

## **NEWS and Events for the AY 2013-2014**

### **I. Academics and Learning**

#### **1. Professional Learning Community (PLC) seminars that focused on the different Physics research groups:**

- a. Theoretical Physics/Condensed Matter Physics
  - Relativity at your pencil tips: An Introduction to the electronic and optical properties of graphene and carbon nanotubes by Dr. Richard Hartman, October 10, 2013
- b. Biomedical Physics/PREMED/MEDINST
  - Kill the Cancer: Compact Accelerators and Lasers for Medicine and Nuclear Engineering by Dr. Mitsuru Uesaka, of University of Tokyo, October 23, 2013
- c. Materials Science/Solid State Physics
  - Magnetic Sensors: Part 2 - Large Magnetoresistance Effect in Highly Disordered Semiconductors by Dr. Michael Delmo, October 30, 2013.
- d. Economics/Finance
  - Order in Chaos in MRT Stations by Mr. Carlo Dajac, November 7, 2013
- e. Biomedical Physics/PREMED/MEDINST
  - Air Pollution and Cardiovascular Mortality by Dr. Raouf Naguib November 14, 2013
- f. INSTRUMENTATION
  - Measure Better: See Your Signals by Gerardo Gonzales and Engr. Renante Zulueta of 2M Technologies Co. November 21, 2013
- g. Nuclear Physics
  - Good-bye Nuclear Bombs: The Future of Nuclear Energy and the Thorium Fuel Cycle by Ma. Katrina Vargas of DLSU, Canlubang, Science & Technology campus, November 28, 2013
- h. Computational Materials Design
  - Chasing the Hydrogen Atom by Computation (Hydrogen atom absorption in Pd(110): A density functional theory study) by Dr. Allan Padama Osaka University, Japan, Jan.16, 2014
- i. Laser Physics/OPTICS

- Star Wars at DLSU: Lasers and Lidar by Dr. John Holdworth, from University of New Castle, Australia, Wednesday, Feb. 5, 2014
  - j. LIDAR/EARTH LAB
    - How is the Weather (in Space)?" by Dr. Ernest Macalalad, Taiwan National Central University, February 6, 2014
  - k. Instrumentation
    - ELVIS Instruments by Dr. Edgar Vallar Feb. 21, 2014
    - Instruments for Monitoring Plants, Soil, and Climate by Dr. Michael Forster, from University of Queensland, Australia, and ICT International Co. March 7, 2014
  - l. Biomedical Physics/PREMED/MEDINST
    - Gold for Imaging: Activatable Multifunctional Nanoparticles for Image-Guided Therapy by Dr. Marites Malencon, of the University of Texas, M.D. Anderson Cancer Center, Houston April 1, 2014
- 2. Two new Programs to be offered at DLSU STC for AY 2015-2016:  
BS Applied Physics and MS Applied Physics**

## **II. Research**

1. MICROSPHIL Conference July 11-12, 2013 entitled "Unlimited Research Possibilities Through Microscopy" 20th Flr Andrew Bldg
2. Field Emission Scanning Microscope donated by SIGMATECH for Nanomaterial research. The equipment was housed at the Shared lab STRC 113 (i-Nano Lab)
3. DLSU Physics Research presentations both local and abroad:
  - a. 2013 SPP Congress at University of San Carlos from October 23 -25, 2013.
    - Ab Initio Investigations of Hydrogen Sorption Into Bi-Layer Graphene via the Edges by Bolalin, R, Natividad, M, Janairo, G, Kasai, H and Arboleda, N
    - Gamma-Irradiation Effects on the Antioxidant Properties and Caffeine Content of Coffee Liberica Beans from Lipa, Batangas by Chianpian, CJ, Abel, JK and Dungao, J.
  - b. Dr. Cecil Galvez and Dr, Edgar Vallar presented their research work at the 34th Asian Conference on remote Sensing, October 20 – 24, 2013
  - c. Dr. Romeric Pobre presented his research work at ICTP Italy, Trieste, November 5-8, 2013

- d. Dr. Gil Nonato Santos presented his research work at the Nano Malaysia Convention and Nanotechnology workshop, Malacca, Malaysia, December 10-13, 2013
- e. Physics graduate students presented their physics research in the 3rd National DOST-SEI ASTHRDP-NSC Scholars' Conference Feb. 27-28, 2014 Traders Hotel
  - Oral Presentations: Jasmine Albelda, Allan Padama
  - Poster Presentations: Aldrin Chang, Kevin Kaw, Toni Guatato, Melsa Ducut, Darl Vincent Perez, Abel Ole
- f. Publications of Physics faculty from several peer reviewed and ISI publications: R. Hartmann Phys. Rev., N. Arboleda, M. Natividad, A. R. Villagrancia, Paul Abanador, M. David, S. Palisoc et al Philippine Science Letters
- g. Physics Faculty participated in the following workshops, conference, and seminars
  - DLSU Research Congress March 6-8, 2014
  - DLSU CENSER Materials Science Unit “Philippine Materials Science and Nanotechnology Conference” March 14, 2014 20th Flr Andrew Bldg
  - 2nd DLSU Innovation & Technology Fair on March 26-27, 2014 at Henry Sy Sr Hall 5th floor.
  - 6th Asian Computational Materials Design Workshop February 13, 2014
  - PSBMB Convention 2013, Plenary Lecture
  - 2nd MOVE Symposium October 18-19, 2013
  - Launch the Philippine Journal of Materials Science and Nanotechnology (ISSN 2363-8073)
- h. Participated and Won 1st place (Mr. Ed Tibayan, GNC Santos) and 2nd place (Ms. Carla Manzano and Engr Ricky Manzano) in the Innovation and Technology Categories
- i. Participated in the NRCP Scientific Conference and General Assembly March 26-27, 2014 and gave a poster presentation entitled Gearing K to 12 Science for National Development and ASEAN Competitiveness

### III. Internationalization/Linkages

1. Dr. Vernon Morris, Distinguished Visiting Professor donated the following: CLIMET, Ozonemeter, and 3 boxes of glass filters. The equipment and materials were delivered October 15, 2013.
2. Dr. Masahiko Tani donated optics accessories for Terahertz Measurements using the Femtosecond Laser
3. The following Visiting Lecturers and Professors were invited and tasked to teach and give public lectures:
  - Dr. Michael Delmo from Kyoto University 2<sup>nd</sup> Term AY 2013-2014.
  - Dr. Raouf Naguib from Coventry University and BIOCORE Intl was Distinguish Visiting Professor of the Physics Department from November 5 to 25, 2013, Feb. 29 to March 21, 2014 and taught Physics Seminar for physics majors and gave a public lecture on GIS Modeling of Environmental Air Pollution to ASESS and MAP its Impact on cardiovascular Mortality – The Bangalore Case Study at the DLSU Research Congress 2014 and HNICEM Conference.
  - Dr. Hui Lyn Ong from Universiti of Malaysia Perlis and Dr. Quynh Nguyen Coventry University and BIOCORE Intl were invited as Visiting Lecturers from Feb. 29 to March 21, 2014 and taught STRUANA, LBYPHY6, SCIENVP, LBYENVP. They also gave their public lectures at the Philippine Materials Science and Nanotechnology Conference March 14, 2013
4. The following Memorandum of Understandings (MOU) and MOA's were being studied and applied:
  - a. On-going MOA's:
    - Physics Department and Howard University
    - Physics Department and Cardinal Medical Center
    - DLSU and St. Luke's. Medical Center
  - b. Memorandum of Understanding between the DLSU Physics Department and the Research Center for Development of Far-Infrared Region, University of Fukui (FIR-FU) was signed and approved March 31, 2014
  - c. In studying process, MOU between
    - Physics Department and National Museum
    - Physics Department and MSU-IIT
    - Physics Department and Campos, Lanuza, & Co.

5. Coordinating the donation of fossils, rocks, and minerals by a DLSU Alumnus, Mr. Marcio Sena from Smithsonian Institute May 2014

#### **IV. Students**

1. Outstanding Thesis Award for Physics Students:
  - Ms. Roseanne Kaw was awarded Outstanding thesis for her thesis entitled "The Dynamics of PLDT Stock Price: Deriving the Dynamical Equation of PLDT Stock Price from the Functional Dependence of the Probability Functional Parameters 2nd Term AY 2013-2014
  - The following students were awarded Most Outstanding Thesis 3<sup>rd</sup> Term AY 2013-2014: Gerome D. Sy, Janell Pablico, Ma. Lourdes T. Francisco, Trina Elisse T Regalado, Patricia Denise L. De Vera, and Toni Beth Guatato
2. Physics students who won awards in sports;
  - Part of the ANIMO SQUAD, Mr. Nicasio Lloran (PREMED Physics) and Ms. Mary Gillian Santos (BS Physics minor in Economics) won 2nd Place in the UAAP cheer leading Competition. In addition, Ms. Santos won 1st place in the National Cheer Leading Competition and Gold medal in the South East Asian Cheer Open.
  - Studying the possibility of a Posthumous Award for Mr. Brett Limkenseng BS Physics minor in Economics
3. Physics students who are on academic exchange:
  - MS Physics students Mr. Carlo Angelo Pelotenia and Mr. Jessiel Gueriba is studying at the Quantum Engineering Design Course at Osaka University
  - PhD Physics Student Mr. Noe Ladines is now at Max Planck Institute Interdisciplinary Centre for Advanced Materials Simulation (ICAMS) and is doing research in Bond-order potential development
4. Physics Pre-Confirmation Orientation March 22, 2014

#### **V. Community Engagement**

1. Physics Faculty volunteers to teach at DLSU SALIKNETA:
  - 1st Semester AY 2013-2014: Dr. Emmanuel Rodulfo – Physics and Math, Dr. Edgar Vallar – Physics and Physics Laboratory, and Dr. Al Rey Villagrancia – Introduction to Computer Basic Concepts. Dr.

Rodulfo extended teaching Physics and Math till 2nd Semester AY 2013-2014.

2. Ms. Carla Manzano does teacher training for DLSU BAGAC teachers.
3. Mentored students of the V. Mapa High School for the project Fabrication and Characterization of Chitin Nanowires on doped N/Mn Carbon Nanostructures for Thin Film Solar Cell Applications, the entry of National Capital Region, to the National Science and Technology Fair 2013, Physical Science, Team Category Cluster II
4. Engr. Ricky Manzano and Dr. Gil Nonato C. Santos were judge in the HS Physics Quiz Contest and Science Fair in Dept. Ed Binan
5. Dr. GNC Santos gave a lecture for the following seminars, workshops, and conference:
  - Council of Failure Analysis and Reliability Forum Nov 15, 2013
  - Science Week UP MANILA January 27, 2014
  - RETROSPECT Engineering Summit, and Emerging Technology in Health from CCS March 7, 2014
6. Dr. Emmanuel Rodulfo is the resource person for ASTIG TV5 Demolition Job science episode such as the ankle breaker move, Throw like a Girl, Cellphone Myths, Sports Surfing, Kapuso Mo, Jessica Soho CCTV phenomenon
7. The Physics Department participated in the SCIBLAST 2014 March 20, 2014
8. Participated in the Space Science Technology Agency Survey