




Confederation of Indian Industry



Science & Engineering
Research Board

Join India's Most Prestigious PPP R&D Initiative

Bright PhD Scholars Working on Industry's Research Assignments



PRIME MINISTER'S FELLOWSHIP SCHEME FOR DOCTORAL RESEARCH

A PPP Initiative of Science
& Engineering Research Board
(SERB) 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 aspiring PhD scholars with double scholarship (up to a maximum Rs. 8.7 lakh per annum, which is slated to increase further soon). 50% of the scholarship is provided by government and balance 50% by a sponsoring industry, for doing research for four years and the research fellow receives PhD degree by doing this industrial research. The maximum duration of the fellowship is 4 years.

ELIGIBILITY

Doctoral fellow should have enrolled / admitted for PhD in last 14 months from the date of submission of applications in any recognized Indian University / Institute / Research Laboratory.

BROAD CRITERIA FOR SELECTION

- Industry supported research
- High practical relevance and industrial application
- High technical and scientific merit
- High credibility, capacity of doctoral fellow and the institution
- High degree of business interest, involvement and collaboration of industry

RESEARCH PROJECTS AWARDED IN 2013 - 2015

S.NO.	PARTNER COMPANY	PARTNER INSTITUTE	RESEARCH TOPIC
1	Applied Materials, Inc, USA Naveen Kaushik	IIT Bombay	Germanium as Channel Material for Future CMOS Applications
2	Arche Biologics Murugan Ezhumalai	PSG College of Arts & Science	Designing and Prototyping of Computer Interfaced Embedded Design for Psychological Patients & Future Warrior Hand Wear System
3	Autosys Engineering (P) Ltd Jailakshmi Menon	Anna University	Development of Control Algorithm for Canal Automation
4	Baker IDI Heart and Diabetes Institute Holdings Ltd Geethika Motika	IISc Bangalore	Endothelial Nitric Oxide Synthase in Vascular Disease: Development of Enzyme Modulators for the Improvement of Endothelial Dysfunction and Diabetes-associated Atherosclerosis
5	Beauscape Farms Jagreeti Gupta	Punjab Agricultural University	Morphological and Physiological Parameters of Subtropical Ornamental Trees Under Salt Stress
6	Corporate Research & Technology, Eaton Corporation Dhivyaraja Kumaran	IIT Madras	Advanced Micro Spray Cooling Technologies for High Power Density Hydraulics
7	Enovex Corp, Canada Aparna Banerjee	IISER Pune	Use of Hydrophobic MOFs in Hydrocarbon Separation
8	Enovex Corp, Canada Shyamapada Nandi	IISER Pune	Adsorptive Air Separation by Using Porous Metal Organic Frameworks
9	Envian Engineers Pvt Ltd Porselvam Subramanian	CSIR-Central Leather Research Institute, Chennai	Studies on Influence of Pre-Treatment and Co-Digestion on Biogas Production from Slaughter House Solid Waste With Other Organic Waste
10	EON Electric Ltd Indu Elizabeth	Academy of Scientific and Innovative Research (AcSIR)	Novel Electrode Materials for Lithium Ion Batteries
11	Forbes Marshall Pvt Ltd Anup Kundu	IIT Bombay	Numerical and Experimental Investigation of Heat Transfer Enhancement in Heat Exchanger
12	G.E.Motors Pvt Ltd Subhrakanti Nanda	Bengal Engineering and Science University	Investigations on Permanent Magnet Synchronous Generator (PMSG) for Different Renewable Energy Sources
13	GE India Technology Center Pvt. Ltd. Avick Sinha	IIT Bombay	Numerical and Experimental Study of Superheated Liquid Jet
14	General Mills India Pvt Ltd Padma Ishwarya Shankaran	Central Food Technological Research Institute, Mysore	A Combined Computational Modeling and Experimental Approach to Investigate the Influence of Non-Wheat Particulate Ingredients on Volume and Structure Development in Baked Food Systems
15	Godrej & Boyce Mfg Co Ltd Ajay Krishnan	IIT Bombay	Influence of Temper Conditions on the Environmentally Assisted Cracking of AA 7085 Alloy
16	Google India Pvt Ltd. Abhijnan Chakraborty	IIT Kharagpur	Designing Information Retrieval Systems Optimized to Users' Sampling Strategies
17	IBIDEN Co Ltd Pratichi Singh	Banaras Hindu University	Quaternary Catalyst for Control of Diesel Engine Exhausts Emissions
18	Infosys Ltd Monika Gupta	IIIT Delhi	Mining Peer Code Review Process
19	Intel Corporation, USA Boyapati Subrahmanyam	IIT Bombay	Low-Noise Nano Scale Signal Conditioning Integrated Circuits for Portable Electro-Medical and Electro-Sensor Applications
20	Intel Corporation, USA Darshak Bhatt	IIT Bombay	Study and Design of Integrated Mixer and Local Oscillator Topologies for WiFi and WiMAX Systems
21	Intel Technology India Pvt Ltd Rahul Jain	IIT Delhi	Runtime System Adaptation for Optimal Energy-Performance Trade-off
22	Jai Bharath Gum & Chemical Ltd Nidhina M Bhaskaran	CSIR-CFTRI, Mysore	Biotechnological Approaches for Value Addition of Industrial Guar Meal
23	Joegeetha Plastic Pipes Karthikeyan Palaniswamy	School of Post Graduate Studies, Tamil Nadu	Agricultural University Techno - Economic Prospects and Environmental Perspective of Recycling Agricultural Plastic Waste towards Sustainable Productivity
24	Joegeetha Plastic Pipes Sengottaian R. Thangamani S	Tamil Nadu Agricultural University	Development of Improved Low Cost Green House Irrigation System Embedded With Polymer Technology
25	Maxim Integrated, California Govardhan Rao Talluri	IIT Bombay	High Speed I/Os for Chip to Chip Interconnects
26	Microsoft Research, India Venkatesh Vinayakarao	IIIT Delhi	Semantic Analysis & Synthesis of Source Code
27	Morphing Machines Pvt Ltd Madhava Krishna C	IISc Bangalore	Architecture and Compiler Support for Concurrent Program Execution on Application Specific Massively Parallel Processors
28	NanoXpert Technologies Jaydeep Bipin Deshpande	National Chemical Laboratory, Pune	Process Design for the Synthesis of Nanomaterials and Scale-up
29	Nova-Surface Care Centre Pvt Ltd Dinesh Bapurao Balgude	ICT Mumbai	Modification of Renewable Resources for Coating Applications
30	Nuziveedu Seeds Ltd. Adinarayana Ganjigunta	Acharya Nagarjuna University	Improvement of Tropical Maize By Introgression Superior Alleles Responsible for Increase Of Lysine, Tryptophan & B - Carotene
31	ONGC Mohammed Samdani Shaik	IIT Madras	Making Small-Scale Solar Thermal Power Generation a Reality in India - A Systems and Practical Approach
32	Ozone Research and Application India Pvt Ltd Sameena Naaz Malik	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 Concomitant Biofuel Production
33	P&G, Beijing Narendra Akiti	IIT Bombay	Granule Breakage in a Controlled Shear Field - Modelling and Experiments

SELECTION PROCESS

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

FUNDING SUPPORT

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

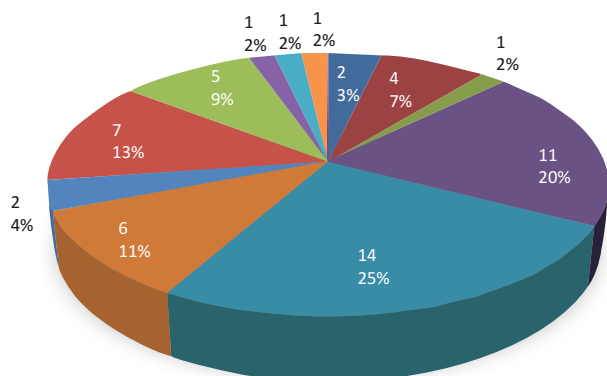
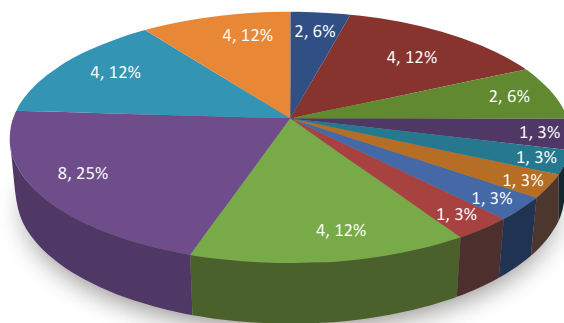
50% contribution is by SERB [being equivalent to the prevailing Government norms for JRF / SRF (inclusive of HRA)]. This amount is subject to revision as per the JRF/SRF norms from time to time. Rest 50% (matching equivalent of SERB component) comes from the partner company.

S.NO.	PARTNER COMPANY	PARTNER INSTITUTE	RESEARCH TOPIC
34	Pennar Engineered Building Systems Pvt Ltd (PEBS Pennar) Sivaganesh Selvaraj	IIT Hyderabad	Sustainable Eco-Friendly Housing Technology
35	Petrotech Society Rohit Kumar	IIT Delhi	Catalytic Tri-reforming of Methane for Syn-gas Generation over Multi-functional Catalysts
36	Petrotech Society Monika Rani	IIT Delhi	Organic Solar Cells
37	Petrotech Society Neha Bhardwaj	IIIT Delhi	Oil-slick Control and Development of an Intelligent Oil-recovery System
38	Photonix Solar Pvt Ltd Swapna Saha (Roy)	Jadavpur University	Study on the Externalities of Grid Integrated Photovoltaic Power Systems
39	Piramal Enterprises Ltd Subhadeep Das	IIT Bombay	Engineering Amyloids for Nanotechnology and Neuronal Cell Regeneration
40	Piramal Healthcare Ltd Shamayeeta Rey	IIT Bombay	Structural Characterization of Regulatory Proteins Useful in Developing Biosensors for Water Purification System
41	Prathista Industries Ltd Manoj Kumar Puniya	Indian Agricultural Research Institute	Anthocyanins as ingredients for food industry: Strategy for extraction, functional characterization and enhanced stability
42	Preca Solutions India Pvt Ltd Sameer Kumar Sarma Pachalla	IIT Hyderabad	Effect of Openings in Prestressed Precast Hollow Core Slabs
43	R & M International Pvt Ltd Pradeep Kankeri	IIT Hyderabad	Evaluation of Strengthening Technologies for Prestressed Precast Hollow Core Slabs
44	R&D, National Mineral Development Corporation (NMDC) Ltd Veera Asha Kumari Aketi	IIT Hyderabad	Improving the Efficiency of Dense Medium Cyclone Treating High NGM Coal Using CFD and PEPT Methods
45	Robert Bosch Engineering and Business Solutions Ltd Chandresh Kumar Maurya	IIT Roorkee	Anomaly Detection in Big Data
46	Robert Bosch Engineering and Business Solutions Ltd Rahul Dubey	IIT Delhi	Adaptive and Intelligent Protection Scheme for Transmission Network Including Facts and Off-Shore Wind-Farms
47	Sahajanand Medical Technologies Pvt Ltd Ankit Kumar Agarwal	ICT Mumbai	Development of Smart Drug Eluting Stents
48	Sampurn Agri Ventures Pvt Ltd Babita Mukhija	Punjab Agricultural University	Characterization of Native Bacillus thuringiensis Isolates Against Mylabris pustulata Thunberg in Pigeonpea and Optimization of Bioprocess Parameters
49	Simco Global Technology & Systems Ltd Shibin Krishnan Tc	National Physical Laboratory (CSIR-NPL)	Growth of InxGa(Al)1-xN Based Heterostructures and Characterization for High-Efficiency Nitride Solar Cell
50	Skymax Research & Regulations Gunjankumar Jagdishbhai Mehta	Saurashtra University	Isolation, Identification and Evaluation of Quorum Sensing Inhibitors (QSIs) From Medicinal Phytoextracts
51	Solar Agrotech Pvt Ltd Hiren Kumar Mansukhbhai	Saurashtra University	Isolation and Evaluation of Anti-Pathogenic Bacteria from Cotton Rhizosphere
52	Sree Akzya Dyeing Kavitha Manoharan	Alagappa University	Nanoparticles Based Biodegradation & Power Generation by Waste Water Bacteria
53	Strand Life Sciences Andugulapati Sai Balaji	Manipal College of Pharmaceutical Sciences, Manipal University	To Study the Role of ABCG Family of Drug Transporters in Breast Cancer Chemoresistance
54	Sun Pharma Advanced Research Co Ltd Mukesh Sharma	Shah-Schulman Center for Surface Science and Nanotechnology, Dharmasinh Desai University	Liposomes for the Topical Delivery of Methotrexate in Treatment of Psoriasis
55	Suyog Nirmiti Sammit Ekanath Karekar	ICT Mumbai	Development of Nanocontainers for Performance Applications
56	Tata Chemicals Ltd Poonam Mishra	Manipal University	Isolation, Purification, Characterization and Optimization of Fermentation Conditions of γ -Polyglutamic Acid Producing Microbes
57	Tata Chemicals Ltd Deepika Pandey	Manipal University	Studies on Production of Gamma-Polyglutamic Acid by Bacillus Sp.
58	Tata Steel Ltd Akula Durga Vara Prasad	IIT Bombay	Microstructural Engineering in Wire Rod
59	Tata Steel Ltd Sajal Saha	Bidhan Chandra Krishi Viswavidyalaya	From Waste to Assets - Use of Iron Slime in Agriculture
60	Thermax India Limited Piyali Dhar	IIT Madras	Pre-Treatment of Lignin By Non-Conventional Methods and Catalytic Conversion to Useful Compounds
61	Thermax Ltd Sushrut Sandeep Bhanushali	IIT Bombay	Investigation of Thermo-Physical Properties of Nanofluids
62	Thermax Ltd Soujit Sengupta	IIT Bombay	Graphene-Based Composite for Capacitive Deionization and Water Purification
63	Trichy Distilleries & Chemicals Ltd Sankaran K	NIT Trichy	Microalgae Treatment of Distillery Wastewater
64	Vaata Infra Limited Srinivasa Sudharsan Govindan	Thiagarajar College of Engineering	Advanced Controllers For Optimizing Wind Energy
65	Varsha Bioscience and Technology Sankepally Samara Shekar Reddy	Amity University, Jaipur	Abiotic Stress Tolerance in Oryza Sativa.L (Paddy) Mainly Drought And Salinity Tolerance Using Genetic Transformation Techniques
66	Xerox India Limited Chiranjeevi Yarra	IISc Bangalore	Analysis of Temporal Contours of Spoken Language Learning
67	Zim Laboratories Ltd. Darsheen Jitendrabhai Kotak	ICT, Mumbai	Design and Development of Non-Invasive Drug Delivery Systems For Large Molecules

Geographical Spread of Institutes

The 67 candidates receiving the Prime Minister's Fellowship are spread over 33 institutes across ten states. Maximum number of institutes with PM Fellows are in Tamil Nadu.

- Andhra Pradesh
- Rajasthan
- Delhi
- Uttar Pradesh
- Gujarat
- Karnataka
- Telangana
- Tamil Nadu
- Uttarakhand
- Maharashtra
- Punjab
- West Bengal



Geographical Spread of Industry Partners

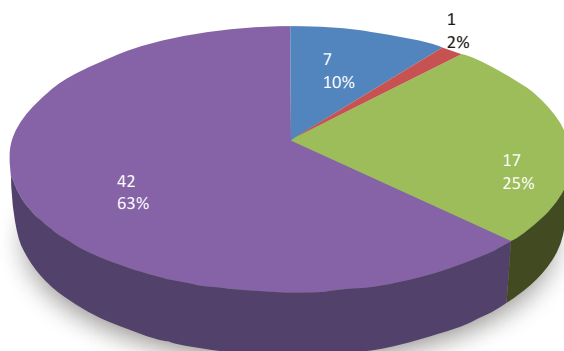
A total of 55 companies spread all across the world are partners in the Prime Minister's Fellowship Scheme. These include 49 Indian companies and 6 international companies.

- Delhi
- Punjab
- Gujarat
- Tamil Nadu
- Jharkhand
- Telangana
- Karnataka
- West Bengal
- Maharashtra
- Haryana
- Overseas

Stream-wise Spread of Research Subjects

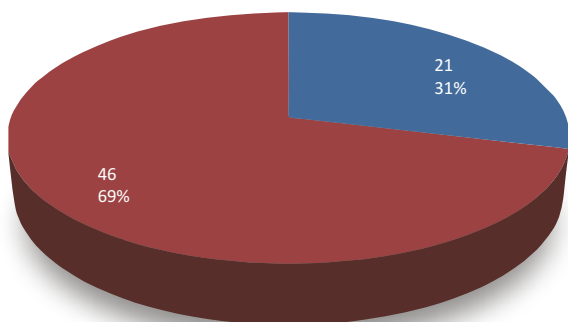
Maximum candidates are working on research projects which are in Engineering domain.

- Chemistry
- Physics
- Life Sciences
- Engineering



Gender Ratio of PM Fellows

While there are 21 females candidates, there are 46 male candidates.



- Female
- Male

Log on to: www.primeministerfellowshipscheme.in

Confederation of Indian Industry (CII)
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