From the Principal’s Desk

Since this is the first issue of Perihelion after taking charge as the Principal, I feel a great sense of responsibility and honour both. It is an honour to be the head of a prestigious college as P.M.B. Gujarati Science College, and there are many responsibilities ahead too. The responsibility is to carry forward the heritage of the college as it is one of the leading private science colleges of our state. For this, it is important that the teaching and non-teaching staff and the students get together as one force and work towards the goal. Academic excellence is to be upheld always, and the extra-curricular and co-curricular activities are equally important. All faculty members need to upgrade themselves to provide quality education to our students. To provide holistic education is the mission of our college and we are all responsible for this. So let us resolve to forge ahead with determination towards our mission and at the same time be responsible citizens.

News at a Glance

Dr. Kiran Dixit, Department of Chemistry, assumed charge as the Principal of the college on 01/09/2017.

Dr. J. Sikka is nominated as member Board of studies in Environmental Science, Kasturba Gram Rural Institute for the period 2017-19.

Dr. Sudip Ray is nominated as member Board of studies in Microbiology, Holkar Science College for the sessions 2017-18 and 2018-19.

Dr. Ketan Topiwala took charge as Head of the Chemistry Department on 27th September 2017.

The Department of Microbiology received “Best Department Award” from Microbiologists Society, India, for activities organized in 2016-17 session. In that recognition, the college received a sum of Rs. 2000/-.

Dr. Jyoti Singh was awarded by JMD Publication and Vishwa Hindi Rachnakar Manch on 24/09/2017 in Bhopal.

Ms. Mahima Golani submitted 165rDNA gene sequence of industrially important bacteria to NCBI, US, GenBank.

On 5th August 2017 Dr. G. D. Sharma participated in ‘Clean Indore No. 1’ - Night Marathon & was awarded by Medal with e-Certificate on completion of 21km race.

Dr. Deepa Vanjani has been appointed as Academic Counselor by IGNOU for its BA English Literature courses. She has been nominated as Member, Board of Studies, Kasturbagram Rural Institute for two years.

Dr. Dhananjay Dwivedi was appointed in editorial and advisory board in Journal of Chemistry and Chemical Science (an International peer viewed UGC approved research journal).

Dr. Rajesh Dixit & Dr. Raksha Modi have been approved & appointed as Ph.D. supervisors for Zoology by DAVV, Indore.
Mr. Sanjay Sharma was appointed as member of anti-ragging committee, convener of college website, and convener of staff training program. Mrs. Manisha Shah was appointed as co-convener of college fun-fair. The online admission committee completed its work under the guidance of Mr. S. Sharma and Mr. Govind Kaithwas. Mr. Govind Kaithwas is member in Mission Green Committee.

The department has started a computer training program for technical staff members of various departments. Mr. Sandeep Atre (Director CH-Edge Makers) delivered an expert lecture on Personality Development. The program was organized jointly with Department of Physics.

Mr. Sanjay Sharma was appointed as Manager for the Chess team that participated in district level chess tournament organized by RPL Maheshwari College, Indore. The department organized an expert lecture for students on data mining for creating awareness about income tax and black money. The speaker was Mr. Nilendu Dave (Chartered Accountant) and officials from the I.T. department.

Microbiology Department


M.Sc. Induction Programme was organized on 30.8.17. Chief Guest, Dr. Mahaveer Sharma, Principal Scientist (Microbiology), Indian Institute of Soyabean Research, Indore, addressed students on “Emerging Avenues in Agriculture Microbiology.”

Biochemistry calculation modules were distributed to students. Principal Prof. R.B. Patel & Dr. N. Phanse also addressed students & parents. Ms. Mahima Golani, programme coordinator, proposed vote of thanks. Ms. Sakshi Patil & Ms. Jagrati Goyal compared the event. M.Sc. final year students arranged educational/motivational videos and games during the programme.

A peer interaction programme “Synergy” was organized on 12.8.17 during which senior students of Microbiology department determined blood groups of B.Sc. I year students. Academic activities like Microbiology Quiz, distribution of Hindi-English dictionary of technical terms, learning by educational videos were other highlights of the programme. Dr. Kiran Dixit, Principal and Dr. N. Phanse addressed students. The programme was compered by Ms. Smriti Chouhan and Ms. Aakansha Soni. Ms. Kiran Paliwal and Ms. Chouhan were programme coordinators.

English Department

‘Finesse’, the communication skills development programme was started for the registered UG & PG students of the college. The opening ceremony of this certificate course was organized in the Computer Science lab on 9th September 2017 and attended by heads of all departments. The convener of this certificate programme Dr. Deepa Vanjani threw light on the module of this certificate course. Three soft-skills trainers Mr. Ram Pahuja, Mr. Mihir Phanse, and Ms. Shweta Khandelwal conducted sessions on extemporary speech, GD and Interview Skills respectively. The programme includes sessions for testing speaking, listening, reading and writing skills of students.

Safal Yuva-Bharat exam, conducted by the Vivekananda Kendra, was organized for the UG students who registered for the same, on 12/09/2017 in the college. Dr. Deepa Vanjani was the incharge of the activity, while Ms. Kusum Joshi coordinated and conducted the exam. Dr. Deepa Vanjani is working as convener of Mission Green, Perihelion, and Knowledge Gallery and Ms. Kusum Joshi as incharge of the Ladies Room of the Central Building.
**Hindi Department**

वं. ज्योति सिंह को राजभाषा प्रचार समिति की साहित्यिक पंजीकरण "हिन्दी सागर" जून-जुलाई में अधिविष्कार सम्मानक के रूप में सम्मिलित किया गया। 14 सितंबर को महाविद्यालय में विभाग द्वारा "काव्य पट" का आयोजन किया गया। वं. ज्योति सिंह को हिन्दी दिवस के उपलब्धियों में जेपीएम परिक्षण एवं विशेष हिन्दी रचनाकार मंडल द्वारा 24 सितंबर को भोपाल में प्रदान किया गया। उन्हें जेपीएम का साहित्य साहित्य सम्मान 2017 हिन्दी साहित्य में विशेष योगदान देने के लिए दिया गया। दिनांक 15.9.2017 एवं 16.9.2017 को महाविद्यालय के इकाईयों कार्यक्रम में वं. ज्योति सिंह ने बायो समूह के प्रभावकों का परियोजना दिया। वं. तुलना शुक्ला भी इसमें सदस्य थी। नॉलेज गेलरी में प्रदर्शन हेतु उर्मिला धर्म के उद्योग का वार्ता वं. तुलना शुक्ला द्वारा बनाया गया।

अम्बाग गण्डल के 59वें स्थापना दिवस के उपलब्धि में एक अंतर्राष्ट्रीय सम्मेलन वाद-विवाद प्रतियोगिता का आयोजन किया गया। 9 सितंबर को समप्न हुई इस प्रतियोगिता में महाशिवरात्रि के छत्र प्रेमियों के अंतर्गत एक परस्पर हर्षक हस्ताक्षर (पसी) में प्रणाल हुआ। वाद-विवाद प्रतियोगिता का शीर्षक था, "बड़े अपघात और अविश्वास के कारण सोशल मिडिया"। छात्र को हिन्दी एवं अंग्रेजी विभाग द्वारा मार्गदर्शन मिला।

**Physics Department**

Dr. P. A. Kekre was invited as chief guest and judge in the inter school science quiz organized by Sahodya Group at Sarafa Vidya Niketan on 29 August 2017.

The department of Physics conducted two lectures by Dr. Sandeep Atre, Director, CH-Edge Makers for B.Sc. I year students from 1-2 September 2017. An Induction Program was arranged by the department for PG students of the department in the month of August 2017. The students were briefed about the importance of the course.

Dr. Sanjay Shah published a paper on Theoretical Analysis of elastic properties of ZnX (X = Se & Te) under High Pressure in International Journal of Theoretical and Applied Science, Vol. 9 (2017).


**Zoology Department**

On 6/07/2017 pre-Ph.D. Presentation by Mudassir Ahmed, student of Prof. (Dr.) A.A. Khan, I.K. Degree College was held in the department. On 19/07/2017 Dr. G.D. Sharma, as a member, attended Board of Studies meeting for Zoology. From 20-22 July 2017 there was a Departmental Museum visit by RRMB students of IX and X class along with the staff. The visiting students had many queries which were taken care of & solved by the faculties of the department. On 8/09/17 a ‘Welcome-Induction-Farewell’ program was organized for incoming and outgoing P.G. students of Zoology, Dr. Shobha Chaturvedi introduced the department. On 23/09/2017 parents-students-teachers meet was organized for P.G. student’s previous & final year Zoology.


**Hindi Divas**

On 9/08/2017 U.G. students attended Kavya-Paath Dr. P. A. Kekre was invited as chief guest and judge in the inter school science quiz organized by Sahodya Group at Sarafa Vidya Niketan on 29 August 2017.
Chemistry Department

The department organized the farewell of Prof. R.B. Patel, Principal of the College. Dr. Savita Shukla, Head of the Department, retired from the College after 39 years of her service.

Dr. Rishina Natu was invited as judge by social activist group “Spandan” which works for prevention of suicide in youth. She was also called in Inter-School debate competition the topic of which was ‘life satisfaction is a matter of choice’. She was college team manager for Inter-College Yuva-Utsav for group dance, mime and rangoli.

Two research papers of Dr. Dhananjay Dwivedi were published. The titles are:
- “Kinetic study of oxidation reaction of malachite green by chloramine-T in aqueous acidic medium” in Journal of Chemistry and Chemical Science, Vol. 7(8), 615-618, August-2017
- “Application of AAS in the study of metal cation available in leaf extract of some medicinal plants” in IOSR Journal of Applied Chemistry (IOSR-JAC), Vol. 10, Issue 8, August-2017


Botany Department

The department conducted visit for B.Sc. I year students in Carl Linnaeus Museum and Hargobind Khurana Lab. More than 150 students visited the museum. The teachers explained about varieties of plant specimens such as insectivorous plants, medicinal plants, plants of economic importance and fossils of plants that existed millions of years ago.

The pre-Ph.D. submission presentation of Mr. V.S. Deoda was held on 14/7/2017 in the department. His supervisor is Dr. C.M. Solanki, Ex-head, Department of Botany. The title of his thesis is “Phytodiversity of East Nimar Wetlands: A Seasonal Study With Special Reference To Endangered & Endemic Species”.

The pre-Ph.D. submission of Ms. Shilpi Patel was held on 31/7/2017 in the department. Her supervisor is Dr. Madhavi Adhav. The title of her thesis is “Comparative Phytochemical and Antimicrobial Studies On Morphotypes Of Hibiscus Rosa Sinensis Linn.”

The faculty of Botany department Dr. M. Adhav, Dr. V. Dubey, Dr. S. Shrivastava, Ms. Priya Trivedi, Ms. Preeti Parashar, Ms. Charulata Shah and Dr. M. Arora attended a one day workshop on “Identification of Medicinal Plants” on 2 July 2017, organized by Dr. A.P.J. Abdul Kalam University, Indore.

A full chapter written by Dr. S. Ray on “Wild Food Plants Of Indo Gangetic and Central India” has been published in Ethnobotany of India, Vol.(5), Apple Academic Press, Canada.

Dr. Manjeet Kaur Arora’s full chapter on the topic entitled “Effect of Environmental Factors on Charcoal Rot of Sorghum Leading to its Integrated Management” has been published in the book-“Recent trends in Biological Research”, Uttar Pradesh 2017.

Mathematics Department

Dr. Vibhoj Parsai was invited as chief guest in Late Dr. Brijendra Singh Award ceremony at Christian Eminent College in the month of September 2017.

Electronics Department

Ms. Vaishali Bhole was appointed as Manager for the girls Chess team that participated in chess tournament organized from 26 - 27 September 2017 by Kasturbagam College, Indore.
NSS Day was celebrated on 23 September 2017 in a function organised in the college auditorium in presence of NSS District Co-coordinator Dr. Sachin Sharma as the chief guest. About 250 NSS volunteers attended the programme. There was a cultural programme arranged by the NSS students. Dr. Sharma also gave away badges to the Environment Ambassadors of the Mission Green Committee - Ankit Verma, Aakansha Soni, Lalit Dhangar, Heer Pathak, Arya Munshi, Anas Khan and Rajpal Yadav.

**Biotechnology Department**

The department organized an “Eco-friendly Ganesha Making” workshop on 22/08/2017 looking at the hazardous effects of POP Ganesha. To conduct the event, textile designer teacher Ms. Parul Soni, MKHS College was invited. Around 50 students of I year (Biotechnology) participated in the event, apart from faculties from various departments.

“Academic Excellence Week” (18 to 22 Sept.) was observed by the department during which guest lectures, interactive sessions & scientific movie session were organized.

In the series of guest lectures, Dr. Sheetal Bhasin (Prof., MRSC) delivered an interesting lecture on the topic “Fermentation Technology”. Around 60 students of I year (Biotech) attended the lecture, which helped them to gain a lot about their syllabus related topics and future prospects. It was followed by interactive session by Prof. Kwiti Thakkar. She gave detailed information on various competitive exams like JNU, IIT Jam, IISC etc., future prospects of Biotechnology and how to appear for a job interview. Queries and problems of students were resolved. It was again followed by guest lecture by Dr. Mukesh Patidar (Prof., MRSC). He delivered an informative lecture on the topic “Recombinant DNA Technology”. Around 55 Biotechnology students of B.Sc. III Sem. and 8 students of M.Sc. (Microbiology) attended the lecture. In this series, a scientific movie “The Martian” was shown to the students of I year in Biotechnology laboratory. Around 30 students attended the same and got to know to about nine real NASA Technologies.

**NCC Airwing Unit**

Combined Annual Training Camp (CATC) of Airwing NCC unit was scheduled from 02-09-2017 to 13-09-2017, at LNCT College, Indore. In this camp all the 2nd and 3rd year cadets, total 56 boys (SD) and girls (SW) from our college, had participated. During the camp they participated adventure activities like river crossing, rock climbing and rippling, under special defense persons. In camp cadets have shooting completion, which is held at Revati Range. To give flying experience, daily morning some of the cadets are randomly selected and send for flying from Indore Airport.

During different activity 6 cadets from our college are selected as best cadets, now they get opportunity to represent state team at Vayu Sainik Camp, Jodhpur this year.

**NSS Unit**

NSS Day was celebrated on 23 September 2017 in a function organised in the college auditorium in presence of NSS District Co-ordinator Dr. Sachin Sharma as the chief guest. About 250 NSS volunteers attended the programme. There was a cultural programme arranged by the NSS students. Dr. Sharma also gave away badges to the Environment Ambassadors of the Mission Green Committee - Ankit Verma, Aakansha Soni, Lalit Dhangar, Heer Pathak, Arya Munshi, Anas Khan and Rajpal Yadav.

**Best Practices**

Induction Programme ‘Aspire’ was held on 15 and 16 September 2017 for B.Sc. I year students. Dr. Ashish Dubey was the activity convener. Dr. Vimal Sharma and Dr. Jyoti Singh presented the departmental reports, while Mr. Manish Joshi outlined details of the NCC Boys Wing, NCC Airwing, NSS units , Sports and Library. Dr. Deepa Vanjani conducted the programme and Dr. G.D. Sharma proposed the vote of thanks.

Mission Green, the environment awareness committee of the college, organized a plantation drive on 14 August 2017 in the SPB ground of the college. The activity was held in collaboration with the NSS Unit of the college. The committee has appointed seven students as Environment Ambassadors. The students are Ankit Verma, Lalit Dhangar, Arya Munshi, Anas Khan, Heer Purohit, Rajpal Yadav and Aakansha Soni.

Knowledge Gallery: Posters on “An Overview of Nano Medicines” and “Chemistry of Fireworks” were displayed by the Chemistry Department in Knowledge Gallery on 2nd August-2017. Posters on ‘Touch Screen Technology’ were displayed by Electronics Department on 2nd August-2017 in the Knowledge Gallery.
**Students’ Achievements**

Sandeep Sharma, a cadet of NCC Boys Wing, (section B5), has been selected in the Trade Department of the Indian Army. He is undergoing six month training in Maharashtra after clearing his medical and physical tests. Harshit Sharma, student of Computer Science V semester, won the 1st prize in inter-college debate competition organised by Abhyas Mandal at Renaissance College, Indore on 9/09/2017. The topic of the debate was ‘Social Media is responsible for Rising Crime and Suspicion’.

**Why Conservation?**

The current products of an endless process of evolution are the plants and animals which now share the earth with mankind. They were shaped by their environment. The continents and oceans, the mountains, the plains and the forests, the great rivers, and the small streams, the lakes and ponds moulded the wildlife that lives in them. All animals are a product of their habitat: elephant or flamingo, lion or trout, rhinoceros or butterfly. They are our heritage, the natural part of our environment and we have a simple duty: to look after them for the generations that will follow us. Man’s own survival depends not only on his capacity to deal with the thermonuclear explosion but also on his capacity to stop the careless plunder of the planet. He must start applying the science of ecology to himself so that he can learn, before it is too late, that he is a part of the intricate relationship between all living things. Nature is a vast treasure-house of knowledge...it is therefore necessary to make the world aware of the need for conservation to avert disasters.

From *Wildlife Encyclopaedia*
Ramsey, NJ Funk & Wagnalls