

July 6–11
Vancouver, Canada
www.isopec.org

**The Eighteenth (2008) International
Offshore (Ocean) and Polar
Engineering Conference**

AND

**1st ISOPE Frontier Energy Resources
(FER-2008) Symposium**

**6th ISOPE High-Performance Materials
(HPM-2008) Symposium**

**2nd ISOPE Strain-Based Design
(SBD-2008) Symposium**

ISOPE-2008

**Sheraton Vancouver Wall Centre Hotel
Vancouver, Canada; July 6–11**

Technical Program

Refereed papers from **48** countries in **114** sessions and
5 plenary sessions

General Information, Reservations, Publication, Author
Index and Program Updates on www.isopec.org

Forms for Advance Registration and Venue Hotel:
Inside this program and on www.isopec.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@isopec.org; www.isopec.org

GENERAL INFORMATION

Further details are posted on www.isopec.org.

PLACE AND DATE: Vancouver, July 6–11, 2008

All ISOPE-2008 Conference's technical events, tea breaks and registration will take place at:

Sheraton Vancouver Wall Centre Hotel*

1088 Burrard Street

Vancouver, BC, Canada V6Z 2R9

Fax: +1-604-893-7123; www.sheratonvancouver.com

* 4-diamond hotel. Use the WORD file of this hotel booking at ISOPE room rates.

PARKING

The Sheraton has over 350 secured underground public parking stalls and charges \$25.99/night for booked hotel guests and \$36.00/night for non-hotel guests, taxes included.

LANGUAGE

The language for the conference is English. No translation service will be arranged.

AIR TRAVEL

Many major airlines provide direct flights to Vancouver International Airport (YVR) from centres in Asia, Europe, and North America – see www.yvr.com. YVR is located very close to the city center and can be easily reached by taxi or bus.

AIRPORT TO HOTEL

Vancouver International Airport

After the Immigration and Customs Control, follow the Exit signs. Outside the airport you will find taxi and bus stops.

Taxi

A taxi ride is the most convenient when you carry luggage. Taxis are readily available outside both the Domestic and International terminals and charge a metered rate based on time and distance traveled. The approximate fare to downtown Vancouver is \$23-\$26 (inclusive of all taxes) under normal conditions.

Airporter

The Airporter provides bus service to major hotel destinations in downtown Vancouver. The Airporter bus is located on the International and Domestic Arrivals level curb. No reservations required with departure times as follows every 20 minutes from 9:00 to 21:30. Tickets may be purchased at the Airporter counter, their pickup locations or on the motor coach. Fares are \$13.50 one-way or \$21.00 round trip. Further information on service, schedules and fares may be obtained from the Airporter counter located on the International and Domestic Arrivals levels, the website, www.yvrairporter.com, or by calling 1-800-668-3141.

Regular bus service

It is less convenient to take a regular city bus from the airport to the Sheraton Wall Centre Hotel. If you wish to do so, take No. 424 from the airport (domestic arrivals level) to *Airport Station*, and then transfer to No. 98, *Burrard Station (B-Line)*. See <http://translink.bc.ca>

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 favourable at the banks. Major credit cards are widely accepted at hotels, department stores and restaurants

TAX

Most purchases in British Columbia are subject to sales tax totalling 12% of the purchase price. The provincial sales tax (PST) of 7% applies to most retail purchases. (Some items, including groceries, restaurant meals, children's clothing and books, are PST exempt.) The federal Goods and Services Tax (GST) of 5% is applicable to most purchased goods and services, but rebates on accommodations and purchases taken out of the country can be claimed by non-residents of Canada. Some restrictions apply. For more information call 1-800-66-VISIT from within Canada; outside Canada call 902-432-5608.

ACCOMODATION (Find the reservation form in this program or download the **WORD** file of it from www.isopec.org > **conference** > **ISOPE-2008** > **hotel reservation form**.)

*Reservations should be made **absolutely before June 4, 2008**.*

Sheraton Vancouver Wall Centre Hotel is the official venue for the Conference. Rooms are reserved at the ISOPE group rates for the Conference. You must use the Reservation Form for ISOPE group discount rate and send by fax or e-mail to the Hotel.

For some **other hotels** nearby, click on www.isopec.org > **Conference** > **isopec-2008** Vancouver, and download the Reservation Form of **other hotel choices**.

CITY TRANSPORTATION

Within the city it is best to take public transportation. *Translink* buses, *Skytrain* and *Seabus* run regularly and will take you almost everywhere in and around the city. Regular fares are:

1 Zone	\$2.50 (all travel within the city of Vancouver)
2 Zone	\$3.75
3 Zone	\$5.00

ELECTRICITY AND ADAPTER

Canadian appliances operate on 110 volts (60 Hz), which is identical to the U.S. voltage. A universal adaptor is required for overseas electrical devices.

TIPPING

It is customary to tip between 15% and 20% at bars and restaurants in British Columbia. Tips are also given to tour guides, and for taxi service, spa treatments and haircuts.

HOURS OF OPERATION

- * Offices in Vancouver are usually open from 8:00 am to 5:00 pm
- * Shops are usually open from 10:00 am to 9:00 pm.
- * Pharmacies keep similar hours to offices, with a few open 24 hours.
- * Banks are generally open 10:00 am to 4:00 pm Monday to Friday, with some banks open on Saturday

SPOUSE PROGRAM: 1/2-Day Tour; Tuesday Afternoon, July 8

Update will be posted shortly. Sponsored by ISOPE, and tickets will be issued to the spouses with ISOPE badge only, free of charge.

It is first-come-first-served basis. E-mail advance reservations (Subject "**Spouse Program**") to isopec-2@isopec.org.

WHAT TO SEE IN THE CITY

www.hellobc.com; www.tourismvancouver.com

Surrounded by water on three sides and nestled alongside the Coast Mountain Range, Vancouver is home to spectacular natural scenery and a bustling metropolitan core. It boasts one of the mildest climates in Canada, while the surrounding snow-covered slopes are the venues for winter sports and breathtaking views of the city twinkling below. The Greater Vancouver region is home to more than two million people, making it the third largest metropolitan area in Canada. The city has been chosen to host the 2010 Winter Olympic and Paralympic Games, and

maintains a permanent position on the Economist's "Most Livable Cities" list. Highlights of the city include:

[Stanley Park](#)

It is the largest city-owned park in Canada and the third largest in North America. The park attracts an estimated eight million visitors every year. An 8.8 km seawall path circles the park. Much of the park remains forested with an estimated half million trees that can be as tall as 76 metres and hundreds of years old. The park is also home to the internationally-acclaimed Vancouver Aquarium Marine Science Centre, one of North America's five largest aquariums.

[Granville Island](#)

Once an industrial manufacturing area, Granville Island is now a major tourist destination, providing amenities such as a public market, a large marina, a hotel, the Emily Carr Institute of Art and Design, various theatres including one run by The Arts Club Theatre, and a number of shopping areas clustered around the one remaining industrial outpost. It also boasts a healthy community of craft studios.

[Robson Street](#)

Robson is Vancouver's most famous shopping street set in the heart of downtown Vancouver; On it you'll find a commercial mecca which includes premier fashion stores, fine dining, services and all the amenities a tourist or local might need. At night, the streets come alive with colorful buskers and performers. Visitors enjoy delicious drinks and fine foods at some of the city's most celebrated restaurants. The street is recognized both on a worldwide level as well as locally as Vancouver's favorite shopping destination.

[Capilano Suspension Bridge](#)

Just outside of downtown Vancouver, Capilano Suspension Bridge takes you to the natural splendor of rainforest trails through magnificent evergreens from the unique perspective of this swaying 136 meter long suspension bridge with spectacular views of the canyons 70 meters below.

[Vancouver Art Gallery](#)

In the heart of downtown, the Art Gallery features the works of Vancouver's internationally renowned artists and significant historical artists, including the most extensive collection of the work of Canada's renowned Emily Carr. Permanent holdings number more than 9,000 artworks, making it one of the most valuable collections in Canada.

[Grouse Mountain](#)

It is well worth taking a ride up to the top on the 100-passenger tram, appreciating breathtaking panoramic vistas of the Lower Mainland en route.

[UBC Museum of Anthropology](#)

Home to one of the world's most magnificent collections of First Nations totem poles, carvings and other artifacts, the museum is housed in an award-winning glass-and-concrete building designed by the world-renowned architect, Arthur Erickson, based on traditional Northwest Coast post-and-beam structures.

[Gastown](#)

Vancouver began here - stroll down charming cobbled streets, explore heritage buildings and mews, visit unique stores and dine in restaurants - from quirky to gourmet.

[Chinatown](#)

Vancouver is home to one of the largest Chinese communities in North America. Its downtown Chinatown (the other major centre is in Richmond) is worth a visit for the historic buildings (including the world's narrowest), exotic markets and herbal apothecaries, not to mention bargains on imported goods, particularly kitchen supplies.

SIGHT SEEING AND TOUR PROGRAM

The program will be posted on www.isopec.org > ISOPE-2008.

ADVANCE CONFERENCE REGISTRATION BY MAIL OR FAX (use the Registration Form)

Remember to send via **airmail or fax** the Advance Registration (*and Invoice*) Form in this Program (It can also be downloaded from www.isopec.org)

DEADLINE: Presenting Authors: March 24.
Non-Authors, non-presenting authors and co-authors: May 31.

In case one charges to a credit card via Fax, the **card number** should be **typed in bold face or written clearly** to be readable in the transmitted Fax copy. The ISOPE Fax number is **1-650-254-2038 USA**.
 Forms received **after May 31** will not be processed and will be returned to the senders for on-site registration with a **surcharge of US\$100**. Registrants will not be separately invoiced.

REGISTRATION CANCELLATIONS

Requests in writing for cancellation of registration received by **June 4, 2008** only will be granted a refund minus US\$70 handling fee. **No refund** will be granted to **one “presenting” author** per paper, if the paper is already included in the proceedings. The registered **presenting author will receive** a proceedings CD-ROM.

REGISTRATION BADGE

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

Advance Registration Fees: Deadline for the *presenting authors* is March 24.
US\$100 surcharge applies after May 31 and for on-site registration fees.

Category	Advance Registration Fee (US\$)*	
	<u>Before <u>May 31</u></u>	
	2+days	1 day
ISOPE member	600	500
Author, Co-author, Session Chair, Co-Chair (non-ISOPE member)	640	540
Member of Coop. organizations	640	540
Non-member of ISOPE	670	570
New ISOPE member application (incl. 2005 membership fee and one year journal issues)	690	590
ISOPE Membership fee, 2008	90	90
ISOPE Member Student with Full-time 2008 ID	390	390
Non-member Student with Full-time 2008 ID	430	430
New ISOPE student member application (incl. 2008 membership fee and one year journal issues)	440	440
Additional /Separate Banquet Ticket	95	95

* The **full Conference registration fee** (2 days or more) **includes** the conference reception, a conference banquet, tea breaks, and a **CD-ROM** of the 3,600-pp. (est.) **4-volume** conference proceedings.

* The **1-day registration fee** **includes** **CD-ROM** of the **4-volume** conference proceedings, tea breaks.

ON-SITE CONFERENCE REGISTRATION: Foyer

Participants who miss the advance registration (before **May 31**) 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, July 6	15:00-18:00	Wednesday, July 9	08:00-15:00
Monday, July 7	07:30-16:00	Thursday, July 10	08:00-13:00
Tuesday, July 8	08:00-16:00		

ISOPE-2008 CONFERENCE PROCEEDINGS

A 4-volume conference proceedings on CD-ROM (ISBN 978-1-880653-70-8; ISBN 1-880653-70-2; ISSN 1098-6189) is included in all conference registration fees. For additional or separate orders, download the publications order form from www.isopec.org for post-conference order:

A **4-volume Conference Proceedings** in CD-ROM (3,600 pp. est.)

Mail, E-mail or Fax order \$270 (ISOPE Member \$230)

Mail or Fax Order from ISOPE, 495 North Whisman Road, Suite 300, Mountain View, California 94043-5711, USA: Fax **1-650-254-2038**. 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.iso-pe.org).

CONFERENCE HEADQUARTERS Parksville

BOARD Chartroom

CONFERENCE RECEPTION
Sunday Pavilion Ballroom +Foyer

ANNUAL CONFERENCE BANQUET
Wednesday Grand Ballroom

AUTHOR PRACTICE ROOM Individual session rooms
An overhead projector, power-point or LCD projector and screen are available during 08:00-17:00 (Monday - Thursday).

CHAIR/CO-CHAIR BRIEFING Port Hardy
The session chairs and co-chairs will be briefed at 07:30 each morning for session briefings on the day of presentation. The manner of each session conduct and information on authors and presentation will be discussed. Presenting authors go directly to their session room 30 minutes before the session.

INFORMATION - MESSAGE CENTER.
The information and message center is located in the registration area. One may contact ISOPE Conference Registration Desk.

INTERNATIONAL PARTICIPANTS AND VISA APPLICATION
International authors, participants or attendees who need help (except financial) can contact: ISOPE-2008 Secretariat, 495 North Whisman Road, Suite 300, Mountain View, California 94043-5711 USA. Fax: +1-650-254-2038; email: meetings@iso-pe.org .
Entry Visa. Some authors may be required to apply for an entry visa.
Visa application form. Get it from the Consulate Office of Canada in your country or click on <http://www.cic.gc.ca/english/visit/visas.asp>. If the Consulate requires you to submit an official letter of invitation, please contact ISOPE, USA (email: meetings@iso-pe.org; Fax: +1-650-254-2038).

QUESTIONS ABOUT THE CONFERENCE ?
Please e-mail, call or fax before **June 23** to: ISOPE, USA (email: meetings@iso-pe.org; Tel: +1-650-254-1871; Fax: +1-650-254-2038), if you have any questions about the conference. Also, click on <http://www.iso-pe.org>.

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 the U.S. citizens and some countries.

CLIMATE
The climate of Vancouver is a moderate oceanic climate tempered by the warm Japan Current. The city is also sheltered by the mountains of Vancouver Island, to the west. These influences contribute to making Vancouver the warmest of Canada's major cities. During June, July and August, the average daily temperature is around 25 degrees Celsius.

AUTHOR INDEX is posted on www.iso-pe.org.



Prospective authors are invited to submit abstract to:

ISOPE-2009 Osaka

The 19th (2009) International
**Offshore (Ocean) and Polar Engineering
Conference**

Osaka, Japan, June 21–26, 2009

Call For Papers

Abstract Deadline **October 20, 2008**
Manuscript Deadline (review) **January 15, 2009**

E-mail or submit online) your abstract in 300-400 words to:

- (1) Submit Online on www.isopec.org;
- (2) One of the TPC members (session organizers); or
- (3) **ISOPE-2009 TPC**, 495 North Whisman Road, Suite 300, Mountain View, California 94043-5711 USA: Fax: +1-650-254-2038; E-mail meetings@isopec.org.



ISOPE Publication Order Information

(Download from www.isopec.org for further information.)

International Journal of Offshore and Polar Engineers - Quarterly (March, June, September, December) (ISSN 1053-5381).

Editors: Jin S. Chung, J. Wardenier, R.M.W. Frederking, W. Koterayama.

Topics: *offshore engineering, ocean engineering, environment, offshore mechanics, polar (Arctic and Antarctic) engineering, advanced marine technology, materials and technology and energy.* **Yearly subscription rates:** US\$145. (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 1-880653-27-3); 325 pp., US\$80 (ISOPE Member; \$60).

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

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

Proceedings of the 7th (2006) ISOPE Pacific/Asia Offshore Mechanics Symposium (ISOPE PACOMS-2006), Dalian, China, September 17-21, 2006. A single volume (CD-ROM) (ISBN 1-880653-67-2); 357 pp., 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): s (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 1-880653-45-1): 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 1-880653-56-7): 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 1-880653-61-3): 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 (hard copy and CD-Rom) (ISBN 1-880653-65-6): 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 (hard copy and CD-Rom) (ISBN 978-1-880653-69-2; ISBN 1-880653-69-9): 219 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 1 880653 60-5; 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 Proceedings of the 14th (2004) International Offshore and Polar Engineering Conference (ISOPE 2004), Toulon, France, May 23-28, 2004. For 4-volumes set CD-Rom (ISBN 1 880653 62-1; 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 Proceedings of the 15th (2005) International Offshore and Polar Engineering Conference (ISOPE 2005), Seoul, Korea, June 19-24, 2005. For 4-volume set CD-Rom, (ISBN 1 880653 64-8; 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 Proceedings of the 16th (2006) International Offshore and Polar Engineering Conference (ISOPE-2006), San Francisco, California, USA, May 28–June 2, 2006. For 4-volume set *CD-Rom*, (ISBN 1-880653-66-4; ISSN 1098-6189: 3,000 pp. est., \$220 (ISOPE Member; \$180).

Fifth (2007) ISOPE High-Performance Materials Symposium, ISOPE HPM-2007, , Lisbon, Portugal, July 1–6, 2007: Published in Proceedings of the 17th (2007) International Offshore and Polar Engineering Conference (ISOPE-2007), Lisbon, Portugal, July 1–6, 2007. For 4-volume set *CD-Rom*, (ISBN 978-1-880653-68-5; ISBN 1-880653-68-5; ISSN 1098-6189: 3,904 pp., \$270 (ISOPE Member; \$230).

First (2007) ISOPE HPM Nanomaterials for Structural Applications Symposium, ISOPE NANOS-2007, Lisbon, Portugal, July 1–6, 2007: Published in Proceedings of the 17th (2007) International Offshore and Polar Engineering Conference (ISOPE-2007), Lisbon, Portugal, July 1–6, 2007. For 4-volume set *CD-Rom*, (ISBN 978-1-880653-68-5; ISBN 1-880653-68-5; ISSN 1098-6189: 3,904 pp., \$270 (ISOPE Member; \$230).

First (2005) ISOPE Advanced Natural Gas Transport (ANGT) Symposium, ISOPE ANGT-2005, held during the 15th International Offshore and Polar Engineering Conference & Exhibition, ISOPE-2005, Seoul, Korea, June 19-24, 2005; Published in Proceedings of the 15th (2005) International Offshore and Polar Engineering Conference (ISOPE 2005), Seoul, Korea, June 19-24, 2005. For 4-volume set CD-Rom, (ISBN 1 880653 64-8; ISSN 1098-6189: 3,110 pp., \$220 (ISOPE Member; \$180).

Reprints of the 1st (1996) International Deep-Ocean Technology Symposium and Workshop, Los Angeles, May 31 - June 1, 1996: December 1996 issue, Vol. 6, No. 4, *International Journal of Offshore and Polar Engineering* (ISSN 1053-5381). Reprint volume (\$60) is available from ISOPE.

First (2007) ISOPE Strain-Based Design Symposium, ISOPE SBD-2007, Lisbon, Portugal, July 1–6, 2007: Published in Proceedings of the 17th (2007) International Offshore and Polar Engineering Conference (ISOPE-2007), Lisbon, Portugal, July 1–6, 2007. For 4-volume set *CD-Rom*, (ISBN 978-1-880653-68-5; ISBN 1-880653-68-5; ISSN 1098-6189: 3,904 pp., \$270 (ISOPE Member; \$230).

Proceedings of the 1st (1991) International Offshore and Polar Engineering Conference (ISOPE-91), Edinburgh, U.K., 11-16 August 1991. For a set of 4 volumes, (ISBN 0-9626104-5-3; LCCN 91-071635): approx. 2190 pp., \$320 (US\$240; member).

Proceedings of the 2nd (1992) International Offshore and Polar Engineering Conference (ISOPE-92), San Francisco, USA, June 14-19, 1992. For a set of 4 volumes, (ISBN 1-880653-00-1; LCCN 91-78280): 2,899 pp., \$340 (Member; \$260).

The Proceedings of the 3rd (1993) International Offshore and Polar Engineering Conference (ISOPE-93), Singapore, 6-11 June 1993. For a set of 4 volumes, (ISBN 1-880653-05-2; LCCN 92-76219): 2,965 pp., \$340 (ISOPE Member; \$260).

Proceedings of the 4th (1994) International Offshore and Polar Engineering Conference (ISOPE-94), Osaka, Japan, April 10-15, 1994. For a set of 4 volumes, (ISBN 1-880653-10-9; LCCN 93-80555): 2,589 pp., \$340 (ISOPE Member; \$260).

Proceedings of the 5th (1995) International Offshore and Polar Engineering Conference (ISOPE-95), The Hague, June 11-16, 1995. For a set of 4 volumes, (ISBN 1-880653-16-8; LCCN 94-73796): 2,543 pp., \$340 (ISOPE Member; \$260). 2,543 pp., \$340 (ISOPE Member; \$260).

Proceedings of the 6th (1996) International Offshore and Polar Engineering Conference (ISOPE-96), Los Angeles, May 26-31, 1996. For a set of 4 volumes, (ISBN 1-880653-22-2): 2,326 pp., \$360 (ISOPE Member; \$280).

Proceedings of the 7th (1997) International Offshore and Polar Engineering Conference (ISOPE-97), Honolulu, May 25-30, 1997. For a set of 4 volumes, (ISBN 1-880653-28-1): 3,556 pp., *CD-ROM* only at \$300 (ISOPE Member; \$240).

Proceedings of the 8th (1998) International Offshore and Polar Engineering Conference (ISOPE-98), Montréal, May 24-29, 1998. For a set of 4 volumes, (ISBN 1-880653-34-6; ISSN 1098-6189 (Set)): 2,577 pp., \$380 (ISOPE Member; \$300).

Proceedings of the 9th (1999) International Offshore and Polar Engineering Conference (ISOPE-99), Brest, May 30–June 4, 1999. For a set of 4 volumes, (ISBN 1-880653-39-7; ISSN 1098-6189 (Set)): 3,061 pp., *CD-ROM* only at \$300 (ISOPE Member; \$240).

Proceedings of the 10th (2000) International Offshore and Polar Engineering Conference (ISOPE-2000), Seattle, WA, USA, May 28–June 2, 2000. For a set of 4 volumes (*hard copy and CD*), (ISBN 1-880653-46-X; ISSN 1098-6189 (Set)): 2,689 pp., \$420 (ISOPE Member; \$340). (*CD-ROM* only available at \$200 (ISOPE Member; \$160); *hard copy* out of stock.)

Proceedings of the 11th (2001) International Offshore and Polar Engineering Conference (ISOPE-2001), Stavanger, Norway, June 17–22, 2001. For a set of 4 volumes (*hard copy and CD-Rom*), (ISBN 1-880653-51-6; ISSN 1098-6189 (Set)): 3,039 pp., \$430 (ISOPE Member; \$350).

Proceedings of the 12th (2002) International Offshore and Polar Engineering Conference (ISOPE-2002), Kitakyushu, Japan, May 26-31, 2002. For 4-volumes set *CD-Rom*, (ISBN 1-880653-58-3; ISSN 1098-6189 (Set)): 3,304 pp., \$220 (ISOPE Member; \$180).

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 1-880653-60-5; ISSN 1098-6189 (Set)): 2,912 pp., \$220 (ISOPE Member; \$180).

Proceedings of the 14th (2004) International Offshore and Polar Engineering Conference (ISOPE-2004), Toulon, France, May 23–28, 2004. For 4-volumes set *CD-Rom*, (ISBN 1-880653-62-1; ISSN 1098-6189 (Set): 3,167 pp., \$220 (ISOPE Member; \$180).

Proceedings of the 15th (2005) International Offshore and Polar Engineering Conference (ISOPE-2005), Seoul, Korea, June 19–24, 2005. For 4-volume set *CD-Rom*, (ISBN 1-880653-64-8; ISSN 1098-6189: 3,116 pp., \$220 (ISOPE Member; \$180).

Proceedings of the 16th (2006) International Offshore and Polar Engineering Conference (ISOPE-2006), San Francisco, California, USA, May 28–June 2, 2006. For 4-volume set *CD-Rom*, (ISBN 1-880653-66-4; ISSN 1098-6189: 2,704 pp., \$220 (ISOPE Member; \$180).

Proceedings of the 17th (2007) International Offshore and Polar Engineering Conference (ISOPE-2007), Lisbon, Portugal, July 1–6, 2007. For 4-volume set *CD-Rom*, (ISBN 978-1-880653-68-5; ISBN 1-880653-68-0; ISSN 1098-6189: 3,904 pp., \$270 (ISOPE Member; \$230).

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