



G.B. Chairman
Shri Jayendra Bhai Patel

The second quarter of the academic session implies moving towards the end of the year. As we step into the next year, let us all resolve to learn more, act more and be more efficient in our work output. That is the only way to enrich the academic field. Students are our human resource. All efforts should be directed towards ascertaining what they gain as beneficiaries. Better quality of work will ensure better output from students. I congratulate the staff members on their achievements. We have lot to be proud of as we celebrate Viksit Bharat@2047. Our resolve should be to contribute our best in fulfilling the dream of making Bharat a world leader in the coming years. Success comes to those who strive towards it.



Shri Gujarati Samaj, Indore

PMB Gujarati Science College

Accredited with grade 'A' by N.A.A.C.

PERIHELION

Quarterly Newsletter -

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From the Principal's Desk

The year has been progressing with regular UG and PG classes and various departmental activities. The faculty members have been engaged in self-upgradation as well in both, national and international domains. The time for the annual function of the college is now around the corner, which has created a buzz on the campus, with students preparing for participation in the many proposed activities. As always, faculty members are actively involved in

various committees for preparing students for various events. The students have actively participated in sports, NCC (both Air and Infantry Wings) and NSS activities also. I am positive that the momentum of work will continue and we all can put in our team efforts to do our best in our endeavours. As the year draws to a close, it is also time to introspect and retrospect to see where we could have done better and how to prepare ourselves for 2024.

News at a Glance

News at a Glance

As part of collaborative and interdisciplinary research in Bio-Nanotechnology, the departments of Microbiology and Physics, published a research paper in the Brazilian Journal of Science, titled 'Phyto-assisted synthesis of silver nanoparticles using *Tinospora Cordifolia* leaf extract and their antibacterial activity: An ecofriendly approach'. Dr Nandini Phanse, Dr K. Venkataraman, Dr Pravin Kekre, Dr Sanjay Shah are the authors.

Dr. K. Venkatraman was a member of IKS Committee for UGC-NET 2023, and participated in the workshop in National Testing Agency (NTA), New Delhi in October 2023.

An exhibition of Dr. Ashish Dubey's photographs was held at Avantika University, Ujjain.

Dr. G.D. Sharma has been invited as a speaker in the 10th World Congress on Cancer Research and Therapy (WCCRT 2024) which will be organized from June 20 - 22, 2024 in Prague - Czech Republic. He was also appointed Static Surveillance

team member from 28/10/23 to 19/11/23 in the State Vidhan Sabha Election 2023.

Ms. Poonam Vijaypuriya had qualified CSIR NET (LS) 2022-23, SET 2023-24 Exam and successfully completed Ph.D. coursework.

Dr. Ketan Topiwala appointed as Observer for practical examination (2023-24) by Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal, Nodal Centre, Indore.

Dr. Jyoti Singh was nominated as the subject expert in the selection committee for appointment of teaching staff on various positions in Renaissance College of Commerce and Management.

Dr. Sudip Ray authored book series "Industrial Botany" for B.Sc. II Year students published by Yashraj Publication, Indore.

Department of Chemistry

Departmental Activity:

Dr. Mamta Shakya, faculty, Govt. KP P.G. College, Dewas, delivered a lecture on Organo-Transition Metal Complexes to PG students on 22-12-2023.

Staff Achievements/Participation in Seminars:

Dr. Ketan Topiwala appointed as member of selection committee to select the University Pistol shooting (Men and Women) team by DAVV, Indore, on 11-10-2023. Dr. Ketan Topiwala, Dr. Dhananjay Dwivedi and Ms. Reetika J. Shah published a book in October-2023 for B. Sc. II Year Chemistry (Paper-II Transition Elements, Chemi-energetics, Phase Equilibria) as per NEP-2020 CBCS-Annual Pattern, Ram Prasad Publication Agra, ISBN no. 9788195824670.

- Dr. Ketan Topiwala, Dr. Dhananjay Dwivedi and Dr. Vandana Sharma Choubey participated in Dr. S. S. Deshpande National Award Ceremony and National Seminar on "Global Science for Global Well Being" organized by Govt. Holkar Science College, Indore, from 6 to 7 Oct-2023. Dr. Dhananjay Dwivedi presented a poster on "Synthesis and Characterization of some Imine Compounds". Also he published three abstracts in souvenir, titles are : (i) Synthesis and Characterization of some Imine compounds (ii) Removal of malachite green dye from industrial waste water using Ficus Benghalensis as bioadsorbent and (iii) Micellar Catalyzed oxidation of L-Aspartic acid by acidic permanganate, kinetics and mechanistic studies.

Dr. Dhananjay Dwivedi :

- As a resource person he has given a lecture on 03-11-2023 on "Experimental Chemistry and Career Guidance" in a certificate course organized from 03-11-2023 to 06-12-2023 by department of Chemistry, Govt. Holkar Science College, Indore.
- Invited as resource person to deliver a lecture in the internship program conducted by Forensic Science Department, Govt. Holkar Science College, Indore, on 21-11-2023.
- He published an article on शहर में फल-बाग से बनेगा स्वस्थ पर्यावरण in the column पर्यावरण मित्र in Nai Duniya newspaper.

Research Activity: Under the co-supervision of Dr. Dhananjay Dwivedi, Mrs. Vibhuti Sohni was awarded the degree of Ph. D. in Chemistry by DAVV, Indore.

Department of Physics

The department conducted an eye-screening programme in collaboration with Lawrence & Mayo on 12 December 2023. More than 150 students and staff participated in this programme. A poster competition was also organised for PG students.

Dr. P.A. Kekre and Prof. Mayur Mota attended "Finesse: The Personality Development and Communication Skills Workshop" from 6 - 9 December 2023, organized by the department of English and English Language Teachers associations of India (ELTAI).

Prof. Mayur Mota worked as a Master Trainer in Vidhan Sabha elections 2023.

Dr. K. Venkatraman chaired a session in National workshop on "Traditions in Indian Mathematics", organized by Ancient Indian Mathematics Research Centre." D.A.V.V., Indore. On 22 December 2023.

Dr. Ashish Dubey was invited as an expert for Digital Design Course.

Student Achievers

- Ms. Jhanvi Sharma (M. Sc. Chemistry) pass out (2022) student of our college, has been selected for joining Indian Navy as Sub Lieutenant in the Education branch. Presently she is undergoing 1year training at the Indian Naval Academy, Ezhimala, Kerala.
- The Air Wing cadets Ayush Bilwadia, B.Sc. II year, were participants in the inter-group pre- RDC competition on 21 October 2023 that won a trophy.



Dr. Dhananjay Dwivedi giving lecture at Holkar Sc. College, Indore



Expert Lecturee by Dr. Mamta Shakya



Eye checkup Camp



Poster Competition

Departmental Activities Cont.



Department of Biotechnology

- Guest Lectures on Bioinformatics were arranged for M.Sc. I yr (Biotechnology) students. Ms. Vartika Mishra, Faculty, Allen Academy, Indore, benefitted the students with her immense knowledge of the subject through her expert lecture.
- Under the banner of “College Chalo Abhiyan”, a workshop on Molecular Biology was conducted for the students of class X, XI, XII of The Shishukunj International School, Indore. Practicals were demonstrated by Dr. Preeti Vyas, along with detailed explanations. Ten students, accompanied by one teacher, attended the workshop.
- Ms. Saroj Solanki, Asst. Prof. Bioinformatics, Holkar Science College, was invited as guest speaker. She discussed practical aspects of Bioinformatics. Students of B.Sc. Biotechnology III yr were benefitted.
- Poster on “3 D Cell Culture” was displayed on knowledge gallery of the college.

NCC Airwing

1. Cadets donated blood on 07 October 2023 in Blood Donation Camp at Gandhi hall M.G Road, Indore.
2. Ex flt. Cdt. Jhanvi Sharma has been selected in the Indian Navy as officer.
3. Twenty **selected** Cadets attended self-defence workshop at Nehru Stadium organized by Jwala Defence Academy, Indore 16/12//2023.
4. Cadets attended the live session of Honourable Prime Minister Narendra Modi on youth empowerment in the Computer Science department.

Department of Electronics & BCA

- To enhance academic performance of students, the department organised an expert lecture on “Arduino Hardware” by Prof. Kirti Panwar Bhati from SOE, Indore for B.Sc. students on 07-12-2023.
- To make students aware of the industry working culture, the department organised a three-day workshop from 20-11-2023 - 22-11-2023 on “Java & Python in Industry”. The speaker was Mr. Bimesh Kumar from Mindcoder.
- Prof. Vaishali Bhale was the manager of the women’s Kho-Kho team that went to Jain Diwakar College for participating in intercollege competition.

Department of Microbiology

The department of Microbiology organized a peer interaction programme “Microbiota” on 10.10.23 for B.Sc. I & M.Sc. Semester I, Microbiology students. Various interesting activities like - Find your match, Flex your memory & Microbiota games, were arranged for students to teach basics of microbiology in interesting & innovative ways. Aditi Panwar & Pratima Padlak, students of M.Sc. Semester III, Microbiology, organized the activities. Competitions were organized for UG & PG category and prize distributed to winners.

‘Haemotest’ a haemoglobin estimation camp was organized on 28th Nov.2023 to observe ‘Iron Deficiency Day’. Staff members and students participated in the event. The event was convened by Dr. Nandini Phanse and co-ordinated by Dr. Mahima Golani.

Ms. Darshana Dusane published 3 books for B.Sc. III-year Microbiology Major (Group-I - Paper I & II) and Minor (Environmental Microbiology) with Nakoda publication as per syllabus of NEP-2023.

Department of Computer Science & IT

The result of BSc II year Computer Science was excellent at approximately 85%, while that of Information Technology 100%. Prof. Manisha Shah has been appointed as convener of Antakshri for the annual cultural program of 2023-24. She was also appointed as judge in poster competition organised by Botany department on International Day for Millets on 8th December 2023. Prof. Brajesh Vijaypuriya has been appointed as convener for stage management and Anchoring for the annual cultural program. Poster on 3D printing & AI robot was displayed in the Knowledge Gallery for the month of October. Shri Umesh Prajapat (PDA, Officer’s, NAVY) visited the department and delivered a lecture to NCC & NSS students for their career enhancement on 3rd November 2023.



Workshop for School Students:
Dr Preeti Vyas with students



Cadets at Gandhi Hall during
Shaheed mela



Students witnessing Live
telecast of PM



Dept. of
Microbiology, Microbiota





हिन्दी पखवाडे के अन्तर्गत हिन्दी दिवस का आयोजन मुख्य अतिथि वरिष्ठ पत्रकार श्रीमान नवनीत पुक्ला , श्री अनिल कर्मा ने किया । एवं आभार ज्योति फडके ने किया ।



देवी अहिल्या विश्वविद्यालय में डॉ. ज्योति सिंह के निर्देशन में नवी पी.एच.डी.की उपाधि छात्र पालिनी वानखेडे



Ph. D. Presentation of Neha Pande



Dr. G. D. Sharma at 21 Km Dewas Run



Department of Hindi

दिनांक 23.9.2023 को हिन्दी विभाग द्वारा हिन्दी पखवाडे के अन्तर्गत हिन्दी दिवस का आयोजन किया गया । मुख्य अतिथि वरिष्ठ पत्रकार श्रीमान नवनीत पुक्ला , श्री अनिल कर्मा ने हिन्दी की महत्ता पर प्रकाश डाला । कार्यक्रम का संयोजन एवं संचालन महाविद्यालय की हिन्दी विभाग की विभागाध्यक्ष डॉ. ज्योति सिंह ने किया । एवं आभार ज्योति फडके ने किया ।

दिनांक 29.10.2023 को क्षितिज संस्था इन्दौर म.प्र. द्वारा आयोजित लघुकथा सम्मेलन में डॉ. ज्योति सिंह ने अपनी सहभागिता निभाई । गोल्डन बुक ऑफ बर्ड रिकॉर्ड्स में नामित स्वर्णित आकाश भाग -5 में रचनाएँ प्रकाशित हुई ए ISBN-978-93-94462-30-4 ।

दिनांक 7.11.2023 को वैष्णव आर्ट्स एंड कॉमर्स कालेज द्वारा एक दिवसीय वेबीनार ने विभाग की डॉ. ज्योति सिंह व ज्योति फडके ने अपनी सहभागिता निभाई ।

मॉ कॅनकेषरी षामहा. इन्दौर द्वारा योगा दिनचर्या जीवन का मूल मंत्र विषय पर आयोजित राष्ट्रीय वेबीनार में डॉ. ज्योति सिंह ने भारतीय योग साहित्य की परम्परा एक परिचय पोथ पत्र प्रकाशित किया गया ।

देवी अहिल्या विश्वविद्यालय में डॉ. ज्योति सिंह के निर्देशन में पी.एच.डी.की उपाधि हेतु छात्र आषीष सोनी एवं रोहित मांडलेकर की आर.डी.सी. सम्पन्न हुई ।

दिनांक 1.12.2023 नर्मदे हर समग्र नर्मदा परिक्रमा साहित्य सम्मेलन इन्दौर द्वारा आयोजित सम्मेलन में डॉ.ज्योति सिंह द्वारा नर्मदा नामकरण एवं व्युत्पत्ति पोथ पत्र प्रकाशित किया गया ।

दिनांक 4.12.2023 को विभाग की डॉ.ज्योति सिंह को युवा पर्यटन क्लब का नोडल अधिकारी नियुक्त किया गया ।

इस वर्ष महाविद्यालय में आयोजित होने वाले वार्षिकोत्सव के लिए समितियों का गठन किया गया जिसमें डॉ. ज्योति सिंह फन फेयर में संयोजक बनायी गयी । विभाग की प्रो. ज्योति फडके क्वीज एवं नृत्य प्रतियोगिता में सदस्य बनाई गई ।

Department of Zoology

The Department conducted the Ph.D. Viva Voce of Ms. Neha Pande, scholar of Dr. GD Sharma, on 'Effects of Spirulina on the Growth and Productivity of Silk worm (Bombyx Mori) in Zoology (Life Science) on 26/12/2023.

Dr Sharma was invited as judge in the poster competition on Millets organized by Dept. of Botany on 8/12/2023.

He completed following marathons.

Dr. GD Sharma at 21 Km Dewas Run

1. Dewas Run: 21 km. Bib no. 2051 in 2.28 hrs. Date: 08/10/23.
2. Infantry Marathon: 21 km. Bib no. 8038 in 2.21 hrs. Date: 29/10/23.
3. 12 hrs. Tiranga Run: completed 75 km, Bib no. 12023, Date: 20/08/2023.

Departmental Achievements:

M.Sc. IVth Semester Zoology result was 100%. Ms. Vartika Mishra secured 1st Rank in the merit list.

As a part of curriculum, the P.G. students of India's 1st youngest NACC Accredited A++ Parul University, Baroda are coming for two-month internship program in the Department of Zoology.

NSS Unit

The NSS Unit of the college organised a camp in Simrol from 26 December 2023- 1 January 2024 in which 40 students participated. During the camp, a health camp and nukkad natak was organised in which awareness was spread among the residents of the area. Faculty members also went to schools as part of the College Chalo Abhiyan.

Interesting Trivia

3rd January is Perihelion Day, a special day for everyone on Earth, for its when our planet is closest to the Sun in 2024. On this day, the Earth is about 3 million miles nearer to the sun compared to when it's farthest away, called the aphelion.



Department of English

1. Certificate course *Finesse*:

The department organised Finesse on Communication Skills and Personality Development from 6-9 December 2023. The workshop was inaugurated in presence of the principal Dr. Kiran Dixit, invited guest Dr. Shalini Mathur, Heads of Departments and participants. There were 50 registrations, which included students from St. Paul Institute of Professional Studies and research scholars, teaching faculty of the college and other colleges. All sessions were activity-based.

The resource persons were:

- 6/12/23- Dr. Shalini Mathur, Head, Dept. of Humanities, IPS Academy. Topic: Employability Aspects of Language and Communication.
- 7/12/23- Mrs. Neetu Shrivastava, Associate Prof. Department of English, IPS Academy. Topic: Fun with Vocabulary.
- 8/12/23- Dr. Shipra Ahuja Joshi, Prof. Department of English, Oriental University. Topic: Analytical Reading and Comprehension Skills.
- 9/12/23- Dr. Deepa Vanjani, Head, English Department, PMB Gujarati Science College and convener, *Finesse*. Topic: Creative Coffee for Personality Pep-Up.

The event was conducted by Mrs. Kusum Joshi, who was also the organising secretary of the workshop.

2. Guest Lectures: Two syllabus -based guest lectures for students.

- Prof. Rahul Mahashabde: Phonetics, BSc II year students, 6/10/23.
- Mr. Sunny Wadhvani, Cyber lawyer and cyber-crime expert, BSc III year students, 29/11/23.

3. **Student Visits:** As part of Personality Development syllabus, II year students were taken to the **Shaheed Mela** in Gandhi Hall on 7/10/23 along with NCC Armed and Air Wing cadets accompanied by their respective officers. On 12/12/23, five students were taken to St. Paul Institute of Professional Studies to participate in a group discussion on India in the World and Impact of Cinema. Dr. Vanjani was incharge of both activities.

4. **Staff Involvement in Activities:** Dr. Deepa Vanjani was invited to Sri Satya Sai Vidya Vihar to adjudge the inter-school Ted-Talk competition on 7/10/23. Mrs. Kusum Joshi has been appointed convener of Dance committee for the annual function of the college.

5. **Abstract submitted** by Dr. Vanjani for presentation of paper in the NELTA Conference scheduled to be held in Kathmandu from 17-19 February 2024 has been accepted.

Department of Sports

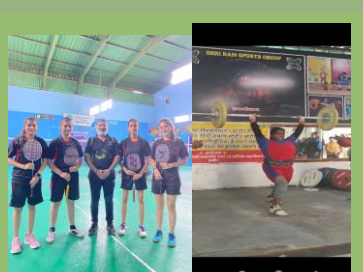
- Sneha Prajapati MSc 3 Sem selected in Devi Ahilya University Football Team for West Zone Inter University Competition
- Our college badminton (W) team played Quarter Finals in Inter College Badminton Tournament organised by UTD Indore.
- Sneha Prajapati MSc 3 Sem secured 2nd position in 800 mts race whereas Vivek Basedia M SC I sem in action in Inter College Athletics Competition- Javelin Throw (M)
- Nikita Rajput MSc 3 Sem selected in Devi Ahilya University Team for All India Inter University Weight Lifting Tournament.
- Dr. Praveen Kekre, Shri Kishan Ojha, Mr. Mukul Sharma (NCC Air Wing Officer), Aluminus Mr. Harsh Pal (Cricket Captain and Badminton Champion of Annual Sports) with winner and runner up of badminton competition organised on occasion of National Sports Day on 26/08/2023



Aarushi Pal expressing her views in GD on Viksit Bharat



Veersingh and Tanishq Sharma II year during presentation





Expert Lecture by Dr. Harish Vyas



Floral Welcome to Dr. Preeti Shukla

Patron:

Shri Jayendra Bhai Patel
[Chairman, GB]

Chief Editor:

Dr. Kiran Dixit [Principal]

Convener:

Dr. Deepa Vanjani

Co-Convener:

Prof. Vaishali Bhale

Department of Botany

The Department organised three expert lectures:

- For M.Sc. students under PG development program, lecture delivered by Dr. O.P. Joshi, retd. principal and professor of Botany, P.M.B. Gujarati Science College, Indore on 29/11/2023 on the topic Life Style for Environment.
- Second lecture was delivered by Dr. D.K. Billore, retd. Prof. of Botany on Biotic interaction.
- Third lecture was delivered by Dr. Harish Vyas, Prof. of Botany, Vikram University, Ujjain on 30/12/2023.

The Department organised one -day workshop to commemorate the International Year of Millets 2023. On this occasion the eminent speaker and chief guest was Dr. Preeti Shukla, Director Nutri Needs Health Consultancy, Indore Dr. Shukla threw light on nutritinal security, nutritional composition of millets, impact of millets consumption to overcome hypertension and diabetes and other important points. A poster competition was also arranged and many posters were displayed by students on various topics of millets. Ist prize: Mahak Koushal, IInd prize: Surya Pratap Chouhan, and Illrd prize: Kajal Sharma. Dr. G.D. Sharma Head of Zoology Department, and Mrs. Manisha Shah of Computer department were judges. Food Exhibition on millets was displayed in the department. Dr. Preeti Parashar conducted program and Dr. Smita Shrivastava gave vote of thanks Dr. Sudip Ray authored book series "Industrial Botany" for B.Sc. II Year students published by Yashraj Publication, Indore.

Dr. Madhavi Adhav attended a three-day online FDP on research Methodology Master class organized by Mandsaur University, M.P. Dr. Madhavi Adhavi participated in the workshop on Techniques in Protein Analysis organized by Global Education Societies Science Technology Training Centre, Pune on 26 February 2023. Ms. Krishna Joshi, Lab technician in department of Botany was honoured with Krishna Basanti Research Literature Excellence Award 2023 and Manas Santati Award 2023. Ms. Krishna Joshi published a poem in book. Dhara SE Gangan Tak-2 ISBN No. 978-93-59170244, published by Vishwa Hindi Sahitya Sansthan.

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To,

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