

**Manav Rachna University, Faridabad  
RDC Cell**

**Research Projects undertaken by faculty and Seed Money given for  
the Projects**

<b>S.No.</b>	<b>Name of Faculty Members</b>	<b>Department</b>	<b>Projects Name</b>	<b>Amount (In Lakhs)</b>	<b>Financial Year</b>
1	Dr. Kiran Gupta	Education & Humanities	Electronic Classroom Design and Implementation (ECDI) for Student-Centered Active Learning Environment with Upside-down Pedagogies (SCALE-UP)	1.655	2017-18
2	Dr. Sudhish Kumar Shukla	Chemistry	Development of Advanced Absorbent Polymers for Sustainable Plant Protection	2.200	2017-18
3	Dr. Megha Bansal	Chemistry	Functionalization of Metalloorganic Compounds with Magnetic Nanoparticles for Pollutant Adsorption and Degradation	2.085	2017-18
4	Mr. Joginder Singh Mr. J.P. Sharma	Mechanical	Design, Analysis, Manufacturing and Physical Testing of the Spur Gear with the Material of Carbon Fiber Reinforced Composites	2.020	2017-18
5	Ms. Manpreet Kaur Dr. Hardeo Kumar Thakur	CST	Artificial Intelligence based Clinical Decision Support System for Cardiovascular Diseases	2.240	2017-18
6	Dr. Mrinal Pandey	CST	AI Based Smart System for the Identification of Diseases in Rice Plants	2.040	2017-18
7	Dr. Dinesh Kumar Sharma	Physics	Development and Performance Evaluation of Nano-Materials based Algal-Solar Distillation System of for Effective Treatment of Wastewater	1.851	2017-18
8	Dr. Mrinal Pandey	CST	AI for Agriculture (Pilot Deployment at Selected AMCs of Telangana for Selected crops)	2.497	2017-18

9	Dr. Babita Sharma	Education & Humanities	SDG Aligned Dimension Pertaining to Labour, Livelihood & Employment as Mandated by the Mentioned University	1.900	2017-18
10	Dr. Pragati Chauhan	Management	Elderly Care Framework in Contemporary India: Socio-Demographic, Entrepreneurial and Policy Implications	1.502	2017-18
11	Dr. Seema Sharma	Education & Humanities	Impact of Meditation and Art related Engagement for Mental Health with the Application of Bio-Chemical Processes and Cognitive Neurosciences using Machine Learning Techniques	1.824	2017-18
12	Dr. Jyoti Pruthi	CST	An Intelligent System for Managing & Controlling Covid and Similar Pandemic	2.570	2017-18
13	Ms. Meena Kapahi Dr. B.M. Bahal	Mechanical Physics	S.W. Rose Bin	0.410	2017-18
14	Dr. Haider Abbas	Physics	Ultra-low Emittance and Monoenergetic Electron Beam Generation: A Theoretical and Simulation Study on Laser-Plasma Wakefield Acceleration	1.950	2017-18
15	Ms. K. Deepa	ECE	IoT based Energy Management on Smart Grids	2.083	2017-18
16	Ms. Bharti Jha	CST	DeepDPM: A Deep Learning Approach Based on Deterministic Phase Masks in DRPE for Medical Image Encryption	2.787	2017-18
17	Dr. Sachin Lakra	CST	Simulation and Analysis of Manufacturing Methods of Mobile Phones and Improving Methods of Managing Mobile Phone E-Waste	2.380	2017-18
18	Ms. Mamta Arora	CST	Intelligent System for Diagnosis Cervical Cancer	2.445	2017-18

19	Dr. Deepti Maikhuri	Physics	Synthesis of Artificial Mammals-Bone Nano-Materials for their Application in Orthopedics and Dentistry	2.250	2018-19
20	Dr. Roopa Rani	Chemistry	Investigation and Assessment of Agricultural Soil Irrigated with Drain Water in Villages of Faridabad and Palwal District of Haryana Inhabiting Cancer Patients	1.850	2018-19
21	Dr. Parneeta Dhaliwal	CST	Empowering Rural Women of Haryana through Advanced Technologies in Pisciculture	1.750	2018-19
22	Dr. Jyoti Pruthi	CST	Online Product Rating Estimation using Aspect Level Sentiment Analysis	1.600	2018-19
23	Dr. Parneeta Dhaliwal	CST	Handling Drifting Concepts in Data Streams	1.750	2018-19
24	Dr. Susmita Ray	CST	Cancer Analytics - A Machine Learning based Robust Intelligent System for Prediction, Detection, Prognosis, Progression, Recurrence and Survival Analysis of Cancer	1.600	2018-19
25	Dr. Arpit Sand	Chemistry	Biodegradable Super Absorbing Polymers (SAPs) from Renewable Sources for Sanitary Application	2.550	2018-19
26	Ms. Meena Kapahi Dr. Arpit Sand Dr. B.M Bahal	Mechanical Chemistry Physics	Multipurpose Medicated and Biodegradable Absorbent Material/Pad	0.430	2018-19
27	Dr. Sudhish Kumar Shukla	Chemistry	The Squelching Ability of the Ionic Liquid Immobilized Magnetic Nanoparticles for Biomolecular Interactions	2.000	2018-19
28	Dr. Vinayak V. Pathak	Chemistry	Development of Thermal Energy Storage Based Photobioreactor for Integrated Wastewater Treatment and Bioenergy Production using Algal-Bacterial Consortium	2.350	2018-19

29	Dr. Arpit Sand	Chemistry	Green & Sustainable Chemistry	0.350	2018-19
30	Dr. Roopa Rani	Chemistry	Study on Cancer Suffering Villages of Palwal District of Haryana, India by Assessment and Estimation of Pesticides, Heavy Metals and Other Pollutants in Soil, Water and Crops of Agricultural Land Irrigated with Wastewater	1.700	2018-19
31	Ms. Meena Kapahi	Mechanical	Horizontal Aerobic & Biodegradable Composting	0.4000	2018-19
32	Ms. Yogita Gupta	ECE	Invisible Drone-Illusion through DIP	0.328	2019-20
33	Ms. Hanu Bhardwaj	CST	Hackathon Project Grant 2019	0.500	2019-20
34	Dr. Jyoti Pruthi	CST	Gait Modelling for Asthma Prediction (GMAP) in Children using IOT & Evolutionary Algorithm Optimization	1.425	2019-20
35	Dr. Hardeo Kumar Thakur	CST	Machine Learning Approach for Hidden Community Detection from Security Perspective	1.540	2019-20
36	Dr. Sandeep Kumar	Physics	Development of Compact X-ray and THz (terahertz) sources for attosecond Science-A Theoretical & Simulation Investigation	1.704	2019-20
37	Dr. A. Jayamani	Chemistry	Exploration of Fibril Squelching Ability by Ionic Liquid Immobilized Magnetic Nanoparticles for Biomolecular Interactions	1.631	2019-20
38	Dr. Yogendra Kumar Sharma	Mathematics	Mathematical Modelling of the Effect of Social Media on Society	1.556	2019-20

39	Dr. Arpit Sand Dr. Aparna Vyas	Chemistry Mathematics	Development of Biodegradable Advance Superabsorbent Polymers Materials for Sanitary Applications	1.220	2019-20
40	Dr. Pradeep K. Varshney Dr. A. Jayamani	Chemistry	Development of Revolutionary Reusable Antiviral Nano-Coated Face Masks for reducing the SARS CoV-2 Virus Effect	1.595	2019-20
41	Dr. Parul Jhajharia	Management & Commerce	A Study of Antecedents of Employee Satisfaction and Its Linkages with Customer Delight in Select Indian Hospitality Industry	1.256	2019-20
42	Dr. Pooja Kapoor	Management & Commerce	An Empirical Study on the Determinants of Usage and Adoption Intention and Behaviour with Regard to Mobile Shopping Application in India	1.435	2019-20
43	Dr. Shruti Vashist	ECE	Routing in Smart Grids	1.420	2019-20
44	Dr. Animesh Singh	Management & Commerce	A Study on the Relationship of Customer Attitude with Behavioural Intention in Green Food Product	1.365	2019-20
45	Dr. Sachin Lakra	CST	Automated Hate Speech Detection for user Comments on Online Platforms	1.435	2019-20
46	Ms. Yogita Gupta	ECE	Analysis and Design of 5G Mobile Antennas to Improve IoT Cellular Communication Connectivity in Rural and Urban	1.700	2019-20
47	Dr. Haider Abbas	Physics	Study of the Interaction between Environmental Pollutants and Small Sized Metallic Clusters using Density Functional Theory	1.398	2019-20
48	Dr. Hardeo Kumar Thakur	CST	Mining and Analysis of Evolving Patterns in Dynamic Graphs	1.445	2019-20

49	Ms. Priyanka Gupta Dr. Hardeo Kumar Thakur	CST	System and Method for Communal Violence Detection using Social Networks based Community Detection	0.255	2019-20
50	Dr. Parneeta Dhaliwal	CST	Rail Lock	0.248	2020-21
51	Mr. Piyush Mahendru	Mechanical	Materials Testing of High Entropy Alloys	0.837	2020-21
52	Dr. Charu Pathak	ECE	Low Cost Smart Cold Storage	0.146	2020-21
53	Dr. Geeta Thakur	Education & Humanities	Light board & E-Content Studio	0.301	2020-21
54	Dr. Mrinal Pandey	CST	Energy Prediction for Smart Buildings Pertaining to the Heating Ventilation and Air Conditioning Plants using Machine Learning Techniques	1.690	2020-21
55	Dr. Jyoti Pruthi Dr. Susmita Ray	CST	Machine Learning based Robust Intelligent System for Analysis of Cancer and Prediction of Survival & Life Span	1.490	2020-21
56	Dr. Mrinal Pandey	CST	Pedagogy for Online Learning Tools	0.390	2020-21
57	Dr. Prinima Gupta	CST	An Optimized Video Steganography Technique using Hybrid Approach	1.045	2020-21
58	Dr. Priyanka Srivastava	Management & Commerce	A Comparative Analysis of Internet Marketing vis-a-vis Traditional Marketing in context to Consumer Buying Behaviour	1.296	2020-21

59	Dr. Pooja Kapoor	Management & Commerce	Role of Media and Market in Shaping Health Consciousness: A Study of Millennial Generation	1.556	2020-21
60	Dr. Pradeep K. Varshney Dr. A. Jayamani	Chemistry	Development of Antimicrobial Coatings using Green Synthesized Nanoparticles for Plummeting the effects of Pathogens	1.717	2020-21
61	Dr. Aditya Sharma	Physics	Concentrated Growth Factor Incorporated Nanoparticles: A Novel Biodegradable Scaffold For Bone Tissue Regenerative Therapy	1.285	2020-21
62	Dr. Arpit Sand Dr. Vinayak V. Pathak	Chemistry	Synthesis and Characterization of Super Adsorbent Polymer (SAPs) for Sanitary Application and Improvement of Soil Quality	1.670	2020-21
63	Dr. Babita Sharma	Education & Humanities	Effects of Mental Health on Educational Aspiration, Scholastic and Non Scholastic Performance of Ninth Standard Students of Government Schools in Urban and Rural areas in Haryana: A Comparative Study	1.850	2020-21
64	Dr. Sachita Yadav	Management & Commerce	Ranking and Accreditation Systems in Higher Education in India: An Empirical Study	1.675	2020-21
65	Dr. Rashi Banerji	Management & Commerce	A Study of Factors Influencing Student's Intention to Study at Higher Educational Institutions	0.340	2021-22
66	Dr. Parul Jhajharia	Management & Commerce	Make in India Programme in Indian Defense Sector: Examining Self Reliance	0.370	2021-22
67	Dr. Rashi Banerji	Management & Commerce	A Study of Factors Affecting Purchase and Renewal of Health Insurance in India in Context with Delhi-NCR	0.325	2021-22

68	Dr. Prinima Gupta	CST	A Novel Algorithm based on Regression Technique for Improving Prediction	0.330	2021-22
69	Dr. Manmeet Bali Nag	Management & Commerce	Inclusive Work Life Balance Culture amongst Female Employees, and its Role in Organizational Effectiveness in Select MNCs, PSUs and Private Organizations of India	0.350	2021-22
70	Dr. Parul Jhajharia	Management & Commerce	Transformational HR Leadership Code: Character, Commitment & Competence-A Qualitative Study	0.370	2021-22
71	Dr. Parul Jhajharia	Management & Commerce	A Study on Teaching Competencies and Self Concept of Selected Government and Private Primary School Teachers in Haryana	0.280	2021-22
72	Dr. Ajit Katiyar	Mechanical	Humanoid Robot	0.800	2021-22
73	Dr. Animesh Singh	Management & Commerce	The Study of Social Media Marketing in Building Brand Equity and Purchase Intention for the Consumers in White Goods Industry	0.300	2021-22
74	Dr. Aditya Sharma	Physics	Fabrication of Pure and Ag/Se/Fe Doped Calcium Phosphate Nanoparticles as Artificial Mammals-bone for Dentistry and Orthopaedics Applications	0.360	2021-22
75	Dr. Sandeep Kumar	Physics	Development of Table-Top Laser-Plasma based Wakefield Accelerator: A Theoretical and Simulation Study	0.355	2021-22
76	Dr. Parul Jhajharia	Management & Commerce	Organizational Culture & its Impact on Employee Engagement & Effectiveness – A Case Study of an Indian Manufacturing Company (Leading Two- Wheeler Manufacturer)	0.300	2021-22



77	Dr. Megha Bansal	Chemistry	Optimization of Experimental Conditions for Improvement of Bio-Methane Production by De-Polymerization of Agro Waste: A Waste to Energy Approach	0.340	2021-22
78	Dr. Megha Bansal	Chemistry	Chemico Mechanical Study of Portland Limestone Cement (PLC) Developed in Indian Scenario	0.355	2021-22
79	Dr. Prinima Gupta	CST	Detecting Disturbed Denial of Service Attacks on Software Defined Networks using Hybrid Approach	0.325	2021-22
80	Dr. Sanjay Singh Dr. M. Thurai Pandian Mr. Ankur Kumar Aggarwal	CST	Design System of PEIS for Handle Large-RFID Network	0.220	2021-22
81	Dr. Shalu	CST	A System for Monitoring Social Distance and generating System Using IoT	0.275	2021-22
82	Dr. Jyoti Pruthi	CST	Requirements Engineering for Target Driven Data Warehouses	0.320	2021-22
83	Dr. Parul Jhajharia	Management & Commerce	Influence of Organisational Climate on Job Satisfaction and Intention-to-Leave of Nursing Staff in Tertiary Level Private Hospitals in Delhi	0.280	2021-22
84	Dr. Ruchi Gupta	Mathematics	A System for Mathematical Representation of Various Physical Systems using Interactive Graphic user Interface and Method thereof	0.255	2021-22
85	Dr. Shalu	CST	System and Method for Monitoring Water Quality of Biofloc Fish Culture	0.245	2021-22
86	Dr. Kalpana Shukla	Mathematics	New Trends of Optimality and Duality Conditions for a Low-Order-Value and Order-Value Mathematical Programming Problems	0.285	2021-22

87	Dr. Babita Sharma	Education & Humanities	A Study of Reaction of School Leaders, Teachers and Peers towards Inclusion of Children with Special Needs in Secondary Schools	0.275	2021-22
88	Dr. Kiran Gupta	Education & Humanities	A Comparative Study of Academic Achievement, Occupational Aspiration, and Adjustment of Students of BPL and Non-BPL Card Holders in Government Secondary Schools in Haryana	0.295	2021-22
89	Dr. Versha Vahini	Law	Development of Law pertaining to Arbitration and Its Impact on minimizing Role of Courts: A Critical Study	0.300	2021-22
90	Dr. Prinima Gupta	CST	A Progression for the Prediction of Earthquake using Data Mining having an Informative Impact on Society	0.320	2021-22
91	Dr. Parul Jhajharia	Management & Commerce	United Nations Global Compact Principles on Environment Impacting Corporate Practices : A Study on Indian Oil & Gas Sector	0.313	2021-22
92	Dr. Hardeo Kumar Thakur	CST	Sentiment Enriched Cross Domain Recommender System	0.305	2021-22
93	Dr. Meena Kapahi	Chemistry	Wastes to Resources - An Awareness Campaign for Waste Management	0.330	2021-22
94	Dr. S.K. Bose	Law	A Novel Device to Produce Electrical Energy using Vibration Generated by its Surrounding	0.277	2021-22
95	Mr. Pradeep Kumar Mouria	Mechanical	Process Parameters of Friction Stir Welding of Dissimilar Aluminium Alloys	0.250	2021-22

96	Dr. Shalu	CST	IoT Based Coagulation Analyzer	0.290	2021-22
97	Dr. Shalu	CST	An IOT based Automatic Medicine Carrier	0.280	2021-22
98	Dr. Ruchi Gupta	Mathematics	A System for Breast Cancer Image Classification using 2C Algorithm with Multiclass Support Vector Machine Interfaces	0.310	2021-22
99	Dr. Priyanka Chadha	Management & Commerce	Health Diagnosing System	0.250	2021-22
100	Dr. R.Girija	CST	IoT driven Sensor Fusion with Deep Learning for the Detection of Dangerous Driver Behaviour	0.240	2021-22
101	Dr. Priyanka Chadha	Management & Commerce	Safety Wrist Band	0.255	2021-22
102	Dr. Priyanka Chadha	Management & Commerce	Small Flower Pot	0.260	2021-22
103	Dr. Priyanka Chadha	Management & Commerce	Foldable Desk cum Laptop Cooling Pad	0.260	2021-22
104	Dr. Kalpana Shukla	Mathematics	A Smart System for Monitoring Charging of Electric Vehicle Battery using Smart Portable Charger	0.250	2021-22
105	Dr. Shalu	CST	A Novel Cost Effective Home Gardening System	0.269	2021-22
106	Dr. Shalu	CST	An IOT Based Swirling Bath Shower System	0.250	2021-22