



PEMS Newsletter

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1st issue

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Welcome to the first issue of the PEMS Newsletter

To answer the need for a vehicle to reach out to its members and to make known to the scientific community and the general public the activities and programs of the Philippine Environmental and Mutagen Society (PEMS), the newly elected board of directors decided to start a newsletter. In this first issue of the PEMS newsletter, a brief history of PEMS, highlights of the annual convention last year, and upcoming activities are presented.

PEMS at 25, remembering when...

By Dr. Irene M. Villaseñor

The Philippine Environmental Mutagen Society, Inc. was incorporated on 10 February 1978. PEMS aims to (1) promote the advancement of knowledge in Environmental Mutagenesis and related fields through research, education, and interchange of professional knowledge among members and related societies, (2) promote active participation in the dissemination of information on environmental mutagens, and (3) establish means by which this knowledge can be utilized for the improvement of the socio-economic and health conditions of the country. Membership is open to regular, honorary, and institutional members.

PEMS has been in existence for 25 years now and was founded by Dr. Clara Y. Lim-Sylianco, a well renowned Filipino scientist who worked in the field on mutagen research during the 1970s and into the 1990s until her retirement. Dr. Lim-Sylianco is a National Scientist and a Professor Emeritus of the University of the Philippines, Diliman.

The 1st Board of Directors were Clara Y. Lim-Sylianco, Ruben Umaly, Lourdes Mantaring, Consuelo Buenvenida, Ma. Lourdes Brion, Serenidad Karunungan, Enriqueta Banzon, Gloria Bernas, Angelita Reyes, and Pilar Anglo.

Through the years, PEMS held annual conventions (except during 2001 and 2002) wherein current trends and modern techniques in environmental mutagenesis are discussed. PEMS, already a member of the International Association of Environmental Mutagen Societies (IAEMS), is now a member of the Asian Association of Environmental Mutagen Societies (AAEMS), which also includes the Chinese EMS, the Environmental Mutagen Society of India, Japanese EMS, Korean EMS and the Thai EMS.

Dr. Amelia Guevara leads new set of PEMS Directors

Dr. Amelia P. Guevara heads the PEMS Board of Directors as President for a three-year term, 2004-2007. The officers and board members are as follows: Dr. Titos A. O. Quibuyen, Vice President; Dr. Irene M. Villaseñor, Secretary; Dr. Evangeline C. Amor, Assistant Secretary; Dr. Virginia Monje, Treasurer; Dr. Ameurfina Santos, Assistant Treasurer; Dr. Glorina Pocsidio, Auditor; Ms. Norie Ann Nolasco, Public Relations Officer; Dr. Edna Amparado, Dr. Annabelle Herrera, and Dr. Ramon Miranda. For the term 2004-2007, please address correspondence to Dr. Irene M. Villaseñor, Institute of Chemistry, UP Diliman, QC 1101. Telefax: 63-2-9205427, e-mail address: ivillase@chem.upd.edu.ph.

PEMS 23rd Annual Convention

PEMS held its 23rd Annual Convention last November 22, 2003 at the College of Science Auditorium of the University of the Philippines at Diliman, Quezon City. The theme of the convention was "DNA and the Environment." The theme is in celebration of PEMS 25th year that coincided with the 50th year of the double helical structure of DNA and the completion of the human genome project.

PEMS 23rd Annual Convention continued...

Two lectures by renowned scientists working on the human genome highlighted the convention. These were by Dr. Cynthia Saloma of the National Institute of Molecular Biology and Biotechnology and Dr. Corazon de Ungria of the Natural Sciences Research Institute, University of the Philippines, Diliman.

The convention was attended by 180 participants from various schools and industries, namely, UP Diliman, Tarlac State University, University of the East, University of Santo Tomas, Mapua Institute of Technology, UP Manila, Jose Rizal University, St. Scholastica, Letran, Technological University of the Philippines, PLP, Polytechnic University of the Philippines, University of Northern Philippines, Philippine National University, St. Luke's Hospital, Philippine Nuclear Research Institute, and FSMC.

DNAs 50th Anniversary by Dr. James A. Villanueva

The year 2003 marked the 50th year since the landmark determination of the DNA's structure by James D. Watson and Francis H.C. Crick. In a remarkably short but momentous paper published on April 25, 1953, in the journal *Nature*, Watson and Crick described the DNA structure as a complementary base-paired double helix, which suggested a molecular mechanism for heredity. Along with Maurice Wilkins, who did important experiments on DNA, their pioneering work earned for them a Nobel Prize in 1962.

Watson and Crick's structure was based primarily on three pieces of evidence:

Chargaff's rules on base pairing, correct tautomeric forms of the bases and X-ray diffraction results obtained by Rosalind Franklin who showed that DNA had a helical structure. Their discovery started modern molecular biology and spawned important milestones such as the deciphering of the genetic code in the 60's, the birth of biotechnology in the 70's and the development of Polymerase Chain Reaction and other DNA techniques in the 80's and 90's, which became essential components of the genetic toolkit in recombinant technology.

In the 50 years since Watson and Crick solved the structure of DNA, scientists have learned how to manipulate this biomolecule bringing tremendous progress in medicine, agriculture, forensics, archaeology and other fields. Genomes of various species like the fruitfly and mouse have been painstakingly mapped and sequenced.

In time for its golden anniversary, one of the most important projects undertaken by mankind has been completed: the sequencing of the human genome. The sequence will allow scientists to systematically identify and characterize the structure, function and regulation of human genes, which may unravel questions that will take us to the core of our humanity such as our desires, fears and behavior. In a practical sense, physicians will now be able to improve diagnostics and therapy as well as find new targets for more effective drug development.

Invitation for Membership

Those interested in joining the Society may get application forms during the convention. New members will be inducted during the convention.

24th PEMS Annual Convention

You are cordially invited to the 24th PEMS Annual Convention with the theme "**Mining and Minding our Biodiversity**" which will be held on **November 20, 2004** at the College of Science Auditorium at the College of Science Library and Administration Building (CSLAB), **UP Diliman**.

Our country has been frequently cited as being rich in biodiversity. How this biodiversity affects the environment and how to properly utilize this biodiversity will be the focus of this year's convention.

Registration will start at 12:30 PM. Registration fee is P 200 for students with ID and P 250 for non-students.

Invited speakers are well-known researchers working in the field of biodiversity: **Dr. Perry Ong** (Changing Mindsets Amidst Philippine Biodiversity Crisis), **Dr. Daniel Lagunzad** (Plant Biodiversity) and **Mr. Leonard Co** (Lessons from the Forest), all belonging to the Institute of Biology, University of the Philippines, Diliman.

Call for Papers

You are invited to submit a paper for poster presentation. Poster papers should be original researches related to biodiversity, mutagenesis / antimutagenesis and related topics.

Guidelines for the abstract:

1. Abstracts must be typewritten in English, with a maximum of 200 words.
2. Titles, authors, and affiliations are centered. Titles are in capital letters.
3. Abstracts should include a brief description of the objectives, methodology, significant results and conclusion, and references.
4. Deadline for submission of abstracts is on **3 November 2004**.

Please send abstracts by e-mail or fax to:

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