



# BIOTA



**BIOLOGY TEACHERS ASSOCIATION OF THE PHILIPPINES**

in cooperation with the

**Far Eastern University - Manila**



**Department of Education**

and



**Commission on Higher Education**

## *48<sup>th</sup> Annual National BIOTA Convention & Scientific Sessions*

*Enriching Biology Education: Transformative Learning in the K to  
12 Curriculum*

4 - 6 April 2013  
Far Eastern University  
Morayta, Manila





## General Information

PROGRAMME OVERVIEW		
Event	Date & Time	Venue
<i>Opening Ceremony</i>	Thursday, 4 April 2012, 8:30 AM Guests to be seated by 8:15 AM	FEU Auditorium
<i>Keynote and Plenary Sessions</i>	<i>See detailed program of activities</i>	FEU Auditorium and University Conference Center
<i>Concurrent Sessions</i> - Young Biologists Forum  - Seminar-Lectures  - Poster Presentations - Workshops	<i>See detailed program of activities</i>	- University Conference Center, Ground Flr., Arts Bldg. - AVR 105,106,107,108 1st flr. Science Bldg; AVR 201, 301 2 <sup>nd</sup> & 3rd flr., Science Bldg - Pavilion Hall, FEU Grounds - Biology Laboratories; Rooms 304, 305, 307, 308, 310, 312, Science Bldg., 3rd Flr.
<i>Fellowship Night &amp; Welcome Dinner</i>	Thursday, 4 April 2013, 6:00 – 9:00 PM	University Conference Center, Ground Flr., Arts Bldg.
<i>Educational Trip</i>	Friday, 5 April 2013, 11:00-3:00 PM; 3:00 – 5:00 PM	The Mind Museum, Taguig City Market Market
<i>Testimonial Dinner &amp; Closing Ceremony</i>	Saturday, 6 April 2013 6:00-9:00 PM	FEU Freedom Park, FEU Grounds

### REGISTRATION

- Advanced on-site registration will be open from 3:00 PM – 6:00 PM on April 3, 2013. Pre-registered participants are encouraged to claim their convention materials (name tags, convention bag and program) at this time
- On-site registration will be open from 7:00 AM – 8:30 AM on 4 April 2013.
- The Registration Desk and the Educational Field Trip Enlistment Desk (for participants joining the field trip) are located at the lobby of the 2<sup>nd</sup> Floor Admin Bldg.
- All participants must register at the Registration Desk to collect convention materials.
- Late registration will be available on Day 1 during the morning snack until lunch break.

### COMMERCIAL EXHIBITION (see List of Exhibitors)

Venue:	Pavilion Hall, FEU Grounds
Dates:	April 4, 5, & 6, 2013
Opening Hours:	7:30 AM - 6:00 PM

### MEALS

(Morning & Afternoon Snack)	Pavilion Hall, FEU Grounds
Lunch	University Conference Center, Ground Flr., Arts Bldg.





## Programme of Activities

April 4, 2013 (Thursday)

Venue: FEU Auditorium

7:00 A.M.	Registration ( <i>Venue: Lobby, 2<sup>nd</sup> Floor Admin Bldg.</i> ) and Ingress ( <i>Pavilion Hall</i> )	
	<b>OPENING CEREMONIES</b> (8:30A.M. – 10:00 A.M.) FEU Auditorium	
8:30	Doxology and Ecumenical Prayer Entrance of Colors Processional of Officials and Special Guests  Philippine National Anthem BIOTA Hymn	FEU Choir  BIOTA Chapter Presidents, BIOTA National Governing Board, FEU Officials, and Special Guests FEU Choir FEU Choir
8:45	<b>WELCOME ADDRESS</b>	DR. MICHAEL M. ALBA <i>President, Far Eastern University</i>  HON. ALFREDO S. LIM <i>Mayor, City of Manila</i>
9:00	Opening Remarks and Presentation of Delegates	Dr. Jessamyn Marie O. Yazon <i>President, BIOTA Philippines</i>
9:10	Intermission Number (FEU Dance Troupe)	
9:20	Introduction of Keynote Speaker	Dr. Edna A. Amparado <i>Vice-President, BIOTA Philippines</i>
	<b>KEYNOTE ADDRESS</b>  <b>A Time of Reform in the Philippine Education:                  K12 and a New Quality Assurance System in Higher Education</b>  DR. REYNALDO B. VEA <i>President, Mapua Institute of Technology</i> <i>Member, CHED Task Force in Quality Assurance</i>	
10:00	GROUP PICTURE TAKING (FEU Auditorium)	
10:30	<b>RIBBON-CUTTING                  CEREMONY and OPENING/                  VIEWING OF POSTER AND                  COMMERCIAL EXHIBITS</b> <i>(Pavilion Hall, FEU Grounds)</i>	Dr. Michael M. Alba <i>FEU President</i> Dr. Ma. Teresa Trinidad P. Tinio <i>FEU Senior Vice-President for Academic                  Affairs</i> Dr. Miguel M. Carpio <i>FEU Vice-President for Administrative                  Services</i>
10:45	S N A C K ( <i>FEU Auditorium Lobby</i> )	





## Programme of Activities

11:15	Introduction of Plenary Speaker	Dr. Rodolfo S. Treyes <i>Board Member, BIOTA Philippines</i>
	<p style="text-align: center;">PLENARY SPEAKER I</p> <p style="text-align: center;">Updates on the K to 12 Basic Education Program</p> <p style="text-align: center;">MR. JOSEPH R. JACOB <i>Education Program Specialist, Department of Education</i></p>	
11:45	Product presentations	
	Announcements	Dr. Myrna P. Quinto <i>Convention Chair and Dean, FEU Institute of Arts &amp; Sciences</i>
	<i>Moderator: Dr. Esmeralda D. Mostajo Ex-Officio, BIOTA FEU Local Chapter</i>	
12:00 NN	<p style="text-align: center;">LUNCH BREAK</p> <p style="text-align: center;">(University Conference Center for Guests, Education Canteen for Participants)</p>	
1:00 P.M.	<p style="text-align: center;">YOUNG BIOLOGISTS FORUM</p> <p style="text-align: center;">(University Conference Center, Ground Flr., Arts Bldg.)</p> <p style="text-align: center;">Moderators: Dr. Edna A. Amparado and Dr. Michael A. Clores <i>Young Biologists Forum Committee</i></p>	
3:00	<p style="text-align: center;">S N A C K</p>	
	<p style="text-align: center;">CONCURRENT LECTURE-SEMINARS (3:15 – 5:15 P.M.)</p> <p style="text-align: center;"><i>(Venue: AVR 105,106,107,108 1<sup>st</sup> flr. Science Bldg; AVR 201,301 2<sup>nd</sup> &amp; 3<sup>rd</sup> flr., Science Bldg)</i></p>	
3:15	Lecture Seminar I	
3:45	Lecture Seminar II	
4:15	Lecture Seminar III	
4:45	Lecture Seminar IV	
6:00 – 9:00	<p style="text-align: center;">FELLOWSHIP NIGHT /WELCOME DINNER</p> <p style="text-align: center;">(University Conference Center, Ground Flr., Arts Bldg.)</p> <p style="text-align: center;"><i>Emcees: Mr. Benjie Bolo &amp; Ms. Brenda B. Lansang</i></p>	





## Programme of Activities

April 5, 2013 (Friday)

Venue: (University Conference Center, Ground Flr., Arts Bldg.)

7:30 A.M.	Registration (University Conference Center, Ground Flr., Arts Bldg.)	
	PLENARY SESSIONS II (8:30 – 10:30 A.M.) (University Conference Center, Ground Flr., Arts Bldg.)	
8:30	Introduction of Plenary Speaker	Dr. Sonia D. Jacinto <i>Board Member, BIOTA Philippines</i>
	<p style="text-align: center;">PLENARY SPEAKER II</p> <p style="text-align: center;">Mechanics of Biopolymer Networks and Living Cells: A Research Direction in Biology-inspired Physics</p> <p style="text-align: center;">DR. ROMMEL G. BACABAC <i>Research Professor, Medical Biophysics Group University of San Carlos, Cebu</i></p>	
9:00	Introduction of Plenary Speaker	Dr. Grecebio Jonathan D. Alejandro <i>Board Member, BIOTA Philippines</i>
	<p style="text-align: center;">PLENARY SPEAKER III</p> <p style="text-align: center;"><b>Learning in the 21<sup>st</sup> Century</b></p> <p style="text-align: center;">DR. MARIA CRISTINA D. PADOLINA <i>President, Centro Escolar University</i></p>	
9:30	Introduction of Plenary Speaker	Dr. Ayolani V. de Lara <i>Treasurer, BIOTA Philippines</i>
	<p style="text-align: center;">PLENARY SPEAKER IV</p> <p style="text-align: center;">Biology Teachers and Biodiversity Museums – Toward a Partnership to Combat the Extinction of Experience with Nature</p> <p style="text-align: center;">DR. IRENEO L. LIT, JR. <i>Director, Museum of Natural History, University of the Philippines Los Baños</i></p>	
10:00	OPEN FORUM	<i>Prof. Genersol G. Monton Auditor, BIOTA Philippines</i>
	Announcements	Dr. Myrna P. Quinto <i>Convention Chair Dean of the FEU Institute of Arts &amp; Science</i>
	Moderator: <b>Dr. Amparo L. Sulam</b> <i>Vice-President, BIOTA FEU Local Chapter</i>	
10:30	S N A C K	





## Programme of Activities

11:00	Departure for Educational Tour <i>Coordinator: Mr. Alfredo R. Alvarez President, BIOTA FEU Local Chapter</i>
12:00-3:00	The Mind Museum, Taguig City
3:00 – 5:00	Market Market, Taguig City

April 6, 2013 (Saturday)

Venue: (University Conference Center, Ground Flr., Arts Bldg.)

8:30AM	Introduction of Plenary Speaker	Ms. Donna Salve P. Cornes <i>Board member, BIOTA Philippines</i>
	<b>PLENARY SPEAKER V</b>  <b>Science, Technology and Society:</b> <b>The scientist as an advocate for eliminating HIV in the Philippines</b>  <b>DR. ESEL MAURICE T. SALVAÑA</b> <i>Research Faculty, National Institutes of Health, University of the Philippines, Manila</i>	
9:00	Introduction of Plenary Speaker	Dr. Ma. Josefa R. Pante <i>Board member, BIOTA Philippines</i>
	<b>PLENARY SPEAKER VI</b>  <b>Ocean Connections</b>  <b>DR. LAURA T. DAVID</b> <i>Professor, The Marine Science Institute, University of the Philippines Diliman</i>	
9:30	OPEN FORUM	Dr. Benilda Z. Narcelles <i>Board member, BIOTA Philippines</i>
	<b>Moderator: Dr. Dennis Caballes</b> <i>PRO, BIOTA FEU Local Chapter</i>	
10:00	SNACKS	
10:30	<b>BUSINESS MEETING</b>	
	President's Report	Dr. Jessamyn Marie O. Yazon
	Treasurer's Report	Dr. Ayolani V. de Lara
	Resolutions/ Amendments	Dr. Edna A. Amparado
	Announcements	Dr. Glorina P. Orozco
	<b>Dr. Glorina P. Orozco</b> <i>Convention Co-Chair &amp; BIOTA Secretary</i>	





## Programme of Activities

11:00	PRESENTATION OF CANDIDATES; ELECTION of NEW BIOTA OFFICERS  Comelec Chair: Prof. Rosie S. Madulid ( <i>Ex-Officio</i> ) Members: Dr. Virginia S. Cariño; Dr. Crescencia C. Joaquin
12:00	LUNCH Luncheon Meeting of Chapter Presidents/Representatives with the BIOTA President and Officers (University Conference Center for Guests, Education Canteen for Participants)
	CONCURRENT WORKSHOP SESSIONS (1:00 – 5:00 P.M.) (Venues: <i>Biology Laboratories;</i> Rooms 304, 305, 307, 308, 310, 312 Science Bldg., 3/F Science Building)
1:00	Workshop Sessions I
2:15	SNACK
2:30	Workshop Sessions II
3:45	Workshop Sessions III
5:00	Egress
6:00-9:00	TESTIMONIAL DINNER (FEU Freedom Park, FEU Grounds)  <i>Emcees:</i> <b>Dr. Benilda Z. Narcelles &amp; Prof. Genersol G. Monton</b>



## Concurrent Lecture-Seminars

Day 1: April 4, 2013

	AVR 105 1/F Science Bldg	AVR 106 1/F Science Bldg	AVR 107 1/F Science Bldg	AVR 108 1/F Science Bldg	AVR 201 2/F Science Bldg
3:15	<p>LS-1: Knowledge, Attitudes, and Practices on Ecological Justice of Educators in K-12 Curriculum Mary Josephine C. Bautista</p>	<p>LS-5: Modeling Evolutionary and Ecological Adaptations in Flowering Plants through Comparison and Contrast of Floral Characteristics Jan Lorie M. Robil and Vivian S. Tolentino</p>	<p>LS-9: Discovering Commonly Held Misconceptions in Biology: Towards Transformative Pedagogy at the Undergraduate Level Michael A. Clores, Aurora A. Conde, Ramona S. Renegado, Agnes B. Salvadora, Donnabel G. Magno, Salvador M. Saavedra, and Judy D. Perez</p>	<p>LS-13: Publishing and Reviewing for International Refereed Journals: A Guide for Biology Teachers Dr. Jimmy T. Masagca</p>	<p>LS-17: Establishing the Generic Status of Unresolved Philippine Endemic <i>Canthium lam.</i> (Rubiaceae) Based on Molecular Data Lyn Enrico Dela Rosa-Paraguison, Axel H. Arriola and Grecebio Jonathan D. Alejandro</p>
3:45	<p>LS-2: Innovative Ways of Teaching Environmental Biology Analinda M. Fajardo, Aimee Lynn A. Barrion-Dupo, Charina Gracia B. Banaay, Romella T. Beringuela, Ivy Amor F. Lambio, and Faith S. Maranan</p>	<p>LS-6: Infrageneric Groupings in Philippine Hoyas (Subfamily Asclepiadoideae, Family Apocynaceae) Inferred from Vegetative Diversity and Geographic Range Joald G. Calpo, Annalee S. Hadsall, Simeona V. Siar</p>	<p>LS-10: A Correlational Study on Catechol-<i>o</i>-methyltransferase (comt) val158Met Single Nucleotide Polymorphism and Academic Performance of Selected Public High School Students in Manila, Philippines Janina S. Bautista, Katrina Lara L. Bravo, Luisa Marie S. Cruz, Franz Ysrael R. Del Rosario, Angelo Alexan R. Tanguio, and Josefino R. Castillo</p>	<p>LS-14: Building Bridges Between the Social and Natural Sciences: Diaries of Biology Teachers on the Wellbeing of Fishers and Rice Farmers in Northeastern Catanduanes Dr. Jimmy T. Masagca, Ma. Cecilia Tiu, Rosel T. Ibardaloza, Abelisa Evangelista, Delia S. Sorra and Dr. Sonia A. Torio</p>	<p>LS-18: Introducing “Biome Kidz” of Catanduanes Island for an Annual Philippine National Biodiversity Meeting for Science Teachers Estrella T. Tribiana, JT Masagca, Sonia Vargas, Sonia A. Torio</p>







## Concurrent Lecture-Seminars

Day 1: April 4, 2013

	AVR 105 1/F Science Bldg	AVR 106 1/F Science Bldg	AVR 107 1/F Science Bldg	AVR 108 1/F Science Bldg	AVR 201 2/F Science Bldg
4:15	<p>LS-3: Marine Mammal Stranding Events: Designing School-based Scientific Response for Bioconservation and Fieldwork Exposure Marie Christine Merca-Obusan</p>	<p>LS-7: Teaching Practices of Biology Faculty and Higher Order Thinking Skills of Students Myra Luz M. Homillano, Ph.D. Ludivico B. Homillano</p>	<p>LS-11: Misconceptions of Students on Climate Change Impacts, Mitigations and Adaptations Arnold D. Pitpitunge</p>	<p>LS-15: Comparing the Conceptual Weaknesses of Biology and Non-Biology University Students Michael A. Clores, Aurora A. Conde, Ramona S. Renegado, Agnes B. Salvadora, Donnabel G. Magno, Salvador M. Saavedra, and Judy D. Perez</p>	<p>LS-19: Ethnobotany in Science Education: A Means to Strengthen Filipino Identity in the Era of Globalization Odulio, Fel Joan Jeremy S., Abella, Albert A., Arrieta, Thelma DC., Belmi, Rosario M., Bunquin, Maria Dulce Amor P., Natividad, Julie Ann D., Petero, Milani C., Roque, Veronica S., Silverio, Analyn P., Tondo, Josephine E., Trinidad, Ely C., &amp; Evangelista, Luisito T.</p>
4:45	<p>LS-4: Bayesian Network of Models: A Bioinformatics Tool to Predict Fish Kill in Taal Lake, Batangas, Philippines Damasa B. Magcale-Macandog, Jaderick P. Pabico, Felino P. Lansigan, Arnold R. Salvacion, Keshia N. Tingson, Jennifer D. Edrial, Marlon A. Reblora, and Marc Brian T. Manlubatan</p>	<p>LS-8: Enhancing Mangrove Science Through Pilot Testing of Dr. Jurgenne <b>Primavera's</b> Module on Mangroves for Elementary Pupils Jimmy T. Masagca, Delia S. Sorra, Ma. Luz A. Floralde, Imaculate T. Latorre &amp; Sonia R. Vargas</p>	<p>LS-12: Recovery of Fish Biodiversity in the Pagatban River, Negros Oriental, Philippines: After Mining Closure 25 Years Ago Esther E. Carumbana and Abner A. Bucol</p>	<p>LS-16: The Distribution and Relative Abundance of Medium-sized Arboreal Mammals at Mt. Mahuson, Mount Apo Key Biodiversity Area Adorico M. Aya-ay</p>	<p>LS-20: Perception of Sophomore Students on Selected Bioethical Issues as Intervened by Mass Media Christine May A. Torres, Ana P. Centeno Recovery of Fish Biodiversity in the Pagatban River, Negros Oriental, Philippines: After Mining Closure 25 Years Ago Esther E. Carumbana<sup>1</sup> and Abner A. Bucol<sup>2</sup></p>





# Concurrent Workshops

Day 3: April 6, 2013

	Biology Laboratories - Room 304, 3/F Science Building)	Biology Laboratories - Room 305, 3/F Science Building)	Biology Laboratories - Room 307, 3/F Science Building)	Biology Laboratories - Room 308, 3/F Science Building)	Biology Laboratories - Room 310, 3/F Science Building)	Biology Laboratories - Room 312, 3/F Science Building)
1:00	<i>W-1:</i> Measuring Biochemical Oxygen Demand in Water Samples Josefino R. Castillo, Rosalinda Mercedes E. Castillo, Jonas Feliciano C. Domingo, and Carmina S. Dalida	<i>W-2:</i> Use of Models in Teaching Regulation of Gene Expression Rita P. Laude and Celia B. de la Viña	<i>W3:</i> A Simulation Activity and a Funny Game: Teaching Strategies for Enriching Biology Lea C. Garcia	<i>W-4:</i> ** Determining Demographic Status and Vegetative Growth Dynamics of Seagrasses Michael A. Clores  **No Repeat	<i>W-5:</i> Biodiversity Boardgame: A Tool for Teaching Environmental Biology Aimee Lynn A. Barrion-Dupo, Ivy Amor F. Lambio, Faith S. Maranan, Charina Gracia B. Banaay, Romella T. Beringuela, and Analinda M. Fajardo	<i>W-6: Laboratory Animals in Research</i> Ma. Dalisay G Maligalig
2:30	<i>W-7:</i> Footing the Bill: The Carbon Footprint Game Aimee Lynn A. Barrion-Dupo, Ivy Amor F. Lambio, Faith S. Maranan, Charina Gracia B. Banaay, Romella T. Beringuela, and Analinda M. Fajardo	<i>W-8:</i> Teaching Plant Science in the 21 <sup>st</sup> Century Nerissa K. Torreta and Annalee S. Hadsall	<i>W-9:</i> Acting out the Stages of Mitosis and Meiosis Benilda Z. Narcelles and Dahlia Soriano	<i>W-10:</i> ** Changes in the Genetic Material Gensol G. Monton and Emilio Gomez  **No Repeat	<i>W-5:</i> Biodiversity Boardgame: A Tool for Teaching Environmental Biology Aimee Lynn A. Barrion-Dupo, Ivy Amor F. Lambio, Faith S. Maranan, Charina Gracia B. Banaay, Romella T. Beringuela, and Analinda M. Fajardo <i>(Repeat)</i>	<i>W-6: Laboratory Animals in Research</i> Ma. Dalisay G Maligalig <i>(Repeat)</i>
3:45	<i>W-1:</i> Measuring Biochemical Oxygen Demand in Water Samples Josefino R. Castillo, Rosalinda Mercedes E. Castillo, Jonas Feliciano C. Domingo, and Carmina S. Dalida <i>(Repeat)</i>	<i>W-2:</i> Use of Models in Teaching Regulation of Gene Expression Rita P. Laude and Celia B. de la Viña <i>(Repeat)</i>	<i>W-7:</i> Footing the Bill: The Carbon Footprint Game Aimee Lynn A. Barrion-Dupo, Ivy Amor F. Lambio, Faith S. Maranan, Charina Gracia B. Banaay, Romella T. Beringuela, and Analinda M. Fajardo <i>(Repeat)</i>	<i>W3:</i> A Simulation Activity and a Funny Game: Teaching Strategies for Enriching Biology Lea C. Garcia <i>(Repeat)</i>	<i>W-8:</i> Teaching Plant Science in the 21 <sup>st</sup> Century Nerissa K. Torreta and Annalee S. Hadsall <i>(Repeat)</i>	<i>W-9:</i> Acting out the Stages of Mitosis and Meiosis Dr. Benilda Z. Narcelles and Dr. Dahlia Soriano <i>(Repeat)</i>

