

# Centre for Research Maitreyi College, University of Delhi

## Summer Internship Programme, 2022-23

Centre for Research (CFR), Maitreyi College continued to have another fruitful academic year 2022-23, just like previous ones in terms of growth and progress of research astuteness of our young scientists and faculty members. The Centre not only recognizes but provides the essential platform to showcase the leading researchers their scientific talent and share their knowledge with like-minded people. Many research oriented activities were organized to directionalize their scientific understanding.

A total of 30 projects were successfully completed under the **Summer Internship Programme** 2022-23. The astounding success of SIP projects was quite evident by 30% increase in the number of projects from the previous year. Approved projects were carried out during the summer break (May-July, 2023), under the supervision of the faculty members. Out of 30 received projects, 25 were from sciences and 5 from social sciences and humanities departments. There was an involvement of 58 Faculty members and 108 students. The project reports were collected at the end of July, 2023 and examined by the external evaluators. On the basis of evaluation marks, top projects were selected for **Avlokan 2023**- the student presentation session.

**Avlokan** was organized in four parallel sessions on 3rd November, 2023. The selected projects (total 27) from SIP 2022-23 (Total 30) were presented before an external jury. There were a total eight judges invited in order to assess the 4 parallel session programs. The student presenters explained their research topics in a detailed manner including literature review, working methodology, results and analysis of data and concluded with future prospects. 1 project presentation per session was awarded on that day. All 8 external jury members appreciated the hard work and efforts of all the students and mentors. Parents of a few presenter students also attended Avlokan and highly acknowledged their work.

### List of projects carried out during SIP 2022-23

Code	Title of the Project	Mentor's Department	Details of Students (Name, course & year)
SIP22-23/01	Effects of polluted Hindon river water on Phytochemical Traits in Ocimum species	Botany	Archana B.Sc. (H) Botany, 2nd Yr , Prachi Panwar B.Sc. (H) Botany, 2nd Yr, Preeti B.Sc. Life Sciences, 2nd yr, Kanika Joshi Roll no Course: B.Sc Life Sciences, 2nd yr

SIP22-23/02	Pharmacovigilant Analysis And Comparison Between Ayurveda, Siddha, Homeopathy And Self-Made Polyherbal Formulations And Repurposing Them For Disease Management	Botany	Joyeeta Mondal, B.Sc. Botany (Hons.), 2nd year, Deepti, B.Sc. Botany (Hons.), 2nd year, Aakangksha Goswami, B.Sc. Botany (Hons.), 1st year, Nikhita Awasthi, B.Sc. Botany (Hons.), 1st year
SIP22-23/03	In- Vitro Assessment Of Antibacterial Activity In Solvent Extracts Of Leaves From Selected Plants	Botany	Nishi B.Sc. (H) Botany (2nd Year) Bedika B.Sc. (H) Botany (2nd Year), Niharika Singh B.Sc. Life Science (2nd Year), Monika B.Sc. Life Science (2nd Year)
SIP22-23/04	Copigmentation-based enhancement of stability of Anthocyanin isolates from selected flowering plants	Botany	Kaveri Choudhary, Course: B.Sc Life Sciences 2nd year, Course: B.Sc Life Sciences 3rd year . Urvashi Sehrawat Course: B.Sc Life Sciences 2nd year Nivedita Rai Course: B.Sc Life Sciences 2nd year Jyotsna Mishra Course: B.Sc Life Sciences 2nd year Monika Course: B.Sc Life Sciences 2nd year
SIP22-23/05	Exploring spatial variation in chemical composition of selected medicinal plants	Botany	Ms. Sana Ahmad, B. Sc. Life Sciences II Yr, Ms. Dishita Jain, B. Sc. Life Sciences II Yr, Ms. Anushika, B. Sc. Life Sciences II Yr, Ms. Soni Jakhmola, B. Sc. Life Sciences II Yr
SIP22-23/06	Target Identification, Docking Studies, and Pharmacokinetic Evaluation of Ayurvedic Compounds	Chemistry	Nyasha Malik (B.Sc.(Hons.) Chemistry, II year, Sneha Kohli (B.Sc.(Hons.) Chemistry, II year, Aleena Shakreen (B.Sc.(Hons.) Chemistry, II year, Taniya Patwal Course: B. Sc. (H) Chemistry, I year Ishita Bhadana Course: B.Sc. (H) Chemistry, I y Prakriti Gusain Course: B.Sc. (H) Chemistry, I year
SIP22-23/07	Treatment of Laboratory Waste With Bio-Substitutes	Chemistry and Physics	Alka Shukla* Divyanshi Upadhyay* Nisha Sharma* Pritam* Suhavani singh* *B.Sc. Hons. (Chemistry) II year Amanjot*, Jeau Mishr** **B.Sc. Hons. (Physics) II year
SIP22-23/09	The global injustice of Fast Fashion	Commerce	Shrreya Dutta, B.com( H) 2nd year, Ashlyn Dhingra B.Com(hons) -2nd Year
SIP22-23/11	Emerging Technologies and Creator Economy: A new linkage for Creative and Sustainable Growth Solutions	Computer Science	E Harshitha, BA(P) VI Sem, Palak Pahwa, BA(P) VI Sem, Sneha Srivastava, Bsc(P) I Sem, Janhvi Sharma, BSc (H) I Sem

SIP22-23/12	DeFi: Challenges, Opportunities and Risk Analysis of Adoption of Decentralized Finance Application	Computer Science	1) Janhavi Khandelwal B.A (P) 2nd yr, Ms Anjali B.A (P) 2nd yr
SIP22-23/13	WEB 3.0: TRANSFORMING INTERACTIONS ON THE WEB	Computer Science	1) Riddhi Mehta, B.A Programme(Computer Applications + Mathematics) II year, Muskaan Dhingra, B.A Programme(Computer Applications + Mathematics) II year
SIP22-23/14	Know What They Say : An AI based Communication Bridge Between Deaf and Hearing	Computer Science	Vishwa Bharti , Anchal Yadav, Annu, Nishi Thakur B.Sc. (Prog) Physical Sciences with Computer Sciences Year : 2nd year
SIP22-23/15	Reinforcement learning in Robotics: A comprehensive study	Computer Science	Aaditri, Bsc Phy Sc with Comp Sc 2nd Year, Bhavya Singh, BSc Phy Sc with Comp Sc 2nd year
SIP22-23/17	Sustainable treatment of textile wastewater using Constructed Wetland - Microbial Fuel Cells	Environmental Science and Botany	Neha Singh Year: 2nd Course: Botany Hons. Prachi Bhandari Year: 2nd Course: Botany Hons. Raksha Year: 1st Life Sciences Kashish Singh Year: 1st BSc life sciences
SIP22-23/18	बदलते सामाजिक परिवेश में वयोवृद्ध वर्ग	Hindi	नेहा कुमारी बी.ए.हिंदी विशेष(द्वितीय वर्ष) त्रिवेदी बी.ए.हिंदी विशेष(द्वितीय वर्ष) लक्ष्मी कुमारी बी.ए.हिंदी विशेष(द्वितीय वर्ष) कुमारी बी.ए.हिंदी विशेष(द्वितीय वर्ष)
SIP22-23/19	सामाजिक बदलाव में फिल्मों का योगदान”	Hindi	प्रतिमा मौर्या: हिंदी विशेष दिशा सिंह अनुक्रमांक - 2021/0172 विभाग: हिंदी विशेष कृतिका मिश्रा विभाग: हिंदी विशेष प्रगति कुमारी विभाग: हिंदी विशेष
SIP22-23/20	AI WARS : Google and ChatGPT in a Battle for Predominance	Mathematics	Nivedita Panwar (BSc. Mathematics(H), II year, Aakanksha (BSc. Mathematics(H), II year, Akshita Singh (BSc. Mathematics(H), II year, Muskan (BSc. Mathematics(H), II year
SIP22-23/21	Research Proposal: The potential of technological innovations, AI & Machine learning in social transformation	Mathematics	Niharika Pandey, B.Sc.(H) Mathematics, 2nd year, Siya Dahiya, B.Sc.(H) Maths, 2nd year, Sejal Gupta, B.Sc.(H) Maths, 2nd year, Anshika Morya, B.Sc.(H) Maths, 2nd year

SIP22-23/22	Thin films as an electrical transducer for an Arduino based electrochemical sensor	Physics	Vaishali Bagauli B. Sc. (H) Physics III year Bhavna B. Sc. (H) Physics III year Ria Goel B. Sc. (H) Physics III year Sharanya Renjit B. Sc. (H) Physics III year Pranshi Mathur B. Sc. (H) Physics III year Soumya Bajpai B. Sc. (H) Physics II year
SIP22-23/23	Optimization of shape and size of ZnO nanoparticles for improved antibacterial properties	Physics+ Chemistry	Vaishali Sharma Aditi pandey Urvashi Sangrola Sweta Singh Purnima B.Sc (H) Physics IIIrd Year), Simran pandeyaditi434@gmail.com (B.Sc (H) Physics IIInd Year
SIP22-23/24	Soil Resistivity Test for Green Field Applications	Physics	Saniya, Karina Kashish Mishra Neelakshi Lakra [All from B.Sc.(H) Physics I Year]
SIP22-23/25	Investigation of Structural and Optical Properties of Solution Grown 4-nitrobenzaldehyde Single Crystal	Physics	1. Pranjal Nayak (B.Sc. (H) Physics, Year: second, nayakpranjal91@gmail.com, 8462961488), 2. Renuka ((B.Sc. (H) Physics, Year: second, renukaubba8295@gmail.com, 8295918221), 3. Bhawna Jangid( B.Sc. (H) Physics, 2nd Yr, jangidbhawna67@gmail.com 8950761911)
SIP22-23/26	Development of Women through Local government in rural area of District Saharanpur (Uttar Pradesh)	Political Science	Kaukab, B.A Hons Political Science, 2nd year
SIP22-23/27	Lok Munch toh Adhunik Punjabi Rangmanch di Yatra	Punjabi	Bipasha, ( 2nd yr, B.A (P), Divya Gupta ( 2nd yr, B.A (P)
SIP22-23/28	षड् ऋतुचर्या का वैज्ञानिक महत्व	Sanskrit	Anjali Tanwar Shivani Kumari Ruchi Pinki BA Sanskrit Hons. , 3rd year
SIP22-23/29	Ovicidal and oviposition deterrent activity of Carica papaya leaf extract against dengue vector, Aedes aegypti	Zoology	Shristi Singh, B.Sc. (Hons.) Zoology, Suryanshi Anand, B.Sc. (Hons.) Zoology Jael Alma Chemjong B.Sc. (Hons.) Zoology
SIP22-23/30	Premenstrual Syndrome: Awareness and role of physical activities	Zoology	Suryanshi Anand, B. Sc. (hons) Zoology IIInd Year, Arya Singh, B. Sc. (hons) Zoology IIInd Year, Anvi Kaushik, B. Sc. Life Sciences IIInd year, Ishani, B.Sc Life Sciences IIInd year



## Glimpses of the Presentations of the Summer Internship Projects 2022-23







GPS Map Camera



New Delhi, Delhi, India

Room No 80, Zoology Teacher Room Old Building, MAITREYI COLLEGE UNIVERSITY OF DELHI,  
Chanakyapuri, New Delhi, Delhi 110021, India

Lat 28.592292°

Long 77.177321°

03/11/23 10:55 AM GMT +05:30



GPS Map Camera



New Delhi, DL, India

San Martin Marg, Chanakyapuri, New Delhi,  
110021, DL, India

Lat 28.592614, Long 77.176850

11/03/2023 12:05 PM GMT+05:30