

[www.iso-pe.org](http://www.iso-pe.org); [www.iso-pe2012.org](http://www.iso-pe2012.org)

June 17–22, Rhodes (Rodos), Greece

The Twenty-second (2012) International  
**Ocean and Polar  
Engineering Conference**

*Including additional Symposia:*

- 1st Tsunami & Safety
- 3rd Arctic Science & Technology
- 2nd Arctic Materials
- 3rd Renewable Energy & Environment
- 4th Sloshing Dynamics & Design
- 4th Frontier & Clean Energy Tech
- 10th High-Performance Materials
- 1st Asset Integrity
- 6th Strain-Based Design

**ISOPE-2012**

Rhodes, Greece, June 17–22

## Technical Program

Refereed papers from some **52** countries in some **145** sessions  
and General and keynote sessions  
General Information, Reservations, Publication and Program  
Updates on [www.iso-pe.org](http://www.iso-pe.org); [www.iso-pe2012.org](http://www.iso-pe2012.org)  
Forms for Advance Registration and Venue Hotel:  
Inside this program and on [www.iso-pe.org](http://www.iso-pe.org)

*Organized by:*

Technical Program Committee, ISOPE

*Sponsored by:*

International Society of Offshore and Polar Engineers (ISOPE)  
with cooperating organizations (list inside)



ISOPE, P.O. Box 189  
Cupertino, CA 95015-0189, USA

Fax: +1-650-254-2038

[meetings@iso-pe.org](mailto:meetings@iso-pe.org); [www.iso-pe.org](http://www.iso-pe.org)

# The Twenty-second (2012) International Ocean and Polar Engineering Conference

## GENERAL INFORMATION

Further details are to be updated on [www.isopec.org](http://www.isopec.org) .



**PLACE AND DATE:** Rhodes (Rodos), Greece  
June 17–22, 2012

All ISOPE-2012 Conference's technical events, reception, annual banquet, tea breaks and registration will take place at:

**RODOS PALACE HOTEL**  
Trianton Ave. Ixia P.O.Box 121  
85100 Rhodes, Greece  
Tel:(+30) 22410 25222

### **HOTEL RESERVATIONS**

Please make your reservation directly with the Hotel. Use the Hotel Reservation Form for online, email or fax reservation: ([Reservation Form in PDF](#))  
You can also download this form in December from [www.isopec.org](http://www.isopec.org) or [www.isopec2012.org](http://www.isopec2012.org) .



#### **LANGUAGE**

The language for the conference is English. No translation services will be available.

#### **AIR TRANSPORTATION**

**Diagoras Airport** is located on the island of **Rhodes (Rodos)**. The airport is located 14km south west of the capital, the city of Rhodes, near the village of Paradisi.

#### **Domestic Flights**

Airlines serving Rhodes **from the Greek mainland are:** Olympic Airlines and Aegean Airlines.

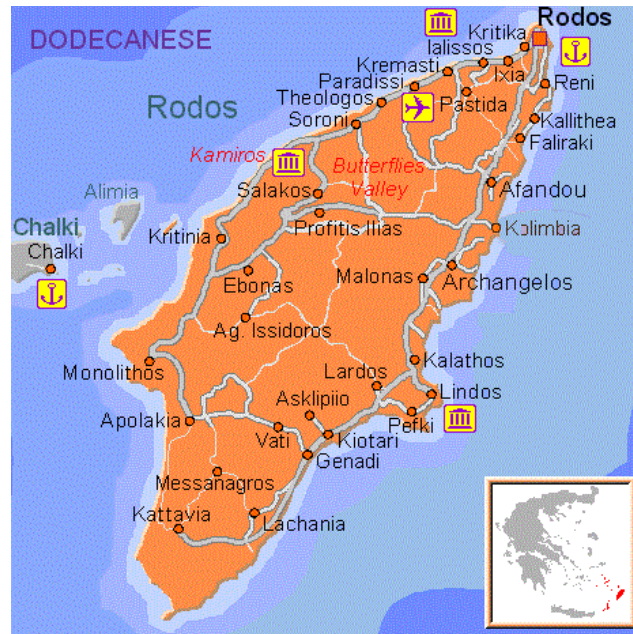
**Diagoras** connects Rhodes with **Athens (Eleftherios Venizelos International Airport)** on a daily basis (up to 8 flights/day), with Thessaloniki (**Makedonia International Airport**), Heraklio and Cyprus (3 to 5 times/week) and with the nearby islands of Kastelorizo, Karpathos, Kasos, Kos, Mytilini, Limnos, Chios and Samos.

#### **International Flights**

There are regular international flights to and from most European cities, mainly during the summer, as well as a large number of flights to and from the rest of the world. There are many international direct flights to **Athens**, including 10 daily flights between **Athens and Rhodes**.

Visitor information counters are located throughout Diagoras airport (Tel. +30-22410-83200). For the most current flight service contact your travel professional.

**Istanbul—Dalaman (Marmaris)—Rodos (Rhodes)** is another option: See below.



#### **GROUND TRANSPORTATION**

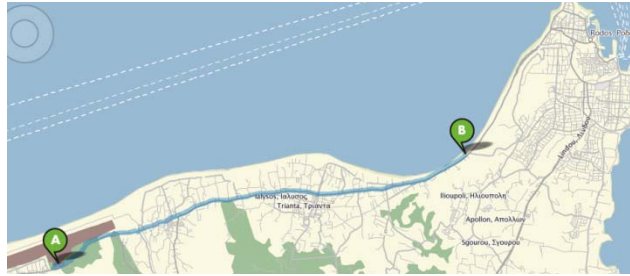
Ground transportation services from the Diagoras Airport to the venue hotel **RODOS PALACE HOTEL** (12 km distance or 15 minutes travel time) are provided by:

**Taxi:** Service is available in the exit of the airport.  
**Cost:** Approximately less than €25.00 total (Maximum allowed up to four people with luggages per Taxi).














**Bus:** Service is available 300m from the exit of the airport.  
**Cost:** Approximately €4.00 (Bus schedules not very reliable).

**Rental Car:** Avis, Hertz, Budget, Drive, Europe Car, Holiday Auto, National-Alamo and Sixt rental desks are adjacent to baggage claim.

**Diagoras Airport to Rodos Palace Hotel by Rental Car**  
Distance is 12 km and driving time will be about 15 minutes.



### Description

-  You start at **Leoforos Eleftherias**.
-  Turn left onto **Leoforos Eleftherias**.
-  You are entering **Petaloudes**.
-  Follow the **Leoforos Eleftherias**.
-  Change from **Leoforos Eleftherias**, in direction **Rodos**.
-  You just left **Petaloudes**.
-  Follow the **Leoforos Eleftherias**.
-  Leave **Leoforos Eleftherias**, and head straightforward onto **Leoforos Irakleidon**.
-  You are entering **Ialysos**.
-  Follow the **Leoforos Irakleidon**.
-  You just left **Ialysos**.
-  Follow the **Leoforos Irakleidon**.
-  You have arrived at your destination.

### HOTEL PARKING

The Rodos Palace Hotel offers self-parking (300 spaces) at no cost to registered guests.

### MARINE TRANSPORTATION

The Commercial Port (Mandraki Location) is located in the City of Rhodes

### Sea Connections

There are daily sailings from Piraeus all year round, more frequent in the summer months. All international and domestic ferries and cruise liners dock at the commercial port of Rhodes. There are regular ferry lines connecting Rhodes to Athens (Piraeus), Thessaloniki, Heraklion, Cyprus and Dalaman (Marmaris)– [Turkey](#). Rhodes is also connected with all neighboring islands through extensive boat and hydrofoil services. Most of them dock at the commercial port and some at the Mandraki harbor.

**Istanbul → Rodos (Rhodes) Option:**

One-hour flight from **Istanbul to** resort town **Dalaman** International Airport.

One-hour shuttle-bus transfer **to Marmaris port**.

One-hour catamaran ferry ride **from Marmaris port to Rodos (Rhodes)** port.

**Istanbul → Dalaman.** Several airlines operate one-hour flight from **Istanbul to Dalaman** airport. There are several (domestic) flights from early morning to late night during the day, Shuttle bus runs between Dalaman airport and Marmaris, one of the most popular Turkish resort city with many five-star hotels.

**Dalaman/Marmaris — Rodos (Rhodes).** Ferry by *Greek and Turkish companies* operates every day except Sunday departure at only 09:00 and 09:30 in the morning and return at only 16:00 in the afternoon. Round trip ticket is about 40-50 euro for catamaran ferries.

There are several ferry agents in Marmaris Port. Ferry **online booking** can be made by visiting following websites:

[http://www.marmarisferry.com/index\\_en.php](http://www.marmarisferry.com/index_en.php)

<http://www.seaservice.gr/v2/en/index.php?itemID=15>

*During the peak summer tourist season, very early booking is advised.*

**Fethiye — Rodos (Rhodes).** A Turkish company operates ferry service from Fethiye (2-3 times weekly).

Please fill in specific ferry reservation for website and ferry frequency, and entry visa office location and phone number or website. But best way for making reservation is to ask from your travel agency. You can also contact Prof. Dr. Sedat KABDASLI at [kabdasslis@itu.edu.tr](mailto:kabdasslis@itu.edu.tr), if necessary for finding local travel agency.



**Transportations from the Commercial Port to the Hotel (12km-10minutes):**

- Taxis
- Regular public bus service

**SHOPPING**

In Ixia Area just around the hotel.  
In the City Of Rhodes and Medieval Town (5 minutes by car or 4 km)

#### **CURRENCY EXCHANGE**

Cash dispensers (ATMs) that accept all major credit/debit cards can be found at several locations in the airport, and at banks and retail areas throughout the city. Currency exchange services will charge either a flat fee for small denominations or a percentage of the amount exchanged: usually the exchange rate is more favorable at the banks. There is an ATM machine very close to the Rodos Palace Hotel.

#### **TAX**

Purchases in are subject to a sales tax of 23% (as of August of 2011) of the purchase price **included in sales price** with no tax rebate.

#### **CITY TRANSPORTATION**

Coach or Boat Sightseeing (Tours organized by Local Travel Agents)  
Rental Car/Motorbike  
Taxi  
Regular public bus service.

#### **ELECTRICITY AND ADAPTER**

Appliances operate on **220 volts**.

#### **TIMEZONE**

Central European Time  
GMT +2 hours

#### **CURRENCY**

Euro

#### **LANGUAGES SPOKEN**

Greek, English, German, Italian, French

#### **TIPPING**

At the restaurants, most of the time service charge is included in the price of the food. It is customary but not obligatory to give a tip of 5% to the waiter at the restaurant. In the Taxis it is not necessary to tip the driver. In the hotel, it is customary to tip the bellman with 2 to 5 € for handling the luggage upon checking in and checking out from the hotel.

#### **HOURS OF OFFICE AND BUSINESS OPERATION**

- Shopping hours In the City of Rhodes: Monday to Friday from 9:00 to 13:00 and from 17:00 to 21:00, Saturday from 9:00 am to 14:00 pm. In the Medieval Town & tourist areas Monday-Sunday all day long
- Banks are generally open 8:00 am to 2:00 pm Monday to Friday.
- There is a pharmacy very close to the Rodos Palace Hotel At the Rodos Palace, there is no medical doctor, however a doctor can come to the hotel upon request and at the expense of the hotel guest.

#### **INTERNET ACCESS**

- Wireless Internet Access in all the public areas with Wi-Fi at 6 euro for 1 hour and 19.5 euro for 24 hours. Access cards can be purchased from the Hotel Reception Desk.
- In-Room Internet connection at the same rates as Wi-Fi.

#### **IN HOTEL BUSINESS SERVICES (with charge)**

- Business Services (Mail, Fax, Email, Photocopying etc.)
- Audiovisual Equipment
- PC's & Printers available
- Private Transfers & Car Hire
- Laundry & Dry Cleaning

#### **CONFERENCE LUNCH MENUS**

ISOPE is arranging with the Hotel for 4-day [lunch packages](#) during the conference. It will be announced in next update on the general information, hopefully for the individual participants to pre-order your lunch using the ISOPE-2012 [advance registration](#) form.

#### **DINING & ENTERTAINMENT**

At Rodos Palace, Greek traditional or international, formal or casual, but always delectable cuisine is served in 10 different restaurants (Gallery Cafe, La Terasse Restaurant, Pool Restaurant, Ambrosia Restaurant, Castellania Restaurant, Superfamily Restaurant, La Rotisserie Gourmet Piano Restaurant, 12 Nissia Gourmet Restaurant, La Terasse Bar, Amphitriton Piano Bar).



## WEATHER

June	Av Temp. °C			Hum.	Rainf.	Winds
	Avg	Max.	Min.	%	mm	Knot
Rhodes	24.7	28.4	19.9	58.5	2.3	10.2

## FOR YOUNGER GUESTS

The Kids Funland area features facilities and services such as: A Family Lagoon type Pool, curvaceously designed with a shallow children's end, set attractively in sun terraces backed with long mature trees. Playground and Playcenter units for kids 4-12 years old, with cyclone, wave, hurricane slides and curved, loop and bumper ladders. A soft-play room for babies and under 4, and a Playroom with games and toys for 4-7 years of age along with a whole range of baby equipment.

## ACTIVITIES AND ATTRACTIONS

When the gods divided the world between themselves, so an ancient legend goes, Helios (the sun god) noticed an island emerging from the sea. He was so fascinated by its beauty that he immediately asked Zeus whether he might have this island as his share. Rhodes was that island. An island that glided and glides still, like a dolphin, over the waves in the transparent seas of the south-eastern Aegean, where West meets East. Wreathed in golden beaches, with bright green hills and valleys, and bathed in the light of the god Helios (her ancient patron), it is a place favored by nature, made on a human scale.

The island of Rhodes is situated between the Aegean and the Mediterranean seas about 11 km from the coast of Asia Minor (Turkey). It has a population of about 100.000 inhabitants. It is by far the largest island in the Dodecanese with an area of about 1400 sq. km. Rhodes is diamond-shaped, 77 km long with a maximum width of about 36km. There is a range of hills rising in the center with mount Ataviros the highest at about 1200m. Finally much of the island is fertile with a variety of fauna and flora.

Rhodes offers a full range of activities and attractions to enjoy such as swimming, sailing, medieval, antiquities, and numerous sightseeing opportunities. The following websites provide useful information you should find helpful in planning your Rhodes visit.

Related web links: <http://www.rhodes.gr/en/>,  
<http://www.gotorhodes.com/> and  
<http://www.rodosislandinfo.gr/>

#### **Guide Book**

A guide book describing the many fun activities and attractions available on Rhodes can be found at <http://www.travel-Rhodes.com>, and <http://www.rodosnet.gr>.

#### **Local Sites of Interest**

Medieval City (The Street of the Knights “Ippoton Street”, The Palace of the Grand Master, Hippocrate’s Square, The Panagia (Virgin Mary) of the Burgh), The Municipal Park of Rhodes, Rodini Park, Filerimos, The Valley of the Butterflies, The Seven Springs (Epta Piges), Prophetes Elias, The biotope of Apolakia Dam, The Archaeological Museum of Rhodes, The Hospice of St. Catherine, Rhodes Aquarium, Decorative Arts Museum of Rhodes, Museum of Modern Greek Art of Rhodes, The Folklore Museum in Apollonas, The Acropolis of Rhodes, Tombs of St. John, The Ancient City of Kamiros, Lindos, The Kallithea Baths, Castles.



### **SIGHT SEEING AND TOUR PROGRAM**

There are several travel agents in the island of Rhodes that can organize for the ISOPE participants customized visits to several places of interest in the island.

*Visit Tour Desk near Conference Registration area.*



### **ADVANCE CONFERENCE REGISTRATION**

Registration fee starts at **\$670** and lower for the students. Click [here](#) for advance registration form.

Mail your registration form together with your payment to:

**ISOPE Accounting (ISOPE-2012)**

**495 North Whisman Road, Suite 300  
Mountain View, California 94043-5711  
USA**

Email: [isope-2@isope.org](mailto:isope-2@isope.org)  
Fax: +1-650-254-2038; Phone: +1-650-254-1871

**Advance Registration Deadline:**

Presenting Authors: March 24, 2012.  
Non-authors and non-presenting authors: May 18, 2012

**REGISTRATION BADGE**

Conference registration badges are required for admittance to all the conference activities, including the reception and banquet.

**ON-SITE CONFERENCE REGISTRATION:**

Grand Promenade

Participants who miss the advance registration (before **May 18**) may register on site at the Conference Registration Desk, but there is US\$100 surcharge. The registration desk will be open during the following hours:

Sunday, June 17	15:00-18:00	Wednesday, June 20	08:00-15:00
Monday, June 18	<b>07:30</b> -16:00	Thursday, June 21	08:00-13:00
Tuesday, June 19	<b>08:00</b> -16:00		

**ISOPE-2012 CONFERENCE PROCEEDINGS**

A 4-volume ISOPE-2011 conference proceedings on CD-ROM (**ISBN 978-1-880653-94-4; ISSN 1098-6189**) is included in all conference registration fees. For additional or separate orders, download the **publications order form** from [www.isope.org](http://www.isope.org) for post-conference order:

A **4-volume Conference Proceedings** CD-ROM (4,200 pp. est.)  
Mail, E-mail or Fax order      \$290 (ISOPE Member \$240)

***E-mail or Fax Order from*** ISOPE, 495 North Whisman Road, Suite 300, Mountain View, California 94043-5711, USA: Fax **1-650-254-2038**; [orders@isope.org](mailto:orders@isope.org).

Advance payment is required. MasterCard, VISA, or AMEX; international money order or U.S. bank checks in US Dollars *payable to ISOPE* will be accepted. Shipping and handling charges will be added (Download the Publication Order Information from [www.isope.org](http://www.isope.org)).

**CONFERENCE RECEPTION**

Sunday, 17:00      Outdoor Pool Area

## **ANNUAL CONFERENCE BANQUET**

Wednesday

Super Dome Pool

### **AUTHOR USB TEST**

Individual session rooms

Power-point or LCD projector and screen are available during 08:00-17:00 (Monday - Thursday).

### **CHAIR/CO-CHAIR BRIEFING**

The **session chairs and co-chairs** will be briefed at 07:30 each morning near the registration desk Grand Promenade and will pick up session jacket for author briefings on the day of presentation.

**Chairs and co-chairs** will also be emailed brief instructions in advance, including the manner of each session conduct and information on authors and presentation.

**PRESENTING AUTHORS** should go directly to their session room 30 minutes before the session and check out the USB presentation file.

### **INFORMATION - MESSAGE CENTER.**

The information and message center is located in the registration area. One may contact ISOPE Conference Registration Desk at Rodos Palace Hotel.

### **INTERNATIONAL PARTICIPANTS AND VISA APPLICATION**

International authors, participants or attendees who need help (except financial) can contact: ISOPE-2012 Secretariat, 495 North Whisman Road, Suite 300, Mountain View, California 94043-5711 USA. Fax: +1-650-254-2038; email: [meetings@isope.org](mailto:meetings@isope.org).

**Entry Visa.** Some authors, spouses and participants may be required to apply for an entry visa.

**Visa application form.** Get it from the Consulate Office of Greece in your country. For visa application information, click on:

#### **Countries requiring or not requiring a Visa**

<http://www2.mfa.gr/www.mfa.gr/en-US/Services/Visas/Visas+for+Foreigners+travelling+to+Greece/Countries+requiring+or+not+requiring+a+Visa/>

#### **Greek Missions Issuing Visas on Third Countries**

<http://www2.mfa.gr/www.mfa.gr/en-US/Services/Visas/Visas+for+Foreigners+travelling+to+Greece/Visa-Issuing+Authorities/Greek+Missions+Issuing+Visas+on+Third+Countries/>

#### **Table of EU member states representing Greece where Greece does not have diplomatic representation**

<http://www2.mfa.gr/www.mfa.gr/en-US/Services/Visas/Visas+for+Foreigners+travelling+to+Greece/Visa-Issuing+Authorities/Table+of+EU+member+states+representing+Greece+where+Greece+does+not+have+diplomatic+representation/>

#### **Countries where no EU member state is currently represented**

<http://www2.mfa.gr/www.mfa.gr/en-US/Services/Visas/Visas+for+Foreigners+travelling+to+Greece/Visa-Issuing+Authorities/Countries+where+no+EU+member+state+is+currently+represented/>

If the Consulate requires you to submit an official letter of invitation, please contact ISOPE, USA (email: [meetings@isope.org](mailto:meetings@isope.org); Fax: +1-650-254-2038).

#### **TAX DEDUCTIBILITY**

Expenses of attending professional meetings such as the registration fee and cost of technical publications may be tax-deductible as ordinary expenses for citizens of U.S. and some other countries.

#### **CLIMATE**

The climate in Rhodes in the month of June will be sunny and pleasantly warm (low humidity), with the West winds to keep you cool and comfortable. Swimming and other water activities will be very pleasant.



#### **PUBLICATION ORDER INFORMATION**

To order, download the publication order form from [www.isope.org](http://www.isope.org) > orders, [www.isope.org](http://www.isope.org) > publications, [www.isope2012.org](http://www.isope2012.org) or e-mail to [orders@isope.org](mailto:orders@isope.org) asking for the order form, and enclose the correct amount of payment or purchase order, and mail to:

**ISOPE Order Department**  
495 North Whisman Road, Suite 300  
Mountain View, California 94043-5711 USA  
Fax 1-650-254-2038: [orders@isope.org](mailto:orders@isope.org).

#### **AUTHOR INDEX AND SUBJECT INDEX**

With the advancement of Find or Search function in PDF file, one can use Find or Search in the PDF file of the conference programs posted on [www.isope.org](http://www.isope.org). For ISOPE CD-ROM, Click **Ctrl F** will display **FIND**.

*ISOPE conference and symposium proceedings are indexed by Engineering Index and EI Compendex and others.*

#### ***International Journal of Offshore and Polar Engineers***

- Quarterly (March, June, September, December) (ISSN 1053-5381): *Indexed by SCI-E and Engineering Index and EI Compendex and others.*

**Editors:** Jin S. Chung, R.M.W. Frederking, W. Koterayama, I. Langen. **Topics:** *ocean and marine engineering, offshore engineering, environment, offshore mechanics, Arctic and*

*Antarctic engineering, structures and materials, energy/ Resources, and emerging topics:*

**Yearly subscription rates:** US\$160. (Member; complimentary) and US\$100 per a set of annual back issues. US\$60 per issue.

**Proceedings of the 1st (1990) Pacific/Asia Offshore Mechanics Symposium (PACOMS '90), Seoul, Korea, 24-28 June 1990.** For a set of 3 volumes, (ISBN 0-9626104-0-2; LCCN 90-082039): approx. 1260 pp., US\$150 per set.

**Proceedings of Special Offshore Symposium China (SOSC-94) /the 3rd (1994) Pacific/Asia Offshore Mechanics Symposium (PACOMS-94),** Beijing, China, 16-18 April 1994. A single volume (ISBN 1-880653-15-X); 797 pp., US\$100.

**Proceedings of the 4th (1996) ISOPE Pacific/Asia Offshore Mechanics Symposium (PACOMS-96),** Pusan, Korea, October 31-November 2, 1996. A single volume (ISBN 978-1-880653-27-2; ISSN 1946-0031); 325 pp., US\$80 (ISOPE Member; \$60).

**Proceedings of the 5th (2002) ISOPE Pacific/Asia Offshore Mechanics Symposium (PACOMS-2002),** Daejeon, Korea, November 17–20, 2002. A single volume (hard copy and CD-Rom) (ISBN 978-1-880653-59-3; ISSN 1946-0031); 252 pp., US\$120 (ISOPE Member; \$80).

**Proceedings of the 6th (2004) ISOPE Pacific/Asia Offshore Mechanics Symposium (PACOMS-2004),** Vladivostok, Russia, September 12–16, 2004. A single volume (hard copy and CD-Rom) (ISBN 978-1-880653-63-0; ISSN 1946-004X); 299 pp., US\$100 (ISOPE Member; \$80).

**Proceedings of the 7th (2006) Pacific/Asia Offshore Mechanics Symposium (ISOPE PACOMS-2006),** Dalian, China, September 17–21, 2006. A single volume (CD-ROM) (ISBN 978-1-880653-67-8; ISSN 1946-004X); 357 pp., US\$100 (ISOPE Member; \$80).

**Proceedings of the 8th (2008) Pacific/Asia Offshore Mechanics Symposium (PACOMS-2008),** Bangkok, Thailand, November 17–21, 2006. A single volume (CD-ROM) (ISBN 978-1-880653-52-4; ISSN 1946-004X); 334 pp., US\$100 (ISOPE Member; \$80).

**Proceedings of the 9th (2010) Pacific/Asia Offshore Mechanics Symposium (PACOMS-2010)**, Busan, Korea, November 14–17, 2010. A single volume (CD-ROM, ISBN 1-880653-79-1, ISSN 1946-004X); 362 pp., US\$100 (ISOPE Member; \$80).

**Proceedings of the 10th (2012) Pacific/Asia Offshore Mechanics Symposium (PACOMS-2012)**, Vladivostok, Russia, September 30–October 3, 2012. A single volume (CD-ROM, ISBN 1-880653-93-7, ISSN 1946-004X); 330 pp. est, US\$100 (ISOPE Member; \$80).

**Proceedings of the 1st (1990) European Offshore Mechanics Symposium (EUROMS-90)**, Trondheim, Norway, 20-22 August 1990. A single volume: (ISBN 0-9626104-4-5; LCCN 90-084691); approx. 590 pp., US\$80. (Member; US\$60.)

**Proceedings of the 2nd (1999) ISOPE European Offshore Mechanics Symposium (EUROMS-99)**: (of Synopsis in Russian and English), Moscow, Russia, 7-9 June 1999. A single volume: (ISBN 1-880653-44-3); approx. 126 pp., US\$50. (Member; US\$40.)

**Proceedings of the 1st (1995) ISOPE Ocean Mining Symposium**, Tsukuba, Japan, November 21-22, 1995. A single volume (ISBN 1-880653-21-4, LCCN 95-77708): 238 pp., US\$100 (Member; US\$80.)

**Proceedings of the 2nd (1997) ISOPE Ocean Mining Symposium**, Seoul, Korea, November 24-26, 1997. A single volume (ISBN 1-880653-33-8, LCCN 97-74490): 201 pp., US\$100 (Member; US\$80.)

**Proceedings of the 3rd (1999) ISOPE Ocean Mining Symposium**, Goa, India, November 8-10, 1999. A single volume (ISBN 978-1-880653-45-6; ISSN 1946-0074):298 pp., US\$100 (Member; US\$80.)

**Proceedings of the 4th (2001) ISOPE Ocean Mining Symposium**, Szczecin, Poland, September 23-27, 2002. A single volume (ISBN 978-1-880653-56-2; ISSN 1946-0074): 208 pp., US\$100 (Member; US\$80.)

**Proceedings of the 5th (2003) ISOPE Ocean Mining Symposium**, Tsukuba, Japan, September 15–19, 2003. A single volume (hard copy and CD-Rom) (ISBN 978-1-880653-61-6; ISSN 1946-0074):256 pp., US\$120 (Member; US\$80.)

**Proceedings of the 6th (2005) ISOPE Ocean Mining Symposium**, Changsha, Hunan, China, October 9–13, 2005. A single volume (CD-Rom) (ISBN 978-1-880653-65-4; ISSN 1946-0066):276 pp., US\$100 (Member; US\$80.)

**Proceedings of the 7th (2007) ISOPE Ocean Mining Symposium**, Lisbon, Portugal, July 1–6, 2007. A single volume (CD-Rom) (ISBN 978-1-880653-69-2; ISSN 1946-0066):219 pp., US\$100 (Member; US\$80.)

**Proceedings of the 8th (2009) ISOPE Ocean Mining Symposium (OMS-2009)**, Chennai, India, September 20–24, 2009. A single volume (CD-Rom) (ISBN 978-1-880653-75-3; ISSN 1946-0066): 308 pp., US\$100 (Member; US\$80.)

**Proceedings of the 9th (2011) ISOPE Ocean Mining Symposium (OMS-2011)**, Maui, Hawaii, USA, June 19-24, 2011. A single volume (CD-Rom) (ISBN 978-1-880653-95-1; ISSN 1946-0066): 308 pp., US\$100 (Member; US\$80.)

**First (2003) ISOPE Symposium on High-Performance Materials in Offshore Industry (HMOI), ISOPE HPM-2003**, Honolulu, Hawaii, US, May 25-30, 2003: Published in Proceedings of the 13th (2003) International Offshore and Polar Engineering Conference (ISOPE 2003), Honolulu, Hawaii, USA, May 25-30, 2003. For 4-volumes set CD-Rom (ISBN 978-1-880653-60-9; ISSN 1098-6189 (Set):2,912 pp., \$220 (ISOPE Member; \$180).

**Second (2004) ISOPE High-Performance Materials Symposium: Friction Stir Welding, ISOPE HPM-2004**, Toulon, France, May 23-28, 2004: Published in CD-Rom (ISBN 978-1-880653-62-3; ISSN 1098-6189 (Set): 3,160 pp., \$220 (ISOPE Member; \$180).

**Third (2005) ISOPE High-Performance Materials Symposium: Advanced Welding, ISOPE HPM-2005**, Seoul, Korea, June 19-24, 2005: Published in CD-Rom, (ISBN 978-1-880653-64-7; ISSN 1098-6189: 3,110 pp., \$220 (ISOPE Member; \$180).

**Fourth (2006) ISOPE High-Performance Materials Symposium, ISOPE HPM-2006**, San Francisco, California, USA, May 28–June 2, 2006: Published in *CD-Rom*, (ISBN 978-1-880653-66-1; ISSN 1098-6189: 2,704 pp., \$220 (ISOPE Member; \$180).

**Fifth (2007) ISOPE High-Performance Materials Symposium, ISOPE HPM-2007**, Lisbon, Portugal, July

1–6, 2007: Published in *CD-Rom*, (ISBN 978-1-880653-68-5; ISSN 1098-6189: 3,904 pp., \$270 (ISOPE Member; \$230).

**Sixth (2008) ISOPE High-Performance Materials Symposium, ISOPE HPM-2008**, Vancouver, Canada: Published in *CD-Rom*, (ISBN 978-1-880653-70-8; ISSN 1098-6189): 3,036 pp., \$270 (ISOPE Member; \$230).

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