September 20–24, 2009
Chennai, India

The Eighth (2009) ISOPE

Ocean Mining Symposium

ISOPE OMS-2009

National Institute of Ocean Technology
Chennai, India, **September 20–24, 2009**

Final Program

Invited and Peer-reviewed Papers

Nodules, Crusts, Sulphide
Exploration & Environment
Deep-Ocean Mining Programs
Mineral Processing
Ocean Energy
Gas Hydrates and Engineering
Deep-Ocean Water Utilization
Mining and Economics
Mining Systems and Technology
Underwater and Subsea Systems

Organized by:
International Organizing Committee

Sponsored by:
International Society of Offshore and Polar Engineers (ISOPE)
National Institute of Ocean Technology (NIOT)
with cooperating organizations (list inside)

ISOPE OMS-2009 Local Secretariat
Attn.: Dr. Atmanand,National Institute of Ocean Technology
Pallikarani,Narayanapuram
Chennai - 600100, India
Fax +91-44-2246-2038; E-mail: atmanandma@hotmail.com

ISOPE
P.O. Box 189
Cupertino, Calif. 95015-0189, USA
Fax 1–650–254–2038: www.isope.org

GENERAL INFORMATION

PLACE AND DATE: NIOT**,**Pallikaranai, India; September 20-24, 2009
All sessions of **ISOPE OMS-2009** symposium will take place at:

National Institute of Ocean Technology
Sagar Sangamam
Pallikaranai
Chennai, Tamil Nadu 600100, India
Phone: +91-44-66783366

Place for Accommodation :

Savera (Use Reservation Form.)
146, Dr. Radakrishnan Road, Chennai 600 004 - India
Phone: +91-44-2811-4700 Fax: +91-44-2811-3475
E-mail: hotsave@mds.vsnl.net.in
Website: http://www.saverahotels.com

GRT Grand (Use Reservation Form)
120, Sir Thyagaraya Road,
T. Nagar, Chennai - 600 017
Tamil Nadu, India
Phone: +91-44 -2815- 0500 / 5500
Fax: +91-44 -2815 -0778.
email : reservations@grtgrand.com
Website : http://www.grtgrand.com

ACCESS TO NIOT
Chennai International Airport is the closest to Hotels. Many fleets of Metropoliton coaches and pre-paid taxi are available round the clock to reach the Hotels . OMS 2009 Local Secretariat have arranged transport from Hotels to NIOT (Venue)

PARKING
Hotel parking is free for guests.

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

CURRENCY EXCHANGE
Currency can be exchanged either at the airport, banks or hotel for the most favorable rates. Exchange rate as of June, 2009 is: 1 USD = Rs 48.

HOTEL ACCOMMODATION:
To get the OMS-2009 discount rate, **use the Reservation Form** in this program or posted on www.isope.org. You can also ask the form from isope-niot@niot.res.in ; Write ISOPE OMS-2009 on Subject line. Only a limited number of rooms at ISOPE OMS-2009 rates are available. **Guaranteed reservation by August 15.**

Electric Voltage: The electrical power supply voltage is 220 V, 50 Hz, for each room of the Hotel.

BUS TRANSPORTATION BETWEEN HOTEL AND NIOT
During the symposium, the OMS local secretariat will provide bus services in the morning and evening between the hotel and NIOT.

CITY TRANSPORTATION
City bus service and taxi service are also available.

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

All persons attending the symposium are required to register, pay the appropriate fee, and get a symposium badge. Remember to send via airmail or Fax the Advance Registration (*and Invoice*) Form in this Program or a copy to reach **before:**

May 15 for one author per paper and August 20 for non-authors from outside India:

ISOPE OMS-2009 Secretariat, 1674 North Shoreline Blvd, Suite 146, Mountain View, California 94043, USA: Fax+1-650-254-2038.

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.
Use the Advance Registration Form in this program or a copy. Registration fees (note: US$50 surcharge after September 1 for on-site registration) are as follows:

Category	Fee (US $)* received before **August 5**	
❑ Author, Co-authors	400	_____
❑ Session or Symposium Chair, Co-Chair	400	_____
❑ ISOPE Member	400	_____
❑ ISOPE member with new application (incl. 2009 membership fee and 1-year journal issues)	490	_____
❑ Non-Member	470	_____
❑ Full-time Student with 2005 student ID Card	300	_____
❑ OMS Banquet	Free	
❑ Reseve a seat for Symposium Tour,	Free	
		_____

TOTAL AMOUNT DUE

***** The *registration fee* includes a symposium proceeding CD-ROM, NIOT Reception , OMS Banquet, lunches, Dinners and coffee/tea breaks.
**** One author per paper is required to advance-register by August 5.**

REGISTRATION CANCELLATIONS
Request for cancellation of registration must be received in writing by **September 05, 2009** to be granted a refund minus US$50 processing charge. No refund for the author whose paper is already included in the proceedings.

REGISTRATION BADGE
Registration badges are required for admittance to all the symposium activities, including the banquet and lunch.

ON-SITE SYMPOSIUM REGISTRATION
Participants who miss the advance registration may register at the Symposium Registration Desk, but there is a US$50 surcharge. The registration desk will be open during 08:30-16:00

ISOPE PUBLICATION ORDER
The ISOPE OMS-2009 Symposium Proceedings (ISBN 978-1-880653-75-3; ISSN 1946-0066) is included in the symposium registration fees: CD-ROM and Hard Copy. The proceedings volumes (300 pp. est.) can be ordered by mail at the rates of:

Mail order at $100 (ISOPE Member $80) including shipping charge.

All ISOPE PUBLICATIONS (listed on www.isope.org) can be ordered from ISOPE, P.O. Box 189, Cupertino, California 95015-0189, USA: Fax 1–650–254–2038. Advance payment is required. MasterCard or VISA card, international money order or U.S. bank checks in US dollars *payable to ISOPE* will be accepted. Shipping (surface-mail) and handling charges are included (also see the ISOPE Publication Order Information.)

PRESS - The press is invited to register at: Registration Desk

SYMPOSIUM HEADQUARTERS Registration Desk

SYMPOSIUM BANQUET
September 21 , 18:30–20:30 Dakshinachitra, Chennai

LCD Test ROOM Session Room
LCD projector, PC and screen (and an overhead projector,) will be set up in the session room. For any other specific requirements ,the participants should mention it in ISOPE form "Author/Projector Information" or may contact:

Dr. Atmanand, **OMS-2009 Local Secretariat**
Project Director
National Institute of Ocean Technology
Pallikarani
Chennai, Tamil Nadu, 600100, India
E-mail: atmanandma@hotmail.com; Fax :+91-44-2246-2038

INTERNATIONAL PARTICIPANTS AND VISA APPLICATION
International authors, participants or attendees who need help (except financial) especially invitation can contact: Dr. M. A. Atmanand, OMS-2009 Local Secretariat.

Entry Visa. Most non-Indian participants may be required to apply for an entry visa. Please get an application form at the Consulate of Republic of INDIA in your country.

ABOUT CHENNAI
Chennai formerly known as Madras, is the capital of the southern state of Tamil Nadu in India, and is the country's fourth-largest city. It is located on the Coromandel coast of the Bay of Bengal. With an estimated population of 7.45 million (2005), the 367 year old city is the 34th largest metropolitan area in the world. Its has the 2nd longest seashore (Marina Beach) in the world.

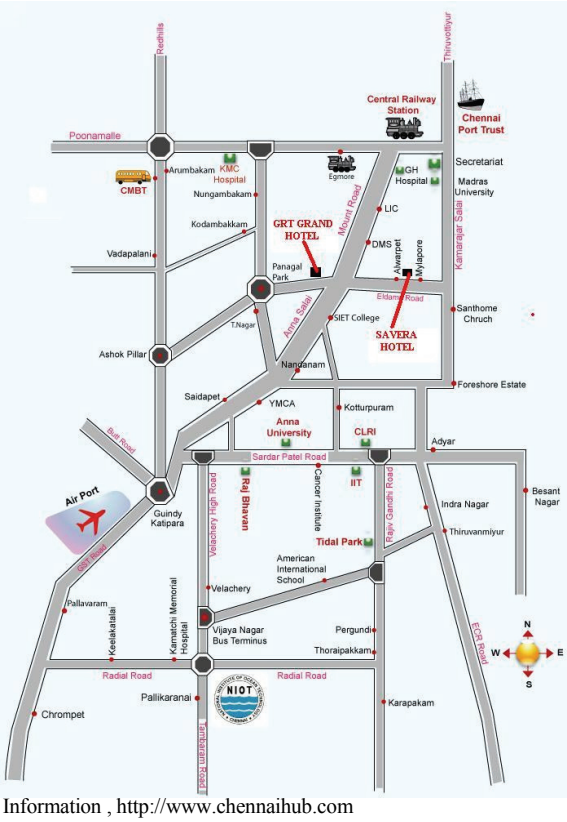
Chennai's economy has a broad industrial base in the automobile, technology, hardware manufacturing, and healthcare industries. The city is India's second largest exporter of software, information technology (IT) and information-technology-enabled services (ITES). A major chunk of India's automobile manufacturing industry is based in and around the city. Chennai Zone contributes 39 per cent of the State's GDP. Chennai accounts for 60 per cent of the country's automotive exports and is sometimes referred to as "the Detroit of India".

Shopping Spots
The Thegaraya Nagar as T Nagar is a great place to shop especially at Pondy Bazaar and bustling markets around Pangal Park. Nalli, Chennai silks, RMKV,Kumaran silks etc, at Usman Rd offers wide range of silks, cottons, saries etc. Here you will also find huge multistory shops like Lalitha Jewellery,GRT Thangamaligai and Prince Jewellery selling astonishing range of gold, silver and diamond jewellery etc,

General shopping Malls
Spencer Plaza, Anna Salai,
City Centre Mylapore
Shopper's Stop, Harrington Road ,
Globus or GeeGee Emerald Plaza, MG Road
Raahat PlazaBurma Bazaar
Landmark, Nungambakkam and Fountainhead,

Climate and Clothes
Weather in Chennai during September is warm: 30°C~34°C.

For further more



Information , http://www.chennaihub.com

NIOT Campus Route map from Airport (map not to scale)

Rajendra Chola Hall

Panikar Hall

HOTEL RESERVATION FORM (must use this form)

ISOPE OMS-2009 Symposium, September 20–24, 2009

Savera /GRT Grand are the official hotel for the Symposium. For **guaranteed reservation and discount room rate**, (1) this form must be directly mail/Faxed to respective Hotel with "NIOT – CORPORATE" as a reference for booking , no later than **August 20:**

Surname: _____ First (Fore) & Middle: _____

Circle: Male Female; Title Mr. Ms. Mrs. Prof. Dr.

Company: _____

Address _____

_____

Country _____ Postal (ZIP) Code _____

Fax _____: E-mail _____

Arrival: September __ Time _____;
Depart.: September _, Time ____

Hotel	Room Rates (Rs)
Savera	**[2500] 1-person room** **[3500] 2-person room**
GRT Grand	**[5500] 1-person room** **[6500] 2-person room**

Note : Room rate + 12.5 % tax, It includes buffet Breakfast.

Local Symposium Secretariat has already reserved at special OMS-discount rate for all the participants and guests necessary number of rooms at Hotel Savera and Hotel GRT Grand.

CANCELLATION: Email or fax room cancellation to Local OMS-2009 Secretariat, **15 days or earlier** before your arrival date in the reservation.

Dowload Reservation Form from www.isope.org .

Find Forms for the Hotel Reservation and Advance Registration inside this program.

ISOPE OMS-2009 *Venue Address:*

ISOPE OMS-2009 Local Secretariat
Deep Sea Technology and Ocean Mining
National Institute of Ocean Technology
Pallikarani
Chennai, Tamil Nadu, 600100, India
E-mail: atmanandma@hotmail.com; Fax :+91-44-2246-2038

Accommodation:
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Savera (Use Reservation Form.)
146, Dr. Radakrishnan Road, Chennai 600 004 - India
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E-mail: hotsave@mds.vsnl.net.in
Website: http://www.saverahotels.com

GRT Grand (Use Reservation Form)
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Tamil Nadu, India
Phone: +91-44 -2815- 0500 / 5500
Fax: +91-44 -2815 -0778.
email : reservations@grtgrand.com
Website : http://www.grtgrand.com

Plan to Attend Other ISOPE Meetings

ISOPE–2010 Beijing, China
June 20–26, 2010
Abstract Deadline: October 1, 2009
***For Call For Papers,* visit** www.isope.org and submit online or fax an abstract to Fax +1–650–254–2038 USA

Venues and date to be announced on www.isope.org

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