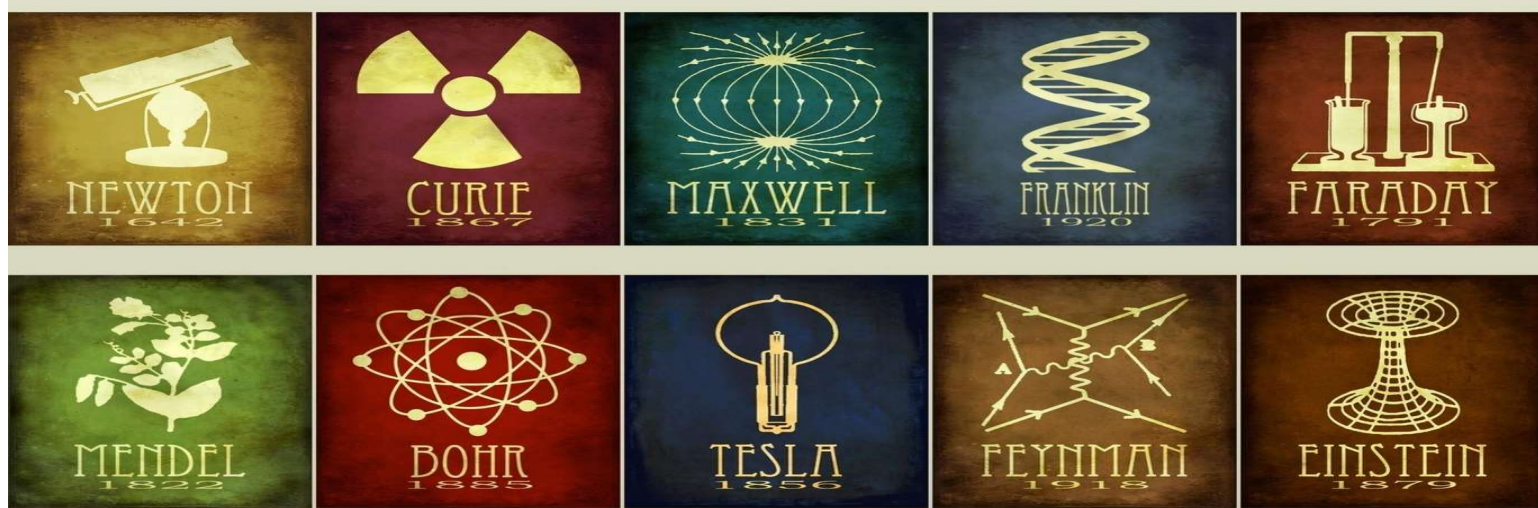


AURUM



NEWSLETTER 2023-24

DEPARTMENT OF CHEMISTRY
VIDYA BHAWAN RURAL INSTITUTE

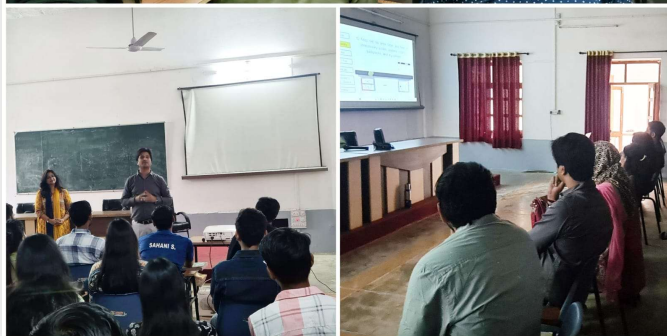
Faculty corner

This newsletter is a small glimpse of the competence and insight of our students. Besides from the co-curricular activities, college round ups, this newsletter is a testament to the dedication, passion, and innovation that define our department. Our department continues to be a hub of discovery, learning, and collaboration, and this newsletter is a platform to share our accomplishments, aspirations, and insights. The Department always endeavors to fulfill its dream of instilling human skills, and employable skills in the students. We are pleased to present our Ninth edition of "AURUM."

ACADEMIC CO-CURRICULAR ACTIVITIES

Orientation Program

Transitioning to a new educational institution can be challenging. An orientation program helps students become acclimated to their new environment, to understand the institution's nature, the educational options available to them, as well as the organization's principles and functions. On October 31st 2023, the Chemistry Department organized an orientation program for M.Sc. Sem-I students. The event began with a formal welcome of newly admitted students and the Staff faculties. In a power point presentation, Dr. Saba Khan highlighted the department's and college's unique features. The importance and possibilities of the M.Sc. in Organic and Analytical Chemistry were made clear to the students. They became acquainted with the NEP pattern, credit system, syllabus, and grading scheme. Along with the academic calendar and timetable, the students were informed about the department's different extracurricular activities, such as fresher and farewell parties, lab and industrial trips, and seminars. The student election process, NSS and Rover Units, as well as the college's sports and cultural program, were conferred.



Dr. Anju Jain explained about the Defaulter Exams, while Dr. Rehana Khanam

and Dr. Manish Rawal addressed the students, encouraging them to do their best and achieve success in their lives.

A video on lab safety was screened for the students. The program ended with an icebreaker activity game that emphasized the value of good communication skills.

Extension Lecture

Extension lectures offer opportunities to expand knowledge in a specific subject matter beyond the regular curriculum. They provide students with access to expertise and information that may not be covered in their standard coursework. The department of Chemistry conducted an extension lecture on "spectroscopy" on 14th September 2023, by Professor Rameshwar Ameta of PAHER University.



Dr. Manish Rawal welcomed Prof. Rameshwar Ameta, who is an eminent academic and has made significant contributions to the field of research. Prof. Ameta elucidated the idea of spectroscopy to the M.Sc. students. The theory of IR spectra and its applications in the field of chemistry were then discussed by him. The lecture was very educative and informative for the students. Further during the interaction, Prof. Ameta answered the queries of the students.

Student seminars and Internal exams

As a regular feature of the department, PG students present seminars on a variety of topics from the syllabus each year. This also aids in the development of communication and teaching skills. Internal examinations were also administered to assess their understanding of the course material. These assessments allow students to check their learning ability as well as practice for important exams.

Industrial Visit: One of the practical teaching tactics is to visit an industry. It is beneficial because it allows students to connect with

genuine business experts and familiarizes them with company processes and workplace dynamics.

Department of Chemistry, VBRI organized an industrial visit on 21st Dec 2023 to Bhansali Engineering Polymers Ltd. located in Ambaji Industrial Area, Abu Road, Sirohi for the students of M.Sc. Chemistry. BPEL is manufacturer of acrylonitrile butadiene styrene (ABS) and styrene Acrylonitrile(SAN). The students started the visit from Compounding section where they learned from shri Anand Rokade, Head, Research and Development how terpolymer is produced from acrylonitrile, butadiene, styrene(ABS). They then visited the Moulding section to understand how the polymer granules is compressed, heated until molten and then squirted into a cold split mold under pressure. The product is then send for contamination checking.



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Students understood the working of metal flow rate machine. They then visited the Weather ability lab to learn how the product is tested for outdoor utility. The students saw the weather Ometer, flow rate machine, Heat distortion tester machine, Digital microscope with 1000X power, and the automatic digital microscope in working.

Ozone House Training Program

Under the MOU signed between Department of Chemistry, VBRI and Ozone Test House in Oct

2022, the second batch completed their 10 days training.



Total 12 students Jay Kumar Rawal, Dilip Kumar Purohit, Naresh Kumar Purohit, Vishal Vaishnav, Priyanka Kharwar, Jay Purohit, Tej Prakash, Parv Chaubisa, Himanshu Ameta, Rajan Rai, Bhawna Suthar, and Preeti Suthar successfully completed this training. They were provided certificates after successful completion of the training.

One Day Seminar

Department of Chemistry, VBRI and Department of Polymer Science and Rubber Technology, VBPC jointly organized a One-day Seminar on “Entrepreneurship, Social Empowerment & Sustainable Green Development in the Emerging Field of Polymer Science & Rubber Technology” in association with Indian Rubber Institute (IRI) Raj. Branch on 20th Dec 2023. The seminar focused on potential future scope of polymer and rubber for sustainable green environment and develop greater entrepreneurship skills and employability in field of polymer Science.

Dr. Sunil Kumar Jagasia Chairman Education Committee IRI, Rajasthan Branch, Mr. Manoj Joshi Managing Director, Mould Makers, Mr. Ankit Singhvi Managing Director, Polymer Processors & Advent Polycoats Pvt Ltd, Mr. Yash dev Singh Business Consultant, Mr. Chetan Sharma, Gen. Manager Technical, J.K. Tyres & Industries, Mr. Jitendra Jangid Managing director Atul Impex pvt Ltd were the speakers in the two technical sessions.

Dr. Vikram Singh Kumawat was the Converner, while Dr. Anju Jain and Dr. Saba Khan were the organizing Secretaries of the seminar.

<p>ORGANIZING INSTITUTE</p> <p>VIDYA BHAWAN POLYTECHNIC COLLEGE</p> <p>Vidya Bhawan Polytechnic College, founded in 1976, provides quality and internationally accepted technical education. The college offers B.Tech. in C.A.T, Electrical, Electronics Engineering, Computer Science and Information Technology, B.Tech. in Graphic and Printing Technology and a 3-Months certificate course (Diploma in Engineering) in Computer Graphics. The college has been approved from the All India Council for Technical Education, Rajasthan. The Institute earned accolades as the Best Institute in 2020 as 'Sustainable Technical Institute' in 2024, and the Best Community Development Group (Entrepreneurship Skill Development) in 2022 by the All India Council for Technical Education, Rajasthan. The Institute earned accolades as the Best Institute in 2020 as 'Sustainable Technical Institute' in 2024, and the Best Community Development Group (Entrepreneurship Skill Development) in 2022 by the All India Council for Technical Education, Rajasthan.</p>	<p>INDIAN RUBBER INSTITUTE</p> <p>To support the professional growth of persons associated with the rubber and allied industries by providing them the learning opportunities of knowledge and skill acquisition in association with industry of national importance and to enhance the networking among the rubber rubber technologists by organizing international national conferences, seminars and workshops in association with national and international professional bodies.</p>	<p>ONE DAY SEMINAR</p> <p>on “Entrepreneurship, Social Empowerment & Sustainable Green Development in the Emerging Field of Polymer Science & Rubber Technology”</p> <p>December 20th 2023</p> <p>Jointly Organized by Department of Chemistry Vidya Bhawan Rural Institute, Department of Polymer Science & Rubber Technology Vidya Bhawan Polytechnic College Udaipur-313001, Rajasthan, India</p>	
<p>CHIEF PATRON</p> <p>Dr. Anand Prasadkumar CEO, Vidya Bhawan Society, Udaipur</p> <p>Dr. Sunil Kumar Jagasia Chairman Education Committee IRI (Rajasthan Branch)</p>	<p>PATRONS</p> <p>Dr. T.P. Sharma Dr. Anil Mehta Dr. Anju Jain Dr. Saba Khan Department of Chemistry, VBRI, Udaipur</p>	<p>CONVENER</p> <p>Dr. Vikram Singh Kumawat Head Dept of Polymer Science & Rubber Technology, VBPC</p>	
<p>ORGANIZING SECRETARY</p> <p>Dr. Anju Jain Department of Chemistry, VBRI, Udaipur</p> <p>Dr. Saba Khan Department of Chemistry, VBRI, Udaipur</p>	<p>ABOUT DEPARTMENTS</p> <p>The Department of Polymer Science and Rubber Technology offers Post Diploma in Polymer Science & Rubber Technology and B.Tech. in Rubber Technology. The objective of the Department is to safeguard and promote interests of the Indian Rubber Industry, both at the high, low- and mid-level, covering rubber products, raw materials, processing machinery and testing equipments etc. and provide present technicians and operators.</p> <p>The Department of Chemistry VBRI was established in 1986 with a mission to produce Under-graduates. In 2002 Post graduation was introduced to industrial students in chemical sciences. The Department offers post graduate degree to students with two specializations (Organic and Analytical).</p> <p>ABOUT THE PROGRAMME</p> <p>The one day Seminar on “Entrepreneurship, Social Empowerment & Sustainable Green Development in the Emerging Field of Polymer Science & Rubber Technology” is well structured, focused and result oriented. The workshop focuses potential future scope of polymer and rubber for sustainable green environment. This workshop will help develop greater entrepreneurship skills and employability in field of polymer Science.</p>	<p>SPANERS</p> <p>Mr. Manoj Joshi Managing Director, Mould Makers Udaipur President, Lughu Udaipur (Bharti), Udaipur CS, President ECC, Udaipur</p> <p>Dr. Sunil Kumar Jagasia Chairman Education Committee, IRI, Rajasthan Branch</p> <p>Mr. Ankit Singhvi Managing Director, Polymer Processors and Advent Polycoats Pvt. Ltd, Udaipur</p> <p>Mr. Chetan Sharma General Manager Technical, J.K Tyres & Industries Ltd, Jaipur and, Jaipur</p> <p>Mr. Yash Dev Singh Managing Director Atul Impex Pvt Ltd</p> <p>Mr. Yash Dev Singh Motivational Speaker Business Consultant</p> <p>WHO CAN ATTEND?</p> <p>Academics Researchers, Scholars, UG & PG students and industry persons</p>	<p>REGISTRATION</p> <p>REGISTRATION FEE: 300/- Last date of registration: 15th Dec 2023 Participants can submit registration fees and registration form to postbox mode. Link for the same is: https://www.vbri.edu.in/Registration</p> <p>COMMITTEE MEMBERS</p> <p>Dr. Dakshina Sharma, Mr. Chandresh Agrwa Mr. Gaurang Sharma, Dr. Neha Sharma, Mr. Anil Kishanbhai, Dr. Manish Rawal, Mr. Bhawan Anand, Mr. Jay Sharma, Dr. Bharat Raj Singh Rathor, Mrs. Rajni Chandrashe, Mr. Mahendra pal, Mr. Ranesh Kumbhar, Mr. Gaurav Kishore, Mr. Suthar Kumarawat, Mr. Raghavender Singh, Mr. Neeraj Kishore, Mr. Umashankar Joshi, Mr. Deepak Prasadpat,</p> <p>Contact Details: Dr. Vikram Singh Kumawat: 9603055558 Dr. Anju Jain: 9460230000</p> <p>Venue: VBPC Seminar Hall, Mochan path VBRI Campus, Sirohi, Udaipur (Rajasthan)</p>



<https://udaipurwale.com/seminar-on-polymer-science-and-rubber-technology-organized/>

Co-curricular activities

Poster Competition

The Chemistry department organized a Poster Competition on 2nd Nov 2023 on the theme “Green Chemistry of Environmental Sustainability”. Total 15 students participated in it. Sanjana won the 1st prize while Divyanshu Gancha stood 2nd and Neha Menariya came in 3rd place.



Farewell Program

For the M. Sc. final students, 21st Nov. 2023 will always be remembered as a special day. The juniors hosted a great afternoon of cultural program for their seniors. The final year students remembered and shared their memories and enjoyable times together. The faculty and students wished



the graduating students farewell.

Fresher Party: Every student eagerly awaits right from their time of admission for their most remarkable event “FRESHER’S PARTY”. It is the day where seniors and juniors



finally bond and unite to celebrate being part of the college. On 10th January 2024, the Program started with the lamp lightening along with seeking the blessings of goddess Saraswati by the Staff faculties. Mr. & Ms. Fresher’s event was hosted in three rounds. The first round included self-introduction and the Ramp walk, which focused on confidence and ability of students to carry themselves. The second round was talent round where dances, songs, poetry were presented by the freshers. In the final round of question and answer, out of the six shortlisted finalists, Mr Kunal Chaubisa and Miss Monika Vairagi were selected as Mr and Miss Fresher respectively. Various games were organized for the newcomers. The day was filled with incredible solo and group performances put up by the Seniors and Juniors.

Games



Parv Chaubisa, Kalpesh Rachiyata, M.Sc. students won 3rd position in inter collegiate tournament of Badminton held on 5th-6th Oct 2023.

In interclass Volleyball, VBRI tournament, Neha Menariya of M.Sc. Class stood First as a team player.

Jayesh Nagda, M.Sc. Sem-IV won third position in Chess inter collegiate tournament on 9th Oct 2023. Dilip Kumar Purohit represented the college team in inter collegiate Hockey tournament on 26th-27th Oct 2023, that won the gold medal.

Faculty Achievements

Dr. Anju Jain and Dr. Saba Khan served as the **Organizing Secretaries of One-day seminar** on “Entrepreneurship, Social Empowerment & Sustainable Green Development in the Emerging Field of Polymer Science & Rubber Technology” in association with Indian Rubber Institute (IRI) Raj. Branch. (20th Dec 2023)

Two-day workshop on “NMR operating and software handling” by the Department of Chemistry. MLSU on 11- 12th Oct 2023 Attended by **Dr. Anju Jain, Mrs Ragini Gandharva, Dr. Saba Khan and Dr. Rehana Khanam.**

An online **Three-Day FDP** on “Citation and Reference Management for Scholarly Writing” Organized by IQAC, NSB Bangalore in collaboration with MENDELEY, Netherlands on 26th-28th Feb, 2024. Attended by **Dr. Daksha Sharma and Dr. Rehana Khanam.**

An online **Five-day FDP** on “Innovation & Technology in digital Pedagogy” organized by S. S. Jain Subodh Management Institute, Jaipur. (20th -24th May 2024) by **Dr. Rehana Khanam and Dr. Saba Khan.**

Faculty knowledge sharing Program on “Experimental learning -Models, methods and practices” on July 14th 2023, by IBS and ICFAI, attended by **Dr. Anju Jain, Dr. Rehana Khanam and Dr. Saba Khan.**

Poster presentation on “Synthesis and characterization of chitosan-polyaniline-chromium(III) oxide nanocomposite for the waste water treatment” at National Conference on Emerging Technologies in chemistry & their Applications" Govt College Sirohi. Oct 19-20th 2023 by **Dr. BharatRaj Rathore, Dr. Anju Jain, Mrs. Ragini Gandharva, Dr. Saba khan, Dr. Manish Rawal.**

Paper presentation on “Synthesis and Characterization of Pectin-Zinc oxide composite and its applications for removal of dyes” at International conference on “Emerging Trends in Chemical Sciences for Sustainable Development” organized by BN university Udaipur. (28-29th May 2024) by **Dr. Saba khan and Mrs. Ragini Gandharva.**

Dr. Daksha Sharma

1) NEP 2020 **Orientation and Sensitization Programme** under Malaviya Mission Teacher Training Programme(MM-TTP) of UGC organized by UGC-MMTTC, Shri Guru Tegh Bahadur Khalsa College, University of Delhi. (19-31st Jan. 2024

2).Presented paper on “Waste-Water Treatment by Photobleaching of Some Dyes Using Polyoxometalates” at 11th International Science Congress (ISC-2023) on 8-9th December 2023 organized by International Science Community Association at Pacific University, Udaipur.

Dr. Rehana Khanam

Refresher program: Two-week online refresher programme on” Research methods: Approaches & practices” (7th to 21st March, 2024) Organised by UGC-(MMTTC), National Institute of Education Planning and Administration (NIEPA), New Delhi & MLSU, Udaipur, Rajasthan.

Edited books

i) Impact of chemicals on environment and societal aspects and Sustainable development. Publisher: S Sharda Global research Publications, ISBN - 978-81-965784-7-3 (2023)

ii) Green synthesis of essential oils and their impact on environment.

iii) Multidisciplinary Research: Recent Innovations and Challenges.



Publisher: MGM Publishing House, ISBN -978-81-965336-4-9 (2023)

iv) Recent advances in chemical research and development

Publisher: Reyansh Global research Foundation, ISBN -978-81-964832-5-8 (2023)

Conference Proceedings

International Conference on Innovations and Challenges in Multidisciplinary Research and Practices (ICICMRP- VIRTUAL 2023) ISBN:978-93-91932-86-2

Papers presented

1) Spectrophotometric Determination of Nickel (II) by Mixed Ligand Technique using 3-Hydroxy-3-phenyl-1-p-chlorophenyltriazene and 4-[2-pyridyl-azo] resorcinol in 1st International Conference on “Recent Advances in Chemical Sciences” Organized by Department of Chemistry, MLSU, Udaipur, (16th -18th Jan., 2023.)

2) Spectrophotometric Determination of Nickel (II) by Mixed Ligand Technique using 3-Hydroxy-3-m-Tolyl-1-Phenyltriazene and 4-[2-pyridyl-azo] resorcinol in International conference on “Recent Innovation in Biotechnology, Chemical and Environmental sciences” Organized by MLSU, Udaipur, in association with Microbiologist Society, India on 15-16th -March, 2023.

3) Spectrophotometric Determination of Nickel (II) by Mixed Ligand Technique using 3-Hydroxy-3-phenyl-1-o-chlorophenyltriazene and 4-[2-pyridyl-azo] resorcinol in National Conference on Recent Advances in Science and Technology, Organized by Department of Chemistry Government College, Kota, Rajasthan on 6-7th Oct., 2023.

4) Spectrophotometric Determination of Nickel (II) by Mixed Ligand Technique using 3-Hydroxy-3-isopropyl-1-p-tolyltriazene and 4-[2-pyridyl-azo] resorcinol in National Conference on “Emerging Technologies in Chemistry & their applications” Sponsored by (DST-SERB) Govt. Of India, New Delhi, Organized by Government College, Sirohi on 19th-20th October, 2023.

5) Analytical application of 3-hydroxy-3-p-tolyl-1-o-carboxyphenyltriazene in spectrophotometric determination of zirconium (IV) in International conference on “Recent Global Innovations, Challenges and Trends in Multidisciplinary Research” Organized by B.B.D. Government College Chimanpura (Shahpura) Jaipur in collaboration with INSPIRA Research Association-IRA, Jaipur. (18th -19th December, 2023).

6) Analytical application of 3-hydroxy-3-m-tolyl-1-p-nitrophenyltriazene in spectrophotometric determination of zirconium (IV) in National Conference on Recent Trends in Polymer & Chemical Science on 5th - 6th Jan. 2024, Department of Chemistry, MLSU, Udaipur (Raj).

7) Analytical application of 3-hydroxy-3-phenyl-1-o-carboxyphenyltriazene in spectrophotometric determination of zirconium (IV) in International conference on “Multidisciplinary Research and Trends in Humanities, Artificial Intelligence, Environmental Sustainability, Social Sciences and applied Sciences” Organized by Shri Ratanlal Kanwarlal Patni Girls’ College, Kishangarh, Ajmer, Rajasthan, in collaboration with INSPIRA Research Association-IRA, Jaipur. (29th -30th Jan, 2024).

8) Azadirachta Indica as a non-conventional corrosion inhibitor for brass in nitric acid medium” in International conference on “Emerging Trends in Chemical Sciences for Sustainable Development” by BN university Udaipur. (28th -29th May 2024)

Awards: 1. Outstanding researcher award by Royal Science Forum, Salem, India (30th Oct 2023).

2. Best paper presentation award (Second) for the technical session-II in International Conference on multidisciplinary research and trends in Social Sciences and applied Sciences

organized by Shri Ratanlal Kanwarlal Patni Girls' College, Kishangarh Ajmer, Raj., in collaboration with INSPIRA Research Association-IRA (29th -30th Jan, 2024)

3. Certificate of recognition in science mentors meet for extraordinary contribution in the field of education by NARNARAYAM SHASTRI INSTITUTE OF TECHNOLOGY on 23rd February, 2024.

4. The SHE AWARDS BY SCI (SHE CIRCLE INDIA) on 9th of MARCH, 2024

Bharatraj Singh Rathore

Presented Paper on "Synthesis and Characterization of Ch-PANI-Fe₂O₃ nanocomposite and its water remediation Applications" in International conference on "Emerging Trends in Chemical Sciences for Sustainable Development" organized by BN university Udaipur. (28th -29th May 2024)

Results

In the academic session 2022-23, in the under graduate section, Himani Mehta stood first with 87.37% Ankit Janwa stood second with 84.31%, Mansi Joshi stood third securing 83.05% in Bio batch. Pradeep secured 84.53% bagging the 1st position and Ashutosh Maurya at second position with 83.82%. Neha Dangri stood third with 80% in Maths Batch.

In M.Sc Final (Batch 2021-23) the first position was secured by Santosh Dangri with 7.75 CGPA and 2nd position by Sulekha Nirban with 7.6 CGPA.

In M.Sc. previous Sem II (Batch 2022-24) Neha Menariya secured first position with 8.5 SGPA while Sana Parveen stood second with 7.8 SGPA.

