

### DEPARTMENT OF PHARMACEUTICAL TECHNOLOGY

#### **UNIVERSITY COLLEGE OF ENGINEERING**

### **BHARTHIDASAN INSTITUTE OF TECHNOLOGY CAMPUS**

## ANNA UNIVERSITY, TIRUCHIRAPPALLI – 620 024

# **SPONSORED RESEARCH PROJECTS**

| NAME OF THE PI/CO PI                        | TITLE OF THE PROJECT  | FUNDING<br>AGENCY/SCHEME | ÅMOUNT SANCTIONED IN<br>LAKHS |
|---|---|--------------------------|-------------------------------|
|   | 2024-20   | 25                       |                               |
| DR. E. SANMUGA PRIYA                        | HARNESSING PHENOLIC ACID-<br>BOUND ÅRABINOXYLANS FROM<br>KODO MILLET AS POTENT<br>IMMUNOREGULATORY DIETARY<br>SUPPLEMENT  | CMRG                     | 34.12500                      |
|   | 2023-20   | 24                       |                               |
| DR.P.SELVAMANI                              | DEVELOPMENT OF NOVEL CALCIFEDIOL LOADED NANO-IN- MICRO (NIM) INHALABLE ANTIBACTERIAL POWDER FORMULATION AGAINST RESPIRATORY SUPERBUGS.  | CSIR                     | 25.00                         |
|   | 2021-20   | 22                       |                               |
| PROF.E.SANMUGA PRIYA/ DR.P.SENTHAMIL SELVAN | IDENTIFICATION OF \$100 PROTEINS BINDING DISTINCT DAMP RECEPTORS AND ITS ACTIVATED SIGNALING PATHWAYS THAT CAUSE FORMATION OF NLRP3 INFLAMMASOME — DEVELOPMENT OF SPECIFIC \$100 INHIBITORS | ICMR, GoI                | 23.35                         |

| DR. K. RUCKMANI/<br>DR.A.<br>SHANMUGARATHINAM   | DEVELOPMENT OF NANO BASED SMART PESTICIDE FORMULATIONS FOR HIGH AGRICULTURAL PRODUCTIVITY   | DST, NEW<br>DELHI   | 55.74                 |
|---|---|---|-----------------------|
|   | 2019 – 2  | 020   |                       |
| DR. K. RUCKMANI   | EDII- Anna University-<br>Pharmanest Incubation<br>Center   | ENTREPRENEURSH IP DEVELOPMENT INNOVATION INSTITUTE (EDII), CHENNAI                      | 249.90                |
|   | 2018 – 2  | 019   |                       |
| PROF.P.SELVAMANI/ DR.S.LATHA/ PROF.Y.TAKEMURA, YOKOHAMA NATIONAL UNIVERSITY, JAPAN DR.SATOSHI OTA, SHIZUOKA UNIVERSITY, JAPAN | DEVELOPMENT OF PEPTIDE CONJUGATED NANO-MAGNETIC PROBES AS CANCER THERANOSTICS   | DST, INDIA AND<br>JSPS, JAPAN   | 5.92 INR (980000 JPY) |
| DR.S.LATHA/<br>PROF.O.A.ODEKKU,<br>UNIVERSITY OF IBADAN,<br>SOUTH AFRICA  | FORMULATION AND EVALUATION OF MAGNETICALLY TRIGGERABLE SMART TABLETS FOR IMPROVED ULCER THERAPY   | AFRICA-INDIA MOBILITY FUND OF DBT WELCOME TRUST, INDIAN AND AFRICAN ACADEMY OF SCIENCES | 5.69 IND (0.075USD)   |
| PROF.N.SUBRAMANIAN /PROF.K.RUCKMANI/ DR.A. SHANMUGARATHINAM/ DR.SANDHYA PITTALA, CRENZA PHARMACEUTICALS, HYDERABAD            | SYNTHESIS, CHARACTERIZATION, FUNCTIONAL AND TOXICOLOGICAL EVALUATION OF TRIBLOCK GRAFTED COPOLYMER FOR THE DELIVERY OF POORLY SOLUBLE DRUGS | DST/INDUSTRY<br>ACADEMIA<br>LINKAGE   | 92.04                 |

|   | 2017 – 20  | 18   |         |
|---|--|------|---------|
| DR. K. RUCKMANI,<br>DR. N. SUBRAMANIAN<br>(CO-PI)       | NATIONAL FACILITY ON<br>BIOACTIVE PEPTIDES FROM MILK   | DST, | 167.16  |
| DR. N. SUBRAMANIAN<br>DR. K. RUCKMANI (Co-<br>PI)       | RESVERATROL AND CATECHINS LOADED NIOSOMES AND NANOPARTICLES AS DELIVERY VEHICLES FOR FORTIFICATION   | ICAR | 28.85   |
| DR. S. LAKSHMANA<br>PRABU,<br>D R. K. RUCKMANI (CO-     | OF MILK AND MILK PRODUCTS SYSTEMATIC EXPLORATION AND ANALYSIS OF INDIGENOUS NAGALAND MEDICINAL PLANT   | DBT  | 26.72   |
| PI)   | CLEMATIS NEPAULESIS 2016-201   | 7    |         |
| DR. P. SELVAMANI<br>DR. K. RUCKMANI                     | BIOASSAY GUIDED FRACTIONATION OF PROTEINS/PEPTIDES FROM MARINE RESOURCES, STRUCTURAL CHARACTERIZATION AND EVALUATION AS THERAPEUTIC LEAD AGAINST NOSOCOMICAL PATHOGENS AND AS NUTRACEUTICAL SUPPLEMENT | SERB | 53.39   |
| DR. K. RUCKMANI<br>DR.A.<br>SHANMUGARATHINAM<br>(CO-PI) | STABILIZATION OF PLAGUE (A POTENTIAL BIOWEAPON) VACCINE USING BIOCOMPATIBLE POLYSACCHARIDES  | DRDO | 44.4872 |
|   | 2015-201   | 6    |         |
| DR. E. SANMUGAPRIYA                                     | AMELIORATION OF HYDROLYSABLE TANNIN FRACTION FROM TERMINALIA CHEBULA FRUITS AS POTENT ANTIRHEUMATIC AGENT  | SERB | 26.93   |

| DR.S.LATHA<br>DR. P. SELVAMANI (CO-<br>PI)             | MAGNETICALLY TRIGGERED<br>DRUG RELEASE FROM MAGNETIC<br>NANOPARTICLES  | DST  | 7.04  |
|--|--|------|-------|
| DR. S. LATHA   | DEVELOPMENT OF MAGNETIC POLYHERBAL FORMULATION FOR TARGETED THERAPY OF BREAST CANCER   | SERB | 11.00 |
|  | 2013-20  | 14   |       |
| DR. N. SUBRAMANIAN                                     | TARGETED DELIVERY OF<br>CAMPTOTHECIN USING POLYMER<br>STABILIZED NANOEMOLUSION<br>FOR THE IMPROVED TREATMENT<br>OF BREAST CANCER         | SERB | 25.58 |
|  | 2012-20  | 13   |       |
| DR. K. RUCKMANI,<br>DR. P. SELVAMANI (CO-<br>PI)       | ISOLATION, CHARACTERIZATION AND FORMULATION STUDIES OF GUMS OBTAINED FROM ALBIZIA STIPULATA AND PRUNUS CERASOIDES OF MIZORAM             | DBT  | 29.40 |
| DR. A. PURATCHIKODY,<br>DR. A. UMAMAHESWARI<br>(CO-PI) | DESIGN, SYNTHESIS AND EVALUATION OF NOVEL DERIVATIVES OF DIBROMOTYROSINE AS ANTI- INFLAMMATORY COX-2 INHIBITORS                          | DST  | 30.42 |
| DR. N. SUBRAMANIAN                                     | DEVELOPMENT OF BIODEGRADABLE TEMPERATURE AND PH RESPONSIVE HYBRID POLYMER-PEPTIDE SYSTEM FOR THE EFFICIENT INTRAOCULAR DELIVERY OF DRUGS | DBT  | 58.50 |

| DR. P. SELVAMANI   | SYSTEMATIC EXPLORATION AND PHARMACOLOGICAL APPRAISAL OF ACTIVE LIVE BOTANICAL INGREDIENT (FRACTION) ISOLATED FROM HERBS AS POSSIBLE ADJUNCT/ALTERNATE THERAPEUTIC AID FOR DEMENTIA ASSOCIATED WITH ALZHEIMER'S DISEASE | DST   | 26.85  |
|--|--|-------|--------|
|  |  | · • • |        |
| DR. K. RUCKMANI, DR. N. SUBRAMANIAN (CO-PI), DR. P. SELVAMANI (CO-PI), | NATIONAL FACILITY FOR DRUG<br>DEVELOPMENT FOR ACADEMIA,<br>PHARMACEUTICAL AND ALLIED<br>INDUSTRIES   | DST   | 600.0  |
| DR.S.LATHA, DR. P. SELVAMANI (CO-PI)                                   | DESIGN CONSTRUCTION OF FE DRUG NANO COMPLEX LOADED NANO/MICRO BULLETS USING A NOVEL HYBRID TECHNOLOGY FOR MAGNETIC TARGETED THERAPY AND ITS COMPARATIVE EVALUATION WITH SPECIAL EMPHASIS ON RHEUMATOID ARTHRITIS       | DRDO  | 12.564 |
|  | 2008-20  | 09    |        |
| DR. K. RUCKMANI,   | NANOCOMPLEXES FOR THE<br>TARGETED DRUG DELIVERY TO<br>THE INFLAMED SITE OF LUNGS   | DST   | 32.14  |
| DR. N. SUBRAMANIAN   | DEVELOPMENT, CHARACTERIZATION AND BIOLOGICAL/PHARMACOTECHNI CAL EVALUATION OF MICROEMULSION AND LIPID DISPERSION FOR DRUG DELIVERY AND DETOXIFICATION  | SERC  | 20.77  |

| Dr.S.Latha,           | FORMULATION DEVELOPMENT       |            |               |
|-----------------------|-------------------------------|------------|---------------|
| DR. P. SELVAMANI (CO- | AND IN-VIVO EVALUATION OF A   |            |               |
| PI)                   | SUSTAINED RELEASE             | UGC        | 5.85          |
|                       | TRANSDERMAL DRUG DELIVERY     |            |               |
|                       | SYSTEM OF A SELECTED NEW      |            |               |
|                       | ANTIEMETIC DRUG.              |            |               |
|                       | 2006-200                      | 7          |               |
| DR. A. PURATCHIKODY   | ISOLATION AND                 |            |               |
|                       | CHARACTERIZATION OF           |            |               |
|                       | BIOACTIVE MOLECULES FROM      | DST        | 14.36         |
|                       | MARINE ORGANISMS              | 231        | 14.55         |
| Dr. S. Latha          | DEVELOPMENT OF A NOVEL        |            |               |
|                       | METHOD FOR THE                |            |               |
|                       | MANUFACTURE OF                |            |               |
|                       | PHARMACEUTICAL MAGNETIC       |            |               |
|                       | NANOPARTICLES AS A            | DST        | 10.62         |
|                       | TARGETED DRUG RELEASE         |            |               |
|                       | SYSTEM FOR FUTURE             |            |               |
|                       | APPLICATIONS IN HUMAN GI      |            |               |
|                       | TRACT                         |            |               |
|                       | 2004-200                      | 5          |               |
| Dr. P. SELVAMANI      | BIOPROSPECTION AND            | TNSCST     | 2.19          |
| DR. I . SELYAMANI     | CHARACTERIZATION OF           | 1143031    | <b>4.</b> 1 3 |
| Dr. S. Latha          | BIOACTIVE METABOLITES FROM    |            |               |
| DR. S. LATTIA         | MARINE ORGANISMS AS           |            |               |
|                       | POSSIBLE THERAPEUTIC AGENTS   |            |               |
|                       | 1 COSIDER HIERMI EGITO AGENTO | CUMULATIVE | 1,726.5862    |
|                       |                               | TOTAL =    | 1,7 = 0.000   |
|                       |                               | 101712     |               |

