



**WESTPAC NEWSLETTER**

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## WESTPAC NEWSLETTER

### Editorial

There are 19 member states within the WESTPAC Program Group. Of these, 13 have now nominated one or more representatives for the various major programs and projects identified at WESTPAC III in September, 1983. This is a most encouraging response and it is hoped that all member states will have made nominations by the time the next issue of this newsletter is released. In the meantime, considerable progress can be reported in this issue with a number of groups well ahead with the planning and implementation of agreed activities.

From responses already received, it appears that this Newsletter is proving useful. In that regard, it is hoped that regular release of information from the Chairman by this means will complement other avenues of information exchange, notably including the well-established RNODC Newsletter for WESTPAC produced by the Japan Oceanographic Data Centre.

#### WESTPAC Poster

As a means of drawing the attention of the scientific community and others likely to be interested in the activities of WESTPAC, the Australian Institute of Marine Science has contributed a poster which includes a listing of the major programs of the group, the responsible Technical Coordinators and other pertinent information. Copies of the poster are being sent to all of those included on the WESTPAC Newsletter mailing list. It is hoped the posters will be given prominent display and that they will assist in drawing attention to initiatives in marine science now taking place within the WESTPAC region.

#### An Up-date on Nominations and the Present Composition of Task Teams

#### WESTPAC TASK TEAM ON MARINE POLLUTION RESEARCH AND MONITORING

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##### Chairman

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#### Project Coordinating Group (Task Team) on Ocean Dynamics in the North-west Pacific

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##### 2. Nearshore currents and tides

**WESTPAC TASK TEAM ON OCEAN SCIENCE IN  
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PHENOMENA ASSOCIATED WITH ALGAL BLOOMS**

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#### Activities within the Programs

**1. Marine Pollution Research and Monitoring** - Dr P. Menasveto, Deputy Chairman of WESTPAC, recently attended a meeting of GIPME in Bangkok, Thailand. A draft report of that meeting has been prepared and should be released shortly. In the meantime, Dr Menasveto reports that the discussions included attention to methods, standards and inter-calibration, the implementation of MARPOLMON and to activities specifically within WESTPAC. Professor Cyril Burdan-Jones, of Australia, as Convenor of the Task Team for the Group in Marine Pollution reports that six countries have provided nominations including two from the USSR.

Further developments in this area under the leadership of Technical Coordinator Dr A. Soegiarto of Indonesia are anticipated with great interest.

**2. Ocean Dynamics and Climate** - Following recommendations from Dr Ron Heath, the Technical Coordinator for this group, and with advice from the Secretary of IOC, Dr M. Ruivo, the Chairman recently invited Dr Warren White of the USA and Dr Stuart Godfrey of Australia, to serve as Chairmen of the Project Coordinating Groups on Ocean Dynamics in the North-west Pacific and in the Tropical Pacific respectively. With the support in turn of member states, the objectives of this ambitious program should certainly be realized.

**3. Ocean Sciences and Living Resources (OSLR)** - Technical Coordinator, Dr D. Tranter attended an IOC/OSLR meeting in Paris over the period July 16-20, 1984. Subsequently, Dr Tranter was able to arrange an *ad hoc* meeting with the following members of the WESTPAC/OSLR group in Shimizu, Japan on July 24, 1984. His report of that meeting has been summarised as follows:

#### Present:

Dr David Tranter, Task Team Coordinator  
Dr Tomotashi Okoichi, Chairman, Study Group on Toxic and Anoxic Phenomena  
Dr Tak Nemoto, Chairman, Study Group on Ocean Production  
Dr Peter Rothlisberg, Chairman, Study Group on Shelf Production  
Dr Masuoki Horikoshi, Study Group on Land-Sea Interface  
Dr Janet Bradford, Study Groups on Ocean Production and Shelf Production  
Dr R. Le Borgne, Study Group on Ocean Production.

The meeting sought to identify areas of common interest in the Western Pacific region and, on that basis, to nominate research themes around which a WESTPAC/OSLR program could be built. The Coordinator reminded members that they were a subset of the Task Team which consisted of about 20 members from the various WESTPAC countries and is likely to grow in size as more countries join the program. The main vehicle for communication among members is by correspondence and by newsletter.

There was much discussion on the question of WESTPAC links with IOC/OSLR. The Coordinator conveyed to the meeting the view of the IOC Secretariat that it was desirable for some WESTPAC/OSLR programs to be linked to the recruitment experiment (IREP) presently developing under the guidance of an IOC/OSLR Group of Experts; however, it was also the view of IOC that other WESTPAC programs might well be less target oriented and more fundamental in character.

There was a general consensus that studies on interannual variability might well form a significant part of WESTPAC/OSLR, particularly since there were active physical oceanography programs in WESTPAC addressed to this research theme. Dr Le Borgne reported that the ORSTOM Laboratory in New Caledonia has a physical and biological data collection program in operation using volunteer observing ships, and participation from other WESTPAC countries is welcome. Dr Tranter reported that the new Australian oceanographic vessel would be working in the tropical equatorial Pacific for the next few years and that Dr Graham Harris (Australia) would be studying the organic flux to the seafloor. It was proposed that studies of the impact of El Nino events in the Western Pacific would be appropriate to WESTPAC, particularly since concurrent studies are being made by physical oceanographers on the Equatorial Western Pacific as a source of global climate change.

Specific land-sea interface studies have not yet been identified. There is interest in Australia on comparative studies of semi-enclosed gulfs and bays, particularly the role of riverine discharge on shelf production. Dr Dan Kinsey (AIMS) is interested in developing regional collaboration in this field. Dr Harikashi described a program in Bay of Djakarta

involving studies on the effect of seasonality, wind, topography and rainfall. New Zealand scientists have begun a management-oriented project on 2 drowned river valleys in Marlborough Sound, one with a large, the other with a small river inflow. The question of amalgamating the study groups on Shelf Production and Land-Sea Interface was raised; it was decided that they should operate separately for the time being.

Dr Nemoto drew the attention of the meeting to the fact that a Workshop on Warm Core Rings would be held under WESTPAC auspices in May 1985 at the Ocean Research Institute of the University of Tokyo. On this occasion a meeting of the WESTPAC/OSLR Study Group on Ocean Production would be held to develop WESTPAC programs further.

**4. Ocean Science and Non-Living Resources(OSNLR) -**  
The Chairman was informed recently that Australia has nominated Dr David Falvey to the Group of Experts within this Program. In addition China and the USA have made nominations to the OSNLR Task Team. The Chairman has written to all National Coordinators seeking additional nominations to this important group. Those with appropriate interests are encouraged to make them known to their National Coordinators.

**5. Ocean Services -** It is a pleasure to announce that Commander H.L. Daw of Australia has now been joined by representatives from six of the member states of WESTPAC. The Task Team, of course, automatically includes the national representatives for IGOSS. Readers are referred to the RNODC Newsletter for WESTPAC for detailed activities of this group and its affiliates.

Of particular relevance in this connection and more generally within WESTPAC, the Chairman recently agreed to recognize two major cruises of the Ocean Research Institute of the University of Tokyo as contributions to WESTPAC. The cruises in question were:

Cruise No KH-85-3  
Led by: Professor Takahisa Nemoto

Cruise No KH-85-1  
Led by: Professor Masuoki Horikoshi

#### **Cronulla "Red Tide" Workshop**

An international workshop on "Red Tide" phenomena, conducted under the auspices of the Association for Science Cooperation in Asia (ASCA), was held at the CSIRO Division of Fisheries Research Cronulla laboratories, 18-20 June 1984.

Scientists from Australia, Canada, Denmark, Hong Kong, India, Indonesia, Japan, New Zealand, Norway, Philippines, Republic of Korea, Thailand and the USA attended the Workshop and the support of the Australian Department of Science and Technology, CSIRO, Jakarta UNESCO/ROSTEA Office, National

Science Foundation of the USA, the New Zealand Oceanographic Institute and IOC enabling such good attendance is gratefully acknowledged.

Evidence was presented that the incidence of "red tide" is increasing in semi-enclosed basins such as the Inland Sea of Japan and the Scandinavian Fjords where there is little circulation of water and increasing discharge of sewage and industrial wastes. The organisms which produce "red tide" (usually 'dinoflagellates') sometimes produce potent toxins which can find their way through the food chain to man causing 'paralytic shellfish poisoning' and 'ciguatera'. Some species can suffocate fish such as yellow tail by clogging up their gills.

The "red tide" phenomenon and its associated toxic and anoxic effects are of sufficient concern in the WESTPAC region to have warranted the establishment of a study group within the framework of the WESTPAC/OSLR Task Team to promote further research on the subject.

This group met in Cronulla after the workshop under the Chairmanship of Dr David Tranter, Technical Coordinator of the WESTPAC/OSLR Task Team.

The Study Group found that there was an urgent need in the Western Pacific area for training in the identification of the many different algal organisms capable of forming "red tide". It was recommended that a training workshop be held, probably in Thailand, on sampling and identification techniques. Special emphasis was given to the study of cysts which are the resting stages of "red tide" organisms, settling out of the water column when conditions are unfavourable, and germinating like seeds when conditions alter in their favour. The study group will develop research programs into the processes in the sea which favour "red tide" development and seek further support for an expanded program of research into this important topic.

#### **Coral Taxonomy**

With support from the Australian Institute of Marine Science, and having recently completed an exhaustive treatment of the Scleractinia of the Great Barrier Reef, Dr J. Veron is presently extending these studies to the western coast of Australia as part of a long term endeavour to encompass all of the corals of the Indo-Pacific. Investigations presently underway have been declared by the Institute as a contribution to WESTPAC.

#### **Marine Information Service**

Beginning in fiscal 1984/85, the Australian Institute of Marine Science has undertaken to establish a computer based marine information service. The system is intended to serve Australian interests in the first instance. However, it is hoped that it may be developed also as a service to the entire marine science community particularly within the WESTPAC

region. Briefly, the objectives are to provide a clearing house and link to established data bases and information services and, in addition, to provide for those who need it, advice on the location of expertise, literature sources and, indeed, sources of advisory assistance of any kind relevant to the marine sciences. In that regard, the library services of the Institute will be hooked into the system with an endeavour to develop holdings in fields of particular concern to the Institute itself. Within that framework, the Institute is presently engaged in the development of agreements under which it will accept coordinating responsibility for the data base AMRIP (Australian Marine Research in Progress) and its periodic publication. This particular activity will be undertaken in association with CSIRO, The Great Barrier Reef Marine Park Authority and the Victorian Institute of Marine Science. With respect to the information service, it should be emphasized that it is not the intention or purposes of the Institute to replace or in any way substitute existing data bases and information services but only to assist others in gaining access to that data and those services should that help be required and to extend that activity with other forms of advisory or referral services as indicated already.

The Institute would be most grateful to hear from anyone interested in these objectives either with advice or enquiries recognizing that the system envisaged is now only in the process of establishment.

#### JECSS III Workshop

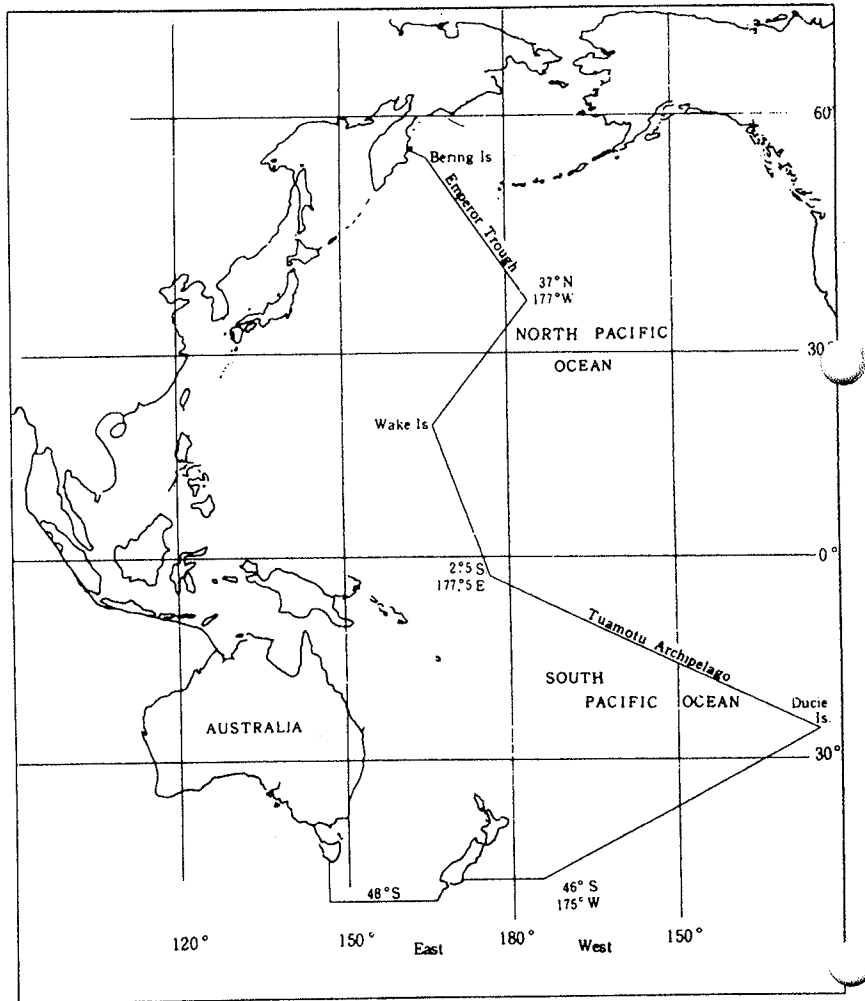
The Third JECSS (Japan and East China Seas Study) Workshop will be convened on May 13 to 18, 1985 at Tsukuba University, in Japan during the Science Expo at Tsukuba. The meeting is sponsored by Japan Marine Science and Technology Center (JAMSTEC), Oceanographical Society of Japan, Japanese-French Oceanographical Society and American Geophysical Union. Its purposes are to exchange results of research on hydrography, circulation, physical and chemical properties, satellite remote sensing and sedimentology of the East Asian marginal seas and to plan cooperative programs for field experiments and modelling. The JECSS Project is an associate program of WESTPAC. Potential participants are asked to submit a one page, typewritten abstract to Takashi Ichiye (Program Chairman), Department of Oceanography, Texas A&M University, College Station, Texas, USA, 77843, (409-845-2306), by November 30, 1984. Program Committee includes Prof A.D. Kirwan of University of South Florida and Prof O. Huh of Louisiana State University. Organizing Committee chairman is Prof K. Takano of Tsukuba University. These abstracts will be used to form discussion groups on different subjects and to screen participants for potential financial assistance. The JECSS-II Proceeding was published in June of this year by Elsevier as "Ocean Hydrodynamics of the Japan and East China Seas" in Elsevier Oceanography Series No 39. The same publisher will publish the JECSS-III Proceedings.

#### CONTRIBUTIONS

Those who can offer information about WESTPAC are invited and encouraged to make contributions at any time through the Chairman to the address given below:

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**The WESTPAC region**