

**Department of Biotechnology  
Bharathidasan Institute of Technology  
Anna University, Tiruchirapalli- 620024.**

**R & D Projects**

**2013- 2014**

<b>Sl.No.</b>	<b>Name of the Faculty</b>	<b>Title of the Project</b>	<b>Funding Agency</b>	<b>Amount Sanctioned (in Rupees)</b>	<b>Status</b>
1.	PI: Dr. P. Rajaguru Co-PI: Dr.N.Subramanian	Designing minicircle vector for tumor specific co-expression of shRNAs and transgene for improved cancer gene therapy	DST-SERB	48,84,100	Sanctioned
2.	PI: Dr. P. Rajaguru Co-PI: Dr.V.Pugalenthi Dr.S.Geetha	Fluorescent protein-receptor based assay to measure toxicity of nanomaterials,	DST-Nano Mission	75,78,000	Sanctioned
1.	Dr. S. John Venison	Development of a recombinant NS1 antigen based diagnostic kit for the early detection of dengue virus infection	DST-SERB	42,45,000	Ongoing
2.	Dr. S. John Venison	Recombinant antigens as a tool for analyzing antibody response among dengue patients to understand the pathology and pathogenesis	ICMR	25,84,000	Ongoing
3.	Dr. S. Geetha	Green synthesis of gold nanoparticle using algal species and evaluation of its anticancer activity	CTDT, AU, Chennai	50,000	Ongoing

**2012- 2013**

<b>Sl.No.</b>	<b>Name of the Faculty</b>	<b>Title of the Project</b>	<b>Funding Agency</b>	<b>Amount Sanctioned (in Rupees)</b>	<b>Status</b>
1.	Co- PI: Dr. P. Rajaguru	Developmet of bio degradable temperature and PH responsive Hybrid Polymer – peptide system for efficient intra ocular delivery of drugs	DBT	58,66,400	Ongoing
2.	Dr. P. S. Sudhakar Gandhi	Mouse seminal vesicle sulfhydryl oxidase (SOx): cloning and expression of recombinant enzyme to identify its cross linking substrate among seminal vesicle proteins	DST	34,70,000	Ongoing
3.	Dr. P. S. Sudhakar Gandhi	Structural exploration of recombinant mouse seminal vesicle spink-3 receptor on sperm acrosome	DBT	29,87,000	Ongoing
4.	Dr. B. Anandaraj	Exploration of therapeutic enzymes from marine microbes.	TNSCST	10,000	Completed

**2011- 2012**

<b>Sl.No.</b>	<b>Name of the Faculty</b>	<b>Title of the Project</b>	<b>Funding Agency</b>	<b>Amount Sanctioned (in Rupees)</b>	<b>Status</b>
1.	Dr. B. Anandaraj	Marine Nano factories – Sense and Sensing	DST-SERB	25,00,000	Ongoing

**2010-2011**

Sl.No.	Name of the Faculty	Title of the Project	Funding Agency	Amount Sanctioned (in Rupees)	Status
1.	Dr. P. Rajaguru	Silencing of ER stress response genes using RNA interference to protect hyperglycemia induced pancreatic $\beta$ -cell death	DST-SERC	28,86,000	Completed
2.	PI: Dr. P. Rajaguru Co-PI: Dr.V.Pugalenthi	Developing a human cell based multigene promoter-fluorescent protein fusion-reporter genotoxicity assay	ICMR	60,48,240	Initiated
3.	PI: Dr. P. Rajaguru Co-PIs: Dr.P.Suresh Kumar Dr.N.Subramanian	Simultaneous silencing of multiple pro-angiogenic factors to suppress tumor-induced angiogenesis	DBT	72,66,000	On going
4.	Dr. P. Suresh Kumar	Micropropagation and antioxidant studies in <i>Costus Igneus</i>	TNSCST	10,000	Completed
5.	PI: Dr. V. Pugalenthi, Co-PI: Dr. P. Rajaguru Mr. M.Rengasamy	Enhancement of biohydrogen production using integrated nanoparticle catalysed fermentation MEC and process modeling	DBT	24,25,000	Completed

**2009-2010**

Sl.No.	Name of the Faculty	Title of the Project	Funding Agency	Amount Sanctioned (in Rupees)	Status
1.	Dr. S. Geetha	Invitro studies on tumour targetting drug delivery using gold nanoparticle from <i>Tragia Plukenetii</i> leaf extract.	TNSCST	10,000	Completed

**2008-2009**

Sl.No.	Name of the Faculty	Title of the Project	Funding Agency	Amount Sanctioned (in Rupees)	Status
1.	PI: Dr. P. Rajaguru,  Co-PI: Dr. S. John Venison	Genotoxicity profiling of ground water in Noyal river basin	UGC	10,57,100	Completed
2.	Dr.S.Geetha	Screening of the medicinal activity for Osteoporosis in garlic ) <i>Allium Sativum</i> )	TNSCST	10,000	completed

**2007-2008**

Sl.No.	Name of the Faculty	Title of the Project	Funding Agency	Amount Sanctioned (in Rupees)	Status
1.	Dr. P. Rajaguru	Designing a 'multitarget RNAi' effector molecule for simultaneous silencing of multiple genes	DBT	30,71,000	Completed
2.	Dr. P. Rajaguru	Screening and characterization of active constituents from an antidiabetic plant <i>Gymnema montanum</i> and its pharmacological evaluation using genomic and proteomic approach (Indo-Japan)	DST-JSPS	2,58,000	Completed
3.	PI: Dr. S. John Venison Co-PI : Dr. P. Rajaguru	Transgenic <i>Bacillus sphaericus</i> for effective mosquito control	DBT	17,40,000	Completed
4.	Dr. S. John Venison	Cloning and expression of pyruvate decarboxylase and alcohol dehydrogenase genes in to cellulolytic bacteria for cellulosic ethanol production	DRDO	16,21,000	Completed
5.	Dr. S. John Venison	Cloning and expression of NS-1 and prM proteins for the diagnosis of dengue infections.	DST	22,40,000	Completed

6.	Dr. P. Sureshkumar	<i>In vitro</i> regeneration of selected endangered medicinal plants, activity guided extraction, comparative assessment of antidiabetic and antioxidant activity	DST-SERC	20,30,400	Completed
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**2005- 2006**

<b>Sl.No.</b>	<b>Name of the Faculty</b>	<b>Title of the Project</b>	<b>Funding Agency</b>	<b>Amount Sanctioned (in Rupees)</b>	<b>Status</b>
1.	Dr. P. Rajaguru	Evaluation of occupational genetic risks among dyeing and bleaching industrial workers	UGC	3,82,000/-	Completed