

Scheme: Research & Development Support (SERC)
Programme: Nanoscience & Technology Initiative (NSTI)
Projects Sanctioned during 2003-04

Sl. No.	Sanction No. Date of Sanction (D/M/Y)	Project Title	Project Investigator & Address	Sanctioned Cost
1.	SR/S5/NM-52/2002 16.04.2003	Oxide based nanomaterials and nanocomposites for magnetic memory and sensor applications.	Dr. S. Annapoorni D/o Physics & Astrophysics University of Delhi New Delhi - 110007	1020000
2.	SR/S5/NM-68/2002 05.05.2003	Nanolithography in color and design of microfluidic devices.	Dr. Arun Chattopadhyay D/o Chemistry Indian Institute of Technology Guwahati - 781039	3554000
3.	SR/S5/NM-81/2003 27.05.2003	Growth of nanoparticles of wide band gap semiconductors (CdS/CdSSe) in glass matrices for optical filters and study of physics of quantum confinement for photonic applications.	Dr. Bharat Bhanudas Kale Centre for Materials for Electronics Technology Pune - 411008	1014000
4.	SR/S5/NM-38/2003 29.05.2003	Modular synthesis of cryptand based nanostructures.	Prof. P.K. Bharadwaj D/o Chemistry Indian Institute of Technology Kanpur - 208016	2857000
5.	SR/S5/NM-05/2003 02.06.2003	Upconverting nanophosphors for photonic applications.	Dr. Amitava Patra Central Glass & Ceramic Research Institute Kolkata - 700032	888000
6.	SR/S5/NM-20/2003 09.06.2003	Magnetic, optical and electronic properties of semiconducting nanoparticles doped with magnetic impurities.	Prof. D.D. Sarma Solid State and Structural Chemistry Indian Institute of Science Bangalore - 560012	4044400
7.	SR/S5/NM-31/2003 09.06.2003	Studies on effect of mineral nanofillers on the mechanical and processing properties of polymers and their industrial applications.	Prof. Satyendra Mishra D/o Chemical Technology North Maharashtra University Jalgaon - 425001	2048000
8.	SR/S5/NM-41/2003 09.06.2003	Synthesis of nanostructured magnetic materials for different applications.	Prof. D. Bahadur D/o Metallurgical Engineering & Materials Science Indian Institute of Technology Mumbai - 400076	10800000
9.	SR/S5/NM-25/2003 24.07.2003	Design of New and Novel Nanoconstruction Tools.	Prof. Sambasivarao Kotha D/o Chemistry Indian Institute of Technology Mumbai - 400076	2148000
10.	SR/S5/NM-26/2003	Nanostructuring of hard and	Dr. Vijay B Shenoy	1440000

	24.07.2003	soft films via pattern transfer.	Materials Research Centre Indian Institute of Science Bangalore - 560012	
11.	SR/S5/NM-18/2003 01.08.2003	Carbon nanotubes bases sensors.	Prof. A.K. Sood D/o Physics Indian Institute of Science Bangalore - 560012	2495000
12.	SR/S5/NM-10/2003 05.08.2003	Nano M/CeO ₂ and M/TiO (M = Cu, Mn, Fe, Co, Ni, Pt, Pd etc.) for catalysis applications.	Prof. H.B. Hedge Solid State & Struc. Chem. Unit Indian Institute of Science Bangalore - 560012	1626400
13.	SR/S5/NM-34/2003 19.08.2003	Electronic transport in molecular nano-systems.	Dr. Swapan Kumar Pati JN Centre for Advanced Scientific Research Bangalore - 560012	2354500
14.	SR/S5/NM-09/2003 22.08.2003	Development of Nano-wires and Nano-structural thin films of Boron for potential applications.	Dr. D. Ravinder D/o Physics Osmania University Hyderabad - 500004	2700000
15.	SR/S5/NM-04/2003 02.09.2003	Studies on nanomaterials and devices.	Prof. S.N. Kaul School of Physics University of Hyderabad Hyderabad - 500046	14686800
16.	SR/S5/NM-58/2002 13.10.2003	Upgradation of existing UHV chamber preparation and investigation of the properties of nanostructured materials.	Prof. S. Ramasamy D/o Nuclear Physics University of Madras Chennai - 600025	3926000
17.	SR/S5/NM-08/2003 22.10.2003	Nano Science and Technology : A Transdisciplinary approach.	Prof. O.N. Srivastava D/o Physics Banaras Hindu University Varanasi - 221005	15368200
18.	SR/S5/NM-61/2002 11.11.2003	Preparation and characterization of metallic and semiconducting nanowire.	Dr. Shyamal Kumar Saha Bidhannagar College Kolkata - 700064	1440000
19.	SR/S5/NM-12/2003 02.12.2003	Size-selective electrodeposition of metal, metal oxide and conducting polymer nanoparticles and their Nanocomposites for Technological applications.	Dr. R. Saraswathi D/o Materials Science Madurai Kamaraj University Madurai - 625021	2466880
20.	SR/S5/NM-17/2003 03.12.2003	Fabrication of pure metal and alloy films as interconnects for nanoelectronics and nano-electrodes by e-beam lithography and study of their stability towards electro, thermal and stress migration.	Prof. A.K. Raychaudhuri D/o Physics Indian Institute of Science Bangalore - 560012	1680000
21.	SR/S5/NM-21/2003 02.12.2003	Development of nanophosphors for industrial applications.	Dr. Harish Chander Div. Of Electronic Materials National Physical Laboratory New Delhi - 110012	5935000
22.	SR/S5/NM-13/2003	Development of state-of-the-art analytical electron Microscopy	Prof. K. Chattopadhyay Materials Research Centre	65500000

	05.12.2003	facility capable of high-resolution imaging and analysis in the nanoscale as an Institute facility at the Indian Institute of Science.	Indian Institute of Science Bangalore - 560012	
23.	SR/S5/NM-43/2003 10.12.2003	Metal-oxide core-shell nanostructures for removal of toxins from water and atmosphere.	Dr. A.K. Ganguli D/o Chemistry Indian Institute of Technology New Delhi - 110016	2910000
24.	SR/S5/NM-76/2003 15.12.2003	Synthesis, characterization and applications of nanosized oxide materials.	Dr. G.T. Chandrappa D/o Chemistry Bangalore University Bangalore - 560001	904800
25.	SR/S5/NM-73/2003 18.12.2003	Development of nanofluidic channels and nanowires using biomolecular self-assembly.	Dr. G.V. Shivashankar National Centre for Biological sciences University of Agricultural Sciences Bangalore - 560065	17300000
26.	SR/S5/NM-35/2003 19.12.2003	Development and properties of polymer based nanocomposites.	Prof. Anil K. Bhowmick Indian Institute of Technology Kharagpur - 721302	3400000
27.	SR/S5/NM-51/2003 02.01.2004	Synthesis and characterization of Ni-P electroless composite coatings with nanosized particles.	Dr. R.C. Agarwala D/o Metallurgical & Materials Engineering Indian Institute of Technology Roorkee - 247667	1827000
28.	SR/S5/NM-55/2003 01.01.2004	Thermal and electrical conduction in nano-fluids.	Dr. Sarit Kumar Das D/o Mechanical Engineering Indian Institute of Technology Chennai - 600036	981600
29.	SR/S5/NM-36/2003 02.01.2004	Tailoring of room temperature Excitonic Luminescence in Mg _x Zn _{1-x} O/SiO ₂ nanocomposites and fabrication of electroluminescent devices.	Prof. Subhadra Chaudhuri D/o Materials Science Indian Association for the Cultivation of Science Kolkata - 700032	1840000
30.	SR/S5/NM-61/2003 12.01.2004	Investigation of the dissolution kinetics of some nano sized metal catalysts.	Prof. Gurmeet Singh D/o Chemistry University of Delhi Delhi - 110007	2380000
31.	SR/S5/NM-47/2003 12.01.2004	Construction of an optical tweezer for nanometer scale rheology.	Dr. Sharath Ananthamurthy D/o Physics Bangalore University Bangalore - 560056	2154000
32.	SR/S5/NM-57/2003 06.02.2004	Nano Sized semi conducting oxide powders, films and catalysts by gas phase codensation for gas sensor applications.	Dr. K. Srinivas D/o Physics and Astrophysics University of Delhi Delhi - 110007	2220000

33.	SR/S5/NM-89/2003 06.02.2004	Excess protons electrons and metal atoms in hydrogen bonded nanoclusters: Studies of structural dynamical and electronic aspects through ab-initio molecular dynamics.	Prof. Amalendu Chandra D/o Chemistry Indian Institute of Technology Kanpur - 208016	2448500
34.	SR/S5/NM-75/2002 10.02.2004	Optical and electronic studies of photoactive molecules capped on metal nanoparticles and their molecularly bridged arrays on surfaces.	Dr. K. George Thomas Photochemistry research Unit Regional Research Laboratory Thiruvananthapuram - 695019	3300000
35.	SR/S5/NM-44/2003 25.02.2004	Development of device-grade nanomaterials using ion beams.	Prof. Arun M. Narsale D/o Physics University of Mumbai Mumbai - 400098	6235000