

ELITE PROJECTS (2016-17)

94 students undertook projects of two month duration under this scheme.

S. No.	Title of the Project	Mentor/s	Students
1	Study of diversity of bees during the summer months in Delhi.	Dr. Charu K Gupta and Dr. Arijit Chowdhuri	Jalabi Chowdhari and Keshav Rathor B.Sc. (H) Biomedical Science, III Year Rupashi and Priyanka B.Sc. (H) Biomedical Science, II Year
2	Synthesis and characterization of zinc sulfide, lead sulfide and copper sulfide nanoparticles by chemical precipitation method.	Dr. Seema Gupta and Dr. Gagan Dhawan	Jayati Khanna B.Sc. (H) Biomedical Sciences, II Year
3	Preparation of bioactive styryl coumarins for the study of its fluorescent property	Dr. Sunita Hooda and Dr. Geetu Gambhir	Devendra Sharma and Simran Aggarwal B.Sc. (H) Chemistry, II Year
4	Comparative pharmacokinetic analysis of commercial analgesics using bioinformatics approach	Dr. Archana Pandey and Dr. Satendra Singh	Abhishek Kumar B.Sc. (H) Biomedical Science, III Year
5	Study of SNP of duffy antigen using publicly available web-based bioinformatics resources	Dr. Gagan Dhawan	Kajal Kumari B.Sc. (H) Biomedical Science, I Year
6	The parents' outlook-experiences and problems faced by parents while caring for their disabled child	Dr. Archana Pandey and Dr. Abhishek Mehta	Shrutika Jha B.Sc.(H) Biomedical Science, I Year
7	Study interaction of <i>P. vivax</i> duffy binding protein with duffy antigen on RBC surface by	Dr. Gagan Dhawan	Shailya Verma B.Sc. (H) Biomedical Science,

	bioinformatics tools.		I Year
8	e-STUDENT - Website for student resources	Dr. Sunita Narang	Priya Singh, Gaurav Jain, Deepanshu, Tejveer, Sagar B.Sc. Physical Science II Year
9	Environment monitoring system	Dr. Anju Agrawal and Dr. Anita Kumari	Kiran, Amrita Kumari, Aman Sharma and Abhijeet B.Tech. Electronics, III Year
10	Effect of UV radiation on ciliate <i>Euplotes aediculatus</i>	Dr. Ravi Toteja and Dr. Seema Makhija	Mahima Kumari and Mukesh Kumar B.Sc. (H) Zoology, III Year Hritik Kadian B.Sc. (H) Zoology, II Year
11	Online recommender system	Dr. Harita Ahuja	Aman Taneja, Gauresh Bhati, Karan Rakheja, Kishan Haldar, Monika Mittal and Prashank Jauhari B.Tech. Computer Science, II Year
12	Thermoelectric generator (TEG)	Dr. Anju Agrawal and Dr. Anita Kumari	Rachit Agrawal, Anand Kumar Pandey, Deepak Sharma and Maneesh Kumar B.Sc. (H) Electronics, I Year
13	Synthesis of different transition metal sulfides nano particles by different methods on the basis of capping agents.	Dr. Gagan Dhawan and Dr. Seema Gupta	Ritika Madaan B.Sc. (H) Biomedical Science, II Year
14	Synthesis of zinc sulphide and lead sulphide nano particles using EDTA and PVA as capping agents and their characterization	Dr. Gagan Dhawan and Dr. Seema Gupta	Anmol B.Sc. (H) Biomedical Science II Year
15	Identification of TCCS (the chosen crustacean species) and study of the molecular	Dr. Sarita Kumar and Dr. Geetu Gambhir	Astha Sachdeva, Chandni Brar and Sarthak Khurana

	mechanism of its haemoglobin gene expression		B.Sc. Life Sciences II Semester Mukul Rohila B.Sc. (H) Biomedical Science I Year
16	Student assistant application (SAA)	Dr. Sunita Narang and Dr. Sharanjit Kaur	Shubhit Gulati, Ishank Shukla and Punchok Namgial B.Sc. (H) Computer Science II Year
17	“Prototials” a programming tutorials application (PTA)	Dr. Sharanjit Kaur	Ekansh Tiwari B.Sc. (H) Computer Science II Year Varad Srivastava and Siddharth Mishra B.Sc. (H) Computer Science, I Year
18	Culturing <i>Drosophila melanogaster</i>	Dr. Ravi Toteja and Dr. Seema Makhija	Ananya Mahajan, Barkha Aggarwal and Pratibha Narang B.Sc. Life Sciences, III Year
19	Identification of species by comparing the secondary structure of rRNA and ITS 2	Dr. Ravi Toteja and Dr. Seema Makhija	Divya Yadav B.Sc. (H) Zoology, I Year
20	A study and comparison of the quality of honey obtained from beekeepers and honey available in the market	Dr. Sarita Kumar	Manoj Kumar B.Sc. (H) Zoology, I Year
21	Synthesis and characterization of gold nanoparticles (AuNP)	Dr. Gagan Dhawan and Dr. Seema Gupta	Sauarbh Yadav B.Sc. (H) Biomedical Science, II Year

22	Determination of some soft drink constituents and contamination by some heavy metals	Dr. Sunita Hooda and Dr. Geetu Gambhir	Simran Aggarwal and Harshi Shrivastava B.Sc. (H) Chemistry, II Year
23	Organic waste management	Dr. Sanjeeta Rani	Arvind Kumar and Deepak Kumar B.Sc. (H) Physics, III Year
24	To study honey bee species of Delhi and NCR region and study its ecology and behaviour ”.	Dr. Charu K Gupta and Dr. Arijit Chowdhuri	Pritam Kashyap B.Sc. (H) Botany, II Year
25	Isolation and identification of <i>Caenorhabditis elegans</i>	Dr. Sarita Kumar and Dr. Geetu Gambhir	Jyoti Pal B.Sc. (H) Biomedical Science, III Year Shubham Rawat B.Sc. Life Sciences, I Year
26	Gut bacteria–symbiotic association with gut of <i>Eisenia fetida</i>	Dr. Sarita Kumar and Dr. Geetu Gambhir	Mayuri Mathuria B.Sc. (H) Biomedical Science, II Year Pratyaksh Singh B.Sc. (H) Botany II Year
27	Synthesis and characterisation of CuS nanoparticle and calculation of its band gap energy	Dr. Gagan Dhawan and Dr. Seema Gupta	Nitish Kumar B.Sc. (H) Biomedical Science, II Year
28	Analytical comparison of road space rationing (odd–even rule)	Dr. Sarita Agarwal	Naina Kholi and Nisha Gupta B.Sc. (H) Mathematics,

			III Year
29	Detection and measuring chaos in non-linear dynamical systems	Dr. Sadanand Prasad and Dr. Neeti Goel	Priyanshi Saxena, Neelima Arora, Kanika Mehta and Satyavir B.Sc. (H) Mathematics, III Year
30	A study of image segmentation and arithmetic operation using ring theory and its application	Dr. Laxmi Narain, Mr. Brijendra Yadav and Dr. Hanuman Verma	Sudarsha Pal, Vikram Dangi, Vishal Kejriwal and Yash Ruhela B.Sc. (H) Mathematics, II Year
31	Investigating recent trends in modeling of deteriorating inventory	Dr. Chaman Singh, Mr. Gurudatt Rao and Mr. Narayan Singh	Shival Gulati, Subhi Sinha and Riya Bhatia B.Sc. (H) Mathematics, II Year
32	Chemical analysis of soil	Dr. Sunita Hooda and Dr. Geetu Gambhir	Harshi Shrivastava and Devendra Sharma B.Sc. (H) Chemistry, II Year
33	Virtual screening of commercial antibiotics for their comparative pharmacological properties	Dr. Archana Pandey and Dr. Satendra Singh	Naim Ahmad B.Sc. (H) Biomedical Science, III Year
34	Mannich reaction: A one-pot three-component reaction catalysed by Ruthenium (II)-chlorido-dimethyl sulfoxide, [RuCl ₂ (DMSO) ₄]	Dr. Vikrant Kumar	Dipin Tomar and Pavitra Shrivastav B.Sc. (H) Chemistry, II Year
35	Field visit to Agasthyamalai bio-reserve with Frogman, Professor Biju	Dr. M.S. Rajeswari	Abhishek Singh, Barkha Gupta, Bhavana Sharma and Gaurav Yadav B.Sc. (H) Botany, III Year
36	Studies on effect of UV on the sensing response of gas sensors	Dr. Arijit Chowdhuri and Dr. Charu K Gupta	Vaibhav Singh and Rohit Dubey B.Sc. (H) Electronics, III Year

37	Ambient air pollution (AAP) measurement using gas sensors- a preliminary study	Dr. Arijit Chowdhuri and Dr. Charu K Gupta	Ativir Singh Vivek Kumar B.Sc. (H) Physics, II Year Vivek Kumar B.Sc. (H) Physics, III Year
38	Mapping particulate matter pollution faced by commuters in public transport in Delhi	Dr. Arijit Chowdhuri and Dr. Charu K Gupta	Priya Chopra and Jatinder Pal Singh B.Sc. (H) Physics, II Year
39	Effect of saline stress on total soluble protein, catalase and peroxidase activities in Chickpea (<i>Cicer arietinum</i>), Moong dal (<i>Vigna radiata</i>) and Mustard (<i>Brassica juncea</i>)	Dr. Rashmi Sharma	Nitika and Jyoti Sahu B.Sc. (H) Botany II Year Monika Negi and Neetu B.Sc. Life Science III Year
40	Predicting the win of a political party using game theory	Dr. Chaman Singh	Alok Kumar, Balbeer Singh, Kapil Thapaliyal and Satish Kumar Patel B.Sc. (H) Mathematics III Year