

RESEARCH PROJECTS

CONTINUING/UNDERTAKEN BY THE TEACHERS OF THE UNIVERSITY DURING 2015-16

Sr. No.	Name of the Teacher	Title of Research Project	Period		Funding Agency	Grant Sanctioned (Rs.)
			From	To		
FACULTY OF ARTS & SOCIAL SCIENCES						
POLITICAL SCIENCE						
1.	Dr. Jagrup Singh Sekhon	Life at the cutting Edge: Political Sociology of the people living in the Border Best of Punjab	01-07-2015	30-06-2018	UGC	10,67,400
PSYCHOLOGY						
2.	Dr. Rupan Dhillon	Depression hopelessness emotional autonomy and hardness as determinants of suicidalideation in adolescence	01-07-2015	30-06-2018	UGC	8,37,400
FACULTY OF ECONOMICS & BUSINESS						
COMMERCE						
3.	Dr. Balwinder Singh	Managing India New Zealand Institutional Challenges for success	01-06-2014	31-12-2015	UGC	6,42,750
4.	Dr. Aparna Bhatia	Contemporary Issue in corporate Social Reporting Practices in India: A journey from voluntary to Mandatory Regima	01-07-2015	30-06-2018	UGC	7,03,400
UNIVERSITY BUSINESS SCHOOL						
5.	Dr. Amarjit Singh Sidhu	Status of Public Health Care Services in Punjab: A Case Study of Punjab Health Systems Corporation (PHSC)	01-07-2015	30-06-2018	UGC	10,22,000
6.	Dr. Jasveen Kaur	Gender Differentiation in Projecting Antecedents & Consequentials of Impulse Buying Behaviour of Indian Retail Shoppers	01-07-2015	30-06-2018	UGC	10,23,000
FACULTY OF ENGINEERING & TECHNOLOGY						
COMPUTER SCIENCE						
7.	Dr. Kuljit Singh	Tracking open source software evolution for characterization of its evolutionary behaviour	01-07-2012	30-06-2015	UGC	9,35,800
FACULTY OF LIFE SCIENCES						
BIOTECHNOLOGY						
8.	Dr. P.K. Pati	Structure-function analysis of plant NADPH oxidase	16-12-2014	15-12-2017	DBT	14,11,200

9.	Dr. Gurcharan Kaur	Study of Molecular and cellular basis of obesity associated neuroinflammation and the role of natural products as neuroprotective agents	03-12-2015	02-12-2018	DBT	40,00,000
10.	Dr. Prabhjeet Singh	Role of peptidyl prolyl cis-trans isomerases in acquisition of thermotolerance in wheat	02-07-2015	01-07-2018	DBT	47,63,200
11.	Dr. Gurcharan Kaur	Behavioral and molecular study of relationship between chronic sleep deprivation and cognitive impairments	10-06-2015	09-06-2018	SERB	40,43,200
12.	Dr. P.K. Pati	Development of IN-SITU Regeneration system (Cell suspension & protoplast) and comparative analysis of bioactive compounds of Rhodiola Species: A high value medicinal plant from Trans-Himalayan Region of Ladakh	17-12-2015	16-12-2017	DRDO	8,80,000

BOTANICAL & ENVIRONMENTAL SCIENCES

13.	Dr. A.S. Soodan	Investigations into phytoliths for Identification and Taxonomic Analysis of Grasses of North Western Himalayan Region	01-07-2015	30-06-2018	UGC	11,25,000
14.	Dr. Avinash Nagpal	Indexing & Management of viruses & viroids Infecting Tomato Crop in Punjab & Neighbouring States	27-01-2015	26-01-2018	CSIR	30,12,000
15.	Dr. Saroj Arora	Profiling and quantification of hydrolytic products of Glucosinolates from germplasms of <i>Brassica juncea</i> (l.) Czern. and <i>Eraca sativa</i> (Mill.)	30-07-2012	29-07-2015	DST	53,24,600
16.	Dr. Manpreet Singh Bhatti	Diminution of arsenic and fluoride from drinking water electrocoagulation and nano-particles based absorbents	01-07-2015	30-06-2018	UGC	13,60,000
17.	Dr. Satwinder Jeet Kaur	Studies on the antiproliferative acritvitiy of <i>Glycyrrhiza glabra</i> L, polyphenols and their roel in targeting cellular signaling pathways	01-03-2015	29-02-2018	ICMR	5,88,000

HUMAN GENETICS

18.	Dr. A.J.S. Bhanwer	Targetted Genome Analysis of two Large diabetic retinopathy cohorts from northern and southern India	01-04-2015	31-03-2018	CSIR	27,96,000
19.	Dr. Vasudha Sambyal	Assessment of HIF-1a and TP53 as prognostic markers in esophageal cancer-Q Multidisciplinary Approach	24-07-2012	23-07-2015	DST	49,68,000

20.	Dr. Sanjana Mehrotra	Genetic and functional analysis of cytokine gene variants as risk factors for primary glaucoma in North Indian population	10-06-2015	09-06-2018	SERB	24,70,000
21.	Dr. Gursatej Gandhi	Molecular Genetics Correlates of DNA Damage and repair and of circadian Rhythm Dysfunction in Humans from Non-Ionizing Radiation Exposure	15-06-2015	01-06-2018	SERB	44,16,000
22.	Dr. Manpreet Kaur	Association of galectin-3 polymorphism its serum levels and oxidative stress biomarkers with Rheumatoid Arthritis (RA)	28-06-2013	27-06-2016	SERB	23,30,000
23.	Ms. Amandeep Kaur	Prevalance of genetic polymorphisms (MTHFR, MTRR, MTR, RCFI) among north mothers as risk factor for down syndrome	19-06-2014	18-06-2017	SERB	14,69,000
24.	Dr. Vasudha Sambyal	Assessing BRCA1 in sporadic breast cancer patients	01-07-2012	31-12-2015	UGC	7,12,500

MIRCROBIOLOGY

25.	Dr. H.S. Saini	Bioremediation of electronic waste(E-waste) for precious metal recovery and removal of polybrominated diphenyl ethers(PBDE's)	10-10-2013	09-10-2016	DBT	13,20,000
26.	Dr. H.S. Saini	Developing efficient microbial inocular for degradation of textile dyes and their amines: Genotoxicity evaluation for validation of their degradation potential	29-09-2011	28-09-2015	DBT	28,45,600
27.	Dr. B.S. Chadha	Developing Fungal strains for enzyme production through mutagenesis, protoplast fusion and over-expression using A. niger citrate synthase promoter	08-10-2013	07-10-2016	DBT	26,37,200
28.	Dr. H.S. Saini	Microbial diversity of Industrial waste Polluted sites of Punjab: Biogeochemical instructions for rejecting of metals and degradation of pollutants	21-03-2014	20-03-2017	DBT	35,80,000
29.	Dr. Pratapbir Singh	Development of cost-effective bioprocess for biosurfactant production: it's effective process scale-up	22-08-2013	21-08-2016	SERB	24,35,000
30.	Dr. B.S. Chadha	Thermophilic fungi from diverse ecosystems and their potential for producing industrially important enzymes (AMAAS)	25-06-2014	31-03-2017	ICAR	31,62,000

31.	Dr. B.S. Chadha	Increasing the efficiency of Microbial production of Bioethanol from agricultural Biomass (NFBSFARA)	01-01-2011	31-12-2015	ICAR	45,14,220
32.	Dr. Sukhraj Kaur	In vitro evaluation of anticancer and antimicrobial properties of novel bacteriocins from human lactic acid bacteria	01-04-2013	31-03-2016	UGC	11,78,300
33.	Dr. Daljit Singh Arora	Profiling of Moringa oleifera Endophytes with Antimicrobial Potential	01-07-2015	30-06-2018	UGC	10,70,000
34.	Dr. Rajesh Kumari Manhas	Isolation of endophytic and soil antinobacteria and evaluation of their plant growth promoting potential	01-07-2015	30-06-2018	UGC	8,96,000

MOLECULAR BIOLOGY & BIOCHEMISTRY

35.	Dr. Rachna Hora	Structure-function analysis of an essential exported, parasite protein	25-07-2013	24-07-2016	DBT	43,64,234
36.	Dr. Seema M Thayil	Comparision of phenotypic and genotypic resistance in TB isolates from previously treated and treatment native coinfectd individuals	14-08-2013	13-08-2016	DST	23,43,000
37.	Dr. Jatinder Singh	Molecular Cloning and expression of two insecticidal lectins	13-11-2013	12-11-2016	SERB	48,50,000
38.	Dr. Anup Kumar Kesavan	Functional Characterization of the Iron Regulatory Negative Repressor Gene sirR In Mycobacterium smegmatis	01-12-2013	30-11-2016	CSIR	31,02,667
39.	Dr. Gagandeep Kaur Gahlay	Characterisation of the role of carbohydrates in sperm-egg interactions	03-12-2015	02-12-2018	DBT	13,03,200

PHARMACEUTICAL SCIENCES

40.	Dr. S.K. Jain	Development and characterization of carrier based nanogel formulation for skin targeting of 5-FU	14-05-2012	13-05-2015	DST	17,00,000
41.	Dr. M.P.S. Ishar	Design, Synthesis, Conformational Studies and Evaluation of Some Novel Rigid Scaffold For Peptidommetics	20-1-2013	19-1-2016	CSIR	14,69,333
42.	Dr. M.P.S. Ishar	Design synthesis and evaluation of novel isoxazolidine analogs of nicotine	01-07-2012	31-12-2015	UGC	15,05,800
43.	Dr. S.K. Jain	Development and Characterization of vitamin E TPGS based nanoemulsion for sustained and targeted delivery of anti-fungal agents	01-04-2013	31-03-2016	UGC	11,59,000

44.	Dr. P.M.S. Bedi	Design synthesis and anticancer evaluation of triazole tethered cis locked chalcones – isatin bifunctional hybrids : Synthesis and anticancer evaluation	01-03-2015	29-02-2018	ICMR	6,21,000
-----	-----------------	--	------------	------------	------	----------

ZOOLOGY

45.	Dr. Sanehdeep Kaur	Developing Strategies for Biological Control of <i>Spodoptera litura</i> (Fab.) by Understanding the Role of Gut Microflora in its Survival and Fitness	18-09-2012	17-09-2015	DBT	35,35,400
46.	Dr. Puja Ohri	Evaluation of stress protective properties of 24-epibrassinolide in plants during nematode infection	01-07-2012	31-12-2015	UGC	13,37,800
47.	Dr. Sanehdeep Kaur	Influence of endophytic fungi on insect herbivore and its parasitoid: Understanding multitrophic interaction for effective bio control strategies	01-07-2015	30-06-2018	UGC	15,35,000
48.	Dr. Satwinder Kaur	Biocidal biochemical effects of extracts/polyphenolic rich fractions from bark of <i>Acacia nilotica</i> (L.) Del. against the common cutworm <i>Spodoptera litura</i>	01-07-2015	30-06-2018	UGC	15,49,500

FACULTY OF PHYSICAL EDUCATION

PHYSICAL EDUCATION

49.	Dr. Baljinder Singh Bal	Research Award to Dr. Baljinder Singh Bal	01-03-2015	30-06-2016	UGC	1,00,000
-----	-------------------------	---	------------	------------	-----	----------

FACULTY OF SCIENCES

CHEMISTRY

50.	Dr. R.K. Mahajan	Spatial Distribution of uranium and associated water quality parameters in ground water in seven northern districts (Tarn Taran, Amritsar, Gurdaspur, Pathankot, Kapurthala, Jalandhar, Hoshiarpur) of Punjab	01-04-2015	31-03-2017	BRNS	21,62,900
51.	Dr. Paramjit Kaur	Electrospectrophotometric Chemosensors and Their Application to Reconfigurable Molecular Logic Gates	01-10-2012	30-09-2015	CSIR	15,20,000
52.	Dr. Parabhpreet Singh	Development of Perylene-Azobenzene Constructures and Their Applications	01-11-2012	31-10-2015	CSIR	20,12,000
53.	Dr. Vandana Bhalla	Fluorescent Materials: Synthesis and Evaluation of Aggregation Behaviour	01-04-2013	31-3-2016	CSIR	19,21,333

54.	Dr. Tarlok Singh Lobana	Metal Mediated Chemical Reactivity of Heterocyclic thiones	01-01-2013	31-12-2015	CSIR	18,96,000
55.	Dr. Tejwant Singh	Self-Assembled Polymer Architecture & their composites with Quantum Dots in Ionic liquids & Ionic liquid/water binary mixtures	21-11-2014	20-11-2017	CSIR	13,42,000
56.	Dr. Palwinder Singh	Charismatic world of peptides: Design, synthesis and evaluation of small peptides for anti-inflammatory and anti-microbial activities	01-02-2015	31-01-2018	CSIR	21,96,000
57.	Dr. S. S. Chimni	Organocatalyzed enantioselective decarboxylative carbon-carbon bond formation	01-01-2016	31-12-2018	CSIR	9,24,000
58.	Dr. S.S. Chimni	Biotransformation of epoxides by recombinant epoxide hydrolases	28-09-2012	31-03-2016	DBT	13,44,600
59.	Dr. Manoj Kumar	Pentaquinone Based Receptors-A Search for New Chemosensors	11-07-2012	10-07-2015	DRDO	56,17,000
60.	Dr. B.S. Randhawa	Synthesis of Pure and mixed ferrites from the solution combustion and precursor methods- A comparative study	30-05-2012	29-05-2015	DRDO	25,52,000
61.	Dr. S.S. Chimni	Development of application of Cinchona alkaloids derived organocatalysts for asymmetric transformation	14-05-2012	13-05-2015	DST	46,85,000
62.	Dr. R.K. Mahajan	A comprehensive study of aggregate assemblies of surfactant-triblock polymer system	23-05-2012	22-05-2015	DST	45,60,000
63.	Dr. Palwinder Singh	Targeting ABC transporters of Candida albicans: Development of chemosensitizers of antimicrobial drugs	11-07-2012	10-07-2015	DST	49,00,000
64.	Dr. Subodh Kumar	Fabricated nano-structured organic hybrids Chemosensors and logic Devices	11-08-2015	10-08-2018	DST	1,21,36,400
65.	Dr. Vipin Kumar	4-Aminoquinoline – phthalimide and 4-aminoquinoline-1, 8-naphthalimide conjugates: Synthesis and anti-material evaluation	15-01-2016	14-01-2019	SERB	25,76,000
66.	Dr. Venus Singh Mithu	Structural Characterization of cell-membrane mediated amyloidogenic-protein aggregation and the association membrane disruption at molecular level	19-10-2015	18-10-2018	SERB	24,46,000

67.	Dr. Inderpreet Kaur	Modification of metal surface by self-assembly of heterocycle based thiols and dithiols: Towards selective electrochemical sensing	19-11-2015	18-11-2018	SERB	26,02,000
68.	Dr. Vandana Bhalla	Aggregation Induced Emmission Enhancement Materials: Synthesis and Evaluation of Photophysical Properties	01-12-2015	30-11-2018	SERB	50,94,000
69.	Dr. Palwinder Singh	Design and synthesis of Enzyme models: Mechanistic studies and Medicinal Applications	15-01-2016	14-10-2019	SERB	42,06,000
70.	Dr. Manoj Kumar	Discotic materials with tunable photophysical properties	02-07-2013	01-07-2016	SERB	54,50,000
71.	Dr. Subodh Kumar	1-Arylbenzimidazolium based molecular architects of recognition of anions	28-06-2013	27-06-2016	SERB	54,70,000
72.	Dr. Kamaljit Singh	Synthesis and evaluation of functional organic materials	28-02-2014	27-02-2017	SERB	47,00,000
73.	Dr. Prabhpreet Singh	Polyamine-Dendronized perylene-tetra Carboxidic-mide based water soluble bola-amphiphiles	04-12-2013	03-12-2016	SERB	24,38,000
74.	Dr. Tejwant Singh	Thermo-responsive liquid crystalline micro-emulsions based on Ionic liquids, Preparation Characterization and applications	24-06-2014	23-06-2017	SERB	24,88,000
75.	Dr. Paramjit Kaur	Multi channel recognition of Ionic analysis using ferrocene based sensors	01-07-2012	30-06-2015	UGC	11,76,800
76.	Dr. Ritu Bala	Cationic chromium urea complex as an anion receptor Synthesis, characterization and X-ray structural study of Hexaureachromium (III) Complexes	01-07-2012	30-06-2015	UGC	10,40,800
77.	Dr. Manoj Kumar	Fluoregenic sensing of soft metal ions	01-04-2013	31-03-2016	UGC	10,63,800
78.	Dr. Rakesh Kumar Mahajan	Characterization of self assemblies of surfactants in the presence of bioactive compounds	01-04-2013	31-03-2016	UGC	13,35,800
79.	Dr. P.K. Banipal	Studies on Solvation Behaviour of polyhydroxy Compounds in Mixed Aqueous Media	01-07-2015	30-06-2018	UGC	14,28,600
80.	Dr. Inderpreet Kaur	Self-assembled monolayers of functional molecular monowires: Electron transportation studies and applications for electrochemical sensing of heavy metal ions	01-07-2015	30-06-2018	UGC	12,18,600

81.	Dr. Venus Singh Mithu	UGC Start-up grant	30-03-2015	25-03-2017	UGC	6,00,000
FOOD SCIENCE & TECHNOLOGY						
82.	Dr. Amritpal Kaur	Effects of processing and storage conditions on physicochemical properties and stability of oils from different plant sources	14-08-2015	13-08-2018	SERB	45,00,000
83.	Dr. N.S. Sodhi	Development of Electromyographic methodologies to study texture of Indian foods	01-07-2015	30-06-2018	UGC	16,60,800
84.	Dr. H.S. Gujral	Reviving the utilization of millets and minor cereals in chapatti to Deliver Bioactive Components	15-07-2014	14-07-2016	SERB	52,88,000
85.	Dr. R.S.S. Kaler	Characterization and modification of cereal grains for value addition	01-07-2015	30-06-2018	UGC	14,22,000
86.	Dr. D.S. Sogi	Ascertaining Immunoreactivity of gliadin isolated from North Indian Wheat Cultivars, Probiotic fermented dough and gluten free products	23-07-2013	22-07-2016	DBT	42,50,000
87.	Dr. Amritpal Kaur	Quality Characterization and utilization of durum wheat cultivars	31-12-2012	30-12-2015	DST	24,22,000
88.	Dr. Narpinder Singh	Chemical, rheological and processing quality of fractions produced by successive size reduction milling of different wheat varieties	26-07-2013	25-07-2015	SERB	69,20,800
89.	Dr. Amritpal Kaur	Development and Quality Evaluation of Gluten free Products for Celiac disease patients	01-10-2013	30-09-2016	SERB	45,42,000
90.	Dr. Amritpal Kaur	Characterization and utilization of Banana flour in Different products	01-07-2012	31-12-2015	UGC	11,80,000
91.	Dr. Narpinder Singh	Modification of starches from different botanical sources	01-07-2012	31-12-2015	UGC	11,97,200
92.	Dr. Narpinder Singh	Diversity in processing quality amongst corn genotypes grown in Indian Himalaya	26-07-2012	25-07-2015	DST	54,99,400
PHYSICS						
93.	Dr. B.S. Bajwa	MOU between BARC, Mumbai & GNDU, Amritsar for setting up of a Model calibration Centre at Guru Nanak Dev University, Amritsar to strengthen radon studies in the state of Haryana, Rajasthan and Punjab.	01-04-2011	31-03-2016	BARC	25,05,000

94.	Dr. Aman Mahajan	Transitional metal Sulphides based counter electrode for dye sensitized solar cells	01-04-2013	31-03-2016	BRNS	24,96,048
95.	Dr. Bindiya Arora	Uncertainties in Frequency Standards	10-07-2013	09-07-2016	CSIR	20,73,000
96.	Dr. R. Thangaraj	Study of characteristic defects for tailoring the phase change behavior in chalcogenide semi conductors	30-07-2012	29-07-2015	DST	20,82,800
97.	Dr. Atul Khanna	Nanostructured Multicomponent Bismuth-Borate Glasses and Glass Ceramics	29-08-2013	28-08-2016	DST	5,25,000
98.	Dr. Anupinder Singh	Enhanced magneto electric properties in perovskite solid solutions for multiferroic device	28-02-2014	27-02-2017	SERB	26,16,000
99.	Dr. Atul Khanna	Study of effects of ion beam irradiation on the structure and properties of oxide glasses.	06-09-2013	05-09-2016	IUAC	5,46,333
100.	Dr. N.S. Saini	Nonlinear excitations and solitary structures in Multi-component plasmas	01-07-2012	31-12-2015	UGC	9,79,800

GURU NANAK DEV UNIVESITY REGIONAL CAMPUS, JALANDHAR

ELECTRONICS & COMMUNICATION ENGINEERING

101.	Dr. Harminder Singh	Study of the performance of nanostructured coating at elevated temperatures	23-09-2015	22-09-2018	SERB	32,06,000
------	---------------------	---	------------	------------	------	-----------