## **List of Research Projects of Pharmacy Department**

| S. No. | Title  | Principal Investigator | Funding Agency      | Worth      | Duration of | Status of |
|--------|--|------------------------|---------------------|------------|-------------|-----------|
|        |  |                        |                     | (in Lakhs) | Project     | Project   |
| 1      | Cultivation and evaluation of Petro-Crops on   | Prof. J. S. Dangi      | Dept. of Land       | 36.5       | 05 yrs      | Completed |
|        | degraded lands in Chhattisgarh                 |                        | Resourses, Govt. of |            |             |           |
|        |  |                        | India.              |            |             |           |
| 2      | Ethnopharmacological studies of Traditional    | Prof. J. S. Dangi      | AICTE               | 10.0       | 02 yrs      | Completed |
|        | Medicinal plants of Amarkantak and Pendra      |                        |                     |            |             |           |
|        | regions of chhattisgarh State.                 |                        |                     |            |             |           |
| 3      | Industry Institute Partnership cell            | Prof. J. S. Dangi      | AICTE               | 7.0        | 03 yrs      | Completed |
|        |  |                        |                     |            |             |           |
| 4      | Entrepreneurship Development Programme         | Prof. J. S. Dangi      | AICTE               | 6.0        | 01 yrs      | Completed |
| 5      | Design synthesis and Biological evaluation of  | Dr. Sanmati K. Jain    | AICTE               | 9.3        | 03 yrs      | Completed |
|        | CCR-5 Antagonists as Anti-AIDS drugs.          |                        |                     |            |             |           |
| 6      | Development of Controlled release gastro-      | Dr. Sunil K. Jain      | AICTE               | 6.9        | 02 yrs      | Completed |
|        | retensive multiparticulate delivery systems    |                        |                     |            |             |           |
|        | for the effective management of Type-2         |                        |                     |            |             |           |
|        | Diabetes mellitus                              |                        |                     |            |             |           |
| 7      | Development and evaluation of Colon            | Dr. Sanjay Lanjhiyana  | CGCOST              | 1.27       | 03yrs       | Completed |
|        | specific drug delivery systems for some Anti - |                        |                     |            |             |           |
|        | Cancer drugs.                                  |                        |                     |            |             |           |

| 8  | Insecticidal activity of medicinal plant   | Dr. Bharti Ahirwar                    | CGCOST      | 1.15     | 03 yrs | Completed |
|----|--|---------------------------------------|-------------|----------|--------|-----------|
| 9  | Synthesis and biological evaluation of histone deacetylase inhibitors  | Prof. J. S. Dangi                     | AICTE RPS   | 14.5     | 02 yrs | Ongoing   |
| 10 | Ethanopharmacological studies of some traditional medicinal plants   | Prof. J. S. Dangi<br>and Dr S. Bodake | UGC- SAP    | 75       | 05 yrs | Ongoing   |
| 11 | Design, synthesis and pharmacological evaluation of novel combretastatin A-4 analogues as anticancer agent.  | Dr. Harish Rajak                      | UGC-MRP     | 10.5     | 03 yrs | Ongoing   |
| 12 | Dosage form development and evaluation of phytomedicines for effective treatment of lymphatic filariasis disease prevelant among indian population | Dr. Sanjay Lanjhiyana                 | UGC         | 5.14     | 03 yrs | Ongoing   |
| 13 | Photochemical and pharmacological evaluation of some potential antigenotoxic plant   | Mr. P. Samal                          | UGC-MRP     | 3.2      | 03 yrs | Ongoing   |
| 14 | Development of colon targeted new generation vaccine formulation   | Dr. Ravi shanker<br>Pandey            | UGC-MRP     | 7,22,800 | 03 yrs | Ongoing   |
| 15 | Evaluation of lipid based carrier system for delivery of hepatitis C antigen for vaccination using subcutaneous route                              | Dr. Dinesh Mishra                     | UGC-STARTUP | 6.0      | 02 yrs | Ongoing   |
| 16 | Development of colloidal carriers for mucosal vaccination  | Dr. Akhlesh Jain                      | UGC-STARTUP | 6.0      | 02 yrs | Ongoing   |

| 17 | To assess the Antiabuse potential of central                | Dr. Nishant S. Jain | UGC-STARTUP | 6.0   | 02 yrs | Ongoing |
|----|---|---------------------|-------------|-------|--------|---------|
|    | histamine receptor analogs for anxiety                      |                     |             |       |        |         |
|    | related reinforcing effect of nicotine                      |                     |             |       |        |         |
| 18 | Computer aided design, synthesis and study                  | Dr. Suresh Thareja  | UGC-STARTUP | 6.0   | 02 yrs | Ongoing |
|    | of novel PTP-1B inhibitors as potential                     |                     |             |       |        |         |
|    | antidiabetic agents   |                     |             |       |        |         |
| 19 | Computational prediction of cytochrome P-                   | Dr. P. P. Roy       | UGC-STARTUP | 6.0   | 02 yrs | Ongoing |
|    | 450 enzyme inhibitors                                       |                     |             |       |        |         |
| 20 | Pharmacological evaluation, quality control                 | Dr. Arjun Patra     | UGC-STARTUP | 6.0   | 02 yrs | Ongoing |
|    | and standardization of some potential                       |                     |             |       |        |         |
|    | antidiabetic plants   |                     |             |       |        |         |
| 21 | Synthesis, characterization and                             | Dr. Jagadish Singh  | UGC-STARTUP | 6.0   | 02 yrs | Ongoing |
|    | antiproliferation of oxadiazole derivatives                 |                     |             |       |        |         |
| 22 | Evalaution of selective imidazoline I <sub>2</sub> receptor | Dr. Rajesh R. Ugale | UGC-STARTUP | 6.0   | 02 yrs | Ongoing |
|    | ligand as analgesic in chronic neuropathic                  |                     |             |       |        |         |
|    | pain models   |                     |             |       |        |         |
| 23 | Phytochemical Investigation and fracture                    | Dr. Vinod Rangari   | UGC-MRP     | 12.85 | 03 yrs | Ongoing |
|    | healing activity studies of some medicinal                  |                     |             |       |        |         |
|    | plants of CG State for treatment of bone                    |                     |             |       |        |         |
|    | fracture  |                     |             |       |        |         |
| 24 | Isolation of secondary metabolites and                      | Dr. Dilip kumar Pal | UGC-MRP     | 13.23 | 03 yrs | Ongoing |
|    | evaluation of antisteroidogenic activities of               |                     |             |       |        |         |
|    | some potential Indian medicinal plants                      |                     |             |       |        |         |

|    | obtained locally from Chhattisgarh state        |                      |             |       |        |         |
|----|---|----------------------|-------------|-------|--------|---------|
| 25 | Lectin conjugated multiparticulate delivery     | Dr. S.K. Jain        | AICTE-RPS   | 12.0  | 03 yrs | Ongoing |
|    | system for the effective treatment of H.        |                      |             |       |        |         |
|    | Pylori infections                               |                      |             |       |        |         |
| 26 | Phytochemical investigations of antisickling    | Dr. Vinod Rangari    | AICTE-RPS   | 19.40 | 03 yrs | Ongoing |
|    | activity studies and formulation development    |                      |             |       |        |         |
|    | of some Indian medicinal plants for the         |                      |             |       |        |         |
|    | treatment and management of sickle cell         |                      |             |       |        |         |
|    | anaemia   |                      |             |       |        |         |
| 27 | A Chemometric way of strategizing extraction    | Dr. Vivekaananda     | UGC-STARTUP | 6.0   | 02 yrs | Ongoing |
|    | of nutraceutical phenolic antioxidants with     | Mandal               |             |       |        |         |
|    | subcritical water as an eco-conventional        |                      |             |       |        |         |
|    | extraction fluid: An accelerated green          |                      |             |       |        |         |
|    | approach for meeting industrial demand          |                      |             |       |        |         |
| 28 | Design and synthesis of some novel metal        | Dr. Sanjay K. Bharti | UGC-STARTUP | 6.0   | 2 yrs  | Ongoing |
|    | (Co, Ni, Ga) complexes of bi / tridentate       |                      |             |       |        |         |
|    | ligand(s) as potential nucleolytic & anticancer |                      |             |       |        |         |
|    | agents  |                      |             |       |        |         |
| 29 | Mucoadhesive Chitosan coated Cationic           | Dr. K. Kesavan       | UGC-STARTUP | 6.0   | 2 yrs  | Ongoing |
|    | Nanoemulsion: Ocular Drug Delivery System       |                      |             |       |        |         |

(Head of the Department) (Pharmacy)