SCIENTIFIC PROGRAMME

10/20/11	13th Samahang Pisika ng Visayas at Mindanao National Physics Conference Andres Bonifacio College, Dipolog City, Philippines	
		Venue/Moderator
07:30-09:00	**REGISTRATION**	Main Library, GPS Building
09:00-10:00	**OPENING CEREMONIES** Keynote Speaker: **Honorable Mario G. Montejo ,** DOST Secretary	College Auditorium
10:00-10:15	**HEALTH BREAK**	
	PLENARY SESSION I	**College Auditorium**
10:15-11:15	**Advanced Image Processing Research : Why Lack of Equipment is No Excuse For Not Being Able To Publish** **Maricor N. Soriano** (National Institute of Physics, UP-Diliman)	Rosario L. Reserva
11:15-11:30	**CONFERENCE PHOTO**	
11:30-12:00	**Ceremonial Ribbon Cutting** Scientific Poster Session	Lobby, GPS Building
12:00-01:00	**LUNCH BREAK**	
	PLENARY SESSION II	**College Auditorium**
01:00-02:00	**Optical fiber devices: Microfiber resonators and fiber lasers** **Prof. Sulaiman Wadi Harun** (Photonics Research Center, University of Malaya, Malaysia)	Ryan B. Balili

Day 1

	SUB-PLENARY SESSION I			
Time and Venue	**ROOM A (201)** **Photonics and Materials Science** Moderator: Ryan B. Balili	**ROOM B(203)** **Experimental and Computational HEP** Moderator: Dennis C. Arogancia	**ROOM C (204)** **Physics Demo** Moderator: Merlita C. Garcia	**ROOM D (205)** **Physics Education/Research** Moderator: Lolita D. Ungui
02:00-02:30	**Laser imaging through panoramic transmission holography** Ednarissa Jenn D. Dultra, Gice Marie J. Jarapan, Melojane I. Piollo, Crystal Mae S. Rugas, Florencio D. Recoleto, Jr.	**PDR-generated Molecular Hydrogen in star-forming regions of the Lupus molecular cloud complex** Jelly Grace B. Nonesa, Kyoung Wook Min, Taeho Lim, Young-Soo Jo, Jae-Woo Park and Il-Jong Kim	**Development and evaluation of a demonstration kit on Faraday's law and Lenz's law** Kathleen Joy N. Buot, Myrna E. Lahoylahoy and Rosario L. Reserva	**A closer look on optical illusions** Margarito S. Reyes Jr., Irene A. Sanoy and Christian A. Cainglet
02:30-03:00	**Particle size measurement using haemacytometer and high resolution olympus MX-80 inspection microscope: method development** Joey Arles O. Vergara, Jerry B. Halibas	**Image reconstruction study using the most likely path of proton for computed tomography** Ronn Marr M. Perez, Catherine Therese J. Quinones, Salasa A. Nawang, Jan Mickelle V. Maratas		**The physics of forming 3D illusions from autostereograms** April Love E. Castillon, Shemenith B. Meninguito and Abigail L. Gumabat

Break (03:00 – 03:15)

Time and Venue	**ROOM A (201)** **Photonics and Materials Science** Moderator: Bianca Rae B. Sambo	**ROOM B (203)** **Experimental and Computational HEP** Moderator: Hermogenes C. Gooc, Jr.	**ROOM C (204)** **Physics Demo** Moderator: Emelyn K. Abao	**ROOM D (205)** **Physics Education** Moderator: Swidin S. Husin
03:15-03:45	**Blue light hazard of common electronic displays: A spectral study** Johanna Evi P. Buendia, Rolando C. Candidato, Jr., Yusof-Den Jaafar Jamasali, Eliezer E.Estrecho, Ronn Marr M. Perez, Jerven Matthew D. Suan, Roger	**Gamma spectra analysis: the search for radioisotopes in fruits and vegetables in Mabinay, Negros Oriental, Philippines** Anatoly Karpov P. Buss and Liza Marie T. Dangkulos	**Construction and performance evaluation of a uniform motion apparatus for experiment and demonstration purposes** Nilda T. Hibaya, Linda Vilma A. Ole, Rosemarie M. Terio and Caironesa T. Pada	**Role playing in teaching Newton's laws of motion: rubric development of an alternative pedagogy** Liza Marie T. Dangkulos and Anatoly Karpov P. Buss

	Joseph S. Lacubtan, Joy Cristy Piagola			
03:45-04:15	**Electroluminescence of commercial Light-emitting diodes (LEDs) using HR4000 spectrometer** Gice Marie J. Jarapan, Jessa Mae P. Tagalog, Florencio D. Recoleto, Jr.	**The effects of polarized water on mongo (*Vigna radiata*) germination** Dominic Joey C. Moncada Jr., Kurt Rhine Bagaindoc, Jay Lloyd Melgar, Joyce Louise Abad, Liza Chen, Alyssa Jane Gregorio and Arnulfo C. Sarnillo		**Developing outdoor game activity to enhance physics teaching** G. Ansing , R.R. Arcayan-Ocot, A.M. Balaobao, H. Bajolo, R. Bergado, E. Cales, H. Delostrico, W.L. Dumdum, J. Eliodra, H. Francisco, P.L. Galeon, A. Mahdi, J. Marticion, M. A. Moncal, R.J. Paglinawan, K.U. Rosales, C.L. Sabinay, J. Tamparong, C. Velasco and C.J. Gravino- Aban
04:15-04:45	**Tidal stream energy: a promising untapped renewable energy** Ivan L. Saligumba	**Analysis of vasomotion spectra in insulin perfused and non – insulin perfused monkeys** Floramie J. Ortega, Salasa A. Nawang, Xenia T. Tigno, Alfonso M. Albano	**Improvised ballistic pendulum** Rosevelt R. Maghanoy, Cheryl C. Rabulan and Marvin A. Maulion	**Concept mapping in teaching earth science** Anatoly Karpov P. Buss
04:45-05:15	**Development of superhydrophobic surfaces with controlled micro-roughness morphology** Mark Gino E. Aliperio, Wheskie N. Membreve and Ryan B. Balili	**Renal tubular necrosis as seen as bio-impedance variations** Angelito A. Silverio and Lean Angelo Silverio		**Muzzle up: an interactive game with projectile motion applications for secondary level schools** Kirk Louie U. Amandoron, Phillip Santi M. Morgia and Kimver Louie S. Nuñez

03:30-05:00	**PHYSICS CLINIC I** Session for High School Students	Ryan B. Balili
07:00-10:00	**CONFERENCE BANQUET**	**Atrium, Top Plaza Hotel**

Day 2

10/21/11	**PLENARY SESSIONS III**	**College Auditorium**
08:15-08:45	**Physics Trivia**	Filchito Renee G. Bagsican Bianca Rae B. Sambo
08:45-09:45	**Teaching practices for barehanded Physics teachers** **Jo-Ann M. Cordovilla** (Science Department, Bicol University)	Lolita D. Ungui

Break (09:45 – 10:00)

	SUB-PLENARY SESSION II AND WORKING COFFEE BREAK			
Time and Venue	**ROOM A (201)** **Photonics and Materials Science** Moderator: Filchito Renee G. Bagsican	**ROOM B (203)** **Computational and Theory** Moderator: Alviu Rey B. Nasir	**ROOM C (204)** **Physics Demo** Moderator: Maria Catherine B. Leelian	**ROOM D (205)** **Physics Education** Moderator: Christine Joy G. Aban
10:00-10:30	**Splitting of polariton states in strained microcavities: a numerical study** Eliezer E. Estrecho and Ryan B. Balili	**Application of white noise analysis to the modified wormlike chain – Fixman and Kovac model with observable bending** Karl Patrick S. Casas and Jinky B. Bornales	**Measurement of the index of refraction of liquids using improvised prism** Swidin S. Husin, Ahmerzon Ali and Ariel C. Alvarez	**Identifying igneous rocks using Gagne's intellectual/psychomotor domains and goal analysis** Russell A. Tucker, Agueda T. Castillo
10:30-11:00	**Transfer matrix simulations in nanophotonics** Ryan B. Balili	**The extension of the application of white noise analysis to the damped harmonic oscillator to include the effect of a uniform magnetic field** Ryan John A. Cubero and Jinky B. Bornales		**"What's hot, what's not?": project-based learning approach for teaching thermodynamics** Charity I. Mulig, Ivy Claire V. Mordeno and Myrna E. Lahoylahoy
11:00-11:30	**Philippine green mussel (*Pernaviridis*) shells in concrete hollow blocks** Kristoffer Montefalcon and Angelina A. Silverio	**Stretching short biopolymers by constant force: A white noise path integral approach** Gibson T. Maglasang, Beverly V. Gemao and Jinky B. Bornales	**Pringles tube stirling engine: a demonstration** Remelyn G. Ocat, Mark Albert A. Minerales and Mohamad Ali E. Ramber	**Generalized mathematical formula for dynamics on one-dimensional motion on two-object system** Marlon F. Sacedon

11:30-12:00	**Effect of rice hull ash on the complete hydration of ordinary cement** Jonas B. Guinto, Gerardo P. Apor, Mary Jean O. Apor, Glenn B. Paclijan, Melchor M. Famisan, Reynaldo M. Vequizo and Roberto M. Malaluan	**The Magellan uncertainty principle** Jingle B. Magallanes		**Effects of cooperative learning with physics education technology (PhET) interactive simulations in the performance of students in high school physics** A. Alpechi, E. Sedurifa, R. Reserva, and M. Lahoylahoy

10:30-12:00	**PHYSICS CLINIC II** Simulations with PhET Interactive Software Room E (206)	Rosario L. Reserva Bianca Rae B. Sambo

	PLENARY SESSION IV	**College Auditorium**
01:00-02:00	**S-band optical amplifier** **Mhod Zalmani Zulfiki** (University of Malaya, Malaysia)	Arnold C. Alguno

	SUB-PLENARY SESSION III			
Time and Venue	**ROOM A (201)** **Photonics and Materials Science** Moderator: Louie C. Murcia	**ROOM B (203)** **Computational and Theory** Moderator: Jan Mickelle V. Maratas	**ROOM C (204)** **Physics Demo** Moderator: Ryan John A. Cubero	**ROOM D (205)** **Physics Demo** Moderator: Joel G. Fernando
02:00-02:30	**FTIR analysis on aluminum compounds evolved from the reaction of cane sugar vinegar and distilled water with aluminum casserole** Joel G. Fernando, Melchor J. Potestas, Reynan L. Toledo and Reynaldo M. Vequizo	**3D surface reconstruction by sampling moiré method** Johanna Evi P. Buendia and Ryan B. Balili	**Supercooled water demonstration: can water remain liquid below 0°C?** Mohamad Ali E. Ramber and Mark Albert A. Minerales	**The graphical descriptions of motion using interactive physics software** Marlon Flores Sacedon
02:30-03:00	**Calcium hydroxide solution as corrosion inhibitor of steel bars in building constructions** Bernabe L. Linog and Gilbert Abejar	**On the application of Golmohammadi's traffic – induced noise model to selected streets of Cebu city** Allan Roy B. Elnar		

02:00-03:00	**PHYSICS CLINIC III** Simulations with PhET Interactive Software Room E (206)	Rosario L. Reserva Antonio J. Alpechi Bianca Rae B. Sambo

Break (03:00 – 03:15)

	SUB-PLENARY SESSION IV			
Time and Venue	**ROOM A (201)** **Photonics and Materials Science** Moderator: Majvell Kay G. Odarve	**ROOM B (203)** **Photonics and Material Science** Moderator: Arnold C. Alguno	**ROOM C (204)** **Physics Demo** Moderator: Jingle B. Magallanes	**ROOM D (205)** **Physics Education** Moderator: Karl Patrick S. Casas
03:15-03:45	**Growth of zinc oxide nanostructure on glass substrate for gamma radiation detector device** Jerven Matthew D. Suan, Louie C. Murcia, Reynaldo M. Vequizo and Arnold C. Alguno	**Engineering of carbonated calcium phosphate bioceramic from bullet tuna in Pb(II) removal from aqueous solution** Benito A. Baje, Jenessa Tumanda, Grace S. Paraiso, Czarenn A. Nhezz Reyes, Meldred A. Yecyec, Mary Joy F.Boje Meldie C. Ordesta, Mar Gil M. Gardiola	**Levitation: Defying gravity using electromagnetic field** Jessie A. Baul, Crystal Mae S. Rugas, Ronald Ray F. Gilos and Anthon Mark Jay A. Rivas	**Expectations in introductory calculus based physics among university students of MSU-IIT** C.J.G. Aban, G. Ansing , R.R. Arcayan-Ocot, A.M. Balaobao, H. Bajolo, R. Bergado, E. Cales, H. Delustrico, W.L. Dumdum, J. Eliodra, H. Francisco, P.L. Galleon, A. Madhi, J. Marticion, M. A. Moncal, R.J. Paglinawan, K.Rosales, C.L. Sabinay, J. Tamparong, C. Velasco
03:45-04:15	**Synthesis of ZnO-SiO2 composite material effects of amorphous silica (SiO_2) powder**	**Effect of $CaCO_3$ and HNO_3 treatment on the crystallinity of biological apatite**		**Common and widespread misconceptions about "static electricity" and "electricity" among first**

	on the morphology of the chemically prepared ZnO nanorods Edmar G. Pantohan, Rolando T. Candidato, Jr. and Reynaldo M. Vequizo	Gilbert M. Poralan, Jr., Reynaldo M. Vequizo, Jess E. Gambe and Eric M. Alcantara		**year college students enrolled in physics 122, second semester 2010-2011 of Negros Oriental State University, Dumaguete City** Agueda T. Castillo
04:15-04:45	**Effect of zinc oxide on the morphological and water absorbing properties of acid-treated apatite** Joy Cristy S. Piagola, Jess E. Gambe and Reynaldo M. Vequizo	**Development of low-cost impedance instrumentation for detection of 1,3,5-triazine-2,4,6-triamine (melamine)** Edcer Jerecho DC Laguda and Angelina Silverio	**Physics presents…. Tom and Jerry: playing with optics** Aubrey May Flores, Janece Galadlas, and Jocarm John Balignot	**A deeper look into force concept inventory** Sotero O. Malayao, Jr.
04:45-05:15	**Extraction, synthesis and characterization of silica powder from bamboo leaves (*Schizostachyum lumampao*) ash** Marlyne M. Villareal, Benito A. Baje, Blessie Denise F. Chung, Kimiko Ann M. Espiritu and Princess Juneire M. Peligro	**Growth of ZnS nanostructures on glass substrate for possible acetic acid sensor application** Amber Dea Marie V. Peguit and Arnold C. Alguno		**Science process skills and attitudes of physics secondary students in Zamboanga City** Emelyn K. Abao, Chona Q. Sarmiento, and Gerald Dillashaw

03:30-05:00	**PHYSICS CLINIC IV** Simulation Session with PheT and My Physics Laboratory Interactive Software Room E (206)	Dennis C. Arogancia
05:30-06:30	**ABC Presentation: Seasons of Life**	**College Auditorium**

Day 3

10/22/11	**PLENARY SESSION V**	**College Auditorium**
08:30-10:30	**Activities Instruction in Learning Photonics and Optics** **Ivan B. Culaba** (Ateneo de Manila University, Philippines)	Jinky B. Bornales
10:30-12:00	**CLOSING CEREMONIES**	
12:00-01:00	**LUNCH**	
01:00-04:00	**CONFERENCE TOUR**	

POSTER PRESENTATIONS		
Materials Science and Photonics	#1	**Effect of deposition time on the oxidation state, energy band gap and morphology of polyaniline thin films** Authors: Marissa G. Cordova, Majvell Kay G. Odarve, Bianca Rae B. Sambo, Reynaldo M. Vequizo, Romeo M. Del Rosario, Filchito Renee G. Bagsican and Girlie D. Leopoldo
	#2	**Fabrication of ZnO nanostructures on glass substrates for possible ethanol sensor device** Authors: Katherine M. Emphasis, Reynaldo M. Vequizo and Arnold C. Alguno
	#3	**Reflectivity of GaAs based semiconductor heterostructures** Authors: Gice Marie J. Jarapan, Ednarissa Jenn D. Dultra, Crystal Mae S. Rugas, Leonarine S. Molin and Florencio D. Recoleto, Jr.
	#4	**Design and fabrication of relative humidity sensor** Authors: Noli Vergel E. Kirit, Rolando T. Candidato, Jr. and Reynaldo M. Vequizo
	#5	**Energy band gap and optical transition of chemically prepared ZnO-SiO2 composite from diffuse reflectance measurement** Authors: Joycee Jean Lador and Rolando T. Candidato, Jr.
	#6	**Properties of apatite-impregnated calcium carbonate using softdrink and calcium hydroxide** Authors: Shigenobu R. Miñoza, Reynaldo M. Vequizo and Jess E. Gambe
	#7	**Characterization of plastic optical fibers for sensor application** Authors: Fedil G. Sanico II and Ryan B. Balili
	#8	**Modeling of the input interface parasitics for the front-end of a bio-impedance instrumentation** Author: Angelito A. Silverio
	#9	**Design procedure for a CMOS folded cascode operational transconductance amplifier** Author: Angelito A. Silverio
	#10	**Highly ordered emeraldine salt polyaniline produced using two-electrode electrochemical technique** Authors: Doebner von C. Tumacder, Bianca Rae B. Sambo, Majvell Kay G. Odarve and Reynaldo M. Vequizo
	#11	**Determination of 1,3,7-trimethyl-1H-purine-2,6(3H,7H)-dione (caffeine) concentration using impedance technique** Authors: Dempsey Uy and Angelina Silverio
	#12	**Silica xerogel from rice hull as carbon dioxide absorbent**

		Authors: Marlyne M. Villareal, Kimiko Ann M. Espiritu and Marie Lou S. Paler
	#13	**Fabrication of ultraviolet sensor using ZnO nanostructures on glass substrate** Authors: Liza-Fe L. Dagaerag and Arnold C. Alguno
	#14	**Fabrication and characterization of Pani/ZnO diode prepared through chemical bath deposition method on glass substrates** Authors: Jihan D. Codizar, Filchito Renee G. Bagsican and Reynaldo M. Vequizo
	#15	**Growth and surface morphology characterization of zinc oxide on SiO2/Si(100) substrate via chemical bath deposition method** Authors: Haziel Marie D. Paculba, Arnold C. Alguno and Reynaldo M. Vequizo
	#16	**Engineering of waste chicken eggshells for the development of a low-cost, non-toxic and environment-friendly moisture and water adsorbent nanoparticles** Authors: Maynard E. Limbaco, Trexie M. Alimpoos, Christian Ed F. Ciencia and Jonathan Garzon
	#17	**Synthesis and characterization of nanostructured silica from cogon grass (*Imperata cylindrical*)** Authors: Princess Juneire Peligro, Benito A. Baje and Felmer Latayada
	#18	**Computer simulation on the effect of germanium nanostructure on silicon substrate to their band structures** Authors: Carlou John S. Letigio, Arnold C. Alguno and Editha P. Jacosalem
	#19	**Optimized performance of dye-synthesized solar cell (DSSC) modules in solar power production for indoor and outdoor settings** Author: Alwielland Q. Bello
Experimental and Computational High Energy Physics	#20	**Determining of natural radioactivity in soil samples gathered around the industrial plants of barangay dalipuga and kiwalan in iligan city using gamma ray spectroscopy** Authors: Chielo Mae C. Gooc, Louie T. Murcia and Hermogenes C. Gooc Jr.
Computational and Theoretical Physics	#21	**Numerical weather prediction: the new age for weather forecasting** Authors: Munir J. Baldomero, Cherrymae Elda M. Suñga, John Andrew C. Albay , Christian V. Cainglet
	#22	**Free Feynman integrand with point interaction as white noise distribution** Authors: Gloriejen V. Cordova and Alviu Rey B. Nasir
	#23	**The harmonic oscillator with a strongly pulsating mass in the white noise path integral formulation** Authors: Ryan John A. Cubero and Jinky B. Bornales
	#24	**Comparative study on the energy content of AA batteries** Authors: Leah M. Malaguit, Michelle Anne B. Maraat, Meriam A. Gabule, Anne B. Ceballos, Johnny Jim S. Ouano and Eduardo N. Fajardo
	#25	**Study of Flow and Sediment Transport in Mandulog River, Iligan City** Authors: Hermes C. Bacala, Hermogenes C. Gooc Jr.
Physics Education	#26	**The eye: the optics with in** Authors: Andy Jun S. Bautista and Eduardo N. Fajardo
	#27	**Movement by blowing in a straight line: an outdoor activity-based teaching and learning methods in motion in one dimension** Authors: Hanissa M. Francisco,Joevanie B. Eliodra, Romie RoseArcayan-Ocot, Andrhea Mae Balaobao and Christine Joy G. Aban
	#28	**Using outdoor activity in vectors to improve the learning of selected physics 11 students of MSU-IIT** Authors: Promise Love B. Galeon, Hazel A. Bajolo, Wayne Lowell T. Dumdum, Elsie B. Cales, Romar G. Bergado and Christine Joy G. Aban
	#29	**Using PROJEC-THROW game as an interactive learning technique in teaching projectile motion** Authors: Jeovanny Marticion, Kin Rosales, Charlyn Velasco, Harold Delustrico, Amrodin Mahdi and Christine Joy Gravino-Aban
	#30	**Video as a teaching aid in learning linear momentum among introductory physics I students** Authors: J. Marticion, H. Francisco, J. Eliodra, K. Rosales, A. Mahdi, H. Delustrico, C. Velasco, R. Arcayan-Ocot, A. Balaobao and C.J. Gravino-Aban
	#31	**Demonstrating match-up and happy feet games as an interactive learning method in understanding Newton's laws of motion** Authors: Ruby Jane C. Paglinawan, Glendelle J. Ansing, Molly Ann D. Moncal, Cherry Lou B. Sabinay, Jefrey M. Tamparong and Christine Joy Gravino- Aban
	#32	**Video presentation as an effective tool in students' learning on circular motion and gravitation** Authors: C.L.B. Sabinay, P.L.B. Galeon, E.B. Cales, M.A.D. Moncal, R.J.C. Paglinawan, W.L.T. Dumdum, H. A. Bajolo, G.J. Ansing, J.M. Tamparong, R.G. Bergado ,C..J.G. Aban & L.D. Ungui
	#33	**Identifying igneous rocks using Gagne's intellectual/psychomotor** Authors: Russell A. Tucker, Agueda T. Castillo
	#34	**Open source software for teaching and learning physics** Author: Dennis C. Arogancia
	#35	**Skeletal Mechanics of Arm and Leg** Authors: Vernie C. Convicto and Eduardo N. Fajardo
Physics Concepts and Demonstration	#36	**Simplified implementation of solid state Tesla Coil** Authors: Edmund B. Bendijo , Mardeliez T. Cuajotor and Jefferson A. Hora
	#37	**Electricity generated from fruit extracts of starfuit** *(Averrhoa carambola)***, camias** *(Averrhoa bilimbi)* **and calamansi** *(Citrofortunella microcarpa)* Authors: Gilbert B. Abejar and Bernabe L. Linog
	#38	**Fermat's principle of least time: an alternative method in determining the index of refraction of various liquids** Authors: Ahmerzon R. Ali, Sharif Zamir L. Caluang and Swidin S. Husin
	#39	**The seebeck effect of aluminum- copper thermocouple**

		Authors: Nigel Niel N. Bagtilay, Anne B. Ceballos, Eduardo V. Descallar and Mary Fe S. Vinas
	#40	**Aviation's worst nightmare: microburst** Authors: Munir J. Baldomero, Ameera A. Jose, John Andrew C. Albay, and Christian V. Cainglet
	#41	**Liquid lenses through pressure techniques** Authors: Catherine G. Clavano, Rosemarie M. Terio and Crystal Mae S. Rugas
	#42	**Construction of a bipolar tesla coil** Authors: Yusof-Den J. Jamasali, Arlie B. Apduhan and Reuben R. Ballesil
	#43	**Obtaining and verifying function tables of different types of latch using a trainer** Authors: Gice Marie J. Jarapan, Ednarissa Jenn D. Dultra and Eduardo N. Fajardo
	#44	**Determination of Young's modulus of selected metallic wires using improvised apparatus** Authors: Judelyn L. Patero and Reynaldo M. Vequizo
	#45	**Dancing water mystery: solved!** Authors: Cherrymae Elda M. Suñga, Munir J. Baldomeroa, John Andrew C. Albaya and Christian V. Caingleta
	#46	**Compound 3 in 1 multi – tester with lampshade** Authors: Micah Ezra N. Chang, Anthony S. Intay and Marvin A. Maulion