

Stormwater Runoff Water Quality Science/Engineering Newsletter
Devoted to Urban/Rural Stormwater Runoff
Water Quality Management Issues

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Contributor to this Issue:
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This issue of the Newsletter presents information on an international symposium, "Prevention of Pollution from Ships and Shipyards," that will be held November 5 – 7, 2003 at the Lindy Boggs Convention Center at the University of New Orleans, New Orleans, LA. Dr. G. Fred Lee, PE, DEE is organizing and co-chairing a session at this symposium entitled, "Stormwater Runoff Management in Ports and Harbors." The other co-chair will be Bhaskar Kura, Ph.D., P.E., Professor of Civil & Environmental Engineering and Associate Director of the Maritime Environmental Resources and Information Center (MERIC) at the University of New Orleans. Emphasis in this session will be on water quality impact evaluation issues.

Additional information on this symposium and the submission of abstracts for it is presented in the attached materials and on the website, www.ATRP.com. The deadline for submission of abstracts has been extended to July 31, 2003. Advanced registration is cheaper than onsite registration and there is a special student rate. The registration fee includes a daily box lunch and transportation between the conference center and the conference hotel, the Best Western Avalon Hotel. The Conference Rate for the conference hotel is \$ 79.00 per day, available on a first-come-first-served basis. To get this rate, it is necessary to mention the Conference. Additional details are on the ATRP website.

MARK YOUR CALENDAR

3RD ANNUAL SHIPYARD ENVIRONMENTAL ISSUES CONFERENCE
&
INTERNATIONAL SYMPOSIUM ON PREVENTION OF POLLUTION
FROM SHIPS AND SHIPYARDS

Antifouling Coatings: Designed for Performance and the Environment

November 5-7, 2003

Lindy Boggs Convention Center
University of New Orleans
New Orleans, Louisiana USA

For more information regarding the conference, travel arrangements, and/or to register on-line, please see the conference announcement and registration page at www.ATRP.com. A block of rooms has been reserved at the Avalon Hotel and Conference Center in New Orleans. Please make your reservations early by calling 800-366-2743 and asking for the ATRP Conference group rate of \$79.00 per night. One night deposit will be charged 30 days in advance. A 10 day cancellation notice is required to receive a refund.

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EPA Sectors Strategies Program
American Association of Port Authorities
Maritime Administration



Prevention of Pollution From Ships and Shipyards **International Symposium**

Revised Announcement & Call for Papers

November 5th to 7th, 2003

Lindy Boggs Convention Center at the University of New Orleans

This International Symposium is the third in a series on “**Prevention of Pollution from Ships and Shipyards.**” The Symposium is to be held in conjunction with the “**3rd Annual Shipyard Environmental Issues Conference**” of the Environmental Technology Panel (ETP) of the National Shipbuilding Research Program during **November 5th through 7th, 2003**. It will be held at the Lindy Boggs Convention Center at the University of New Orleans.

Due to the IMO Treaty to Ban TBT, the theme of the 2003 Symposium is “**Antifoulant Coatings: Designed for Performance and the Environment**”. The objectives of this Symposium are to bring together a wide array of international experts associated with prevention of pollution from ships, shipyards and drydocks and expertise related to the fate, behavior and environmental effects of biocides used in marine antifouling paints and in the development of new environmentally friendly marine antifouling paints. The Symposium would be organized under the Symposia Series: “Prevention of Pollution from Ships, Shipyards, and Drydocks” with the publication of the papers presented in a special Edited Symposium Proceedings for global distribution on a CD-Rom.

PURPOSE

This Cross-Disciplinary Symposium has been developed to bring together the major communities that are associated with these issues but usually do not meet together unless it is for discussions on cross-cutting issues:

- Academic and Industrial Research Community for Marine Antifouling Coatings;
- State and Federal Policy and Regulatory Community for Pollution Prevention from Ships, Shipyards and Drydocks;
- Shipyard Environmental Managers (SP-1 of the National Shipbuilding Research Program);
- Marine Antifouling Paint Companies and Chemical Manufacturers;
- Port Directors (American Association of Port Authorities);
- Port Waste Treatment Companies;
- Ship Operating Companies and Shipowners;
- Coastal State Regulatory Agencies;
- The US EPA;
- The US Army Corps of Engineers; and
- The US Navy.
- **Others to be Added**

WHY IS THIS SYMPOSIUM NEEDED?

The International Maritime Organization (IMO) in London adopted the International Convention for the “Control of Harmful Anti-fouling Systems for Ships” (October 1-5, 2001) to immediately ban the application of Tributyltin (TBT) globally in antifouling paints to “protect the marine environment” effective January 1, 2003, with a total ban (meaning complete removal or overcoating) by January 1, 2008 of TBT from all commercial ships.

The Convention is to be implemented with a retroactive date of January 1, 2003, as soon as flag countries representing 25% of the world’s fleet ratify the Treaty. Ratification is expected very soon as Panama has indicated that it will sign the Treaty (21% of the world’s fleet). This Treaty will require Member Nations to IMO to regulate the “Safe Removal, Treatment and Disposal” of TBT-based marine coatings on all ships worldwide. The Convention will prohibit the use of organotins in anti-fouling paints on ships and will establish a mechanism to prevent the potential future use of other harmful substances in anti-fouling systems (www.imo.org).

The International Symposium in November 2003 is needed to help inform all interested parties of the requirements, available options, and operational considerations as the Treaty is implemented.

The **Technical Program** will be organized around the following:

- Review of Status of Marine Antifouling Systems and Technologies (use and release of biocides from marine coatings), and includes a focus on: the science and technologies of existing systems such as Copper-based, other biocides, and Environmentally Friendly Technologies including low release rate copper, non-persistent organic biocides and non-toxic fouling release coatings with no biocides;
- Review of New Alternative Marine Antifouling Technologies (Innovative Alternatives to TBT in the Marketplace and incorporating new technologies or variations with special surface inhibitor mechanisms and processes to prevent adhesion of hard fouling organisms);
- State of the Science regarding antifouling biocide release mechanisms and environmental fate and effects with special emphasis on copper; and
- Treatment of Regulated Discharges from Shipyards and Drydocks (focusing on new advanced waste treatment technologies as well as systems for both shipyard and drydock washdown waste waters but also treatment of TBT contaminated dredged materials that will be increasingly important because of the IMO Treaty).

SYMPOSIUM CO-CHAIRS

The Symposium will be Co-chaired by **Michael A. Champ** (President & CEO of ATRP Corp.) and **Peter F. Seligman**, the Associate Division Head for Environmental Quality, Environmental Sciences Division (Code D3601), SPAWARSYSCEN San Diego. Mr. Seligman has organized and co-chaired two (1998, and 2002) Navy Sponsored Workshops on Copper:

Seligman P.F., and A. Zirino (Editors). 1998. Chemistry, Toxicity, and Bioavailability of Copper and its Relationship to Regulation in the Marine Environment. Office of Naval Research Workshop. SPAWAR Systems Center, San Diego. Technical Document 3044. 99p.

Zirino, A. and P.F. Seligman (Editors). 2002. Copper Chemistry, Toxicity, and Bioavailability and its Relationship to Regulation in the Marine Environment. Office of Naval Research 2nd Workshop. SPAWAR Systems Center. San Diego Technical Document 3044. 80p.

PREVIOUS SYMPOSIA PROCEEDINGS

This “**Prevention of Pollution from Ships, Shipyards, and Drydocks**” International Symposium will produce Proceedings similar to previous Symposia, except it will be published only on a CD-Rom.

The following are the complete citations for the Published Proceedings from the previous two Symposia in the series:

Treatment of Regulated Discharges from Shipyards and Drydocks. 1999. Proceedings of the Special Sessions held at Oceans '99 in Seattle Washington, Sept 13-16, 1999. The Marine Technology Society, Washington, D.C. 20036. ISBN No. 0-933957-24-6. Office of Naval Research. Vol. No. (4). 223p. Champ, M.A., Fox, T.J., and A.J. Mearns (Co-Chairmen and Editors Special Volume).

International Symposium on Pollution Prevention from Ships and Shipyards. 2001. Oceanology International 2001 Conference. April 4-5, 2001. Miami, Florida. Office of Naval Research. Vol. No. (1). 351p. Champ, M.A. (Chairman and Proceedings Editor).

SYMPOSIUM SCHEDULE

April 15, 2003 to December 31, 2003

May 15 th ASAP	Distribution of Call for Papers, Technical Program Announcement. Submission of Titles and Authors Instructions for Authors on ATRP.com
July 31th July 31th	Final Deadline for Submission of Abstracts. Selection of Papers and Manuscript Instructions to Authors. Development of Draft Technical Program
June – September	Preparation of Papers
October 1 st	Deadline for Submission of Camera-Ready Papers Electronically in MS Word.
October 15 th	Finalization of Symposium Proceedings
November 5-7 th	Hold the Conference in New Orleans
November 30 th	Distribution of Copies of Proceedings to Funding Sources and Participants.

PROPOSED TECHNICAL PROGRAM DEVELOPMENT STRATEGY

First Day

Keynote: Status and Regulation of TBT

AM Sessions:

- Current Products and Performance Testing
- Laboratory Tests
- Ship Panel Tests
- New Organic Biocides for AF Coatings.
- Booster Biocides Fate and Effects
- Shipyard, Application & Removal

Special Session on Release Rates Laboratory (ASTM and ISO) and Field Methods, Standards

- Release Rates
- ASTM Release Rate Tests

Navy Ship Hull Release Rate Studies

PM Sessions: (Copper)

- Historical Use of Copper in Marine AF Paints
- Copper Issues
- Chemistry of Copper
- Copper Speciation
- Cu Free Ion Activity
- Bioavailability
- Biotic Ligand Models
- Copper Complexation Activity

Second Day

AM Sessions: (Copper)

Special Session(s) on Toxicity, Fate & Environmental Effects

- Environmental Levels
- Monitoring Studies
- Bio Effects
- WQ Standards
- Policy and Regulations

Special Session on TMDL Studies

- Future Direction of Copper Regulations

Panel Discussion: Does the Science Justify Regulation?

PM Sessions: (State-of-Art)

Special Session on New Product Presentations

- New Paint Technologies
- Environmental Friendly Technologies
- EU Program –Booster Biocides

Special Session on Silicone AF Marine Coatings

Evening: Reception & New Orleans Port Tour TBA

Third Day

AM Sessions:

Special Session on Waste Treatment Technologies & Regulations

- Washdown & Wastewater
- Technologies & Systems
- Discharge Regulations & Permits
- Policing, Inspection, Certification and Enforcement

Special Session on Robotic & Closed Systems

- Costs – Economics
- Performance

PM Sessions: Port and Harbor Issues and Concerns

- Contamination of Dredged Materials
 - Toxic Waste Management
- Special Session on Stormwater Runoff Management in Ports & Harbors**

Panel Discussion: Antifoulant Coatings Designed for the Environment – the Future

TECHNICAL PROGRAM COMMITTEE MEMBERS:

Colin D. Anderson (UK) Akzo Nobel, International Coatings.

Neal Blossom (USA) American Chemet Corporation, East Helena, MT.

Michael A. Champ (USA) Advanced Technology Research Project Corporation.

Stephen de Mora (Monaco) Marine Environmental Studies Laboratory, International Atomic Energy Agency.

Thomas J. Fox (USA) is the former Executive Director of the Center for Advanced Ship Repair and Maintenance (CASRM) Norfolk, Virginia.

Elizabeth G. Haslbeck (USA) Naval Surface Warfare Center, Carderock Division, Paints and Processes Branch Carderock, MD.

Julian E Hunter (UK) International Coatings (Akzo-Nobel).

Dr. G. Fred Lee, (USA) G. Fred Lee & Associates

John A. Lewis (AUSTRALIA) Maritime Platforms Division, Aeronautical and Maritime Research laboratory, Melbourne.

Stephen McElvany (USA) Office for Environmental Quality, Code 331, Physical Science S&T Division, Office of Naval Research, Arlington.

Keith H. Pannell (USA) University of Texas at El Paso.

Douglas A. Randall (CANADA), National Defense, Fleet Maintenance Facility, Halifax.

Peter F. Seligman (USA) Environmental Quality, Environmental Sciences Division, Space and Naval Warfare Systems Center (Code 23601), SPAWARSYSCEN San Diego, CA

Geoffrey W. Swain (USA) Florida Institute of Technology, Melbourne, FL.

Michael J. Waldock (UK) Centre for Environment, Fisheries & Aquaculture Science.

Burkard T. Watermann (GERMANY) Laboratory of Freshwater/Marine Research and Comparative Pathology (LimnoMar). Hamburg.

Others - to be Added.

SYMPOSIUM CONTACTS:

Technical Program

To Submit an Abstract, Title or Paper for Presentation, Contact:

Michael Champ

Symposium Co-Chairman

ATRP Corporation

7000 Vagabond Drive

Falls Church, VA 22042

Tel. (703) 237-0505, Fax (703) 241-1278, E-mail: machamp@aol.com

For Advance Registration and Attendance at the Symposium:

For Advance Registration, go the www.atrp.com Website and Register for the Conference.

International Symposium Proceedings

Instructions to Authors

For Submission of a Abstract to the Symposium Call for Papers:

- (1) Submit an Informative - Comprehensive Title of your Paper, with Complete Names and Address (with Tel., Cell., Fax., and E-mail Addresses) for each author of the paper.
- (2) Submit an Abstract. The Abstract can include a Figure, Photo, or Table of Data. The Abstract should not tell what is going to be presented, but should be Summary of the results and discussion to be presented not to exceed **300 words** or one page in length. Submissions are to be made electronically via e-mail to machamp@aol.com and will be acknowledged within 48 hours.

For Submission of a Manuscript to the Symposium Proceedings:

Author will submit an electronic copy of each manuscript, typed with simple formatting or without any formatting and with 1-inch margins, using Times New Roman Type and size 12 Fonts. The Title is to be Size 28 Font Size. Authors will be encouraged to list their name and complete address (Tel., Fax., and E-mail: address) on the first page as Footnotes (1,2,...) to the manuscript. The intent of the Symposium is to publish the full address, phone and fax numbers and electronic mail address of each author to facilitate communication in the community.

Submissions related to products can be published as short summaries (as a Technical Research Note or Technical Note, or a Product Note in Special Sections) in the Symposium Proceedings even if one of the authors is not able to attend the conference. Please contact machamp@aol.com for an example.

A goal of the Proceedings is to serve as a working

reference of all the research and development projects being conducted in the field. The Proceedings will consist of the following sections (in ADOBE PDF Format): Proceedings Cover; Symposium Introduction; Sponsors; Table of Contents; Presented Papers; Power Point Presentations (etc.); Technical Research Notes; Technical Product Notes, Technical Notes; Other Contributions; Comprehensive Directory of Contributors and Participants at the Symposium;

The corresponding author needs to send an electronic copy of their Manuscript to:

Dr. Michael A. Champ
Tel. (703) 237-0505
E-Mail: machamp@aol.com

Organization of Manuscript

Manuscripts to be in the English language with:

- Main title (not more than two lines printed);
- Author's Complete Name(s), affiliation and present contact details; Tel., Fax: & E-mail Address: in Footnotes (¹....) of first page, and identification of corresponding author if different than lead author.
- Abstract (Summary - not more than 300 words); see description requirements in (2).
- Keywords (maximum 8)
- Text Sections: (Suggested)

Abstract

Keywords:

INTRODUCTION

METHODS AND MATERIALS

RESULTS AND DISCUSSION

CONCLUSIONS

Acknowledgements

REFERENCES

Text of Manuscript

The Manuscript is to be typed in Times New Roman, Font size 12, typed single spaced, with simple formatting. A Galley Proof (PDF Format) will be provided to each author for final approval, prior to publishing the Proceedings.

Style Points

All tables and figures should be numbered with Arabic numerals. In the text the word Fig' should be used, except at the beginning of a sentence. Avoid hyphenation at the end of a line. Weights and measures must be expressed in metric units according to the *Système Internationale* (non-metric equivalents, if appropriate, can be included in parentheses). All non-standard abbreviations or symbols should be defined when first mentioned.

Tables, Figures, and Photographs

Tables of data are to be placed in the text. Extensive tables of data are of questionable value and authors should consider more succinct ways of presenting essential information. The same data should not be presented in both tabular and graphical form. Authors must cite original sources (published or unpublished sources (technical reports, etc.) of data, and are encouraged to cite relevant published papers in reviewing the subject. All photographs, schemes, and drawings should be referred to as figures, numbered consecutively in the text and should be sharp with clear contrasts. Scales, if needed, should be shown on the drawing or photographs. All Maps require indication of scale and direction (North). Final Font size in Figures will be the appropriate scale for ease of reading. Contrast and shading will be appropriate for printing. Use of color for contrast is recommended

References

References should be listed at the end of the text in strict alphabetical order of authorship and year of publication. Give all authors names, full article title, and inclusive pages. Journal titles should conform to abbreviations in the World List. Citations in the text should be by author and date, given in parentheses; Jones and Smith (2003) or (Jones, 2003) or (Jones et al., 2003), or Jones et al. (2003) used for papers with three or more authors.

Examples:

Journals:

Goldberg, Edward. 1986. TBT: An Experimental Dilemma. *Environment*. Vol. 22(17-20):42-44.
Champ, M.A. 2000. A Review of Organotin Regulatory Strategies: Pending Actions, Related Costs and Benefits. *Science and the Total Environment*. Vol. 258(1):21-71.

Books:

Laughlin, Jr. R.B. 1996. Bioaccumulation of TBT by

Aquatic Organisms. Chapter 16. In: Organotin: Environmental Fate and Effects. (Champ and Seligman, Editors). Chapman & Hall, Oxford, UK. pp. 331-355.

Published Conference Proceedings:

Abel, D. and A. Abbott. 2001. Treatment Processes for TBT-Contaminated Waters and Sediments. Proceedings of Oceanology International 2001 Conference. Miami, Florida. Vol. 1:14-21.
Damodaran, N., Toll, J., Pendleton, M., Mulligan, C., Deforest, D., Kluch, M., Brancato, M.S. & Felmy, J. (1999). Cost analysis of TBT self-polishing copolymer paints and tin-free alternatives for use on deep-sea vessels. Oceans '99. MTS/IEEE special session Proceedings, Vol. 4, Seattle, 1999. Treatment of Regulated Discharges from Shipyards and Drydocks. The Marine Technology Society, Washington, DC. ISBN 0-933957-24-6.
Evans, J.S. (2000). Alternatives to TBT hull coatings: how will ship-owners deal with the economic and environmental consequences? ENSUS 2000 – Marine Science and Technology for Environmental Sustainability. 378-382. Depts. of Marine Technology and Marine Sciences and Coastal Management, University of Newcastle, U.K. ISBN 0-7017-0093-9.

Copyright Guidelines

The US Government is one of the sponsors the Symposium and the Proceedings are not peer reviewed or copyrighted. They are reviewed by Session Chairs and Copy & Format Edited for Consistency and will be distributed to participants of the Symposium at no cost and be available to others for a small fee from atrp.com/

Proofs

Unless otherwise specified, galley proofs will be sent to the first-named author for correction. Excessive alterations should be avoided. Corrected proofs should be returned in 24 hours to machamp@aol.com

NOTE: The Editors will attempt to publish the Peer Reviewed Papers from the Symposium in a Special Issue of an International Journal if there are enough papers to merit and fill a special issue.