## **Deep Blue Minerals**

The purpose of the workshop is to bring together industry, government and research scientists with interests in marine minerals. The workshop forms part of a due diligence study under the "Blue GDP" Theme of the Wealth From Oceans Flagship. Topics include:

- recent developments in the extension of Australia's maritime boundary and continental shelf submission, and assessment of marine minerals by federal government agencies.
- up date on marine exploration and mining of minerals as diverse as carbonate sands, aggregate, massive sulfides and diamonds.
- state-of-the-art technologies such as robotics, concepts in remote mining, magnetic tensor gradiometry, sedimentological and discrete element modelling, video imaging and mapping.

### Who should attend?

- Universities, Government Agencies and CSIRO Divisions who wish to potentially engage in the Wealth From Oceans Flagship Theme 3 "Blue GDP"
- Federal and State Agencies with responsibilities for marine minerals
- Industry professionals with interests in marine minerals

### **Hosted By**

CSIRO Wealth from Oceans Flagship CSIRO Exploration & Mining

## **Supported By**

Geoscience Australia National Oceans Office Australian National University Coastal CRC Macquarie University Sydney University University of Western Australia Adelaide Brighton Limited Nautilus Minerals Limited Neptune Resources Limited Oceanica Consulting Pty Ltd Placer Dome Oceania Limited Quaternary Resources Ptv Ltd CSIRO Information & Communication Technology **CSIRO** Industrial Physics CSIRO Marine Research **CSIRO Mathematical & Information Sciences** CSIRO Petroleum Research Sydney Mineral Exploration Discussion Group (SMEDG)

### **Convenors:**

Tim McConachy Chris Yeats Tim McLennan CSIRO Exploration and Mining

# For further information Contact:

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CSIRO Wealth from Oceans Flagship and CSIRO Exploration and Mining

Present a Workshop on

## **Deep Blue Minerals**

9.00 am- 4.45 pm Wednesday 27th April 2005

> Riverside Auditorium CSIRO 11 Julius Avenue North Ryde NSW 2113

### **Program**

Welcome and Introduction to Wealth from Oceans Craig Roy (Director, Wealth from Oceans National Flagship)

### **National Context Setting**

United Nations Law of the Sea: The New Australia Jim Colwell & Phil Symonds (Geoscience Australia)

Australia's offshore minerals: an overview

Rill McKay Yanis Miezitis (Geoscience Australia) No

Bill McKay, Yanis Miezitis, (Geoscience Australia) Neville Exon (Australian National University) & Ron Sait (Geoscience Australia)

National Oceans Office Initiatives: An Update
Barbara Musso (National Oceans Office)

# Commercial Opportunities: Marine Exploration & Mining

Submarine massive sulfides: an update Mike Johnston (Placer Dome)

International Seabed Authority draft polymetalic sulfide prospecting regulations: A model for domestic regulation or a model for confusion and uncertainty?

David Leary (Macquarie University)

#### Marine aggregate

John Hudson (Quaternary Resources Pty Ltd)

#### Marine carbonate mining

Bruce Hegge, Jenn Sabean (Oceanica Consulting Pty Ltd) & Gareth Ward (Cockburn Cement Limited)

### Latest Technology & R&D Trends

Submarine fossil island arcs and spreading ridges east of Australia

Maria Sdrolias (Sydney University)

# Magnetic tensor gradiometry: applications in seafloor mineral exploration and mapping Cathy Foley, Phil Schmidt, Dave Clark & Jeanne Young

Cathy Foley, Phil Schmidt, Dave Clark & Jeanne Youn (CSIRO Industrial Physics)

#### Advances in seafloor robotics

Simon Allen (CSIRO Marine Research) & Matthew Dunbabin (CSIRO Information and Communication Technology)

# Concepts in remote mining and applications in the marine environment

Jock Cunningham (CSIRO Exploration & Mining)

## Sediment modelling applications to seabed minerals

Cedric Griffith (CSIRO Petroleum Research)

## Video imaging, mapping & interpretation of the seafloor

Euan Harvey (Univ. of Western Australia, Coastal CRC), Xiaoliang Wu & Norm Campbell (CSIRO Mathematical and Information Sciences)

# Discrete element modelling applications: Where to on the seafloor?

Paul Cleary (CSIRO Mathematical and Information Sciences)

Plus: Plenary session on scope and value propositions for R&D. Volume of Extended Abstracts and copies of power point presentations; including separate updates on seafloor massive sulfides: by

- (1) David Heydon (CEO, Nautilus Minerals Limited) &
- (2) Simon McDonald (CEO, Neptune Resources)

### Registration fee

(includes Volume of Extended Abstracts, CD of presentations, lunch, morning and afternoon tea, drinks afterwards)

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# Registration Form and Tax Invoice

# CSIRO Exploration and Mining ABN: 41 687 119 230

This form becomes a tax invoice upon receipt by CSIRO Exploration and Mining of the registration fee.

### **Deep Blue Minerals**

Name:
Organisation:
Address
Phone: Email:
Other:
Registration Fee \$50.00
Credit Card Options -[Mastercard or Visa]
Exp Date
Cardholder Name:
Cardholder Signature
Cheque/money order: \$ [made payable to CSIRO]
Discourations assumble in the second of the

## Please return completed form and payment by 14 April 2005 to:

Ms Cheryl Harris CSIRO Exploration and Mining 26 Dick Perry Avenue Kensington WA 6151 Fax: (08) 6436.8586

Email: Cheryl.Harris@csiro.au