



Miranda House
UNIVERSITY OF DELHI

**DS Kothari Centre for Research and Innovation in Science
Education**

Summer Workshop 2023

Flavors of Research:

Investigative Projects in Multidisciplinary Contexts



**DS KOTHARI CENTRE FOR RESEARCH AND INNOVATION
IN SCIENCE EDUCATION (DSKC)**

**Miranda House
University of Delhi**

invites you at the inaugural ceremony of

Summer Internship Programme

on

**Flavour of Research: Investigative
Projects in Multidisciplinary Contexts**

June 6 – July 17, 2023

Chief Guest



Prof. Rajender Singh
Professor IIT Delhi

Patron



Prof. Bijayalaxmi Nanda
Principal, Miranda House

Program Coordinator



Prof. Monika Tomar
DSKC Coordinator

June 06, 2023

11:00 a.m.

Venue: Auditorium, Miranda House, DU

All are cordially invited to attend

Summer Workshop 2023

Flavors of Research: Investigative Projects in Multidisciplinary Contexts

The six weeks Summer Workshops 2023 for Undergraduate Science Students, was held from 6 June to 17 July 2023. Approximately 365 students were participated in this DSKC workshops and carried out projects in interdisciplinary fields. These research projects were conducted in offline mode and were not granted money from any funding agency. 133 students successfully completed their projects in Physics and 25 Faculties of Physics Departments mentored 38 project groups. The names of Departments, title of the projects along with the mentors and mentees are listed here.

BOTANY DEPARTMENT

The Department of Botany conducted the following student research projects under DSKC

Project 1:

Title of the Project: A study on dehydrogenases

Mentors: Dr. Janaki Subramanyan

Student's Names:

1. Ilma Moin, B.Sc. (H) Botany, IV Semester, Miranda House
2. Lenthobi Thokchom, B.Sc. (H) Botany, IV Semester, Miranda House
3. Muani Mizo, B.Sc. (H) Botany, IV Semester, Miranda House
4. Prachi Patidar M.Sc. Biotechnology, II Semester, Banasthali Vidyapith, Jaipur

Project 2:

Title of the Project: A study on compost effect

Mentors: Dr. Deepali; Dr. Geetanjali Elangbam; Dr. Shivangi Shah

Student's Names:

1. Md Saba Zafar, B.Sc. (Hons) Botany, VI Semester, Zakir Husain Delhi College
2. Aisha Khan, B.Sc. (Hons) Botany, IV Semester, Zakir Husain Delhi College
3. Mayank Raj, B.Sc. (Hons) Botany, IV Semester, Zakir Husain Delhi College
4. Muskaan Maan, B.Sc. (Prog) Life science, IV Semester, Zakir Husain Delhi College

Project 3:

Title of the Project: Cytogenetic Studies on *Allium cepa*

Mentors: Dr. Madhu Bajaj, Dr. Saloni Bahri, Dr. Renuka Agrawal, Dr. Somdutta Sinha Roy

Student's Names:

1. Charvi Khanna, B.Sc.(Prog) Life science, VI Semester, Zakir Husain Delhi College
2. Riya Satish, Integrated M.Sc.-B.Sc. (H) Botany, II Semester, Cluster University of Jammu
3. Sandhya Kumari, B.Sc. (Hons) Botany, VI Semester, Miranda House
4. Binita Kanwar, B.Sc. (Prog) Life science, VI Semester, Hansraj College

Project 4:

Title of the Project: A study on pollen grains

Mentors: Dr. Madhu Bajaj, Dr. Saloni Bahri, Dr. Renuka Agrawal, Dr. Somdutta Sinha Roy

Student's Names

1. Yamini, BSc. Biotechnology, Semester II, M.B.G.P.G Intercollege Haldwani
2. Shalini Mainali, B. Sc. Biotechnology, Semester II, M.B.G.P.G Intercollege Haldwani
3. Yamini Sharma, B. Sc. (Prog) Life science, Semester VI, Hansraj College
4. Mishthi Khurana, B. Sc. (Prog) Life science, Semester VI, Hansraj College

Project 5:

Title of the Project: Study on Bioinformatics tools to analyze phylogeny

Mentors: Dr. Saloni Bahri, Dr. Neha Mann

Student's Names

1. Teena Bhardwaj, B. Sc. (Prog) Life science, Semester V, J.C. Bose University of Science and Technology, YMCA, Faridabad
2. Neetu Rawat, B. Sc (Prog) Life science, Semester V, J.C. Bose University of Science and Technology, YMCA, Faridabad
3. Sandhya Verma, B. Sc. (Prog) Life science, Semester V, J.C. Bose University of Science and Technology, YMCA, Faridabad

Project 6:

Title of the Project: Study of different developmental stages of Catharanthus roseus flower

Mentors: Dr. Rashmi Shakya, Dr. Laishram Sundari Devi

Student's Names

1. Nidhi Sharma, B. Sc. (Hons) Botany, VI Semester, G.T.B. Khalsa College
2. Jweria Alam, B. Sc. (Hons) Botany, VI Semester, Zakir Husain Delhi College
3. Varia, B. Sc. (Hons) Botany, II Semester, Zakir Husain Delhi College

Project 7:

Title of the Project: A Review on Biological Action of Heavy Metals in Plants

Mentors: Dr. Somdutta Sinha Roy, Dr. Saloni Bahri

Student's Names

1. Srishti Priya, B.Sc. (Hons) Botany, II Semester, Miranda House
2. Akanksha Oraon, B.Sc. (Hons) Botany, II Semester, Miranda House
3. Kritika Kumari, B.Sc. (Hons) Botany, II Semester, Miranda House
4. Preksha Rao, B.Sc. (Hons) Botany, II Semester, Miranda House
5. Anshika Thakur, B.Sc. (Hons) Botany, II-Semester, Miranda House

CHEMISTRY DEPARTMENT

The Department of Chemistry conducted the following student research projects under DSKC.

Project 1:

Title of the Project: Protein-ligand binding interaction

Mentors: Prof. Mallika Pathak and Prof. Malti Sharma

Student's Names

1. Himanshi sharma, B.Sc.(H), Sem IV, Chemistry, Miranda House
2. Abhilasha, B.Sc.(H) Chemistry, Sem IV, Miranda House

3. Rashi, B.Sc.(H) Chemistry, Sem IV, Miranda House
4. Jyoti, B.Sc.(H) Chemistry, Sem IV, Miranda House
5. Jyoti, B.Sc.(H) Chemistry, Sem IV, Miranda House

Project 2:

Title of the Project: Adsorption studies using modified natural product

Mentors: Prof. Mallika Pathak and Prof. Malti Sharma

Student's Names

1. Isha Kapoor, B.Sc.(H) Chemistry, Sem VI, Miranda House
2. Anjali Sharma, B.Sc.(H) Chemistry, Sem VI, Miranda House
3. Shruti Rana, B. Sc. Chemistry, Sem VI, Miranda House
4. Bhoomika, BS MS (Dual Degree) Sem IV, Natural Sciences, IISER, Bhopal

Project3:

Title of the Project: Green Methods of Reduction of Quinones

Mentors: Prof. Sharda Mahilkar Sonkar and Dr Sujata Sengupta

Student's Names

1. Khyati Kinger, B.Sc.(H) Sem VI Chemistry, Miranda House
2. Anagha K T, B.Sc.(H) Sem IV Chemistry, Miranda House
3. Aleena Anto K A, B.Sc.(H) Chemistry, Miranda House
4. Karthika V, B.Sc.(H) Chemistry, Miranda House
5. SkarmaTsultim Palmo, B.Sc.(H) Chemistry, Sem VI Miranda House
6. Garima Singh, B.Sc.(H) Chemistry, Sem VI Miranda House

Project 4:

Title of the Project: The Chemistry of Colour: Natural Dyes and Its Applications

Mentors: Prof. Sharda Mahilkar Sonkar and Dr Sujata Sengupta

Student's Names

1. Sneha, B.Sc.(H) Chemistry, Sem IV, Miranda House
2. Anumol P, B.Sc.(H) Chemistry, Sem IV, Miranda House
3. Ameera M H, B.Sc.(H) Sem IV, Chemistry, Miranda House
4. Sneha Elizabeth, B.Sc.(H) Chemistry, Sem IV, Miranda House

Project 5:

Title of the Project: Synthesis, Properties and Applications of Alkaline Earth Metal Titanate Perovskite Nanoparticles

Mentors: Prof. Mallika Pathak and Prof. Malti Sharma

Student's Names

1. Fidha Lamiya Hussain, B.Sc.(H) Chemistry, Sem IV, Miranda House
2. Amala Abraham, B.Sc.(H) Chemistry, Sem IV, Miranda House

Project 6:

Title of the Project: A Brief Overview of Azadirachta indica (Neem): The Miracle Herb

Mentors: Prof. Sharda Mahilkar Sonkar and Dr Sujata Sengupta

Student's Names

1. Nisha, B.Sc. (H) Chemistry, Sem IV Chemistry, Miranda House

2. Gargi, B.Sc. (H) Chemistry, Sem IV, Miranda House
3. Kusum Singh, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 7

Title of the Project: Designing of kinase inhibitors as anticancer drugs using Computational chemistry

Mentors: Prof. Smriti Sharma Bhatia and Dr. Mamta Sethi

Student's Names

1. Ujwala Udayakumar, B.Sc.(H) Chemistry, Sem IV, Miranda House
2. Nandana P, B.Sc.(H) Chemistry, Sem IV, Miranda House
3. Nikhita Sharma, B.Sc.(H) Chemistry, Sem IV, Miranda House
4. Harshita, B.Sc.(H) Chemistry, Sem IV, Daulat Ram College

Project 9

Title of the Project: Medicinal properties of Ajwain (thymol) against menstrual cycle using computational chemistry

Mentors: Prof. Smriti Sharma Bhatia and Dr. Mamta Sethi

Student's Names

1. Muskan Goyal, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Manjeet, B.Sc. (H) Chemistry, Sem IV, Daulat Ram College
3. Priyanka Kataria, M.Sc. Chemistry, Sem II, Amity University
4. Saja KT, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 10

Title of the Project: The Chemistry of Fats and Oils

Mentors: Prof. Sharda Mahilkar Sonkar and Dr. Sujata Sengupta

Student's Names

1. Deepti Bishnoi, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Devika K S, B.Sc. (H) Chemistry, Sem IV, Miranda House
3. Diksha, B.Sc. (H) Chemistry, Sem IV, Miranda House
4. Diksha Sharma, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 12

Title of the Project: Cardioprotective Potential of Arjunolic Acid: Insights from Molecular docking studies with M2 Muscarinic receptor

Mentors: Prof. Smriti Sharma Bhatia and Dr. Mamta Sethi

Student's Names

1. Urfi Aaliya, B.Sc. (H) Chemistry, Sem VI, Miranda House
2. Stuti Gupta, B.Sc. (H) Chemistry, Sem VI, Hansraj College

Project 13

Title of the Project: Green synthesis of metal oxide nanoparticles and their applications

Mentors: Prof. Kalawati Saini, Dr. Nutan Rani and Dr. Annushka Pal

Student's Names

1. Himanshi, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Shivani, B.Sc. (H) Chemistry, Sem IV, Miranda House
3. Anushka Gupta, B.Sc. (H) Chemistry, Sem VI, Daulat Ram College, University of Delhi
4. Chitra Shankar, B.Sc. (H) Chemistry, Sem IV, Miranda House
5. Kunali Gautam, B.Sc. (H) Chemistry, Sem IV, Miranda House
6. Aastha Bhasin, B.Sc. (H) Chemistry, Sem IV, Miranda House
7. Kanchan Kanwar, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 14

Title of the Project: Recent advancements of medicinal plants in cancer therapy.

Mentors: Dr. Poonam

Student's Names

1. Anjitha P Satheesh, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Navyatha Jenu J, B.Sc. (H) Chemistry, Sem IV, Miranda House
3. Nandana Nambiar, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 15

Title of the Project: Synthesis of sulfonamide based heterocyclic compounds efficacious against SARS-CoV-2

Mentors: Dr. Poonam

Student's Names

1. Vedhika Salgotra, B.Sc.(H) Chemistry, Sem VI, Miranda House
2. Karmveer Kumar, BS-MS Natural science, Sem IV, Indian Institute of Science Education and Research, Bhopal

Project 16

Title of the Project: Development of morpholine based heterocyclic compounds effective against Malaria

Mentors: Dr. Poonam

Student's Names

1. Abhay Pant, B.Sc (H) Chemistry, Sem IV, Hindu College
2. Gopika ck, B.Sc. (H) Chemistry, Sem IV, Hindu College

Project 17

Title of the Project: UV-spectroscopic and volumetric determination of total Vitamin C content in various fruits and juices consumed in North Delhi.

Mentors: Ms. P. Lishinai Paoteimai, Dr Preeti Droliya and Dr Yogesh Kumar

Student's Names

1. Nandana Narayanan, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Prachi, B.Sc. (H) Chemistry, Sem IV Miranda House
3. Vishakha Rani, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 18

Title of the Project: Comparative overview of techniques for degradation of pharmaceuticals in wastewater

Mentors: Dr Yogesh Kumar, Dr Preeti Droliya and Ms. P. Lishinai Paoteimai

Student's Names

1. Niharika Lohare, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Nitika Thakur, B.Sc. (H) Chemistry, Sem IV, Miranda House
3. Shubhangi Maheshwari, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 19

Title of the Project: Synthesis and applications of nanocomposites from flower waste

Mentors: Prof. Kalawati Saini, Dr. Nutan Rani and Dr. Anuushka Pal

Student's Names

1. Mehak Das, B.Sc. (H) Chemistry, Sem VI, Kirori Mal College
2. Rajat Chauhan, B.Sc. (H) Chemistry, Sem VI, Kirori Mal College
3. Reetik Chib, B.Sc. (H) Chemistry, Sem VI, Kirori Mal College
4. Anjali Chauhan, B.Sc. (H) Chemistry, Sem VI, Kirori Mal College
5. Priya Singhal B.Sc. (H) Chemistry, Sem VI, Kirori Mal College
6. Aayushi Jain, B.Sc. (H) Chemistry, Sem VI, Hans Raj College

Project 20

Title of the Project: Photocatalytic Application of metal Oxide semiconductors for environment remediation

Mentors: Dr. Deepti Rawat

Student's Names

1. Ansab Javaid, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Bipasha, B.Sc. (H) Chemistry, Sem IV, Miranda House
3. Pooja, B.Sc. (H) Chemistry, Sem IV, Miranda House
4. Sakshi, B.Sc. (H) Chemistry, Sem IV, Miranda House
5. Diksha, B.Sc. (H) Chemistry, Sem IV, Miranda House
6. Rahba Haleema, B.Sc. (H) Chemistry, Sem IV, Miranda House
7. Stuti, B.Sc. (H) Chemistry, Sem IV, Miranda House
8. Gunjan, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 21

Title of the Project: Synthesis of Metal Oxide Nanoparticles & Nanocomposite by Green Method using Various Plant Extracts

Mentors: Prof. Kalawati Saini, Dr. Nutan Rani, and Dr. Anuushka Pal

Student's Names

1. Ayush Thakur, BSc (P) Life Sciences, Sem VI, Kirori Mal College
2. Chetan Rathi, B.Sc. (H) Chemistry, Sem VI, Kirori Mal College
3. Jahanvi Sharma, BSc (P) Life Sciences, Sem VI, Daulat Ram College
4. Esha Deswal, B.Sc. (H) Chemistry, Semester IV, Miranda House
5. Rishabh Singh, B.Sc. (H) Chemistry, Semester VI, Kirori Mal College

Project 22

Title of the Project: Paper Production using Pineapple Leaves and its Applications

Mentors: Dr Anita Kumari and Dr Taruna Singh

Student's Names

1. Nikita Saharan, B.Sc. (H) Chemistry, Sem VI, Miranda House
2. Sonam, B.Sc. (H) Chemistry, Sem VI, Miranda House

Project 23

Title of the Project: Biological Significance of Carotenoids and Oils derived from Indian Cultivars: A Comparative Analysis

Mentors: Dr Anita Kumari and Dr Taruna Singh

Student's Names

1. Shinjinee Bhattacharyya, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Trishna Sorout, B.Sc. (H) Chemistry, Sem IV, Miranda House
3. Sneha Frijo, B.Sc. (H) Chemistry, Sem VI, Miranda House
4. Sneha Mahindran, B.Sc. (H) Chemistry, Sem VI, Miranda House

Project 24

Title of the Project: Synthesis of Metal containing Mustard Oil based Polymers and its Application as Coatings

Mentors: Dr Anita kumari and Dr Taruna Singh

Student's Names

1. Raksha Upadhyay, B.Sc. (H) Chemistry, Sem VI, Kalindi College, University of Delhi
2. Saloni Gupta, B.Sc. (H) Chemistry, Sem VI, Kalindi College, University of Delhi
3. Mehak, B.Sc. (H) Chemistry, Sem VI, Sri Guru Tegh Bahadur Khalsa College, University of Delhi
4. Ardra Ganesan, B.Sc. (H) Chemistry, Sem VI, Miranda House

Project 25

Title of the Project: Preparation of Bioactive Metal containing Oil based Polymers and its Application in Water Remediation

Mentors: Dr Anita Kumari and Dr Taruna Singh

Student's Names

1. Bhagyashri, B.Sc. (H) Chemistry, Sem VI, Miranda House
2. Hadiya Tahir, B.Sc. (H) Chemistry, Sem IV, Kalindi College, University of Delhi
3. Devika PS, B.Sc. (H) Chemistry, Sem VI, Miranda House
4. Swetha Gopan, B.Sc. (H) Chemistry, Sem VI, Miranda House
5. Malavika AM, B.Sc. (H) Chemistry, Sem VI, Miranda House

Project 26

Title of the Project: Air Quality during Dust Storms and Transport of Air Pollutants in Delhi

Mentors: Dr Anita Kumari, Dr Taruna Singh and Dr Shivani

Student's Names

1. Sonam, B.Sc. (H) Chemistry, Sem IV, Miranda House
2. Tejika Choudhary, B.Sc. (H) Chemistry, Sem IV, Miranda House
3. Sanju Yadav, B.Sc. (H) Chemistry, Sem IV, Miranda House
4. Ritu, B.Sc. (H) Chemistry, Sem IV, Miranda House
5. Twinkle Rani, B.Sc. (H) Chemistry, Sem IV, Miranda House

Project 27

Title of the Project: synthesis of gadolinium oxide and Lanthanum oxide nanoparticles

Mentors: Dr. Kalawati saini , Dr. Nutan rani

Student's Names

1. Sanna, M. Sc Chemistry, Sem II, Amity university, Noida

GEOGRAPHY DEPARTMENT

The Department of Geography conducted the following student research projects under DSKC

Project 1

Title of the Project: Micro-shed Delineation and Ecological Assessment

Mentors: Prof. Bashabi Gupta, Dr. Om Jee Ranjan, Dr. Praffulit Bisht

Student's Names

1. Kumar Prajapati, B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi
2. Anshul Abantika pal, B.A. (Hons.) Geography, 4th Semester, Shayma Prasaad Mukherjee College for Women, University of Delhi
3. Kulvinder Dahiya, B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi
4. Muskan, B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi
5. Mamta Barik, B.A (Hons.) Geography, , 4th Semester, Dyal Singh College, University of Delhi
6. Akanksha, B.A. (Hons.) Geography, , 4th Semester, Kamala Nehru College, University of Delhi
7. Shuhana Dutta Gupta, B.A. (Hons.) Geography,4th Semester, Shivaji College, University of Delhi
8. Jaya Kamboj,B. Sc 4th Semester, Earth Science Department, Bansthali Vidyapeeth
9. Prerna Singh Boura, B.A. (Hons.) Geography, 4th Semester, Miranda House, University of Delhi
10. Vaishnavi Sharma, B.A. (Hons.) Geography, 4th Semester, Dyal Singh College, University of Delhi
11. Bhawna, B.A. (Hons.) Geography, 4th Semester, Dyal Singh College, University of Delhi
12. Renu Kumari Mahto, B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi
13. Prachi Verma, B.A., 4th Semester, Banasthali Vidyapeeth
14. Shivani, B.A. (Hons.) Geography, 4th Semester, Kalindi College, University of Delhi
15. Sakshi Pal, B.A. (Hons.) Geography, 4th Semester, Miranda House, University of Delhi
16. Rajashwi Saxena, B.A. (Hons.) Geography, 4th Semester, Shyama Prasad Mukherji College for Women, University of Delhi
17. Ashlesha Passi, B.A. (Hons.) Geography, 4th Semester, Indraprastha College for Women, University of Delhi
18. Jyotsna Yadav, B.A. (Hons.) Geography, 4th Semester, Miranda House, University of Delhi
19. Neha Singh, BA (Hons.) Political Science, 4th Semester, Miranda House, University of Delhi

20. Apurva, B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi
21. Dikshant, B.A. (Hons.) Geography, 4th Semester, Dyal Singh College, University of Delhi
22. Aditi Balayan, B.A. (Hons.) Geography, 4th Semester, Swami Shraddhanand College, University of Delhi
23. Kanika Chundawat, B.A. (Hons.) Geography, 6th Semester, Kamla Nehru College, University of Delhi
24. Anshu Kumari, B.A. (Hons.) Geography, 4th Semester, Dyal Singh College, University of Delhi.
25. Dimple, B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi.
26. Piyush kalra, B.A. (Hons.) Geography, 4th Semester, Dr Bhim Rao Ambedkar College, University of Delhi
27. Neha Yadav, ,B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi
28. Jyoti Varshney, B.A. (Hons.) Geography, 6th Semester, Miranda House, University of Delhi
29. Swati Singh, B.A. (Hons.) Geography, 4th Semester, Kirori Mal College, University Of Delhi
30. Lakshay Dahiya, B.A. (Hons.) Geography, 4th Semester, Kirori Mal College, University Of Delhi
31. Deeksha Bhandari, B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi
32. Sneha Raj, ,B.A. Programme, 4th Semester, Shivaji College, University of Delhi, Shivaji College, University of Delhi
33. Poonam,B.A. (Hons.) Geography, 4th Semester, Indraprastha College for Women, University of Delhi
34. Suraj Kumar, B.A. (Hons.) Geography, 4th Semester, Shivaji College, University of Delhi
35. Manaswi Kulahara, B.A. (Hons.) Geography, 4th Semester, Shyama Prasad Mukherji College for Women, University of Delhi
36. Kareena Singhania, B.A. (Hons.) Geography, 4th Semester, Indraprastha College for Women, University of Delhi

MATH DEPARTMENT

The Department of Math conducted the following student research projects under DSKC:

Project 1

Title of the Project: In Depth Analysis of Fractals

Mentors: Dr. Monika Arora, Mr. Mohit Machhal, Mr. Md. Sarik Idrisi, Dr. Shweta Gandhi, Dr. Rekha Gupta, Dr. Harsha Kharbanda, Dr. Anita Rao

Student's Names

1. Chhavi, B.Sc.(H) Mathematics,4th Semester,Miranda House, University of Delhi
2. Pragya Dahma,B.Sc.(H) Mathematics,4th Semester,Miranda House, University of Delhi
3. Kanishka, B.Sc.(H) Mathematics,4th Semester,Miranda House, University of Delhi
4. Anushka Shukla,B.Sc.(H) Mathematics,4th Semester,Miranda House, University of Delhi

Project 2

Title of the Project: House Price Prediction using Regression Models

Mentors:Dr. Monika Arora, Mr. Mohit Machhal, Mr. Md. Sarik Idrisi, Dr. Shweta Gandhi, Dr.

Rekha Gupta, Dr. Harsha Kharbanda, Dr. Anita Rao. Rekha Gupta, Dr. Harsha Kharbanda, Dr. Anita Rao

Student's Names

1. Priya Kumari, B.Sc.(H) Mathematics, 4th Semester, Vivekanand College
2. Nivedita Yadav, B.Sc.(H) Mathematics, 4th Semester, Miranda House, University of Delhi
3. Bhavana, B.Sc.(H) Mathematics, 4th Semester, Miranda House, University of Delhi
4. Khushi, B. Sc Program, 4th Semester, Zakir Hussain College

Project 3

Title of the Project: Homomorphic Encryption under MS SEAL Library

Mentors: Dr. Monika Arora, Mr. Mohit Machhal, Mr. Md. Sarik Idrisi, Dr. Shweta Gandhi, Dr. Rekha Gupta, Dr. Harsha Kharbanda, Dr. Anita Rao

Student's Names

1. Neha Baliyan, B.Sc.(H) Mathematics, 6th Semester, Miranda House, University of Delhi
2. Tanuja Yadav, B.Sc. Physical Sciences with Computer Science, 6th Semester, Miranda House, University of Delhi

Project 4

Title of the Project: Graphs in Network Analysis

Mentors: Dr. Monika Arora, Mr. Mohit Machhal, Mr. Md. Sarik Idrisi, Dr. Shweta Gandhi, Dr. Rekha Gupta, Dr. Harsha Kharbanda, Dr. Anita Rao

Student's Names

1. Sejal Kumari, B.Sc.(H) Mathematics, 2th Semester, Miranda House, University of Delhi
2. Suhana, B.Sc.(H) Mathematics, 2th Semester, Miranda House, University of Delhi
3. Kusum, B.Sc.(H) Mathematics, 2th Semester, Miranda House, University of Delhi
4. Riya, B.Sc.(H) Physics, 4th Semester, Kalindi College, University of Delhi

ZOOLOGY DEPARTMENT

The Department of Zoology conducted the following student research projects under DSKC

Project 1

Title of the Project: Microtomy and Staining

Mentors: Dr. Nisha Vashishta, Dr. Reetuparna Basak, Dr. Rohit Jamwal

Student's Names

1. Naina Kataria, B.Sc. (H) Microbiology, Sem VI, Bhaskaracharya College of Applied Sciences
2. Yashshree, B.Sc. (H) Botany, Sem IV, Bhaskaracharya College of Applied Sciences
3. Daidipya Singh, B.Sc. (H) Zoology, Passout batch 2019-2022, Bhaskaracharya College of Applied Sciences
4. MD Sawood Alam, B.Sc. (H) Biotechnology, Sem VI, Jamia Milia Islamia
5. Mohd. Imran, B.Sc. (H) Biotechnology, Sem VI, Jamia Milia Islamia
6. Ananya Arya, B.Sc. Life Sciences, Sem IV, Miranda House
7. Aastha Gupta, B.Sc. Life Sciences, Sem IV, Miranda House
8. Mansi, B.Sc. Life Sciences, Sem IV, Miranda House
9. Shubhda Sharma, B.Sc. Life Sciences, Sem IV, Miranda House
10. Muskaan, B.Sc. Life Sciences, Sem IV, Miranda House

11. Jasjot Kaur, B.Sc. Life Sciences, Sem VI, S.G.T.B Khalsa College
12. Mankirat Singh, B.Sc. Life Sciences, Sem VI, S.G.T.B Khalsa College
13. Ishna Chopra, B.Sc. Life Sciences, Sem IV, Zakir Husain Delhi College
14. Monu Kumar, B.Sc. Life Sciences, Sem IV, Zakir Husain Delhi College
15. Deep Ranjan, B.Sc. Life Sciences, Sem IV, Zakir Husain Delhi College

Project 2

Title of the Project: Metagenomic approach to identify Xenobiotic degrading bacterial genus collected from waste dumpsite

Mentors: Dr. Rekha Kumari and Dr. Rashmi Sakhya

Student's Names

1. Ritesh Kumar, B.Sc. Life Sciences, Sem V, Zakir Husain Delhi College
2. Dhritidipa Roy, Int MSc Sem III, Biological Sciences, NISER, Bhubaneswar

Project 3

Title of the Project: Assaying potential of thermophile for industrially important enzyme

Mentors: Dr. Rekha Kumari and Dr. Rashmi Sakhya

Student's Names

1. Sonal Roy, BSc (H) Microbiology, Sem V, Shaheed Rajguru College of Applied Sciences for Women
2. Vidhi Dhiman, BSc (H) Microbiology, Sem V, Shaheed Rajguru College of Applied Sciences for Women

Project 4

Title of the Project: Comparison of different genome assembly tools and analyzing the efficiency of each tool in generating number of contigs using different parameters

Mentors: Dr. Rekha Kumari

Student's Names

1. Aryan Boruah Venki, BSc (H) Biochemistry, Sem I, Sri Ventakeswara College, University of Delhi

Project 5

Title of the Project: Study on impact of medicinal extracts on *Drosophila melanogaster*.

Mentors: Dr. Nisha Vashishta, Dr. Pooja Suman and Dr. Shivani Kumari

Student's Names

1. Amandeep Kaur, B. Sc.(Prog) Life Science, Sem IV, Shri Guru Tegh Bahadur Khalsa College
2. Avneet Kaur Sohal, B. Sc.(Prog) Life Science, Sem IV, Shri Guru Tegh Bahadur Khalsa College
3. Charul, B. Sc. Medical (Life Sciences), Sem IV, Punjab University
4. Himshika, B. Sc.(Prog) Life Science, Sem IV, Hansraj College
5. Indrani Sarkar, B. Sc.(Hons.) Zoology, Sem II, Amity University
6. Lavanya, B. Sc.(Prog) Life Science, Sem IV, Hansraj College
7. Loveleen Kaur, B. Sc.(Prog) Life Science, Sem IV, Shri Guru Tegh Bahadur Khalsa College
8. Miti Gupta, B. Sc.(Prog) Life Science, Sem IV, Shivaji College
9. Neha Zachariah, B. Sc.(Hons.) Zoology, Sem IV, Swami Shraddhanand College

10. Prashant Kumar, Integrated B. Sc.(Hons)-M.Sc.Zoology, Sem IV, Central University of Jammu
11. Shivam Kumar Singh, B. Sc.(Prog) Life Science, Sem IV, Swami Shraddhanand College
12. Sumbul Afshan, B.Sc. Biotechnology, Sem VI, Jamia Millia Islamia

Project 6

Title of the Project: In silico characterization of Membrane genes and proteins of DosR regulon of Mycobacterium tuberculosis

Mentors: Prof. Sadhna Sharma and Dr. Monika Sharma

Student's Names

1. Pushkarini Rohidas, B. Sc. (Hons) Zoology, Miranda House, Semester IV
2. Shivanshi Khurana, B.Sc (Prog) Life sciences, Kalindi college, Semester IV
3. TUSHAR PANDEY, B.Sc (Prog) Life sciences, Kirori Mal College, Semester VI
4. Arjun Singh, B.Sc (Prog) Life sciences, Kirori Mal College, Semester VI
5. Soniya Dhama, B.Sc (Prog) Life sciences, Gargi college, Semester IV
6. Priyansi Sharma, B.Sc (Prog) Life sciences, Miranda House, Semester IV
7. Debangshi Dasgupta, B.Sc.Zoology (Hons), Swami Shraddhanand College, Semester IV
8. Madhav Dawar, B.Sc(Prog) Life Sciences, Swami Shraddhanand College, semester IV
9. Arpita, B.Sc(Prog) Life Sciences, Miranda House, Semester VI
10. Anjali Mishra, B.Sc(Prog) Life Sciences, Miranda House, Semester VI
11. Inaana, B.Sc. (Hons) Microbiology, Swami Shraddhanand College, Semester IV

Project 7

Title of the Project: Application of Natural Dyes on Textiles: A Ecofriendly Approach

Mentors: Dr. Jyoti Arora, Ms. Saba Zulfiqar and Dr. Deepak Yadav

Student's Names

1. Shweta, B.Sc(Prog) Life Sciences, Sem VI, Ramjas College
2. Pratibha Yadav, B.Sc(Prog) Life Sciences, Sem VI, Ramjas College
3. Tanika Dalakoti, B.Sc(Prog) Life Sciences, Sem VI, Ramjas College
4. Gargi Jain, B.Sc(Prog) Life Sciences, Sem VI, Ramjas College

Project 8

Title of the Project: A Survey on Polycystic Ovary Disorder(PCOD)/ Polycystic Ovary Syndrome(PCOS) in Indian Women: Diagnosis, Lifestyle and Treatment

Mentors: Dr. Deepak Yadav, Ms. Saba Zulfiqar, Dr. Jyoti Arora and Dr. Reetuparna Basak

Student's Names

1. Pranjal Kumar Singh, B. Sc. (Hons) Zoology, Sem II, Kirori Mal College
2. Sameeksha, B.Sc(Prog) Life Sciences, Sem IV, Hansraj College
3. Nandini, B.Sc(Prog) Life Sciences, Sem IV, Hansraj College
4. Hanna Joby, B. Sc. (Hons) Zoology, Sem VI, Miranda House
5. Shahna Mumthas, B. Sc. (Hons) Zoology, Sem VI, Miranda House
6. Aastha Vikrant, B.Sc(Prog) Life Sciences, Sem IV, SGTB Khalsa College
7. Ananya, B.Sc(Prog) Life Sciences, Sem IV, Hansraj College
8. Saijal, B.Sc(Prog) Life Sciences, Sem IV, Hansraj College
9. Kriti Mehra, B.Sc(Prog) Life Sciences, Sem IV, Deshbandhu College

PHYSICS DEPARTMENT

The Department of Physics conducted the following student research projects under DSKC

Project 1

Title of the Project: Drone based on Arduino

Mentors: Dr. Mallika Verma, Dr. Bilasini Naorem, Prof. Monika Tomar, Dr. Geeta Rani

Student's Names

1. Tanisha Chauhan, B. Sc Physical Science, 4th Semester, Miranda House
2. Ankita, B. Sc Physical Science, 4th Semester, Miranda House
3. Riya, B.Sc. (H) Physics 2th Semester, Miranda House
4. Shruti, B.Sc. (H) Physics, 2th Semester, Miranda House

Project 2

Title of the Project: Smart Dustbin

Mentors: Dr. Mallika Verma, Dr. Bilasini Naorem, Prof. Monika Tomar, Dr. Geeta Rani

Student's Names

1. Namrata Kumari, B.Sc. (H) Physics, 2th Semester, Miranda House
2. Anita Kumari, B.Sc. (H) Physics, 2th Semester, Miranda House
3. Nilanjana, B.Sc. (H) Physics, 2th Semester, Miranda House
4. Sumaya Rahman, B.Sc. (H) Physics, 2th Semester, Miranda House

Project 3

Title of the Project: RC charging discharging

Mentors: Dr. Mallika Verma, Dr. Bilasini Naorem, Prof. Monika Tomar, Dr. Geeta Rani

Student's Names

1. Khushi, B.Sc. (H) Physics, 2th Semester, Miranda House
2. Daidipya, B.Sc. (H) Physics, 2th Semester, Miranda House
3. Aditi, B.Sc. (H) Physics, 2th Semester, Miranda House
4. Preeti, B.Sc. (H) Physics, 2th Semester, Miranda House

Project 4

Title of the Project: Digital Lab using Arduino

Mentors: Dr. Mallika Verma, Dr. Bilasini Naorem, Prof. Monika Tomar, Dr. Geeta Rani

Student's Names

1. Tanisha Singh, B.Sc. (H) Physics, 4th Semester, Miranda House
2. Kajal Chandola, B.Sc. (H) Physics, 4th Semester, Miranda House
3. Abijith benny, B.Sc. (H) Physics, 6th Semester, Ramjas College

Project 5

Title of the Project: Mn doped ZnO thin films for biosensing applications

Mentors: Dr. Mallika Verma, Prof. Monika Tomar, Dr. Bilasini Naorem, Dr. Neha Batra, Jatinder Pal Singh

Student's Names

1. Mahima Momaliya, B. Sc Physical Science, 4th Semester, Miranda House
2. Shubhi Sahu, B. Sc Physical Science, 4th Semester, Miranda House
3. Muskan, B.Sc. (H) Physics, 6th Semester, Miranda House

4. Athira C, B.Sc. (H) Physics, 6th Semester, Miranda House
5. Hashima Sherin, B.Sc. (H) Physics, 6th Semester, Miranda House

Project 6

Title of the Project: Fabrication of Hydroelectric Cell using ZnO-NiO nanocomposites

Mentors: Dr. Mallika Verma, Prof. Monika Tomar, Dr. Geeta Rani, Babita Sharma

Student's Names

1. Sakshya, B.Sc. (H) Physics, 4th Semester, Ramjas college
2. Vishwam Vashishtha, B.Sc. (H) Physics, 4th Semester, ARSD college
3. Divyansh Chamoli, B.Sc. (H) Physics, 4th Semester, ARSD college

Project 7

Title of the Project: Growth of WO₃ thin films for Photochromic applications

Mentors: Dr. Mallika Verma, Prof. Monika Tomar, Dr. Kajal Jindal, Dr. Reema Gupta, Jatinder Pal Singh

Student's Names

1. Komal Bhatt, B.Sc. (H) Physics, 4th Semester, Miranda House
2. Jiya Meena, B.Sc. (H) Physics, 4th Semester, Miranda House
3. Anjali Sharma, B.Sc. (H) Physics, 4th Semester, Miranda House
4. Vineeta Devi, B.Sc. (H) Physics, 4th Semester, KMC college
5. Monarch Kumar, B.Sc. (H) Physics, 6th Semester, ARSD college

Project 8

Title of the Project: Gas sensing properties of nanoribbons of molybdenum trioxide

Mentors: Dr. Mallika Verma, Prof. Monika Tomar, Dr. Kajal Jindal, Ajay Kumar, Jatinder Pal Singh

Student's Names

1. Rajan, B.Sc. (H) Physics, 6th Semester, Rajdhani college
2. Manorama, B.Sc. (H) Physics, 6th Semester, Ramjas College
3. Pushkar, B.Sc. (H) Physics, 6th Semester, Ramjas College
4. Deveshi, B.Sc. (H) Physics, 4th Semester, Miranda House

Project 9

Title of the Project: Study of Electro-Optic properties of a single crystal (Pure TGS: Triglycine Sulphate).

Mentors: Dr. Mallika Verma, Dr. Bilasini Neorem, Prof. Monika Tomar, Dr. Ayushi Paliwal, Babita Sharma

Student's Names

1. Harshit Prabhu Reshmi, B.Sc. (H) Physics, 4th Semester, Hindu college
2. Nishtha Bhardwaj, B.Sc. (H) Physics, 4th Semester, Gargi college
3. Ayush Pal, B. tech., 2th Semester, Delhi Technological University.

Project 10

Title of the Project: Optical dispersion of RF magnetron sputtered MoO₃ thin film using SPR technique

Mentors: Dr. Mallika Verma, Prof. Monika Tomar, Dr. Ayushi Paliwal, Dr. Reema Gupta, Jatinder Pal Singh

Student's Names

1. Anisha Yadav, B.Sc. Physical Science, 6th Semester, Miranda House
2. Tanya Gupta, B.Sc. (H) Physics, 6th Semester, Miranda House
3. Hrudy Prasanth, B.Sc. (H) Physics, 6th Semester, Miranda House
4. Payal, B.Sc. (H) Physics, 4th Semester, Guru Jambheshwar University of Science & Technology
5. Bajrang, B.Sc. (H) Physics, 4th Semester, Hindu College

Project 11

Title of the Project: Thermal Barrier Coating

Mentors: Prof. Monika Tomar, Jatinder Pal Singh

Student's Names

1. Varun Bisht, B.Sc. (H) Physics, 6th Semester, Rajdhani college

Project 12

Title of the Project: Thin film and Gas Sensing

Mentors: Dr. Mallika Verma, Prof. Monika Tomar, Prof. Arijit Chowdhary, Dr. Anjali Sharma

Student's Names

1. Ravi Kant Shukla, B.Sc. (H) Physics, 4th Semester, ANDC, University of Delhi
2. Aditya Kumar Singh, B.Sc. (H) Physics, 4th Semester, ANDC, University of Delhi
3. Ashish Gupta, B.Sc. (H) Physics, 4th Semester, ANDC, University of Delhi
4. Shivam Tomar, B.Sc. (H) Physics, 4th Semester, ANDC, University of Delhi

Project 13

Title of the Project: Hall effect and its applications

Mentors: Dr. Raishma Krishnan

Student's Names

1. Ujjwal Agrawal, Integrated M.Sc, UM-DAE CEBS MUMBAI
2. Namashya Gogoi, B.Sc. (H) Physics, 4th Semester, Miranda House, University of Delhi, Delhi
3. Ankit Maiti, INTEGRATED BS MS, IISER BERHAMPUR, Odisha

Project 14

Title of the Project: Astronomical Image Processing

Mentors: Dr. Sonam Singh, Dr. Nirmala Saini

Student's Names

1. Satyam Verma, B.Sc. (H) Physics, 4th Semester, SVC, University of Delhi
2. Pranjal Ranjan, B.Sc. (H) Physics, 4th Semester, SGTB Khalsa College, University of Delhi
3. Muskan, B.Sc. (H) Physics, 4th Semester, Gargi College, University of Delhi

Project 15

Title of the Project: Biometric Recognition and Image Encryption

Mentors: Dr. Nirmala Saini, Dr. Sonam Singh

Student's Names

1. Vishnupriya Sajeev M, B.Sc. (H) Physics, 6th Semester, Miranda House
2. Adhithya K Sumesh, B.Sc. (H) Physics, 6th Semester, Hindu College
3. Afnan E, B.Sc. (H) Physics, 6th Semester, Hindu College

4. Muhammad Shahanad, B.Sc. (H) Physics, 6th Semester, Hindu College

Project 16

Title of the Project: Analysis of MRI scan of Brain Tumor using image processing

Mentors: Dr. Sonam Singh, Dr. Nirmala Saini

Student's Names

1. Astha Tiwari, B.Sc. (H) Physics, 4th Semester, S Rajguru CASW
2. Varinder Kaur, B.Sc. (H) Physics, 4th Semester, Kirori Mal College,
3. Rajat Agrahari, B.Sc. (H) Physics, 6th Semester, Ramjas College

Project 17

Title of the Project: Comparative Analysis of Voice Recognition techniques

Mentors: Dr. Nirmala Saini, Dr. Sonam Singh

Student's Names

1. Riyas Babu K K, B.Sc. (H) Physics, 6th Semester, Hindu College
2. Neenu T S, B.Sc. (H) Physics, 6th Semester, Hindu College
3. Shabeeb K, B.Sc. (H) Physics, 6th Semester, Hindu College

Project 18

Title of the Project: Biometric Security Systems

Mentors: Dr. Nirmala Saini, Dr. Sonam Singh

Student's Names

1. Aditya Kishore, B.Sc. (H) Physics, 6th Semester, Rajdhani College
2. Jagrit Rajora, B.Sc. (H) Physics, 4th Semester, Rajdhani College
3. Yogita, B.Sc. Physical Sciences, 4th Semester, Miranda House
4. Ritu, B.Sc. (H) Physics, 4th Semester, Miranda House

Project 19

Title of the Project: Lane Detection System

Mentors: Dr. Sonam Singh, Dr. Nirmala Saini

Student's Names

1. Rinku Dhukiya, B.Sc. (H) Physics, 6th Semester, Miranda House
2. Priya, B.Sc. (H) Physics, 6th Semester, Miranda House
3. Simran Yadav, B.Sc. (H) Physics, 6th Semester, Miranda House
4. Vaishnavi Saini, B.Sc. (H) Physics, 6th Semester, Miranda House

Project 20

Title of the Project: Signal Filtering

Mentors: Dr. Sonam Singh, Dr. Nirmala Saini

Student's Names

1. Amanjot, B.Sc. (H) Physics, 4th Semester, Miranda House
2. Khushi Sharma, B.Sc. (H) Physics, 4th Semester, Miranda House
3. Anjali Mahi, B.Sc. (H) Physics, 4th Semester, Miranda House
4. Pratiksha Sharma, B.Sc. (H) Physics, 4th Semester, Miranda House

Project 21

Title of the Project: Extra-tidal stars around the Galactic globular cluster NGC 7492

Mentors: Dr. Richa Kundu

Student's Names

1. Gauri Patti, B.Sc. (H) Physics, 6th Semester, Miranda House
2. Kiran Gaur, BSc Physical Science with Computer Science, 4th Semester, Miranda House
3. Devyani Tyagi, BSc Applied Physics, 2th Semester Purdue University
4. Subhadeep Mondal, BS-MS integrated, 4th Semester, IISER Kolkata

Project 22

Title of the Project: Extra-tidal stars around the Galactic globular cluster NGC 5466

Mentors: Dr. Richa Kundu

Student's Names

1. Shubh Mittal, B.Sc. (H) Physics, 6th Semester, Rajdhani College, University of Delhi
2. Jason Hilton, B.Sc. (H) Physics, 6th Semester, Rajdhani College, University of Delhi
3. Shreyas Divakaran, B.Sc. (H) Physics, 4th Semester, Rajdhani College, University of Delhi
4. Deepanshi Singh, B.Sc. (H) Physics, 6th Semester, Miranda House

Project 23

Title of the Project: Extra-tidal stars around the Galactic globular cluster NGC 6752

Mentors: Dr. Richa Kundu

Student's Names

1. Najah A Saleem, B.Sc. (H) Physics, 6th Semester, Hindu College, University of Delhi
2. Abhishek NJ, B.Sc. (H) Physics, 6th Semester, Hindu College, University of Delhi
3. Aswin V J, B.Sc. (H) Physics, 6th Semester, Hindu College, University of Delhi
4. Dhanish KT, B.Sc. (H) Physics, 6th Semester, Hindu College, University of Delhi

Project 24

Title of the Project: Study of Micrometeorites on Earth

Mentors: Dr. Soumya Prakash Dhal

Student's Names

1. Laxmi Narayan Ambuj, B.Sc. (H) Physics, 6th Semester Ramjas College
2. Neha, B.Sc. (H) Physics, Swami Shraddhanad college, University of Delhi
3. Ambuj, B.Sc. (H) Physics, Ramjas College, University of Delhi
4. Hisham sheejahameed, B.Sc. (H) Physics, 6th Semester, Hindu College

Project 25

Title of the Project: General Theory of Relativity: An Introduction to Gravitational Instantons

Mentors: Dr. Nitish

Student's Names

1. Omprakash karwa, B.Sc. (H) Physics, Deen Dayal Upadhyaya College, University of Delhi
2. Priyanshu Gupta, B.Sc. (H) Physics, Kirori Mal College, University of Delhi
3. Taniya Sandhu, B.Sc. (H) Physics, Miranda House, University of Delhi
4. Lavish Kumar, B.Sc. (H) Physics with Electronics, Rajdhani College, University of Delhi
5. Faheem Raja, B.Sc. (H) Physics Rajdhani College, University of Delhi
6. Anjali, B.Sc. (H) Physics, Miranda House college, University of Delhi
7. Mahak Saini, B.Sc. (H) Physics, Miranda House college, University of Delhi
8. Rajan, B.Sc. (H) Physics, Rajdhani College, University of Delhi
9. Akanksha Patel, B.Sc. (H) Physics, Miranda House college, University of Delhi

Project 26**Title of the Project:** Perturbation Theory for Heavy Quarkonia

Mentors: Dr. Divakar Pathak

Student's Names

1. Rohit Verma, BS-MS Dual Degree, Department of Physical Science, Indian Institute of Science Education and Research (IISER), Kolkata

Project 27**Title of the Project:** Computational - Variational Quantum Mechanics

Mentors: Dr. Divakar Pathak

Student's Names

1. Mahak Poonia, B.Sc. (H) Physics, 6th Semester, Miranda House
2. Muskan, B.Sc. (H) Physics, 6th Semester, Miranda House
3. Rajeshwari Roy, B.Sc. (H) Physics, 6th Semester, Miranda House
4. Sania Singh, B.Sc. (H) Physics, 6th Semester, Miranda House
5. Upasna Singh, B.Sc. (H) Physics, 6th Semester, Miranda House

Project 28**Title of the Project:** Quantum Mechanical Perspectives of Nuclear Shell Model

Mentors: Dr. Divakar Pathak

Student's Names

1. Abhinav Kumar, B.Sc. (H) Physics, 6th Semester, Ramjas College, University of Delhi
2. Saikat Mistry, B.Sc. (H) Physics, 6th Semester, Ramjas College, University of Delhi
3. Siddhant Kumar, B.Sc. (H) Physics with Electronics, Rajdhani College
4. Vaibhav Pratap Singh, B.Sc. (H) Physics with Electronics, Rajdhani College
5. Abhi Raj, B.Sc. (H) Physics, 6th Semester, Swami Shraddhanand College,

Project 29**Title of the Project:** Statistical Techniques and methods in Cosmology

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Tanisha, B.Sc. (H) Physics, 4th Semester, Miranda House, University of Delhi
2. Vaibhav Verma, B.Sc. (H) Physics, 4th Semester, Rajdhani College

Project 30**Title of the Project:** Comparative study of cosmological models using strong gravitational lensing

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Neha Bhoria B.Sc. (H) Physics, 6th Semester, Miranda House, University of Delhi
2. Seerat Fatima Khan, B.Sc. (H) Physics, 4th Semester, Miranda House, University of Delhi
3. Suchita Agarwal, B.Sc. (H) Physics, 4th Semester, Miranda House, University of Delhi

Project 31**Title of the Project:** Bayesian approach to study dark matter profiles of galaxies

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Anisha Khatri, B.Sc. (H) Physics, 6th Semester, Shaheed Rajguru College of Applied Sciences for Women, University of Delhi
2. Ashok B.Sc. (H) Physics, 2th Semester, Hindu College
3. Kanika Kakran, M.Sc. Physics, 2th Semester, National Institute of Technology, Rourkela
4. Priyanshu Mahato, Integrated BS-MS Dual Degree, 4th Semester Indian Institute of Science Education and Research, Kolkata

Project 32

Title of the Project: Bounds on graviton mass using Bayesian Statistics

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Jalsha Lodhi, B.Sc. Physical Sciences with Computer Science, 4th Semester, Miranda House
2. Krishnaang Kohli, B.Sc. (H) Physics, 4th Semester, DDUC, DU
3. Kumari Vini, B.Sc. Physical Sciences with Computer Science, 4th Semester, Miranda House
4. Kunal Dhawan, B.Sc. (H) Physics, 4th Semester, Hansraj College

Project 33

Title of the Project: Cosmology: Data simulation and parameter fitting

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Neelmani Chaturvedi, B.Sc. (H) Physics, 6th Semester, Rajdhani college
2. Twishum Tah, B.Sc. (H) Physics, 6th Semester, IISER, Kolkata

Project 34

Title of the Project: Applying Bayesian methods for constraining cosmological models using time delay

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Jyoti, B.Sc. (H) Physics, 4th Semester, Miranda House, University of Delhi
2. Lehar Laxmi Joshi, B.Sc. (H) Physics, 4th Semester, KiroriMal College, University of Delhi
3. Vansh Hooda, B.Sc. (H) Physics, 6th Semester, Swami Shraddanand College

Project 35

Title of the Project: Bounds on $R_h = ct$ model using Angular size of Galaxy Clusters

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Kanika Malik, B.Sc. Physical Sciences with Computer Science, Miranda House

Project 36

Title of the Project: Bayesian Statistics and Methods

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Apeksha vyas, B.Sc. Physical Sciences with Computer Science, 4th Semester, Miranda House

2. Shraddha Dixit, B.Sc. Physical Sciences with Computer Science,, 4th Semester Miranda House

Project 37

Title of the Project: Constraining Lambda CDM Cosmological Model using Strong Lensing Statistics

Mentors: Dr. Abha Dev Habib, Dr. Nisha Rani

Student's Names

1. Kripa Swarnkar, B.Sc. (Hons) Physics, 6th Semester Miranda House

Teacher Mentors

<p>Physics Department</p> <ol style="list-style-type: none">1. Dr. Mallika Verma2. Dr. Bilasini Naorem3. Prof. Monika Tomar4. Dr. Geeta Rani5. Dr. Raishma Krishnan6. Dr. Nirmala Saini7. Dr. Sonam Singh,8. Dr. Richa Kundu9. Dr. Soumya Prakash Dhal10. Dr. Nitish11. Dr. Divakar Pathak12. Dr. Abha Dev Habib13. Dr. Nisha Rani14. Jai Shree Choudhary (PhD Student)15. Rashmi (PhD Student)16. Satyam Garg (PhD Student)17. Jatinder Pal Singh (PhD Student)18. Dr. Neha Batra Bali (HC)19. Babita Sharma (PhD Student)20. Dr. Kajal Jindal (KMC)21. Ajay Kumar (PhD Student)22. Dr. Reema Gupta (HC)23. Dr. Anjali Sharma (ARSD)24. Dr. Lokesh Rana (ZHC)	<p>Chemistry Department</p> <ol style="list-style-type: none">1. Prof. Mallika Pathak2. Prof. Malti Sharma3. Prof. Sharda Mahilkar Sonkar4. Dr Sujata Sengupta5. Prof. Smriti Sharma Bhatia6. Dr.Mamta sethi7. Prof. Kalawati Saini8. Dr. Nutan Rani9. Dr. Annushka Pal10. Dr. Poonam11. Ms. P. LishinaiPaoteimai12. Dr Preeti Droliya13. Dr Yogesh Kumar14. Dr. Deepti Rawat15. Dr Anita Kumari16. Dr Taruna Singh17. Dr Shivani
<p>Botany Department</p> <ol style="list-style-type: none">1. Dr. Janaki Subramanyan2. Dr. Deepali3. Dr. Geetanjali Elangbam4. Dr. Shivangi Shah5. Dr. Madhu Bajaj6. Dr. Saloni Bahri7. Dr. Renuka Agrawal8. Dr. Somdutta Sinha Roy9. Dr. Neha Mann10. Dr. Rashmi Shakya11. Dr. Laishram Sundari Devi	<p>Maths Department</p> <ol style="list-style-type: none">1. Dr. Monika Arora2. Mr. Mohit Machhal3. Mr. Md. Sarik Idrisi,4. Dr. Shweta Gandhi,5. Dr. Rekha Gupta,6. Dr. Harsha Kharbanda7. Dr. Anita Rao
	<p>Zoology Department</p> <ol style="list-style-type: none">1. Dr. Nisha Vashishta2. Dr. Reetuparna Basak3. Dr. Rohit Jamwal4. Dr. Rekha Kumari5. Dr. Rashmi Sakhya6. Dr. Pooja Suman7. Dr. Shivani Kumari8. Prof. Sadhna Sharma9. Dr. Monika Sharma10. Dr. Jyoti Arora,11. Ms. Saba Zulfiquar

Geography Department 1. Prof. Bashabi Gupta, 2. Dr. Om Jee Ranjan 3. Dr. Praffulit Bisht	12. Dr. Deepak Yadav Support Staff 1. Mr Khem Raj 2. Mr. Jay Prakash
Prof. Monika Tomar DSKC Coordinator	Prof. Bijayalaxmi Nanda Principal, Miranda House





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Prof. Monika Tomar
DSKC Coordinator

July 18, 2023

11:45 a.m.

Venue: Auditorium, Miranda House