

NEW PROJECTS SANCTIONED DURING FY 2011-2012 BY NANO MISSION

INDIVIDUAL SCIENTIST-CENTRIC RESEARCH PROJECTS = 39

Sr.	DST Reference Number and Project Title	Principal Investigator details
1.	SR/NM/NS-85/2010 Development of multifunctional biodegradable nanoparticles/nanocrystals for cancer diagnosis and treatment.	Dr. Harpal Singh Center for Biomedical Engineering Indian Institute of Technology-Delhi, Hauz Khas New Delhi - 110 016 (Delhi)
2.	SR/NM/NS-60/2010 Studies on development of ormosil nanoparticle based gene transfer system: An innovative Approach in breast cancer gene therapy	Dr. S. Kannan Department of Zoology/Animal Biotechnology Bharathiar University Coimbatore – 641 046 (Tamil Nadu)
3.	SR/NM/NS-95/2010 Structural, electronics and optical properties of composite and core-shell semiconductor nanostructures	Dr. B.R. Mehta, Department of Physics and Dr. A.K. Ganguli, Department of Chemistry Indian Institute of Technology-Delhi, Hauz Khas, New Delhi-110 016 (Delhi)
4.	SR/NM/NS-96/2010 Synthesis, Characterization and Bioconjugation of nanoparticles and their utilization as a vehicle for gene transfer	Dr. M.K. Rai Department of Biotechnology Sant Gadge Baba Amravati University Amravati - 444 602 (Maharashtra)
5.	SR/NM/NS-83/2010 Fabrication of Mdm2 peptide conjugated Gold Nanoparticles for targeted therapy of Retinoblastoma	Dr. S. Krishnakumar Department of L & T Ocular Pathology Vision Research Foundation, Sankara Nethralaya No. 41, College Road, Nungambakkam Chennai- 600 006 (Tamil Nadu)
6.	SR/NM/NS-115/2010 Encapsulation of divalent lanthanides in dendrimers and lanthanide based nano-structures in dendritic aggregates to generate novel optically active nano-system.	Dr. Edamana Prasad Department of Chemistry Indian Institute of Technology-Madras Chennai - 600 036 (Tamil Nadu)
7.	SR/NM/NS-98/2010 Enhancement of luminescent quantum efficiency and magnetic properties of functional nanomaterials and related computational studies	Dr. A. Choudhury Department of Physics Tezpur University Napaam - 784 028 (Assam)
8.	SR/NM/NS-89/2010 Fabrication of Nano-agricultural inputs for promoting groundnut productivity and environmental safety	Dr. K.S. Subramanian Department of Nano Science & Technology Tamil Nadu Agricultural University Coimbatore - 641 003 (Tamil Nadu)
9.	SR/NM/NS-91/2010 Electronic and structural properties of semiconductors at the nanoscale	Dr. (Ms.) Priya Mahadevan S.N. Bose National Centre for Basic Sciences JD Block, Sector-3, Salt Lake Kolkata-700 098 (West Bengal)
10.	SR/NM/NS-109/2010 Development of suitable nano-ocular formulations for superficial and vitreal fungal infection	Dr. (Mrs.) Indu Pal Kaur Department of Pharmaceutics, University Institute of Pharmaceutical Sciences Panjab University Chandigarh-160 014

11.	SR/NM/NS-111/2010 Polyamine mediated assembly silica nanoparticles to make functional materials and implications for biosilicification	Dr. Rohit Kumar Rana Nanomaterials Laboratory Inorganic & Physical Chemistry Division Indian Institute of Chemical Technology Hyderabad - 500 607 (Andhra Pradesh)
12.	SR/NM/NS-104/2010 Nanoscale heterostructures for catalysis and photovoltaic applications	Dr. N. Ravishankar Materials Research Center Indian Institute of Science Bangalore - 560 012 (Karnataka)
13.	SR/NM/NS-92/2010 Nanoparticles in traditional medicine may lead to new medical chemistry: a study of <i>bhasmas</i> using modern sciences	Dr. Jayesh Bellare Department of Chemical Engineering Indian Institute of Technology-Bombay, Powai Mumbai - 400 076 (Maharashtra)
14.	SR/NM/NS-113/2010 Fabrication of ZnO nanorods/polymer hetero-junction for solar cell application	Dr. K.P. Vijayakumar Department of Physics Cochin University of Science & Technology Cochin - 682 022 (Kerala) and Dr. R.T. Rajendra Kumar Department of Physics, Bharathiar University Coimbatore – 641 046 (Tamil Nadu)
15.	SR/NM/NS-103/2010 Development of Nano Mullite and Nano Mullite Based Biocers and their applications	Dr. Sukhen Das Department of Physics Jadavpur University Kolkata 700 032 (West Bengal)
16.	SR/NM/NS-114/2010 Fabrication of titania nanotubes arrays with polyoxometalates and their photoelectrochemical hydrogen generation properties	Dr. D. Pathinettam Padiyan Department of Physics Manonmaniam Sundaramar University Tirunelveli- 627 012 (Tamil Nadu)
17.	SR/NM/NS-124/2010 Analysis and engineering of particle-to-particle composition distribution for chemically synthesized FEPt, CoPt, FePd and MnAl nanoparticles	Dr. Chandan Srivastava Department of Materials Engineering Indian Institute of Science Bangalore - 560 012 (Karnataka)
18.	SR/NM/NS-122/2010 Engineering of dual porous polymer nanocomposites scaffolds for tissue engineering.	Dr. Sabu Thomas Centre for Nanoscience & Nanotechnology Mahatma Gandhi University Priyadarshni Hills P.O. Kottayam- 686 560 (Kerala)
19.	SR/NM/NS-110/2010 Targeted intracellular delivery of metal based anticancer drugs using functionalized Monolayer Protected Gold Nanoparticles (MGNPs)	Dr. M. Palaniandavar Center for Bioinorganic Chemistry School of Chemistry Bharathidasan University Tiruchirappalli - 620 024 (Tamil Nadu)
20.	SR/NM/NS-116/2010 Nano-structured films of transparent conducting oxides: Sensitization and opto-electronic response	Dr. S.B. Ogale Physical and Materials Chemistry Division National Chemical Laboratory Dr. Homi Bhabha Road, Pashan Pune-411 008 (Maharashtra)

21.	SR/NM/NS-129/2010 Study of magnetic anisotropy in magnetic nanoparticles, thin films and heterostructures	Dr. R.C. Budhani Director, National Physical Laboratory Dr. K.S. Krishnan Marg New Delhi - 110 012 (Delhi)
22.	SR/NM/NS-126/2010 Development of an electrochemical immunosensor using functionalized magnetic nanoparticles for detection of tumor markers	Dr. S.H. Pawar Centre for Interdisciplinary Research D.Y. Patil University Kolhapur- 416 006 (Maharashtra)
23.	SR/NM/NS-128/2010 Nanomechanics of advanced materials	Dr. Upadrasta Ramamurty Department of Materials Engineering Indian Institute of Science Bangalore-560 012 (Karnataka)
24.	SR/NM/NS-02/2011 Synthesis and characterization of heteroatom doped carbon nanotubes and its use in supercapacitor	Dr. A. Pandurangan Institute of Catalysis & Petroleum Technology Anna University-Chennai Chennai-600 025 (Tamil Nadu)
25.	SR/NM/NS-120/2010 Fabrication of magnetic nanostructures employing oblique angle vapour deposition and investigations on their structural and magnetic properties	Dr. M.R. Anantharaman Department of Physics Cochin University of Science and Technology Kochi-682 022 (Kerala)
26.	SR/NM/NS-134/2010 Viscoelastic properties of Nanoparticle Dispersed Liquid Crystals	Dr. Surajit Dhara School of Physics, University of Hyderabad P.O. Central University Hyderabad-500 046 (Andhra Pradesh)
27.	SR/NM/NS-1017/2010 Fluorescent carbon nanoparticle: Colloid chemical synthesis, functionalization and cellular labelling application	Dr. Nikhil Ranjan Jana Centre for Advanced Materials\ Indian Association for the Cultivation of Science 2A & 2B Raja S.C. Mullick Road, Jadavpur Kolkata-700 032 (West Bengal)
28.	SR/NM/NS-1008/2010 Study of the plasmaonic coupling in self-aligned silver nanoparticles grown on ripple patterned templates	Dr. Mukesh Ranjan Facilitation Centre for Industrial Plasma Technologies Institute for Plasma Research A-10/B, G.I.D.C. Sector-25 Gandhinagar-382 044 (Gujarat)
29.	SR/NM/NS-1012/2010 Nonspherical Plasmonic Nanoparticles and Photochemical Transformations	Dr. Tapan Kumar Sau Centre for Computational Natural Sciences & Bioinformatics International Institute of Information Technology Gachbowli, Hyderabad -500 032 (Andhra Pradesh)
30.	SR/NM/NS-1064/2010 Synthesis, characterization and evaluation of drug-loaded nano-formulations against Trypanosoma evansi in animal model	Dr. (Ms.) Anju Manuja Department of Veterinary Medicine National Research Centre on Equines Sirsa Road, Hisar-125 001 (Haryana)
31.	SR/NM/NS-1000/2010 Theoretical study of structural, magnetic & optical properties of transition metal doped metal oxide nanostructures	Dr. (Mrs.) Mrinalini Dilip Deshpande Department of Physics H.P.T. Arts and R.Y.K. Science College College Road, Nashik – 422 005 (Maharashtra)

32.	SR/NM/NS-151/2010 Novel solar light driven bismuth sulphide quantum dot-glass nanocomposite photocatalyst for hydrogen generation	Dr. B.B. Kale Department of Nanocrystalline Materials and Glasses Centre for Materials for Electronics Technology Panchwati, Off. Pashan Road Pune-411 008 (Maharashtra)
33.	SR/NM/NS-1016/2010 Nanostructured TiO ₂ as active support material for the electrocatalysts of the direct methanol fuel cells	Dr. R. Manoharan Department of Nanotechnology PSG Institute of Advanced Studies Post Box 1609, Avinasi Road, Peelamedu Coimbatore - 641 004 (Tamil Nadu)
34.	SR/NM/NS-149/2010 Investigation of silicon nanowire FET reliability at high and low temperatures and its modeling	Dr. Sanjeev Manhas Department of Electronics & Computer Engineering Indian Institute of Technology-Roorkee Roorkee-247 667 (Uttarakhand)
35.	SR/NM/NS-1006/2010 Understanding nanoparticle internalization by mammalian cells	Dr. Dharendra S. Katti Department of Biological Sciences and Bioengineering Indian Institute of Technology - Kanpur Kanpur – 208 016 (Uttar Pradesh)
36.	SR/NM/NS-1077/2011 Thrombus modulation by metallic nanoparticles	Prof. Debabrata Dash Department of Biochemistry Institute of Medical Sciences Banaras Hindu University Varanasi – 221 005 (Uttar Pradesh)
37.	SR/NM/NS-1052/2011 Doping of Carbon Nanotubes in Liquid crystals for Practical Applications; use in display devices and actuators	Dr. (Ms.) Samriti Khosla Department of Physics, JC DAV College, Dasuya Distt. Hoshiarpur-144 205 (Punjab)
38.	SR/NM/NS-1033/2011 Nanostructured thermoelectric materials development	Dr. Satish Vitta Department of Metallurgical Engineering and Materials Science Indian Institute of Technology- Bombay, Powai Mumbai – 400 076 (Maharashtra)
39.	SR/NM/NS-107/2010 Computational studies of nanoscale self-assembly	Dr. (Mrs.) Charusita Chakarvarty Department of Chemistry Indian Institute of Technology- Delhi Hauz Khas, New Delhi– 110 016 (Delhi)

OTHER PROJECTS = 1

Sr.	DST Reference Number and Project Title	Principal Investigator details
1.	SR/NM/NS-97/2010 Standardization for Nanoscience and Technology: Spreading its Awareness in India and Participation in International Organization for Standards (ISO) Activities on Nanometrology	Dr. R.C. Budhani Director, National Physical Laboratory Dr. K.S. Krishnan Marg New Delhi - 110 012 (Delhi)

THEMATIC UNIT OF EXCELLENCE PROJECTS = 8

Sr.	DST Reference Number and Project Title	Project Coordinator details
1.	SR/NM/NS-13/2011 Thematic Unit of Excellence on Nanochemistry at the Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore	Dr. G. U. Kulkarni Chemistry & Physics of Materials Unit Jawaharlal Nehru Centre for Advanced Scientific Research Jakkur P.O., Bangalore - 560 064 (Karnataka)
2.	SR/NM/NS-07/2011 Thematic Unit of Excellence on Tissue Engineering and Medical Bio-Nanotechnology at the Amrita Institute of Medical Sciences & Research Centre, Kochi	Dr. Shantikumar V. Nair Amrita Institute of Medical Sciences Elamakkara P.O., Kochi – 682 026 (Kerala)
3.	SR/NM/NS-08/2011 Thematic Unit of Excellence on Soft Nanofabrication with applications in Energy, Environment and Bioplatfroms at the Indian Institute of Technology, Kanpur	Prof. Ashutosh Sharma Department of Chemical Engineering Indian Institute of Technology-Kanpur, Kanpur- 2018016 (Uttar Pradesh)
4.	SR/NM/NS-10/2011 Thematic Unit of Excellence on Nanomaterial-based Technologies for Automotive Applications at the International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad	Dr. Tata Narsinga Rao Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) Balapur Hyderabad – 500 005 (Andhra Pradesh)
5.	SR/NM/NS-09/2011 Thematic Unit of Excellence on Nano Device Technology at the S.N. Bose National Centre for Basic Sciences, Kolkata	Dr. Anjan Barman S.N. Bose National Centre for Basic Sciences JD Block, Sector-III, Salt Lake Kolkata- 700 098 (West Bengal)
6.	SR/NM/NS-06/2011 Thematic Unit of Excellence on “Physics and Technology of Nano Assemblies” at the Indian Institute of Science, Bangalore.	Dr. P.S. Anil Kumar Department of Physics Indian Institute of Science Bangalore - 560 012 (Karnataka)
7.	SR/NM/NS-11/2011 Thematic Unit of Excellence on “Computational Materials Science” at the Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore	Dr. Balasubramanian Sundaram Chemistry & Physics of Materials Unit, Jawaharlal Nehru Centre for Advanced Scientific Research Jakkur P.O. Bangalore - 560 064 (Karnataka).
8.	SR/NM/NS-12/2011 Thematic Unit of Excellence on “Water purification using nanotechnology” at the Indian Institute of Technology-Madras.	Dr. T. Pradeep Department of Chemistry Indian Institute of Technology-Madras Chennai – 600 036 (Tamil Nadu)