

**NATIONAL INSTITUTE OF PHYSICS
2013 Research Grants**

	Faculty	Project Title	Grant
1	Jose A. Magpantay	Gibbs Statistical Mechanics and Approach to Equilibrium	P 48,000.00
2	Henry J. Ramos	Synthesis of Ti_3SiC_2 Thin Films Using a Magnetized Sheet Plasma Source	P 48,000.00
3	Arnel A. Salvador	Intensity Dependence on the Photoluminescence Spectra of GaAs Double Quantum Well	P 48,000.00
4	Roland V. Sarmago	Investigation of Magnetic and Electrical Properties of Mn-Doped YBCO Superconductors	P 48,000.00
5	Maricor N. Soriano	Transformable Bounding Box for the Automated Tracking of Fencer Limb Movements	P 48,000.00
6	Percival F. Almoro	Digital Watermarking of Optical Wavefronts	P 42,000.00
7	Ronald S. Banzon	Implementation of Quantum Gates in an Ising Nuclear Spin Chain Computer with First-and Second-Nearest Neighbor Interaction	P 42,000.00
8	Luis Ma. T. Bo-ot	Direct Application of Homotopy Analysis to the Two-Level-System	P 42,000.00
9	Jose Perico Esguerra	Pulse-Propagation in an Exponentially-Graded Spring-Mass System	P 42,000.00
10	Elmer S. Estacio	Improvement of the Terahertz Emission Characteristics in a Textured GaAs Surface	P 42,000.00
11	Eric A. Galapon	An N-Qubit Master Equation and Two-Qubit Entanglement Dynamics in Spin-Chain and Bosonic Environments	P 42,000.00
12	Wilson O. Garcia	Transmission and Fluorescence Spectroscopy of Laser Crystals with LEDs, Laser Diodes and Lamps as Excitation Sources	P 42,000.00
13	May T. Lim	Data Mining Online Social Networks	P 42,000.00
14	Caesar P. Palisoc	Hadronic Production of Standard Model Particles	P 42,000.00
15	Armando S. Somintac	Electrical Properties of Doped Zinc Oxide Grown via Spray Pyrolysis	P 42,000.00
16	Giovanni A. Tapang	Bird Call Characterization Using Music Networks	P 42,000.00
17	Cristine DLR. Villagonzalo	Effects of Spin Orbit Interactions in the Transport Carriers in Low Dimensional Systems	P 42,000.00
18	Francis Norman C. Paraan	Development of High Performance Parallel Computing for Structure and Dynamics Applications	P 36,000.00