



# Join India's Most Prestigious PPP R&D Initiative

PRIME MINISTER'S
FELLOWSHIP SCHEME
FOR DOCTORAL RESEARCH

A PPP Initiative of Science & Engineering Research Board (SERB) Department of Science & Technology, Government of India and Confederation of Indian Industry (CII)





# 100 FELLOWSHIPS IN THE AREAS OF

SCIENCE | TECHNOLOGY | ENGINEERING AGRICULTURE | MEDICINE

AN OPEN-ENDED SCHEME

#### **ABOUT THE SCHEME**

The scheme supports full-time PhD scholars with a scholarship of up to Rs 8.7 lakh per annum per candidate. The scheme has the provision to award up to 100 new scholarships every year. As per the provisions of the scheme, as approved by the Department of Science and Technology, the scholarship will be given for a maximum period of four years, 50 per cent of which will come from the government and 50 per cent from the partner

#### **ELIGIBILITY**

- The applicant should be a full-time PhD scholar in any recognized Indian university / institute / research laboratory. The scholar's PhD registration date should not be more than 14 months from the date of submission of application.
- The applicant should have a valid industry partner who should be ready to support the research project financially as well as provide guidance and mentorship.

#### **BROAD CRITERIA FOR SELECTION**

- The projects should be innovative and of high scientific merit; with discrete R&D as opposed to exploratory investigation.
- · The proposed research project should have a high commercialisation potential.
- · The applicant, the academic guide and the industry mentor should have strong track record.

RESEARCH PROJECTS AWARDED IN 2013 - 2016							
S. No.	PM Fellow	Partner Company	Partner Institute	Research Topic			
1.	Abhijnan Chakraborty	Google India Pvt. Ltd.	IIT Kharagpur	Designing Information Retrieval Systems Optimized to Users' Sampling			
2.	Adinarayana Ganjigunta	Nuziveedu Seeds Ltd.	Acharya Nagarjuna University	Strategies Improvement of Tropical Maize By Introgression Superior Alleles Responsible			
3.	Ajay Krishnan	Godrej & Boyce Mfg Co.	IIT Bombay	For Increase Of Lysine, Tryptophan & B - Carotene Influence of Temper Conditions on the Environmentally Assisted Cracking of AA			
4.	Akash Dilipkumar Patel	Ltd. Abellon Clean Energy Ltd.	Hemchandracharya North Gujarat University	7085 Alloy Economic and Environmental Potential of Industrially Useful Microalgae cultivation			
5.	Akula Durga Vara Prasad	Tata Steel Limited	IIT Bombay	Microstructural Engineering in Wire Rod: Possibilities?			
6.	Andugulpati Sai Balaji	Strand Life Sciences	Karnataka College of Pharmaceutical Sciences, Karnataka University	To Study the Role of ABCC Family of Drug Transporters in Breast Cancer Chemoresistance			
7.	Ankit Kumar Agarwal	Sahajanand Medical Technologies Pvt. Ltd.	ICT Mumbai	Development of Smart Drug Eluting Stents			
8.	Anup Kundu	Forbes Marshall Pvt. Ltd.	IIT Bombay	Numerical and Experimental Investigation of Heat Transfer Enhancement in Heat Exchanger			
9.	Archana Rajendran	Hoganas AB	CSIR-CERI, Karaikudi	Fabrication of porous Ti and Ti alloys with multi element substituted nano- structured titania layer having bioactivity, antibacterial activity and bone cell			
10.	Ashok Babadev Jagtap	Maxim Crop Sciences Pvt. Ltd.	Punjab Agricultural University	responses for biomedical application Identification And Characterization Of High Temperature Stress Responsive Genes In Maize (Zea Mays L.)			
11.	Avick Sinha	GE India Technology Center Pvt. Ltd.	IIT Bombay	Numerical and Experimental Study of Superheated Liquid Jet			
12.	Babita Mukhija	Sampurn Agri Ventures Pvt. Ltd.	Punjab Agricultural University	Characterization of native Bacillus thuringiensis isolates against Mylabris pustulata Thunberg in Pigeonpea and optimization of Bioprocess parameters			
13.	Barnali Banerjee	Shell India Markets Private Limited	NIT Rourkela	Fundamental Investigations of Cationic Surfactants with Bitumen Product Components			
14.	Bhaskar Bethi	K-Pack Systems Private Limited	NIT Warangal	Development of pilot scale cavitation assisted catalytic membrane reactor for wastewater treatment			
15.	Boyapati Subrahmanyam	Intel Corporation, USA	IIT Bombay	Low-Noise Nano Scale Signal Conditioning Integrated Circuits for Portable Electro-Medical and Electro-Sensor Applications			
16.	Chandresh Kumar Maurya	Robert Bosch Engineering and Business Solutions Limited	IIT Roorkee	Anomaly Detection in Big Data			
17.	Chiranjeevi Yarra	Xerox India Limited	IISc Bangalore	Analysis of Temporal Contours of Spoken Language Learning			
18.	Darshak Bhatt	Intel Corporation, USA	IIT Bombay	Study and Design of Integrated Mixer and Local Oscillator Topologies for WiFi and WiMAX Systems			
19.	Darsheen Jitendrabhai Kotak	Zim Laboratories Ltd.	ICT Mumbai	Design and Development of Non-Invasive Drug Delivery Systems For Large Molecules			
20.	Deepak C Akiwate	Eaton Technologies Pvt. Ltd.	IIT Hyderabad	Acoustic Analysis of Periodic Structures			
21. 22.	Deepika Pandey Dhivyaraja Kumaran	Tata Chemicals Ltd. Corporate Research & Technology, Eaton Corporation	Karnataka University IIT Madras	Study on Production of Gamma-Polyglutamic Acid by Bacillus Sp. Advanced Micro Spray Cooling Technologies For High Power Density Hydraulics			
23.	Dinesh Bapurao Balgude	Nova-Surface Care Centre Pvt. Ltd.	ICT Mumbai	Modification of Renewable Resources for Coating Applications			
24.	Ejaz Ahmad	Hindustan Petroleum Corporation Limited	IIT Delhi	Catalytic Conversion of Biomass Derived Residual Lignin into Aromatics and Value Added Chemicals			
25.	Govardhan Rao Talluri	Maxim Integrated, California	IIT Bombay	High Speed I/Os for Chip to Chip Interconnects			
26	Gundappa Saha	Cadila Pharmaceuticals Limited	IIT Guwahati	Immunosuppression during Leishmania infection and immuno-therapeutics against the parasite.			
27.	Gunjan Gurunath Naik	Persistent Systems Limited	Savitribai Phule Pune University	Adaptive kernel framework for Active mechanism for effective segmentation strategies			
28.	Gunjan kumar Jagdishbhai Mehta	Skymax Research & Regulations	Saurashtra University, Rajkot, Gujarat, India	Isolation, Identification and Evaluation of Quorum Sensing Inhibitors (QSIs) From Medicinal Phytoextracts			
29.	Hament Thakur	Verdenta Hybrid Seeds Pvt. Ltd.	Punjab Agricultural University	Genetics and Molecular Mapping Of Leaf Curl Virus Disease Resistance Gene(S) in Chilli Pepper (Capsicum Annuum L.)			
30.	Harshal Agarwal	Thermax Ltd.	AcSIR Chennai	Thermal Management of High Temperature Proton Exchange Membrane Fuel Cell (HT-PEMFC) Integrated with Fuel Reformer and Vapor Absorption Machine			
31.	Hiren Kumar Mansukhbhai	Solar Agrotech Pvt. Ltd.	Saurashtra University	Isolation and Evaluation of Anti-Pathogenic Bacteria from Cotton Rhizosphere			
32.	Inayathullah Ghori	Kamineni Hospital Ltd.	IIT Hyderabad	Development of a low-cost screening system devised to identify cardiac diseases in a rural health care setup.			
33.	Indu Elizabeth	EON Electric Ltd.	Academy of Scientific and Innovative Research (AcSIR)	Novel Electrode Materials For Lithium Ion Batteries			
34.	Ishita Das	Krish Biotech Research Pvt. Ltd.	NIT Durgapur	Microbial production of a surfactant and study of its agricultural application			
35.	Jagreeti Gupta	Beauscape Farms	Punjab Agricultural University	Morphological And Physiological Parameters of Subtropical Ornamental Trees Under Salt Stress Under Salt Stress			
36.	Jailakshmi Menon	Autosys Engineering (P) Ltd.	Anna University	Development of Control Algorithm for Canal Automation			
37.	Jaydeep Bipin Deshpande	NanoXpert Technologies	National Chemical Laboratory	Process Design for the synthesis of Nanomaterials and Scale-up			
38. 39.	Jyoti Shankar Jha Karanveer Singh Aneja	Bharat Forge Limited Talga Resources Ltd.	IIT Bombay IIT Bombay	Microstructure based fatigue modeling of Titanium Alloy (Ti-6Al-4V) Graphene based anticorrosive coatings			

#### **SELECTION PROCESS**

A high level Apex Council consisting of members from academia, industry and government will review the applications and select the candidates for award of PM Fellowship.

#### **FUNDING SUPPORT**

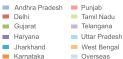
- Fellowships for up to 100 research projects will be supported in every financial year.
- Fellowship amount of up to Rs. 8,70,000/- per annum per candidate

50% contribution is by SERB [being equivalent to the prevailing Government norms for JRF /SRF (inclusive of HRA)]. This amount is subject to revision as per the JRF/SRF norms from time to time. Rest 50% (matching equivalent of SERB component) will come from the partner company.

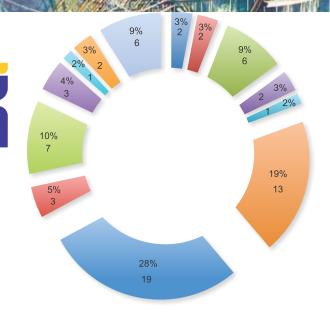
S. No.	PM Fellow	Partner Company	Partner Institute	Research Topic
40.	Karthikeyan Palaniswamy	Joegeetha Plastic Pipes	Tamil Nadu Agricultural University	Techno - Economic Prospects and Environmental Perspective of Recycling Agricultural Plastic Waste towards Sustainable Productivity
41.	Kaushal Rameshchandra Parmar	Hindustan Petroleum Corporation Limited	IIT Delhi	Catalytic decomposition of methane in fluidized bed reactor.
42.	Kavitha Manoharan	Sree Akzya Dyeing	Alagappa University	Nanoparticles Based Biodegradation & Power Generation by Waste Water Bacteria
43.	Madhava Krishna C	Morphing Machines Pvt. Ltd.	Indian Institute of Science, Karnataka	Architecture and Compiler Support for Concurrent Program Execution on Application Specific Massively Parallel Processors
44. 45.	Mahesh Maroti Dhakate Manoj Kumar Puniya	United Phosphorus Ltd. Prathista Industries Limited	IIT Bombay Indian Agricultural Research Institute	Optimum Design and Scale-up of Air Jet Mills: Experimental and Computation Anthocyanins as ingredients for food industry: Strategy for extraction, functional characterization and enhanced stability
46. 47.	Monika Gupta Mrityunjay	Infosys Ltd. Aarti Industries Ltd.	IIIT Delhi CSIR- NCL Pune	Mining Peer Code Review Process Selectivity Engineering of Exothermic Multi-step Reactions using Flow Reactors
48.	Kehsavprasad Sharma Murugan Ezhumalai	Arche Biologics	PSG College of Arts & Science	Designing and Prototyping of Computer Interfaced Embedded Design for
49. 50. 51	Narendra Akiti Naveen Kaushik Neeraj C Hanumante	P&G, Beijing Applied Materials, Inc. Tata Chemicals Limited	IIT Bombay IIT Bombay IIT Bombay - Monash University Research Academy	Psychological Patients & Future Warrior Hand Wear System Granule Breakage in a Controlled Shear Field - Modelling and Experiments Germanium as Channel Material for Future CMOS Applications Agent based modeling for sustainability assessment
52. 53.	Neha Bhardwaj Nidhina M Bhaskaran	Petrotech Society Jai Bharath Gum & Chemical Ltd.	IIT Delhi CSIR-CFTRI, Mysore	Oil-slick Control and Development of an Intelligent Oil-recovery System Biotechnological Approaches for Value Addition of Industrial Guar Meal
54.	Padma Ishwarya Shankaran	General Mills India Pvt. Ltd.	CFTRI Mysore	A combined computational modeling and experimental approach to investigate the influence of non-wheat particulate ingredients on volume and structure
55.	Piyali Dhar	Thermax India Limited	IIT Madras	development in baked food systems Pre-Treatment of Lignin By Non-Conventional Methods and Catalytic Conversion to Useful Compounds
56.	Poonam Mishra	Tata Chemicals Ltd.	Karnataka University	Isolation, Purification, characterization and optimization of fermentation conditions of γ-Polyglutamic acid producing Microbes
57.	Porselvam Subramanian	Envian Engineers Pvt. Limited	CSIR-CLRI, Chennai	Study on Influence of Pre-Treatment and Co-Digestion on Biogas Production from Slaughter House Solid Waste With Other Organic Waste
58. 59.	Pratichi Singh Rahul Dubey	IBIDEN Co. Ltd. Robert Bosch Engineering and	Banaras Hindu University IIT Delhi	Quaternary Catalyst for Control of Diesel Engine Exhausts Emissions Adaptive and Intelligent Protection Scheme for Transmission Network Including Facts and Off-Shore Wind-Farms
60.	Rahul Jain	Business Solutions Ltd. Intel Technology India	IIT Delhi	Runtime System Adaptation for Optimal Energy-Performance Trade-off
61.	Rajpreet Kaur Goraya	Pvt. Ltd. The Punjab State Cooperative Milk Producers Fed Limited	Punjab Agricultural University	Development of Low Sugar/Sugar Free Ice Cream and Whey Beverages with Improved Physico-Chemical And Sensory Attributes
62. 63.	Ravi Bhandari Rohit Kumar	(Milkfed Punjab) Microsoft Research India Petrotech Society	IIT Bombay IIT Delhi	Improving Road Safety using Smart Sensing Catalytic Tri-reforming of Methane for Syn-gas Generation over Multi-functional Catalysts
64.	Sajal Saha	Tata Steel Limited	Bidhan Chandra Krishi Viswavidyalaya	From Wastes to Assets - Use of Iron Slime in Agriculture
65.	Sameena Naaz Malik	Ozone Research and Application India Pvt. Ltd.	IIT Bombay	Development, Optimization, Modelling and Scale-Up of a High Performance Pre-Treatment System For Complex Industrial Wastewaters For Biodegradability Enhancement, Colour and Toxicity Reduction Along With
66.	Sameer Kumar Sarma Pachalla	Preca Solutions India Pvt. Ltd.	IIT Hyderabad	Concomitant Biofuel Production Effect of Openings in Prestressed Precast Hollow Core Slabs
67. 68.	Sammit Ekanath Karekar Sandeep Kumar	Suyog Nirmiti Cymk Inks LLP	ICT Mumbai University Institute of Engineering and Technology, Kurukshetra	Development of Nanocontainers for Performance Applications Synthesis & Characterization of Graphene Based Conductive Ink for Flexible & Printable Electronics
69.	Sankaran K	Trichy Distilleries &	University NIT Trichy	Microalgae Treatment of Distillery Wastewater
70.	Sankepally Samara Shekar Reddy	Chemicals Ltd. Varsha Bioscience and Technology	Amity University, Jaipur	Abiotic stress tolerance in Oryza sativa.L (paddy) mainly drought and salinity tolerance using genetic transformation techniques
71.	Shamayeeta Rey	Piramal Healthcare Ltd.	IIT Bombay	Structural Characterization of Regulatory Proteins Useful in Developing Biosensors for Water Purification System
72.	Shibin Krishnan Tc	Simco Global Technology & Systems Ltd.	National Physical Laboratory (CSIR-NPL)	Growth of In, Ga(Al), N Based Heterostructures and Characterization for High- Efficiency Nitride Solar Cell
73.	Snehkumar Narendrakumar Shahani	Persistent Systems Ltd.	Savitribai Phule Pune University	Techniques of Privacy Preserving Data Aggregation in an Untrusted Distributed Environment
74. 75.	Soujit Sengupta Srinivasa Sudharsan Govindan	Thermax Ltd. Vaata Infra Limited	IIT Bombay Thiagarajar College of Engineering	Graphene-Based Composite for Capacitive Deionization and Water Purification Advanced Controllers For Optimizing Wind Energy
76. 77.	Subhadeep Das Subhrakanti Nanda	Piramal Enterprises Ltd. G.E. Motors Pvt. Ltd.	IIT Bombay Bengal Engineering and Science University, Shibpur	Engineering Amyloids for Nanotechnology and Neuronal Cell Regeneration Investigations on Permanent Magnet Synchronous Generator (PMSG) for Different Renewable Energy Sources
78.	Sushrut Sandeep Bhanushali	Thermax Ltd.	IIT Bombay	Investigation of Thermo-Physical Properties of Nanofluids
79. 80.	Vaishakhi Trivedi Veera Asha Kumari Aketi	Natco Pharma Limited National Mineral Development Corporation (NMDC)	Tata Memorial Hospital IIT Hyderabad	Characterization of therapeutically relevant alterations in human cancer Improving the Efficiency of Dense Medium Cyclone Treating High NGM Coal Using CFD and PEPT Methods
81.	Venkatesh Vinayakarao	Limited Microsoft Research, India	IIIT Delhi	Semantic Analysis & Synthesis of Source Code

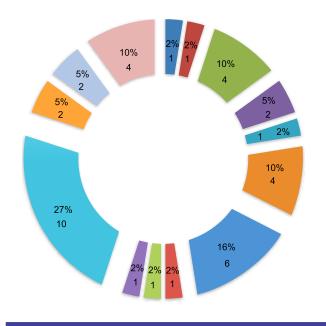
#### **Geographical Spread of Industry Partners**

A total of 67 companies spread all across the world are partners in the Prime Minister's Fellowship Scheme. These include 61 Indian companies and 6 international companies.









### **Geographical Spread of Institutes**

Andhra Pradesh Orisha Assam
Delhi Raiasthan Gujarat Tamil Nadu TelanganaUttar Pradesh Haryana Karnataka Maharashtra West Bengal

The 81 candidates receiving the Prime Minister's Fellowship are spread over 40 institutes across 14 states. Maximum number of institutes with PM Fellows are in Tamil Nadu.

## Stream-wise Spread of Research Subjects

Maximum candidates are working on research projects which are in Engineering domain.

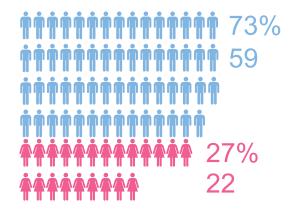












# **Gender Ratio of PM Fellows**

Male Female

While there are 22 female candidates, there are 59 male candidates.

Confederation of Indian Industry (CII)

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