



The 22nd Biennial Conference
of the AABE

Program and Abstracts

**ANA Gate Tower Hotel, Osaka, Japan
November 21-24, 2008**

Agenda

November 21 (Friday)

17:00-19:00 Registration and Welcome Gathering

November 22 (Saturday)

08:30-09:10 Registration
09:10-09:30 Opening Ceremony
09:30-10:10 Plenary Lecture (K-01)
10:10-10:40 Tea Break, Poster Viewing
10:40-11:55 Oral Presentation (O-01 – O-05)
11:55-12:55 Lunch
12:55-13:35 Plenary Lecture (K-02)
13:35-15:05 Oral Presentation (O-06 – O-11)
15:05-15:35 Tea Break, Poster Viewing
15:35-16:50 Oral Presentation (O-12 – O-16)
17:00-18:00 Poster Presentation & Workshop
(18:30-20:00 AABE Executive Meeting)

November 23 (Sunday)

Excursion to Aquarium and Natural Museum (Optional)
18:00-20:00 Conference Dinner

November 24 (Monday)

08:45-10:15 Country Reports (C-01 – C-06)
10:15-10:45 Tea Break, Poster Viewing
10:45-12:00 Oral Presentation (O-17 – O-21)
12:00-13:00 Lunch
13:00-14:50 Poster Presentation
14:50-15:30 Tea Break
15:30-16:00 AABE Assembly and Closing Ceremony

List of Papers

Plenary Lectures

- K-01 Biology Education for Realizing the Preciousness of Life**
Kunio UMENO
- K-02 Meeting the Challenges of the Decade of Education for Sustainable Development through Quality Science Education**
Merle C. TAN

Country Reports

- C-01 Biology Education in Schools Country Report - Australia**
Anne M WALLIS
- C-02 Transition of Curriculum Guidelines for Biology Education in Japan**
Teiko NAKAMICHI
- C-03 Korean Elementary Science Textbook Development (Grade 3 & 4)**
*Kyounggho KIM and Namil KIM
- C-04 The Status of Biology Education in the Philippines**
*Rosie S. MADULID and Jessamyn Marie O. YAZON
- C-05 Life Sciences as a Framework for Biology Education and the Training of Biologists: the Singapore Experience**
*C H DIONG, T M LIM, and S L LIM
- C-06 Thailand**

Oral Presentations

- O-01 Study on Educational Significance of “Dissection of Fish” —Biology Education for Realizing the Preciousness of Life—**
*Junko IWAMA, Taro HATOGAI, Shizuo MATSUBARA, Ryoko YAMAGISHI and Takashi SHIMOJO
- O-02 Understanding Evolution is Essential in Education of Life**
Kazutoshi TAMURA
- O-03 Biology Education Attaching Great Importance to Life: The Method of How to Feel Man's Internal Organs Lie in Reality**
Takeshi TATE
- O-04 Indicators of Cultural Identity in Student-made Life Science - Themed Storybooks**
Frederick T. TALAUE
- O-05 Science Reading Material Development on Famous Scientists – Robert Hooke vs Chang Yongsil**
*Kyounggho KIM, Namil KIM and Jungmin KIM

- O-06 Indigenous Protected Areas in Australia – Opportunities for Environmental Education**
Robert WALLIS
- O-07 A Design of ESD program That Aims the Maintenance of the Global Diversity of Species – Not Re-creatable and Extremely Elaborate Beings**
Hidenori UBUKATA
- O-08 Environmental Education for Kindergarten: A Hands-on Approach Using Worms**
*Yukari TAMIYA, Namio NAGASU and Tokai Area E.E.E. Project
- O-09 Environmental Advocacy and the Internet: How do Philippine Science High School Students Build Connectivity?**
*Niño A. ESPINAS, Ma. Elena K. DACANAY, Justin Ray M. GUCE,
Martin Benedict S. PEREZ and Melanie Anne B. CHENG
- O-10 Construction of International Network on River Environmental Education with Special Reference to Diatoms**
*Shigeki MAYAMA, Kazuhiro KATOH, Hiroshi OHMORI, Satoquo SEINO,
Hiroyuki OSAKI, Jung Ho LEE, Cheol CHEONG, Eduard A. LOBO,
Andrzej WITKOWSKI and Matt JULIUS
- O-11 Embedding Academic Skills Development in Course Delivery**
*Anne M. WALLIS and Linda THIES
- O-12 An Analysis of Skills for Use of Scientific Ability in the University Entrance Qualification Examination Biology Test**
Tomoko OHMORI
- O-13 Using *Fissidens* Hedw. (Bryales, Bryophyta) in Thailand as a Model for an Electronic Learning Key**
*Kanya SANTANACHOTE, Kanjana WONGKUNA, Benito C. TAN,
Soonthree KORNOCHARLERT and Narin PRINTARAKUL
- O-14 Examination Method of Teaching Materials Development of “Ferns”**
*Toshiyuki KAWAKAMI and Hideo IKEDA
- O-15 Teaching Materials on “How Can Water Striders Float on Water Surface?” and Their Using in the Science Classes of Elementary and Junior High School**
*Tetsuo HARADA, Toshiki TAMURA, Shinya MAIHARA, Kazuo MIYOSHI,
Fumiko KOJIMA and Mika YOKOTA
- O-16 Use of a Blind to Observe the Breeding Biology of the Asian Paradise Flycatcher (*Terpsiphone paradisi*)**
*Pattamavadee NGOENJUN and Narit SITASUWAN
- O-17 Standards for the Development of Certification Examinations for Secondary School Biology Teachers in Korea**
*Hae-Ae SEO, Ho-Kam KANG and Yong-Jin KIM
- O-18 Examining Practices in an Inquiry-based, Work-oriented Science and Technology Classroom: Implications on Biology Education**
Jessamyn Marie O. YAZON

- O-19 An Example of a Support to the Integrated Study of a Junior High School of Japan in the Local Community**
Mitsuo SAITOH
- O-20 Development of Biology Audiovisual (CD) Teaching Material for Developing Experimental Basic Skills of Science Teacher on Developing Country**
*Namio NAGASU, Toshinobu HATANAKA and Nobuyasu KATAYAMA
- O-21 Multimedia Presentations on the Human Genome "Implementation and Assessment of a Teaching Program for the Introduction to Genome Science Using a Poster and Animations"**
*Kei KANO, Saiko YAHATA, Kaori MUROI, Masahiro KAWAKAMI,
Mari TOMODA, Koichi MIYAKI, Takeo NAKAYAMA, Shinji KOSUGI and
Kazuto KATO

Poster Presentations

- P-01 Diversity of Birds and Food Plants of Birds at Wiang-Kosai National Park, Thailand**
Surakan PAYAKKHABUT
- P-02 Cercarial Infections of Freshwater Snails Genus *Bithynia* Leach, 1818 in the Northeast of Thailand**
*Duangduen KRAILAS, Chayada CHOTSRISUPPARAT, Sirilak CHOTESAENGSRISRI and Tunyarut KOONCHORNBOON
- P-03 Trematode Infections Obtained from Freshwater Snail *Melanooides tuberculata* in the North Thailand**
*Duangduen KRAILAS, Wivitchuta DECHRUKSA, Namfon PATTARADUSSADEE, Suluck UKONG, Wasin INKAPATANAKUL and Tunyarut KOONCHORNBOON
- P-04 Sensitivity to Chemical Attractant of Diacetyl after Pre-exposure to Diacetyl Is Inversely Related to Life-span of the Nematode *Caenorhabditis elegans***
*Tetsuya MATSUURA, Seiko SUZUKI, Ayaka MUSASHINO and Mitsuyuki ICHINOSE
- P-05 The Study of Biosurfactant as a Cleaning Agent for Insecticide Residue in Leafy Vegetable**
*Churdchai CHEOWTIRAKUL and Nguyen Dieu LINH
- P-06 Variability in Acetylcholinesterase upon Exposure to Chlorpyrifos and Carbaryl in Hybrid Catfish**
*Voravit CHEEVAPORN, Chawanrat SOMNUEK, Chutarat SAENGKUL and F. William H. BEAMISH
- P-07 Effects of Handling Processes on the Quality and Biochemical Changes in Tissue of Mud Crab, *Scylla serrata*, (Forsk., 1755) during Emersion Storage**
*Nongnud TANGKROCK-OLAN and Waritchon NINLANON
- P-08 The Effects of Earthworm-formulated and Commercial Feeds on the Growth and Development of Nile Tilapia (*O. niloticus*)**
*Rosa Mistica L. HERMOSO, Blythe N. KE and Samuel M. GO

- P-09 Study on Actinomycetes Soluble Pigments for Suitable Application**
*Rattanaporn SRIVIBOOL and Udomluck THITIRAKPANICH
- P-10 *In Vitro* Effects of Some Thai Antihelminthic Plants on Tegument Surface and Mortality of *Stellantchasmus falcatus* (Trematoda: Heterophyidae)**
Kittisak PHUTTACHAT, Kittichai CHANTIMA, Chakkapong TEUMMEE,
*Siriwadee CHOMDEJ and Chalobol WONGSAWAD
- P-11 Effect of IGF-2 Gene on Litter Size and Reproductive Performance in Pigs**
Waranee PRADIT, Supamit MEKCHAY, Korakot NGANVONGPANIT, and
*Siriwadee CHOMDEJ
- P-12 Sound Quality of Salor's Bow from Different Horsehair Species**
Watcharapong NARABALLOBH, Chamnan TRINARONG, Narit SITASUWAN and
*Siriwadee CHOMDEJ
- P-13 Microsatellite Primers in *Ficus hirta* and *Erythrina subumbrans* for Applications in Tropical Forest Restoration**
Wuttichai PHAIRUEANG, Bhanupong PHROMMARAT,
Prasit WANGPAKAPATTANAWONG, Stephen ELLIOTT,
Sutthathorn CHAIRUANGSRI and *Siriwadee CHOMDEJ
- P-14 A Proposal of Recycling Club Model for Environmental Education in Malaysia**
*Yap Pei SUAN and Shigeyoshi WATANABE
- P-15 Investigation of Japanese Biology Curriculum in Primary School which is Regarded Nature Observation as Important**
*Takayuki SATO and Ikumi ASAHARA
- P-16 Creating a Field Biology Program for Your School: Lessons from the PSHS-Main Campus Experience**
*Niño A. ESPINAS, Ma. Elena K. DACANAY, Frederick T. TALAUE, and
Melanie Anne B. CHENG
- P-17 Environmental Education with Reference to Biological Aspects for Non-science Majors in Pre-service Teacher Training Courses**
Nobuyasu KATAYAMA
- P-18 Effects of Fish Breeding Activity for College Students Who Aim to Become a Elementary School Teacher**
Fumi NAKANISHI
- P-19 Animal-assisted Education at Japanese Schools with Support from Veterinarians**
*Mihoko NAKAGAWA, Yuka NAKAJIMA and Taro HATOGAI
- P-20 Conservation Medical Education Performed by the Wild Animal Medical Center (WAMC) in Rakuno Gakuen University**
Mitsuhiko ASAKAWA
- P-21 Teaching-Materials of the "Rice Plant" in Biology Education**
*Kazuko IJIMA, Ryuichi SAGO, Tomoko IJIMA, Masayoshi UESHIMA and
Michinori KARIYA
- P-22 Usefulness of Small Scale Biotopes in Kindergarten Education in the Urban Area of Japan**
*Tsutomu OSAWA and Mitsuo MATSUKA

- P-23 The Effectiveness of Using Data Which Have Been Obtained by Students for Learning about the Human Environment in Junior High School Science**
*Yasuhiro KANAIZUKA and Nobuyasu KATAYAMA
- P-24 The Practice of Environmental Education in Japanese Elementary and Junior High School Science Using Natural Resources in Hokkaido Area**
Kiyoyuki OHSHIKA
- P-25 The Current State of Myxomycete Collections in Museums and Future Prospects of the Utilization on Biological Education**
*Yuka YAJIMA and Kiyoyuki OHSHIKA
- P-26 Evaluation of Hypoglycemic Activity of *Ardisia* sp. (Myrsinaceae): Mouse Model**
*Edna A. AMPARADO and Dennis D. RAGA
- P-27 Evaluation of the Glycemic Effect of *Telosma* (Asclepiadaceae) in Normal and Alloxan-induced Diabetic Juvenile Mice (*Mus musculus*)**
Lilibeth A. CAJUDAY and *Edna A. AMPARADO
- P-28 The Antioxidant Potential of Crude Leaf Extracts from Selected Endemic Plant Species of the Philippines**
Reynand C. CANOY, Jan Michael Jesse LOMANTA, Paolo SIGUAN and *Sonia D. JACINTO
- P-29 Cytotoxicity of Extracts from Endemic and Indigenous Plants of Protected Forests of Bataan in the Philippines**
*Sonia D. JACINTO, Jan Michael Jesse LOMANTA, Reynand C. CANOY, Pinky M. BALLESTEROS and Romel P. DATOR
- P-30 Screening Plant Species for Assessing Cd and Neem Extract Contamination**
*Vilaiporn BUNYAKITJINDA, Supanyika SENGSAI and Nongnuch GAMLANGPAT
- P-31 Evaluation of Genotoxic Effects of Residue Aza Containing Neem Extract on Root Tip Cells of *Allium cepa*, *Zephyranthes rosea* and *Eucrosia bicolor***
*Wimol KWANKUA, Supanyika SENGSAI and Nongnuch GAMLANGPAT
- P-32 Factors Affecting Cadmium Adsorption of *Kirchneriella lunaris***
*Ptumporn MUANGPHRA, Waramanee PONGSAWAT and Kanlaya SRIBUDDHACHART
- P-33 Genotoxicity of Cadmium to Coelomocytes of Earthworms, *Pheretima peguana* and *Pheretima posthuma***
Ptumporn MUANGPHRA
- P-34 Karyotype Studies of Freshwater Snails, *Filopaludina* spp.**
*Supanyika SENGSAI, Wimol KWANKUA, Duangduen KRAILAS and Siriporn KAEWKLOM
- P-35 An Application of Conventional and GISH Karyotypes to Biological Education —An Example of Compositae Plants—**
*Hisakazu OGURA, Shiguang GUO and Katsuhiko KONDO
- P-36 A Validation Study of Shell Porosity Measurements in Eggshells of the Lesser Black-backed Gull (*Larus fuscus*)**
*Kampanat THARAPOOM and Ruedi NAGER

- P-37 New Teaching Materials on “Life of Oceanic Sea Skaters and Adaptation to Oceanic Environment”**
*Mika YOKOTA, Toshiki TAMURA, Takao INOUE, Shiho TAKENAKA Takero SEKIMOTO, Mitsuru NAKAJYO, Chihiro KATAGIRI and Tetsuo HARADA
- P-38 Life Table of Springtail, *Xenylla* sp. (Hexapoda: Collembola)**
*Vacharobon THIRAKHUPT and Kasem KONGNIRUNDONSUK
- P-39 Male Sterile *Oxalis corniculata* as Teaching Material for Pollination and Fructification**
*Shigeaki ATSUMI and Megumi KASAHARA
- P-40 Classroom Experiment for Studying the Response of Organisms to Their Environment with the Unicellular Green Algae *Haematococcus pulvialis***
*Haruka MATSUMOTO and Nobuyasu KATAYAMA
- P-41 Study on Teaching Materials of Creature in Elementary School Science Textbooks —Appropriateness of the Fact that Japanese Schools begin in April—**
*Junko IWAMA, Shizuo MATSUBARA and Takashi SHIMOJO
- P-42 Close Analysis of Reading Inscriptions in Biology Textbooks**
*JaeYoung HAN, Yong-Jin KIM, Jung-In CHUNG, Seong Hey PAIK and Young-Wook SONG
- P-43 Changes of High School Students’ Explanatory Hypothesis Formation by the Anxiety Types of Cognitive Conflict in Respiration Experiment Task**
*Young-Sik KWON and Kil-Jae LEE
- P-44 The Development and Application of Teaching-learning Program utilizing Scientists’ Research Papers for Improvement of the Gifted-in Science Students’ Problem Solving Ability.**
*Hyun-Jung LEE and Kil-Jae LEE
- P-45 Learning-related Brain Activation Changes in High School Students: An fMRI Study**
*Yong-Ju KWON, Il-Sun LEE, Suk-Won KWON, Il-Ho YANG and Myoung HUR
- P-46 Brain-based Differences between Pre-service Science Teachers’ Causal Inference and Perception about Biological Phenomena**
*Young-Joon SHIN, Jun-Ki LEE, Jung-Ho BYEON and Dong-Hoon SHIN
- P-47 An Exploratory Study on Emotional Factors in the Elementary Science Instruction**
*Jaeyoung KIM, Chaeseong LIM, Gwangsam RYU
- P-48 Space Educational Program - Implementation of Sample Return Missions**
*Hideaki KOBAYASHI and Tsutomu YAMANAKA

Workshop

- W-01 A Simple and Useful Method for the Observation of Somatic Cell Divisions Using Acetic Dahlia Solution as a Staining Solution for Biology Class at the Secondary School Level**
*Yoshihiko YONEZAWA and Hidehiro HANMOTO

List of Participants [(S): student; *: accompanying person]

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 Dr. Robert WALLIS O06

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 Prof. Kyoung Ho KIM C03, O05
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 Prof. Yong Jin KIM O17, P42
 Prof. Yong Ju KWON P45
 Mr. Young Sik KWON (S) P43
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Dr. Kampanat THARAPOOM P36
Dr. Vacharobon THIRAKHUPT P38

今回の会議の開催を支援して下さる方々(アイウエオ順,敬称と株式会社等は省略)

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