from other colleges of DU were also present. The staging was a grand success as all students played their character very well and received applause from everyone present in the auditorium.

Canteen Committee

The Committee believed that "A lot can happen over a cup of coffee". In order to encourage better interaction amongst the staff and students, the committee started the trend of visiting the canteen for a meal or snack, rather than ordering it at your working table. The newly constructed Bamboo structure canteen premises now has separate units to seat students and the staff of the college. One of the units is air-conditioned also. The canteen committee revised the contract with the canteen-contractor with the new contract paying special emphasis on quality, quantity and hygiene. The auxiliary kiosk attached to the canteen now besides providing the snacks now also stores general stationary items. It also caters to the popular flavours of ice creams and momos. The new canteen has been well received by the students and teachers and has become one of the hot spots to hang around.

NSS

The NSS unit of the college is one of the most important pillars of its social outreach programme. As has been the case for the previous many years, this year too the N.S.S. unit of Acharya Narendra Dev College continued to work hard to inculcate the spirit of self-less commitment and spirit of volunteerism.

There is no better way to start the NSS calendar of activities other than by organizing the orientation of the NSS program officers of the South Zone (University of Delhi) at our college. This orientation programme was a huge success with participation from various colleges and the presence of the evergreen Dr. G.K. Tuteja and Dr. Vinod Lyal (Head, N.S.S. Centre University of Delhi) who have been at the helm of affairs in making the NSS such a success amongst the Delhi University students. The two day event held on September 17-18, 2010 was organized successfully with the participation of NSS program officers of 18 different colleges along with volunteers.

The wonderful start of the NSS calendar of activities of the year was topped by the massive participation of NSS volunteers during the XIX Commonwealth Games, Delhi. Over 100 volunteers from our college participating actively for their country in this sporting event, displaying the true spirit of an NSS volunteer - selflessness, value, ethics and integrity. The dedicated effort of the volunteers made this event a huge success and provided a once-in-a-life time experience to the volunteers of the college. This also provided them a rare opportunity to play their role in nation building.

Even though this year's academic calendar in the University of Delhi saw many



structural changes, the NSS unit of Acharya Narendra Dev College still managed to find the participation to organize bigger and useful activities. Under the aegis of NSS a free health check up camp was organized in the college on September 24, 2010 in association with Cipla and Janki Health Care Centre. It was not only for the students, staff and teachers of the college but also for the residents of nearby colonies. The camp saw massive participation as consultation was being provided for a wide array of medical problems.

As an annual activity, the NSS unit also organized the 'Sayhog - Diwali Mela' on November 3, 2010 in association with various NGO's like Aastha and Govt. School of Blind. It is an event usually held before Diwali, where the college invites various NGOs working for differently abled people to sell the products produced by their students such as candles, decorative materials, handmade products, diyas and various stationary items. It allows the college to play its bit role in making the diwali of these less-privileged people memorable and more enjoyable. The mela was highly successful in so far as all their wares were quickly sold by noon. All the NGOs expressed thanks to students and staff members and expressed their willingness to be the part of such events in the future also.

We also continued to organize special programs on World AIDS day (December 1) where our college students promoted this great cause by wearing red ribbons. Our activities continued in the New Year as well with our college participating in the NSS festival at the Faculty of Arts in the North campus (February 11 - 12, 2011).

On the initiative of our principal the NSS unit has established ties with 'GOONJ' - an N.G.O. working to provide basic necessities like clothes, food, sanitary items etc to the poor and underprivileged in urban as well as rural areas throughout India. The NSS volunteers of ANDC visited their centre on many occasions to hand over generous donations of clothes, books and stationary items collected from our college students, teachers and staff.

On February 17, 2011 the NSS unit of the college organized a blood donation and health check up camp in the college. The camp witnessed historical numbers in participation with over 150 people donating blood. Also health checkups were conducted for a variety of ailments like blood sugar, kidney stone, lung function, bone densitometry, Gynaecology etc. Expert analyses were available with the help of our medical partners which includes R.G. Stone Cipla and Janki Health Centre. This camp was open not only to students, teachers and staff of our college but also the people residing in nearby areas thus emphasising on our belief in service beyond boundaries.

On the 19th of February we organized the Sports day for 'Aastha' - an N.G.O working for differently abled children. The event was a huge success and we continue to extend our support to this organization with whom we have been working for a number of years and we hope to continue our alliance in future. It gives us



immense pride and satisfaction in giving back to the society and lighting up the faces of these children and their families. It was an afternoon of great fun, competition and making new friends.

At Acharya Narendra Dev College we believe that though studies are a vital part in one's development but we should also fulfil our responsibilities to our society and set an example to those who don't and help making our society a better place to live and making a legacy which would last for years to come. Also during this academic session six of our volunteers regularly visited the NGO - 'Pravah' and participated in many projects, which was appreciated by all.

The Ministry of Youth Affairs & Sports (Government of India) under Rajiv Gandhi Adventure Scheme had organized Adventure trips for NSS volunteers and Programme Officers. The programme Officer of the ANDC unit of N. S. S. Mr. Sadanand Prasad accompanied students to two of such trips viz., Desert Adventure (Trekking, Camel Safari and Camping) Programme in the Thar Desert, Jaisalmer, Rajasthan (February 01-08, 2010) where two students - Pranay Moktan and Pallav Goel participated; and Mountaineering Adventure (Trekking, Rock Climbing and Camping) Programme at Manali, H. P. (25 May 2010 to 02, June 2010) which saw our student Chetan Chaudhry participating.

Equal Opportunity Cell

The college is sensitive to the special needs for differently abled people who may be any of the stakeholders of the college community. To further this objective, the college has constituted an Equal Opportunity Cell in the current academic year consisting of members from teaching and non-teaching employees of the college. The Cell has been constituted to look after the special needs of differently abled persons. Through the year the Cell has been giving suggestions to make the college disabled-friendly. Towards this goal, the college is in the process of purchasing 'Zoom-ex' hardware and software to aid visually challenged persons.

Sports Committee

Though the sports committee has been present in our college for many years but the level of activity in this academic year has been unprecedented. This is because of the sportive spirit prevailing in Delhi due the XIX Commonwealth games and the wide support and encouragement of our principal Dr. Savithri Singh, director of physical education Dr. Satyapal Singh, the sports committee members, students and all the staff members. The college celebrated its first ever Annual Sports Day with the generous support of our sponsors - Indian Oil, Adidas and Vinex sports.

Due to the ambiguity in the University of Delhi calendar this year the sports activities were little late to begin with, but still we managed to send 2 teams in cricket and chess for the inter college sports tournament. In these inter college events the performance of cricket team reflected the drastic improvement in the



sports facilities and sports culture in the college by managing to tie a match for the first time.

A student's sports committee was constituted in which a sports president was elected and sports coordinators for each course was also appointed. The first task at hand for this sports committee was to purchase the necessary equipment for all the sports which was accomplished with the support of our Principal and we were able to purchase all the requisite equipments. The second most important task was to maintain the playing areas and make them fit for a sports event. Due to high level of construction going on in the college the state of playing areas was less than satisfactory. With the support of all the sports students, N.S.S. volunteers and labour a huge maintenance project was undertaken which lasted over a week, at the end of which the ground was fit to organize a big sporting event.

The highlight of the year was the successful organization of the intra college sports tournament and the first annual sports day in the history of our college in the first week of March- 2011. Participation was recorded in historical numbers with over 600 athletes participating from 12 different courses fighting it out in 8 different sports disciplines which included both track and field events. The participating students competed hard to bring honour and pride to their respective departments in every event.

There was very good participation from students in the team games more so since they were representing their course/class. Among team games, maximum teams were there in Cricket (isn't that natural considering we are the World Cup Winners this year!!) and in individual in badminton(mens). In the athletics maximum participation was in Long jump (mens) and 100 m sprint (women). Non-teaching (men) out numbered the teaching faculty in their competitive spirit.

The whole week of fun and frolic ended with the sports day on March 17, 2011 where a host of activities was organized for students and teachers. The day began with a cricket match between the teaching and non teaching staff. This exhilarating encounter was won by the non teaching staff. After this the 4X200 m relay was organized for the students followed by 100m race for teaching and non teaching staff and a round of fun filled musical chairs.

The high point of the Sports day was the presence of our chief guest, Asian games gold medallist, Arjuna Awardee, Padam Shri Mr. Sriram Singh. It was a matter of great pride to our institution that an athlete of such distinction had come to encourage the students of our college. His message was simple - sports are important for one's development but studies should remain the priority. The day was rounded up by the prize distribution ceremony for all the winners and runners-up where we distributed certificates and Adidas T-Shirts for all the distinguished athletes. Also a trophy for overall sport's champion was given which was won by the class of B.Sc (Hons.) Chemistry. The day ended with a sumptuous



lunch for all the participants and spectators. It was a delight and a treat to see the cheer on the faces of the students and teachers alike as everyone had reserved this one day out of their busy schedules. Jyoti Yadav of B.Sc. (H) Chemistry I and Sahil Batra of B.Sc (H) Zoology III have been identified as best female sports person and best male sports person, respectively. They will be awarded on the Annual Day 2011.

Placement Cell

The Career Counseling & Placement Cell (CCPC), earlier known as the Placement Cell was started in year 2005 with the vision of providing in-campus job opportunities, counseling for higher education and career options. Since its inception it has been working with the motive of bringing career opportunities and aspiring human resource together, thereby eliminating the hassles of an aspirant and instilling in him or her, the sense of career security. In view of the growth in Indian Economy and to assuage the apprehensions of a learner towards a secured career after completing studies, Career Counseling and Placement Cell has been organising various career oriented events like Campus Recruitment, Career Counseling Seminars & Talks on avenues in Higher Education apart from regular guidance to the students of the college.

Evolving in to a structured professional entity, this cell has over the years established linkages with prospective employers from diverse fields of IT, Pharmaceuticals, Banking & Finance, Insurance, and KPOs including the most sought after like Infosys, TCS, WIPRO Infotech, WIPRO Technologies, Satyam Infotech, Tech Mahindra, SRL Ranbaxy, Apex Laboratories, Max Healthcare, Ernst & Young, ICICI, HDFC, Kotak Mahindra, IBM Daksh and many more. Over 50 students are getting selected every year by these companies. Few of these companies like TCS, Infosys, Wipro are also offering higher education options while on job.

With the vision of preparing our students even before they complete their studies, the CCPC has liaised with Okhla Industrial Association and expecting a tie-up with Greater Noida Udyog Vikas Mandal to provide training and part time job opportunities to students.

CCPC has been organizing career counseling sessions in which experts from various institutes and organizations of repute have been visiting campus to guide students about Higher Education prospects in India & abroad, career opportunities, ways to develop professional & soft skills and scholarship offers. A consortium of Business schools in Delhi has also got associated with us and has provided scholarships to students to pursue MBA programmes after graduation.

Career Counselling & Placement Cell of Acharya Narendra Dev College has not only been providing services to its own students but also extending opportunities to the students of other Delhi University colleges, affiliated institutes of GGSIPU



and other professional institutes like JIMS as well. Our cell has been working in close association with the placement cells of other such institutes and Central Placement Cell of DU. We have been organizing Centralised Campus Recruitment drive for WIPRO Infotech (an entity of WIPRO group in the field of IT Infrastructure Management) under WIMS (WIPRO Infotech Master of Science) Program for the students of University of Delhi, GGS Indraprastha University and from institutes like JIMS and IITL.

Seminars and sessions were also organized on developing soft skills, language skills, how to prepare for MBA/MCA entrances, preparations for interviews, GD, presentations and personality development.

The placement cell has developed a data bank of student-information to aid them in interaction with employers. It has also created an information inventory of the choices of career of all final year students, and has been passing out this information to the probable employers.

OPEN DAY and Orientation Programme

Like last year we were invited by the University to conduct an OPEN DAY of the University at our campus to provide a platform for interaction of prospective students and their parents with faculty in the University so that they could ask questions and clear their doubts. This was held on May 22, 2010. It was very well received by the students and their parents. The University team that was coordinating was also very impressed with our efforts.

The college also organizes 'Orientation Days' at the start of the session - This is to welcome the fresh batch of the students to the college and to familiarize them with the college, faculty, rules and regulations, details about various programmes and facilities available. All freshers were expected to attend and teaching schedules were made available to them. This year the Orientation days were held over two days - 18th and 19th of July 2010.

Editorial Committee

This committee is responsible for all the publications the college brings out through the year. The ones that we deem very important are the Prospectus, the Annual report and the college magazine 'Insight'. Over the last few years we have worked hard at improving the print quality as well as content in the publications. Often, even before anybody comes to the college it is the publications that they see. And we all know first impressions are last impressions - recognizing this we make special efforts while designing - the prospectus particularly. We also ensure that the content is comprehensive and it does show case the college for what it is. Our prospectus of last year was highly appreciated.

The magazine of course, tries to showcase the efforts of the students. The magazine was released by Shri Oscar Fernandes, the Chief Guest, on the annual



day last year. We prepare the annual magazine as well as the Annual Report as a twin set with similar covers and layout. This has become our tradition over the last few years.

11. ADD-ON COURSES

Effective Communication and Personality Development through Theatre

Effective Communication and Personality Development through Theatre (ECPDT) is an add on course for the students of the college. The convenors of the course were Dr. Ravi Toteja, Mr. Sandeep Goel and Dr. Geetu Gambhir. This was the second year of running ECPDT course in the college. The course is self financed and discount in the fee is given to economically weaker students after holding interviews.

This year 26 students from different streams got themselves enrolled. Mr. Ajay Manchanda, a well known Theatre personality was appointed as the coordinator of the course. The classes were held on weekends and on all days during autumn break in college permises. Various other well known personalities like Mr. Lokendra Trivedi and Avtar Sahni (from National School of Drama), Rewati Saran Sharma (writer of various soaps on Indian Television), Shrivardhan Trivedi (Sansani fame) were also invited.

The course ended with a culmination program where the students showcased what they have learnt during the course to their parents who had been invited. The chief guest of the course was Shrivardhan Trivedi of Sansani (STAR Plus) fame. Everybody appreciated the college for organizing this course as this has been helpful in making their wards more confident and disciplined. The certificate were also given to the successful students.

Finally...

I cannot pen off without acknowledging the support I and the college have always received from the University team, the Governing Body of the College, the Directorate of Higher Education, the UGC and various other funding authorities. It is not only by way of funding that we have got support - though it may appear to be so, it is more in the myriad of other ways we seek it - permissions at short notice, agreeing to come for a function, talking about us to people or organizations that matter, involving us in decision making, recognizing our commitment, awarding us, rewarding us ... and in so many other ways. I thank everybody, for we would not have achieved much without support. Last but not the least it is the faculty, the staff and the students that makes a college special - I have every reason to be proud!

Dr. Savithri Singh
Principal

April 7, 2011



ANNEXURE

LIST OF PUBLICATIONS : 2010-2011

Papers In Journals

1. D. Haridas, Arijit Chowdhuri, K. Sreenivas and Vinay Gupta, Enhanced room temperature response of SnO₂ thin film sensor loaded with Pt catalysts clusters under UV radiation for LPG, Sensors and Actuators B, (2010) [in press] (I.F. 2.934)
2. D. Haridas, Arijit Chowdhuri, K. Sreenivas and Vinay Gupta, Effect of thickness of platinum catalyst clusters on response of SnO₂ thin film sensor for LPG, Sensors and Actuators B, (2010) [in press] (I.F. 2.934)
3. D. Haridas, Arijit Chowdhuri, K. Sreenivas and Vinay Gupta, Fabrication of SnO₂ thin film based electronic nose for industrial environment, IEEE Sensors Applications Symposium, SAS 2010 - Proceedings, art. no. 5439413, pp. 212-215 (2010).
4. Manish Verma, Arijit Chowdhuri, K. Sreenivas and Vinay Gupta, Comparison of H₂S sensing response of hetero-structure sensor (CuO - SnO₂) prepared by rf sputtering and Pulsed Laser Deposition, Thin Solid Films 518 (24 SUPPL.), e181 - e182(2010).
5. Arijit Chowdhuri, S. K. Singh, K. Sreenivas and Vinay Gupta, Contribution of adsorbed oxygen and interfacial space charge for enhanced response of SnO₂ sensors having CuO catalyst for H₂S gas, Sensors and Actuators B 145 (1), 155 - 166 (2010). (I.F. 2.934)
6. Arijit Chowdhuri, K. Sreenivas, and Vinay Gupta, Influence of nanosized catalysts on trace level H₂S sensing characteristics of SnO₂ thin film based novel heterostructures, Proc. of 7th National Conference on Physics (PANE 2010), December 05 - 06, 2010, Manipur University, Imphal, pp - 81.
7. Pankaj Tyagi, R K Misra , N.C.Mehra & A.G. Vedeshwar, Dependence of optical band gap on residual stress in group IIB iodide (ZnI₂, CdI₂, HgI₂) Films, Integrated Ferroelectrics, 122(1), 52 -62 (2010).
8. Pankaj Tyagi, A.G. Vedeshwar, V. Gulia and N.C.Mehra, Nucleation and Growth in PbI₂ thin films, in International Conference on Advances in Electron Microscopy and Related Techniques EMSI-2010, March 8-10, 2010, Bhabha Atomic Research Centre (BARC), Mumbai, India, (Abstract Book pp - 180-181).
9. Subhash Kumar and Harinder P. Singh, Magnetohydrodynamic waves in the presence of relative motion between two populations of a plasma system, Physics of Plasmas 17, 092104 (2010).
10. C. H. Lee, H. U. Dahms, S. H. Cheng, S. Souissi, F. G. Schmitt, Ram Kumar and J. S. Hwang, Predation on Pseudodiaptomus annandalei (Copepoda: Calanoida) by the grouper fish fry Epinephelus coioides under different hydrodynamic conditions,



Journal of Experimental Marine Biology and Ecology 393, 17-22 (2010).
www.elsevier.com/locate/jembe (I.F. 2.36)

11. J-S Hwang, R. Kumar, H-U. Dahms, L.C. Tseng, Q.-C. Chen, Interannual, seasonal, and diurnal variation in vertical and horizontal distribution patterns of 6 *Oithona* spp. (Copepoda: Cyclopoida) in the South China Sea. *Zoological Studies* 49(2), 220-229 (2010). <http://zoolstud.sinica.edu.tw/492.htm> (I. F. 0.8)

12. J. S. Hwang, Ram Kumar, C. W., Hsieh, A. Y. Kuo, S. Souissi, M. H. Hsu, J.T. Wu, W. C. Liu, C. F. Wang, and Q. C. Chen, Patterns of Zooplankton Distribution along the Marine, Estuarine, and Riverine Portions of the Danshuei Ecosystem in Northern Taiwan *Zoological Studies* 49(3), 335-352 (2010). <http://zoolstud.sinica.edu.tw/493.htm> (I. F. 0.8)

13. Chien-Huei Lee, Hans-Uwe Dahms, Shin-Hong Cheng, Sami Souissi, Francois G. Schmitt, Ram Kumar and Jiang-Shiou Hwang, Mating behaviour of *Pseudodiaptomus annandalei* (Copepoda, Calanoida) at calm and hydrodynamically disturbed waters, *Marine Biology* (2010). (I.F.2.0) (In Press)

14. L. -C. Tseng, Ram Kumar, Q.-C. Chen, J. -S. Hwang, The summer distribution of *Noctiluca* and mesozooplankton abundance in the western and southern East China Sea before the Three Gorges Dam operation, *Hydrobiologia* (2010). (I. F. 1.76) (In Press)

15. Shin-Hong Cheng, Samba Kâ, Ram Kumar, Chung-Su Kuo and Jiang-Shiou Hwang, Effects of salinity, food level and presence of microcrustacean zooplankters on the population dynamics of the rotifer *Brachionus rotundiformis*, *Hydrobiologia* (I.F.1.76) (In Press)

16. L. -C. Tseng, Ram Kumar, Q. -C. Chen, J. S. Hwang (Submitted). Seasonal and inter-annual variations in population dynamics of *Temora turbinata* and *T. discaudata* (Copepoda: Calanoida) in the vicinity of two Nuclear Power Plants of northern Taiwan, *Hydrobiologia* (I. F. 1.76). (In Press)

17. D. Beyrend-Dur, Ram Kumar, T. R. Rao, S. Souissi, S. H. Cheng and J. S. Hwang (Submitted) Demographic parameters of adults of *Pseudodiaptomus annandalei* (Copepoda: Calanoida): temperature-salinity and generation effects, *Journal of Experimental Marine Biology and Ecology* (I.F. 2.36). (In Press)

18. Ravneet Kaur, Rishu Chaujar, Manoj Saxena, and R. S. Gupta, Hot Carrier Reliability Monitoring of DMG ISE SON MOSFET for Improved Analog Performance, *Microwave and Optical Technology Letters* 52(3), 770-775 (2010).

19. Rishu Chaujar, Ravneet Kaur, Manoj Saxena, Mridula Gupta and R. S. Gupta, Design Considerations and Impact of Technological Parametric Variations on RF/Microwave Performance of GEWE-RC MOSFET, *Microwave and Optical Technology Letters* 52(3), 652-657 (2010).



20. Ritesh Gupta, Ravneet Kaur, Sandeep Kr Aggarwal, Mridula Gupta and R. S. Gupta, Metal Insulator Gate Geometric HEMT: Novel Attributes and Design Consideration for High Speed Analog Applications, *Journal of Semiconductor Technology and Science* 10(1), 66-76 (2010).
21. Amit Garg, Reena Sharma, Vishal Dhingra, Computer Assisted Magnetism Studies, *Latin American Journal of Physics Education* 4 (3), 523-528 (2010).
22. Amit Garg, Reena Sharma, Vishal Dhingra, An Automated Physics laboratory, *International Journal on Hands-on Science* 2 (4), (2009).
23. Amit Garg, Reena Sharma, Vishal Dhingra, Automating Energy Band-Gap Measurements in Semiconductors Using LabVIEW, *European Journal of Physics Education* 1(1), 5-17 (2010).
24. Sunita Hooda, A. K. Goyal and A.S. Brar, One- and two-dimensional NMR studies of Methyl acrylate - Vinyl acetate - N- Vinyl Carbazole terpolymers., *J. Mol. Str.* 963, 27 (2010).
25. Sarita Kumar, Naim Wahab and Radhika Warikoo, Bioefficacy of Mentha piperita essential oil against dengue fever mosquito, *Aedes aegypti* L., *Asia Pacific Journal of Tropical Biomedicine* 2, 90-93 (2011).
26. Deepika Khandelwal, Sunita Hooda and A. S. Brar, Configurational sequence determination of poly(isobornyl acrylate) by NMR spectroscopy, *J. Mol. Str.* (2010). (In Press)
27. Sarita Agarwal and M.P. Chaudhury, Jordan Ideal in Non-Commutative Rings, *Global Journal of Science Frontier Research* 10 (4), 9-11., (2010).
28. Ranjeet Singh and V. K. Tripathi, Raman upshifted third harmonic generation of a laser in a plasma, *Physics of Plasmas* 17, 112103 (2010).
29. Sukanta Deb and Harinder P. Singh, Physical parameters of 62 eclipsing binary stars using the All Sky Automated Survey-3 data - I, *Monthly Notices of the Royal Astronomical Society*, published online: 1 MAR 2011, DOI: 10.1111/j.1365-2966.2010.18016.x. (In Press)
30. Priyanka Malik, Sona P. Kumar, Rishu Chaujar, Mridula Gupta, and R. S. Gupta, Gate Material Engineered Trapezoidal Recessed channel Mosfet for high performance Analog and RF applications, *Microwave and Optical Technology Letters* 52(3), 694-698 (2010).
31. Sona P Kumar, Anju Aggrawal, Rishu Chaujar, Mridula Gupta and R.S.Gupta, Device Linearity and Intermodulation Distortion Comparison of Dual Material Gate and Conventional AlGaIn/GaN High Electron Mobility Transistor, *Microelectronics Reliability (MER)* (2010). (In Press)
32. Udaibir Singh, Nisha Jha, Tikendra Prakash Singh, Avinashi Kapoor and Alessio Perrone, Investigation of transmittance property of Palladium thin film fabricated



by pulsed laser deposition with polarization using single layer model, *Optics and Laser Technology* 42, 1128-1133 (2010).

33. Sarita Kumar, Radhika Warikoo and Naim Wahab, Larvicidal Potential of Ethanolic Extracts of Dried Fruits of Three Species of Peppercorns Against Different Instars of an Indian Strain of Dengue Fever Mosquito, *Aedes aegypti* L. (Diptera: Culicidae), *Parasitology Research* 107, 901-907 (2010).

34. Sarita Kumar and M.K.K. Pillai, Correlation between the Reproductive Potential and the Pyrethroid Resistance in an Indian Strain of Filarial Vector, *Culex quinquefasciatus* Say (Diptera: Culicidae), *Bulletin of Entomological Research*, (2010) doi:10.1017/S0007485310000131

35. Sarita Kumar, Abhay Pratap Singh, Gokul Nair, Sahil Batra, Anubha Seth, Naim Wahab and Radhika Warikoo, Impact of *Parthenium hysterophorus* leaf extracts on the fecundity, fertility and behavioural response of *Aedes aegypti*, *Parasitology Research*, (2010) L. DOI: 10.1007/s00436-010-2126-1.

36. Sarita Kumar and M.K.K. Pillai, Reproductive Disadvantage in an Indian Strain of Malarial Vector, *Anopheles stephensi* Liston on selections with deltamethrin/synergized deltamethrin, *Acta Entomologica Sinica* 53(10), 1111-1118 (2010).

37. Vibha Gaur, Anuja Soni, An Integrated Approach to Prioritize Requirements using Fuzzy Decision Making, *International Journal of Engineering and Technology* 2(4), 320-328 (2010).

38. Chaman Singh, Two Echelon Supply Chain Model with Imperfect Production for Weibull distribution deteriorating items under Imprecise and Inflationary Environment, *International Journal of Operations Research and Optimization* 1(1), 9-25, (2010).

39. Chaman Singh, Supply Chain Model with Stochastic Lead Time under Imprecise Partially Backlogging and Fuzzy Ramp-Type Demand for Expiring Items, *International Journal of Operational Research* 8(4), 511-522 (2010).

40. Abhay Pratap Singh, Anubha Seth, Radhika Warikoo, Naim Wahab and Sarita Kumar, Oviposition deterrent and ovicidal effects of the leaf extracts of *Parthenium* sp. against an Indian strain of *Aedes aegypti*, *Proceedings of 3rd International Conference on Parthenium*, December 8 -10, 2010, IARI, New Delhi pp: 135-138.

41. Gokul Nair, Sahil Batra, Radhika Warikoo, Naim Wahab and Sarita Kumar, Spatial repellency and contact irritancy response of female *Aedes aegypti* to the leaf extracts of *Parthenium* sp. in different solvents, *Proceedings of 3rd International Conference on Parthenium*, December 8 -10, 2010, IARI, New Delhi pp: 139-143.



42. Radhika Warikoo, Naim Wahab and Sarita Kumar, Laboratory Evaluation of the larvicidal efficiency of *Parthenium* sp. against an Indian strain of *Aedes aegypti*, Proceedings 3rd International Conference on *Parthenium*, December 8 -10, 2010, IARI, New Delhi, pp: 143 -146.

43. J. K. Kohli, Rajesh Kumar, Jeetendra Aggarwal, Between Continuity and Setconnectedness, *Applied General Topology* 11(1),43-55 2010.

44. Inderjit, Devika Bajpai, M. S. Rajeswari, Interaction of 8 - hydroxyquinoline with soil environment mediates its ecological function, *PLoS ONE* 5, (9) e12852 2010

Patent Publication

• Vijayalaksmi Ravindranath, Alok Gupta, Neha Sehgal, Subhash Chand Jain, Suman Thakur and Pankaj Khanna, *Withania somnifera* plant extract and method of preparation thereof.

PCT/IN2009/000430, Pub. No.: WO/2010/013254

<http://www.wipo.int/pctdb/en/wo.jsp?WO=2010013254>

B. Invited Talk

1. Arijit Chowdhuri: "N-type semiconducting metal oxides as gas sensors" at the 16th National Seminar on Physics and Technology of Sensors (NSPTS-16), February 11 - 13, 2011, Department of Physics, University of Lucknow, Uttar Pradesh - 226007.

2. Ram Kumar: Delivered Invited seminar on "Piscivory by the invasive mosquito fish as a function of relative abundance of alternative prey " May 18, 2010, University of Littoral, France.

3. Ram Kumar: Delivered Invited seminar on "Ground Water faunal diversity: what is known and what is yet to be known", June 12, 2010, University of Science and Technology, Lille-1, France.

4. Sharanjit Kaur: Delivered lecture on WEKA during Refresher Course for Computer Science in December-January, 2010.

5. Savithri Singh: Delivered Talks on 'Open Educational Resources (OERs)' and 'Quality Assurance through Multimedia Learning Materials (QAMLM)', Refresher Course in Chemistry, March 6, 2010, Centre for Professional Development in Higher Education (CPDHE), University of Delhi.

6. Savithri Singh: Delivered Keynote Address on "Textbook Development : Concerns and Challenges" and chaired a Technical Session titled "Teaching Science to Young Children" in the workshop - Exploring Environment - Learning Science for teachers, November 10, 2010, Delhi Public School Society, New Delhi.

7. Savithri Singh: Talk on Open Paradigms in Education, International Conference on Open Paradigms in Education (OPEN 2011), January 31-February 2, 2011, India International Center, New Delhi.



8. Savithri Singh: Talk on 'Information and Communication Technologies (ICTs)' & the 'Wiki's', Workshop on ICT in Education, March 11-13, 2010, Central Institute of Educational Technology, NCERT, New Delhi.

9. Amit Garg: Invited talk in Three Day Workshop for PGT Physics Teachers of Kendriya Vidyalaya, October 4 -6, 2010, Kendriya Vidyalaya, Sector 3, Rohini, Delhi.

10. Reena Sharma: Invited talk on Communication System in Three Day Workshop for PGT Physics Teachers of Kendriya Vidyalaya, October 4 -6, 2010, Kendriya Vidyalaya, Sector 3, Rohini, Delhi.

11. Sarita Kumar, Ravi Toteja; Talk on Open Educational Resources: Success Stories, International Conference on Open Paradigms in Education (OPEN 2011), January 31-February 2, 2011, India International Center, New Delhi.

12. Neeti Misra, Subhash Kumar: Talk on Initiatives of AND College in promoting Open Source, International Conference on Open Paradigms in Education (OPEN 2011), January 31-February 2, 2011, India International Center, New Delhi.

C. Presentations in International Conferences/Symposiums

1. Vibha Gaur, Neeraj Sharma, Evaluating Reputation Systems for Agent Mediated e-Commerce, International Conference on Advances in Computer Science ACS 2010, Trivandrum, Kerala, India, 2010.

2. Sarita Kumar, Radhika Warikoo and Naim Wahab, A Laboratory Study on the Larvicidal Properties of Three Peppercorns Against an Indian strain of Dengue Fever Mosquito, *Aedes aegypti* L. (Diptera: Culicidae), National Symposium 'Chemistry in Biology: The Future of Life Sciences', February 2-13, 2010, India International Centre, New Delhi.

3. Neeti Misra, Easy Now Techniques: Empowering teachers to create contents using information and communication technologies, Sixth Pan-Commonwealth Forum on Open Learning, November 24-28, 2010, Kochi, Kerala.

D. Presentations in National Conferences/Symposiums.

1. Pankaj Khanna and Subhash C Jain, Synthesis of some coumaryl-spiroindoles of pharmaceutical interest, 13th CRSI National Symposium in Chemistry, February 4-6 2011, National Institute of Science Education and Research, Bhubaneswar.

2. Monisha Khanna, Renu Solanki and Rup Lal, *Streptomyces chromogiensis* and *Streptomyces antibiotiensis* spp. nov; two novel species from a sanitary landfill site, National Symposium on "Biodiversity, Biotechnology and Man: Interdependence and future challenges", March 26 - 28, 2010, Lansdowne, Govt. P.G. College, Lansdowne, Uttarakhand.

3. Monisha Khanna, Renu Solanki and Rup Lal, Bioactive compounds from soil actinomycetes, National Symposium on "Biodiversity, Biotechnology and Man:



Interdependence and future challenges", March 26 - 28, 2010, Govt. P.G. College, Lansdowne, Uttarakhand.

4. Monisha Khanna, Renu Solanki and Rup Lal, Two novel species of *Streptomyces* isolated from a sanitary landfill soil, National Symposium on "Biotechnology", October 29-30, 2010, Delhi Technological University, India.

5. Renu Solanki, Monisha Khanna and Rup Lal, Antimicrobial activities of an actinomycete isolated from pesticide contaminated site in Lucknow, India, 51st Annual Conference of AMI "International symposium on recent advances in cross disciplinary Microbiology: Avenues & Challenges", December 14-17, 2010, Birla Institute of Technology, Mesra, Ranchi, Jharkhand.

6. Manoj Kumar Garg, Religious Practices and Biodiversity Conservation: An Overview, National Symposium on "Biodiversity, Biotechnology and Man: Interdependence and future challenges", March 26 - 28, 2010, Govt. P. G. College, Lansdowne, Uttarakhand.

7. Manoj Kumar Garg, Elements of Wetland Conservation in Islam, National Symposium on "Biodiversity, Biotechnology and Man: Interdependence and future challenges", March 26 - 28, 2010, Govt. P. G. College, Lansdowne, Uttarakhand.

8. Vinay Kumar: Relationship between cold point tropopause (CPT) and corresponding water vapor pressure over Indian region during May 2007 using COSMIC data, National Conference on Advance in Atmospheric Remote Sensing Weather Prediction & Climate Change (ARWPCC-2011), March 10-11, 2010, S. V. University Tirupati.

9. Amit Garg, Ankit Mittal, Reena Sharma, Vishal Dhingra, Measuring Noise Levels in Delhi, The 11th International Conference on Public Communication of Science & Technology (PCST-2010) Science Communication Without Frontiers, December 6 - 10, 2010, New Delhi.

10. Amit Garg, Ankit Mittal, Reena Sharma, Vishal Dhingra, Aritra Chatterjee, Pratik Chakravarty, Investigating recycling methodologies adopted by Photovoltaic industry, National conference on sustainable management of e-waste, December 14 - 15, 2010, Bhaskaracharya College of Applied Sciences, Dwarka, New Delhi.

11. Amit Garg, Avdesh Kumar Singh, Deepak Joshi, Kanika Sandhu, Pratik Chakravarty, Praveen Kumar, Purnima Wadhawan, Reena Sharma, Vaibhav Sharma, Vishal Dhingra, Zameer Khan, Ankit Mittal, Promoting Science at School Level through hands-on Experiments, The 11th International Conference on Public Communication of Science & Technology (PCST-2010) Science Communication Without Frontiers, December 6 - 10, 2010, New Delhi.

12. Amit Garg, Ankit Mittal, Reena Sharma, Vishal Dhingra, Understanding Global



Warming through Physical Parameters Measurement, International Conference On Global Warming, Climate Change, Sustainable Development and Secular Spirituality-2010, September 9 - 11, 2010, Santhigiri Ashram, Thiruvananthapuram.

13. Dharmendra Kumar Mahato, Komal, Amit Garg, Reena Sharma, Vishal Dhingra, Evaluating optical components using phase shift interferometry, VI Mantra 2010

14. Sandeep Goel, Capital Gains Taxation under Direct Tax Code, 63rd All India Commerce Conference organized by Faculty of Commerce, Goa University during October 1-3, 2010.

15. Chaman Singh, Optimal Ordering Policy for Two-Warehouse Model with Power-form Stock-Dependent Demand, 3rd National Seminar on Recent Trends in Advancement of Mathematical and Physical Sciences, Organized by D. N. College, Meerut, 5-6 February, 2011, D. N. College, Meerut.

E. Books Published

1. I Explore: A Science Textbook for Class 8 by Shobhita Johri, Pankaj Tyagi and Parminder Chopra (2010) (ISBN: 978-0-521-18602-5) (with CD ROM), Cambridge University Press, New Delhi, India.

2. I Explore: A Science Textbook for Class 7 by Shobhita Johri, Pankaj Tyagi and Parminder Chopra (2010) (ISBN: 978-0-521-18600-1) (with CD ROM), Cambridge University Press, New Delhi, India.

3. I Explore: A Science Textbook for Class 6 by Shobhita Johri, Pankaj Tyagi and Parminder Chopra (2010) (ISBN: 978-0-521-18597-4) (with CD ROM), Cambridge University Press, New Delhi, India.

4. Textbook of Biotechnology for undergraduate students, 2010 by Ravi Toteja:, Ane Books Pvt Ltd. ISBN 9789380156804.

5. Visualized Science- Class IX (I Term) First Ed. by P. N. Kapil, Pankaj Tyagi and Sarita Kumar, Sultan Chand and Sons, New Delhi (2011).

6. Visualized Science- Class IX (II Term) First Ed. by P. N. Kapil, Pankaj Tyagi and Sarita Kumar, Sultan Chand and Sons, New Delhi (2011).

7. Visualized Science- Class X (I Term) First Ed. by P. N. Kapil, Pankaj Tyagi and Sarita Kumar, Sultan Chand and Sons, New Delhi (2011).

8. Visualized Science- Class IX (II Term) First Ed. by P. N. Kapil, Pankaj Tyagi and Sarita Kumar, Sultan Chand and Sons, New Delhi (2011).

F. Conference/Symposiums/Workshops/School/ Lecture Attended/Conducted International

1. Savithri Singh: As Member Reviewing Panel, Third International Conference on



e-Learning, November 29-30, 2011, Universiti Teknologi MARA (UiTM), Malaysia.

2. Savithri Singh: CEMCA Training of Trainers (ToT) Advanced EasyNow Trainers' Workshop to provide Educational Support to Online Learning, June 19-25, 2010, Wawasan Open University, Penang, Malaysia.

3. Pankaj Tyagi: International Conference on Advances in Electron Microscopy and Related Techniques, March 8-10, 2010, BARC, Mumbai.

4. Vikrant Kumar: 2nd International Exhibition and conference on Scientific and Laboratory Instruments (Second India Lab Expo), December 10 - 12, 2010, Pragati Maiden, New Delhi.

5. Sarita Kumar: Indo-European Conference on Quality assurance in Higher Education, May 6 - 7, 2010 organized by University of Delhi.

6. Monisha Khanna: International conference on "Biotechnology for Better Tomorrow, February 6-9, 2011, Department of Microbiology, Dr. Babasaheb Ambedkar Marathwada University, Sub-campus, Osmanabad, Maharashtra, India.

7. Monisha Khanna: International conference on Recent trends in developing bioremediation strategies for hexachlorocyclohexane (HCH) and other chlorinated contaminants, February 9-11, 2011, Department of Zoology, University of Delhi, Delhi.

8. Vinay Kumar: International school on Atmospheric Radar (ISAR-NCU-2010), November 15-24, 2010, National Central University, Chungli, Taiwan

9. Neeti Misra: Five day Advanced EasyNow Trainers' Workshop (to provide Educational Support to Online Learning conducted by Wawasan Open University, Penang, Malaysia in collaboration with CEMCA, New Delhi), June 21-25, 2010, Wawasan Open University, Penang, Malaysia.

10. Neeti Misra: Expert at workshop on Development of Multimedia Content using EasyNow techniques, organized by D.Net, Dhaka, Bangladesh, December 6-9, 2010.

National

1. Savithri Singh: As Member Organising Committee, Workshop on 'Dealing with Evolution in the Classroom: Evolutionary perspective in Modern Biological Teaching and Research', April 1-2, 2011, Homi Bhabha Centre for Science Education, TIFR, Mumbai.

2. Savithri Singh: Meeting of 'Project WikiLabs', April 2-3, 2011, Homi Bhabha Centre for Science Education, TIFR, Mumbai.

3. Savithri Singh: Course Coordinator, Workshop on Open Educational Resources (OERs), (in collaboration with CEMCA, Commonwealth of Learning), February 24-26, 2011, Institute of Distance and Open Learning, Mumbai University, Mumbai.



4. Savithri Singh, Ravi Toteja, Resource persons for workshop on 'Open Educational Resources - WikiEducator', (in association with CEMCA, Commonwealth of Learning), September 3-5, 2010, Department of Computer Science, Teerthankar University, Moradabad.
5. Savithri Singh: Conducted workshop on 'FOSS and OER' (In association with NRCFOSS, Anna University), December 2-5, 2010, Computer Science Department, Guwahati University, Guwahati.
6. Savithri Singh, Sarita Kumar: Conducted a Workshop 'Orientation of master trainers in the laboratory techniques and practical work in biology at higher secondary stage' for NCERT, February 25 - 27, 2010, Acharya Narendra Dev College, New Delhi.
7. Savithri Singh: Resource Person at Training Programme on Media Studies for teachers of Kendriya Vidyalayas, November 23-25, 2010, Central Institute of Educational Technology (CIET), NCERT, New Delhi.
8. Savithri Singh: Resource Person at Training Programme on Biology at Secondary and Higher Secondary level, February 7-11, 2011, North East Regional Institute of Education of the NCERT, Shillong.
9. Savithri Singh: As member of Committee for Development of Textbook on Pedagogy of Science for B. Ed., Workshops on December 11-15, 2010 and January 20-25, 2011, Departments of Education in Science and Mathematics (DESM), NCERT, New Delhi.
10. Subhash Kumar, Shalu Mahajan, Resource persons for workshop on 'WikiEducator', (in association with CEMCA, Commonwealth of Learning), June 14-16, 2010, Uttrakhand Open University, Haldwani, Uttrakhand.
11. Savithri Singh, Neeti Misra, Manisha Jain, Sarita Kumar, Ravi Toteja, Subhash Kumar, Shalu Mahajan, Resource persons at Workshop on WikiEducator, May 25-28, 2010, Central Institute of Educational Technology (CIET), NCERT, New Delhi.
12. Sunita Jetly, Ravi Toteja, Sarita Kumar, Archana Pandey: National Workshop on RNAomics: Isolation to Interference, October 25-29, 2010, Shivaji College, New Delhi.
13. Shalu Mahajan, Surinder Kaur: UGC sponsored National Seminar on Financial Sector Reforms in India-The Road Ahead organized by Shaheed Bhagat Singh College, January 21 - 22, 2010, Paintal Memorial Auditorium, Patel Chest Institute, Delhi,
14. Sandeep Goel: Familiarization Programme on "Cost Accounting Standards" organized by The Institute of Cost and Works Accountants of India, May 11, 2010, YMCA Auditorium, New Delhi.
15. Sandeep Goel: Investor Awareness Programme on "Mutual Funds" organized



by Northern India Regional Council of The Institute of Company Secretaries of India, July 15, 2010, New Delhi.

16. Sandeep Goel: Investor Awareness Programme on "Recent Developments in Capital Markets" organized by Northern India Regional Council of The Institute of Company Secretaries of India, August 9, 2010, Zakir Hussain College, New Delhi.

17. Sandeep Goel: Training Course on "Statistical Package for Social Sciences" organized by Delhi University Computer Centre, September 6-10, 2010, Computer Centre, University of Delhi, Delhi.

18. Sandeep Goel: National Seminar on "Indian Financial Sector: Thrust and Challenges" organized by Department of Financial Studies, University of Delhi South Campus, October 30, 2010, S. P. Jain Centre Auditorium, University of Delhi South Campus.

19. Sandeep Goel: National Workshop on Data Analysis using SPSS organized by Department of Commerce, Kirori Mal College, University of Delhi, November 13, 2010, Kirori Mal College, University of Delhi, Delhi.

20. Sandeep Goel: National Conference on "Issues in International Trade during Globalisation Era" organized by Shri Ram College of Commerce, University of Delhi, November 19-20, 2010, Shri Ram College of Commerce, University of Delhi, Delhi.

21. Surinder Kaur: National seminar on "Business and Economics" organized by Shivaji College, February 25, 2011, Shivaji College, Delhi.

22. Surinder Kaur: A conference on "Paradigm shift from Accounting Standards to International Financial Reporting Standards" organised by SRCC with National India Regional Council ICAI, Shri Ram College of Commerce, University of Delhi, Delhi.

23. Ravi Toteja: A lecture by Nobel Laureate, V. Ramakrishnan on "The Road to the Structure of the Ribosome: A Personal Account", December 20, 2010, FICCI auditorium, New Delhi.

24. Subhash Kumar, Pankaj Khanna: Member of the organizing committee of workshop on Applications of Free/Open Source Software in Science Teaching & Research organized by Acharya Narendra Dev College and NRCFOSS, Anna University Chennai, April 14 - 15, 2010, Acharya Narendra Dev College, New Delhi.

25. Savithri Singh, Subhash Kumar, Pankaj Khanna: Member of the organizing committee of Seminar on Applications of Free/Open Source Software organized by Acharya Narendra Dev College and NRCFOSS, Anna University Chennai, April 16, 2010, University of Delhi South Campus, New Delhi.

26. Neeti Misra, Manisha Jain, Ravi Toteja, Sunita Jetly and Pankaj Khanna: Resource persons at Easy Now Techniques: A workshop on multimedia content



development, May 4-7, 2010, Acharya Narendra Dev College, New Delhi.

27. Manoj Kumar Garg: A seminar on "'Support System for Disabled Students at Higher Education Level", March 9, 2010, Guru Gobing Singh College of Commerce, Pitam Pura, Delhi.

28. Sarita Kumar: A workshop entitled 'Genetics of Drosophila', November 13 - 14, 2010, Department of Zoology, University of Delhi, Delhi.

29. Sarita Kumar: UGC - INFLIBNET User Awareness Programme on Access to E-resources under the UGC's National Library and Information Services Infrastructure for Scholarly Content', September 17, 2010, University of Delhi South Campus, New Delhi.

30. Sarita Kumar: Resource person in the programme entitled 'Orientation of Masters Trainers of ST Category of NCR for Activity-based Science Teaching at Upper primary stage', August 9 - 12, 2010, NCERT, New Delhi.

31. Sharanjit Kaur: Faculty Development Program on cloud computing, September 8, 2010 organized by BVICAM, New Delhi.

32. Sharanjit Kaur: One-day workshop on Design Science Research, November 12, 2010, organized by Deptt. of Computer Science, University of Delhi, Delhi.

33. Sharanjit Kaur: 3-day workshop on Voluminous Databases, December 21-23, 2010, organized by Deptt. of Computer Science, University of Delhi, Delhi.

34. Monisha Khanna: National Symposium on "Biodiversity, Biotechnology and Man: Interdependence and future challenges", March 26 - 28, 2010, Lansdowne, Uttarakhand.

35. Monisha Khanna: National Symposium on Biotechnology, October 29 - 30, 2010, Delhi Technological University, Delhi.

36. Monisha Khanna: 51st Annual Conference of AMI "International symposium on recent advances in cross disciplinary Microbiology: Avenues & Challenges", December 14 - 17, 2010, Birla Institute of Technology, Mesra, Ranchi, Jharkhand.

37. Monisha Khanna: Basic training workshop in Drosophila genetics, November 13 - 14, 2010, Drosophila Stock Center, Department of Zoology, University of Delhi, Delhi.

38. Roopesh Tehri: Workshop on Mathematica, December 8, 2010, University of Delhi South Campus, New Delhi.

39. Roopesh Tehri: Workshop on Scilab, March 10 - 11, 2011, Acharya Narendra Dev College, New Delhi.

40. Neeti Misra, Seema Gupta: Resource Generation Camp in Chemistry, September 20-25, 2010, Homi Bhabha Center for Science and Education, Mumbai.

41. Neeti Misra: Workshop on "Preparation of interactive Video Guide for Science



and Mathematics Kits for Secondary Stage" , July 26 -29, 2010, NIE-Workshop, NCERT, New Delhi.

42. Sona P. Kumar: "First National Workshop on Recent Trends in Semiconductor Devices and Technology", February 2-13, 2010, Deen Dayal Upadhyaya College, Delhi.

43. Amit Garg: National Instruments One Day seminar "HOD Conclave on Experiential Education - An approach for enhancing engineering and science education", June 11, 2010, Park Plaza, New Delhi.

44. Udaibir Singh: National Workshop on "Quality Assurance through Blended Learning", January 19 -21, 2010, Maitreyi College, University of Delhi with support from University Grants Commission.

45. Ravinder K. Sagar: Workshop on Food and Nutrition organized by ILL in Lady Irwin College, New Delhi.

46. Seema Gupta: International Conference on Education in Chemistry-2010, Organized by Indian Association of Chemistry Teachers and HBCSE, November 12-14, 2010, Homi Bhabha Centre for Science Education, Mumbai.

47. Sadanand Prasad: Workshop Cum Training Programme on Modern Trends in Celestial Mechanics and Astronomy" Organized by Deshbandhu College (University of Delhi), March 17-19, 2010, University of Delhi, Delhi.

48. Sadanand Prasad: 3rd National Seminar on Recent Trends in Advancement of Mathematical and Physical Sciences, Organized by D. N. College, Meerut, February 5-6, 2011, D. N. College, Meerut.

49. Chaman Singh: Workshop Cum Training Programme on Modern Trends in Celestial Mechanics and Astronomy" Organized by Deshbandhu College (University of Delhi), 17-19 March 2010, University of Delhi, Delhi.

50. Sarita Agarwal: National Workshop on Computational Science, July 1 - 7, 2010, Department of Physics & Astrophysics and Delhi University Computer Centre, North Campus, University of Delhi, Delhi.

51. Pankaj Khanna: A National Workshop on Role of Analytical Techniques in Industry, January 21-22, 2010, Kirori Mal College, Delhi.

52. Urmi Bajpai, Resource person for a Workshop for the school teachers, teaching biology and biotechnology, August 28, 2010, Modern School, Vasant Vihar, New Delhi.

53. Shalлу Sachdeva, Member of the organising committee of a Workshop on Green Chemistry, November 20, 2010, Organized by Department of Chemistry, University of Delhi.

54. Subhash Kumar: Member Organizing Committee "Surprises of the Cosmos - An exhibition of Astronomy photographs", organized by Centre for Science



Education and Communication (CSEC, DU) and Instituto Cervantes, New Delhi in association with IUCAA Resource Centre and Department of Physics & Astrophysics, Conference Centre, University of Delhi, Delhi.

55. Savithri Singh: Convenor- QUEST 2010-11, Organized by Centre for Science Education and Communication (CSEC, DU), January - March, 2011.

56. Subhash Kumar, Rajesh Chaudhary: Member Organizing Committee-QUEST 2010-11, Organized by Centre for Science Education and Communication (CSEC, DU), January - March, 2011.

Workshop on Application of Free and Open Source Softwares in Science Teaching and Research: Organized by Acharya Narendra Dev College in association with NRCFOSS, April 14- 15, 2010, Acharya Narendra Dev College, New Delhi.

Coordinators : Savithri Singh, C. N. KrishnanFacilitators : Sarita Kumar, Pawan Kumar, Pankaj KhannaOrganizing Secretaries : M. S. Rajeshwari, Niti Misra, Subhash Kumar

Participants: Pankaj Tyagi, Bineet Kumar, Pawan Kumar, Dinesh Kumar Arya, Priti Agarwala, Manisha Jain, Sunita Hooda, Kavita Singhal, Gagan Dhawan, Vikrant Kumar, Geetu Gambhir, Yasheshwar, Sunita Jetley, Priyanka Sharma, Seema Gupta, Sarita Kumar, Sarita Agarwal, Harita Ahuja, Mr. Avaneesh Anand Singh, Ravi Toteja, Amit Garg, Meenu Mohil, Sunita Narang, Laxmi Narain, Madhu Bala Raigar, Rajesh Chaudhary, Sadanand Prasad, Chaman Singh

International Conference OPEN 2011: Open Paradigm in EducationOrganized by Acharya Narendra Dev College, 31 January - 2 February, 2011, India International Centre, New Delhi

Organizing Committee: Savithri Singh, Sarita Kumar, Sunita Hooda, Arijit Chowdhuri, Charu K. Gupta, Geetu Gambhir, Manisha Jain, Neeti Misra, Rajesh Chaudhary, Ravi Toteja, Shalu Mahajan, Sharanjit Kaur, Sona P. Kumar, Subhash Kumar.

Participants: Archana Pandey, Vandana Uberoi, Shallu Sachdeva, Neelu Dheer, Pooja Bhagat, Vikrant Kumar, Dinesh K. Arya, Rashmi Thukral, Pankaj Khanna, Madhu Bala Raigar, Lokeshwari, Sakshi Vasudeva, Sarita Agarwal, Neetu Chaudhary, Jyoti Taneja, Abhisek, Priyanka Sharma, Vinay Kumar,

Participation in Faculty Development Programmes

A. Orientation Programmes

S. No.	Name	Duration	Academic Staff Collage
1.	Dr. Pankaj Khanna	July 12-August 7, 2010	CPDHE, University of Delhi
2.	Mr. Manoj Kumar Garg	April 13 - May 10, 2010	ASC, Jamia Millia Islamia, New Delhi



3.	Dr. Rashmi Sharma	April 5 - 30, 2010	ASC, JNU, New Delhi
----	-------------------	--------------------	---------------------

B. Refresher Courses

S. No.	Name	Subject	Academic Staff Collage
1.	Dr. Arijit Chowdhuri	Physics Electronics	March 9 - 20, 2010 CPDHE, University of Delhi & December 23, 2010 - January 13, 2011
2.	Mr. Subhash Kumar	Physics & Electronics	December 23, 2010 CPDHE, University of Delhi - January 13, 2011
3.	Mr. Pawan Kumar	Physics & Electronics	December 23, 2010 CPDHE, University of Delhi - January 13, 2011
4.	Dr. Priti Agarwala	Physics Electronics	March 9 - 20, 2010 CPDHE, University of Delhi & December 23, 2010 - January 13, 2011
5.	Dr. Roopesh Tehri	Mathematics	December 13, 2010 CPCPDHE, University of Delhi - January 04, 2011
6.	Dr. Laxmi Narain	Mathematics	December 13, 2010 CPCPDHE, University of Delhi - January 04, 2011
7.	Ms. Seema Gupta	Mathematics	December 13, 2010 CPCPDHE, University of Delhi - January 04, 2011
8.	Mr. Gaurav Sharma	Mathematics	December 13, 2010 CPCPDHE, University of Delhi - January 04, 2011
9.	Mr. Sandeepk. Goel	Commerce & Business Management	November 29 - ASASC, Jamia Millia Islamia December 21, 2010
10.	Dr. Archan Pandey	Life Sciences	February 15 - March 09, 2011 CPDHE, University of Delhi
11.	Mr. Ravinder K. Sagar		CPDHE, University of Delhi
12.	Dr. Geetika Kalra	Life Sciences	
13.	Dr. Monica Misra	Life Sciences	