

AN EXTRAORDINARY PROFESSIONAL OPPORTUNITY OFFERED AT AN EXCITING LOCATION

A PROGRAM TO MEET THE SPECIAL PROJECT MANAGEMENT
AND TECHNICAL NEEDS OF CIVIL ENGINEERS DOING BUSINESS IN ASIA



CIVIL ENGINEERING IN THE ASIA REGION

ASIAN INFRASTRUCTURE, SUSTAINABLE
DEVELOPMENT AND PROJECT MANAGEMENT

AN INTENSIVE TWO-DAY CONFERENCE
MANILA, PHILIPPINES • FEBRUARY 19-20, 1998

JOINTLY
SPONSORED BY:

AMERICAN
SOCIETY OF
CIVIL ENGINEERS

PHILIPPINE
INSTITUTE OF
CIVIL ENGINEERS,
INC.

JAPAN
SOCIETY OF
CIVIL ENGINEERS

ORGANIZATION PROFILES

ASCE

Founded in 1852, the American Society of Civil Engineers represents more than 120,000 civil engineers worldwide and is America's oldest national engineering society. ASCE's mission is to advance professional knowledge and improve the practice of civil engineering. ASCE works closely with Congress, the White House, and federal agencies to build sound national policy on engineering issues. ASCE is the world's largest publisher of civil engineering information. The Society publishes a monthly magazine and newspaper, 25 technical and professional journals, and a variety of books.

ASCE established its research affiliate, the Civil Engineering Research Foundation (CERF) in 1989 to "facilitate, coordinate, and integrate" research for the civil engineering profession and the design and construction industry, and to help expedite the transfer of research results into practice.

ASCE's World Headquarters is located in Reston, Virginia. The Society's offices for government and public relations, the ASCE Foundation and CERF are located in Washington, DC. Visit the Society's World Wide Web site at <http://www.asce.org>.

**James E. Davis, P.E.,
Executive Director**



The Philippine Institute of Civil Engineers was formally organized on December 11, 1973, as a result of the merger of the Philippine Society of Civil Engineers (founded in the late 1920s) and the Philippine Association of Civil Engineers (founded in 1937). To date, PICE has 23,753 Regular members, 1,210 Life members, and 36 Fellows in 93 chapters throughout the country. There are 91 student chapters in leading universities and civil engineering institutions.

The main objective of PICE is to advance the knowledge and practice of civil engineering, giving primary focus to continuing professional education, publications, holding of conventions, networking with other construction industry professionals and with the civil engineering academic community.

PICE has established links by entering into Agreements of Cooperation with the American Society of Civil Engineers, Korean Society of Civil Engineers, Japan Society of Civil Engineers, and the Canadian Society for Civil Engineering.

**Nannette C. Villanueva
National Administrative
Officer**

JSCE

社団法人 土木学会

Japan Society of Civil Engineers

Founded in 1914, JSCE is a prestigious association with more than 38,000 members. Open not only to expert civil engineers, JSCE accepts for membership other individuals who express an interest in civil engineering. The Society strives to enhance the quality of civil life through the improvement of environmental amenity, the guarantee of public safety, and the promotion of culture and welfare.

JSCE publishes a monthly magazine and seven technical and professional journals and a variety of books, including "Handbook of Civil Engineers." JSCE also publishes "Civil Engineering in Japan" in English, in addition to many other publications geared to overseas readers.

Currently, the Society is conducting intensive and comprehensive research in the field of earthquake engineering, including the review of design codes. This project comes as a result of the enormous damage to infrastructure during the 1995 Hanshin-Awaji earthquake. A large volume of well-documented, comprehensive reports will be published to serve as a valuable reference for the future.

JSCE headquarters is located in Tokyo. Visit our Home Page at <http://www.soc.nacsis.ac.jp/home/jsce2/>.

**Itsuji Miyoshi,
Executive Director**

CONTENT HIGHLIGHTS

INSIDE FRONT COVER: ORGANIZATION PROFILES

All about three sponsoring organizations: ASCE, PICE, and JSCE.

TOUR CONFERENCE PARTICIPANTS

2

Industry and Conference goals from the policy team.

CONFERENCE TOURS/HIGHLIGHTS

Places to go and things to see. Even a tour for spouses during the professional development program.

3



CONFERENCE SCHEDULE: AN OVERVIEW

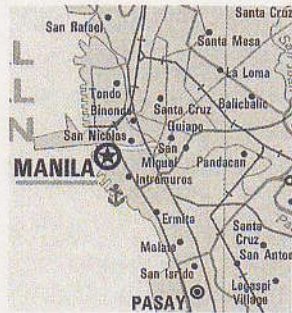
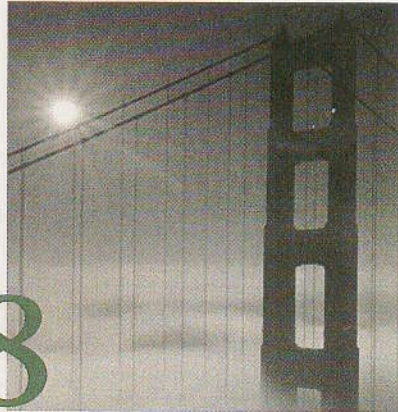
5

A complete schedule of all activities and events to help you manage your time.

PROFESSIONAL DEVELOPMENT TRACKS

Concurrent programs provide an opportunity to explore infrastructure, sustainable development, and project management issues.

8



ABOUT THE PHILIPPINES:

TRAVEL TIPS

Some things you should know to make your trip more enjoyable.

16

REGISTRATION FORM/INFORMATION

Information you need to provide and things you need to do to assure a space at this exciting conference.

18

21

IN APPRECIATION

This conference was made possible by the generous contributions of time and money of many special people.



ON THE COVER:

Cover photo:
Los Banos Rice Institute,
Philippines.

Dick Swanson

TO OUR CONFERENCE PARTICIPANTS



(Top to Bottom)
Patricia D. Galloway,
Luther W. Graef,
Akira Miyazaki,
Minoru Matsuo,
Felipe F. Cruz

With the advancement of technology, people around the world can now communicate with each other in "real time." The world has become smaller and travel around the globe is now accomplished in a matter of hours. As such, the civil engineer is faced with new challenges - to build a better quality of life - yet manage it in such a way as not only to control time and costs, but also to balance new infrastructure projects with sustainable development concepts in order to preserve the fragile and limited resources Mother Earth possesses. To best meet these challenges, ASCE, JSCE, and PICE have developed jointly an international conference to focus on infrastructure, sustainable development, and project management. Here in Manila, civil engineers from around the world will gather to discuss these critical issues and develop recommendations that will build the quality of life. As Conference Chair, I challenge you to be part of this civil engineering team, to share your thoughts with world renowned experts, and to take home ideas that will enhance your own civil engineered projects.

Patricia D. Galloway, P.E.
Conference Chair
AMERICAN SOCIETY OF
CIVIL ENGINEERS

ASCE is proud to be a sponsor of the first international conference on Asian infrastructure, sustainable development, and project management. Sponsoring the conference in partnership with JSCE and PICE has strengthened ASCE's commitment to worldwide involvement. Civil engineers all over the globe contribute to the rebuilding effort required to improve lives and to continue prosperity into the next century. Sustainable development enhances the quality of life of the general public, and ASCE looks for opportunities to promote public education and information programs on infrastructure benefits and needs. We hope that this conference will prove

beneficial to you in your efforts to build a more sustainable world and will provide an atmosphere of camaraderie in which you can exchange ideas and experiences with colleagues from all over the world.

Luther W. Graef, P.E.
President
AMERICAN SOCIETY OF
CIVIL ENGINEERS

Multicultural Asia is an area of rapid development, an area of increasing human resources, and an area with a wealth of natural environments. A recent worldwide critical issue of harmonized balance between the environment and infrastructure construction is magnified in this region. Civil engineers must play a role of vital importance in this respect. The 21st century will witness how civil engineers in our generation have made efforts to prepare for the next generation. In this context, ASCE, PICE, and JSCE jointly offer a first-class international conference in Manila, the center of Asia. This conference affords our profession an opportunity to exchange experiences, ideas, and innovative concepts in both management and technical issues, in view of the harmonized balance between the environment and development. We have no doubt that success of this international conference and continuation of this event will promote our mutual understanding and closer future multilateral collaborations in the Asian Region.

Akira Miyazaki
President
Minoru Matsuo
Immediate Past President

JAPAN SOCIETY OF
CIVIL ENGINEERS

The Philippine Institute of Civil Engineers, Inc. (PICE) is pleased to host the very first international civil engineering conference being sponsored jointly with our counterparts from the United States [ASCE] and Japan [JSCE]. In addition to the official Conference program, you are being given the opportunity to visit the Ifugao Rice Terraces, dubbed the "eighth wonder of the world," located in Banaue, one of the 11 towns of Ifugao. The result of a man-made engineering project of the Ifugao people built over 2000 years ago, Philippine President Fidel Ramos has said of the site, they "endure—but even more importantly, they continue to function...the ultimate test of sustainability." If placed end-to-end, the Terraces could reach halfway across the world. Currently being considered by UNESCO for inclusion among world heritage sites, the Ifugao Rice Terraces have been selected by the ASCE Board to be recognized as an International Historic Civil Engineering landmark. We hope your stay in the Philippines shall be enjoyable and memorable. Welcome to our country and to Manila.

Felipe F. Cruz
President
PHILIPPINE INSTITUTE OF
CIVIL ENGINEERS, INC.

CONFERENCE TOURS/HIGHLIGHTS

THERE'S SOMETHING FOR EVERYONE IN THE PHILIPPINES

TOURS OFFER THE PERFECT WAY TO SEE THE COUNTRY

In addition to the opportunity to participate in a professional Conference that will bring together civil engineering professionals from both the east and the west, your trip to the Philippines also affords you the chance to discover and explore the many new places, spectacular sights, and unusual bargains that make a visit to the Philippines so special. Light casual clothing [walking shorts acceptable] is suitable for all tours, but Banaue will be cool in February with temperatures between 59°-79° F (15°-26°C).

The following tours have been carefully selected and planned to offer maximum access to the wide range of sights and activities that exist within a day's travel of the Conference in Manila. It's up to you...you can select how and when you would like to participate. But remember, space will be limited so it is important that you designate your tour preferences and make your reservations as part of your Conference Registration submission. Please note, when submitting your Hotel Registration, that some tours necessitate that you arrive a day or more earlier than the start of the official Conference program. See you in Manila!

THE IFUGAO RICE TERRACES, BANAUE

Monday and Tuesday, February 16-17, 1998
Arrive in Manila no later than Sunday, February 15.
Manila Departure: February 16 at 8:00 am; ETA: 4:00 pm
Banaue Departure: February 17 at 12 noon; ETA: 8:00 pm
Cost: \$125/person, based on double occupancy, \$150/person, based on single occupancy. Rates include overnight at Banaue Hotel [all meals included], and round trip travel by air-conditioned coach. (Limited to 40 persons only.)



The Ifugao Rice Terraces have been dubbed the eighth wonder of the world and offer the modern-day visitor an opportunity to experience an early example of sustainable development that works. The terraces are a man-made engineering project of the Ifugao people of 1000 BC, hatched into the mountainsides of Banaue. ASCE will bestow The International Historic Civil Engineering Landmark Award upon the Rice Terraces during the site visit.

NIGHTSEEING TOUR OF MANILA

Wednesday, February 18, 1998
Four-hour tour commencing at 1:00 pm: Cost: \$12
[This tour will be repeated on Saturday, February 21, commencing at 8:00 am.]

A comprehensive visit to the more important historical landmarks in and around Manila will include Rizal Park and the walled city of Intramuros with its centuries old San Agustin Church, and Fort Santiago, a restored Spanish garrison. The tour will also travel across the Pasig River to the commercial hub of Quiapo and Santa Cruz before visiting the Santo Tomas University, the country's oldest institution of learning. Other sights will also be highlighted.

CONFERENCE TOURS/HIGHLIGHTS

HIGH SCHOOL AND COLLEGE STUDENTS INVOLVED IN SUSTAINABLE DEVELOPMENT

The Conference's three sponsoring organizations, ASCE, PICE, and JSCE, in anticipation of this professional gathering in Manila, have hosted a student essay contest open to young adults in high school and college. The high school students were asked to write an essay on the topic: Why Is Sustainable Development Important? The college students will respond to the question: As we approach the 21st century, what are the challenges which civil engineers will face as project managers considering sustainable development, global economics, and the existing infrastructure? Two winners each from the United States, the Philippines and Japan will be flown to the Conference.

In addition to their participation at the Conference, the winners will tour the city, travel to the Ifugao Rice Terraces, meet with PICE student chapter presidents from various universities and attend civil engineering classes at local education institutions.

CORREGIDOR ISLAND

Saturday, February 21, 1998

Day-trip commencing at 8:00 am. Return: 4:00 pm

Cost: \$62.50. Includes round trip transfers by air-conditioned coach from hotel to ferry and from terminal to hotel and by ferry from Manila to Corregidor Island and back to Manila, tunnel fees, lunch/snack.

The beautiful and historic island of Corregidor sits off the coast of Bataan and Manila. Today, although war memorials are still strewn all over the island, Corregidor has become an exciting tourist destination. The guided tour will provide an opportunity to see the many aspects of Corregidor. In addition to the Pacific War Memorial, there will be a visit to the Malinta Tunnel, which served as a supply depot and hospital during World War II.

SUBIC, CLARK & LAHAR/MT. PINATUBO

Saturday, February 21, 1998

Day-trip commencing at 6:00 am. Return: 6:00 pm

Cost: \$48. Includes round trip transfers by air-conditioned coach.

This day trip offers very different views of the island of Luzon. Luzon is home to Subic (former U.S. naval base), and Clark (former U.S. air force base), once known as America's bastions of regional security until they were converted into special economic and duty free zones. Currently, Subic is known for its pristine beaches and outstanding shopping bargains. In a visit to the lahar areas, expect to see the remains of one of the towns buried in 'lahar,' the gray, volcanic dust from Mount Pinatubo, which, in monsoon season, mixes with water and flows like concrete on the surrounding settlements. Also on the tour will be a visit to the Mega Dike constructed to contain the lahar flows which continue to devastate outlying areas. These areas surrounding Mt. Pinatubo offer a view of the effects of the last volcanic eruption, in June 1991, after 600 years of dormancy. The resilience and ingenuity of the local residents is evidenced by their unwillingness to give up, even in the face of lands that cannot be cultivated for the next 50 years.

SPECIAL TOUR EVENT FOR SPOUSES

Thursday, February 19-Friday, February 20, 1998

Day One: Depart 9:00 am. Return 5:30 pm. Visit to Malacañang and National Museums, and a handicraft factory. Day Two: Depart 8:00 am. Return 4:00 pm. Tour City of Manila and shop in Makati City.

Cost: \$150. Includes any fees for activities, two receptions, two lunches and all transportation by air conditioned coach.

Scheduled to coincide with the regular program events, each day's schedule will offer spouses the opportunity to participate in activities apart from the official program.

GOLF TOURNAMENT

Saturday, February 21, 1998

Cost: \$150. Fee includes transportation to and from the hotel, green fee, caddy fee and lunch.

To be finalized depending on number of registrants. Indicate your interest by responding on Registration Form. (No payment due until you arrive.)

CONFERENCE SCHEDULE: AN OVERVIEW

PRE-CONFERENCE EVENTS

MONDAY AND TUESDAY, FEBRUARY 16-17, 1998

TOUR OF THE IFUGAO RICE TERRACES
Overnight trip. Refer to Tour Highlights.

WEDNESDAY, FEBRUARY 18, 1998

Afternoon:
SIGHTSEEING TOUR OF MANILA
Four hour afternoon tour of city. Refer to Tour Highlights.

Evening:
WELCOME COCKTAIL PARTY
Hosted by the three sponsoring civil engineering societies: ASCE, PICE, & JSCE

NOTE: Refer to TOUR HIGHLIGHTS for information on the Spouse Tours scheduled for Thursday & Friday, February 19-20.

PROGRAM SCHEDULE

DAY ONE: THURSDAY, FEBRUARY 19, 1998

0800—0830
REGISTRATION

0830—0845
CONFERENCE WELCOME
Conference Chair: Patricia D. Galloway, P.E.

0845—0930
KEYNOTE ADDRESS/OPENING SESSION
Introduction of Guest of Honor: PICE President Felipe F. Cruz
Address: His Excellency Philippine President Fidel Valdez Ramos

0930—1000
PLENARY SESSION
Why Worry about Sustainable Development?
Speaker: Luther W. Graef, P.E., President, ASCE

1000—1030
BREAK

1030—1200
Parallel Sessions in Specific Program Tracks

ASIAN
INFRASTRUCTURE,
SUSTAINABLE
DEVELOPMENT
AND
PROJECT
MANAGEMENT

MANILA, PHILIPPINES
FEBRUARY 19-20, 1998



**His Excellency President
Fidel Valdez Ramos**

CONFERENCE

ASIAN
INFRASTRUCTURE,
SUSTAINABLE
DEVELOPMENT
AND
PROJECT
MANAGEMENT

MANILA, PHILIPPINES
FEBRUARY 19-20, 1998

1200—1330
LUNCHEON

Introduction of Speaker: PICE Past President Aber P. Canlas
Keynote Address: The Importance of Sustainable Development in
Today's Civil Engineering Project

Speaker: William J. Carroll, Immediate Past President,
World Federation of Engineering Organizations; Past President, American
Society of Civil Engineers; Past Chairman & CEO, James M. Montgomery,
[currently Montgomery Watson, Inc.], Pasadena, California, USA

1330—1500
Parallel Sessions in Specific Program Tracks

1500—1530
BREAK

1530—1700
Parallel Sessions in Specific Program Tracks

1730—1930
NETWORKING RECEPTION
Hosted by the Japan Society of Civil Engineers

DAY TWO, FRIDAY, FEBRUARY 20, 1998

0800—0830
CONTINENTAL BREAKFAST

0830—0845
WELCOME

Remarks: Hon. Gregorio R. Vigilar, Secretary,
Department of Public Works and Highways, Manila, Philippines

0845—0930
PLENARY SESSION
Construction Works in Developing Countries: Problems and Solutions
Speaker: Mitsuhiro Sasanuma, Immediate Past
President, Overseas Project Management Consultants, Ltd.; Former Vice
President, Overseas Economic Cooperation Fund of Japan

0930—1000
BREAK

CONFERENCE

1000—1200

Parallel Sessions in Specific Program Tracks

1200—1330

LUNCHEON

Awards Ceremony for Winners of Student Essay Contest and Presentation of Summaries of Entries Presented by Students

1330—1500

Parallel Sessions in Specific Program Tracks

1500—1530

BREAK

1530—1700

Parallel Sessions in Specific Program Tracks

1700—1800

CLOSING SESSION/CONFERENCE SUMMARY

Remarks: Akira Miyazaki, President, Japan Society of Civil Engineers
Luther W. Graef, P.E., President, American Society of Civil Engineers
Felipe F. Cruz, President, Philippine Institute of Civil Engineers, Inc.

POST-CONFERENCE EVENTS

One day following close of Conference.

SATURDAY, FEBRUARY 21, 1998

TOUR OF CORREGIDOR ISLAND

Day Trip. Refer to Tour Highlights.

TOUR OF SUBIC, CLARK, AND LAHAR/MT. PINATUBO AREA

Day Trip. Refer to Tour Highlights.

SIGHTSEEING TOUR OF MANILA

Four hour morning tour of city. Refer to Tour Highlights.

GOLF TOURNAMENT

To be finalized depending on number of registrants.

Refer to Tour Highlights, page 4 and Registration Information, page 18.

ASIAN
INFRASTRUCTURE,
SUSTAINABLE
DEVELOPMENT
AND
PROJECT
MANAGEMENT

MANILA, PHILIPPINES

FEBRUARY 19-20, 1998