

Welcome to Poseidon Sciences Updates

We wish to share with you our recent article published in *Polymer Coatings Colour Journal* entitled "Perspectives on Biocides." The article discusses recent trends on biocides, regulatory issues and new concepts in biocides in paints and coatings. Here is an excerpt:

For the general public, the word 'biocide' is almost like a dirty word. Yet biocides remain an essential part of modern life, protecting the very same public that decry it from the host of bacteria and viruses in food, household items, such as cosmetics and toiletries, to swimming pools, paints and medical supplies.....Imagine our world without biocides. Contact lenses would no longer function because of bacterial growth. Toothpastes won't work anymore and cavities would increase. Most superficial wounds would become deadly and serious wounds automatically become fatal. The food we eat and the cosmetics we use would no longer be stored; medicines won't last longer than a few weeks on the shelf. Wood products would rot because of decaying fungus. Architectural paint even in the can would become fouled during storage and those painted on surfaces covered by mould/mildew in a matter of weeks. Container ships slow down to half speed and ship transport would cost twice as much because of barnacle overgrowth on its submerged hull. Our lifestyle reverts back to pre-World War II days when a common infection, otherwise non-lethal, would decimate people by tens of thousands.

For a complete copy of this article, please click [here](#).

Biofouling R&D updates

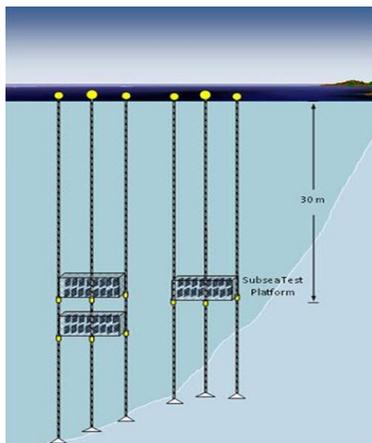
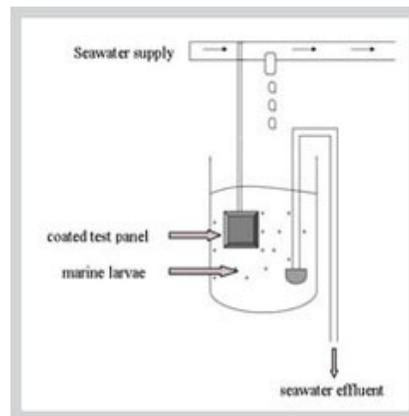
- SHMRC's director, Sister Avelin Mary, presented a paper at a special conference organized by the Indian Navy that discussed methods of evaluating the performance of marine coatings under Indian coastal water conditions. Most marine coatings used in India are typically supplied by multinational coating companies whose research and development are mostly undertaken outside of Indian waters. Local fouling conditions, particularly in areas where the naval vessels operate, tend to be more aggressive so that evaluation under local conditions is needed to guarantee optimum performance of candidate coatings for naval vessels.



- Last week, our annual retrofit of static and dynamic platforms were completed, along with structural improvements at the SHMRC Shore Laboratory. The changes were undertaken as part of the general maintenance procedures, calibration and corrosion prevention of the ocean platforms. Learn more about our marine coating testing capabilities [here](#).



- **Screening of biocides and marine coatings** using cultured and wild marine larval species is continuing as a means of supporting product substantiation claims on nontoxic nature of coatings. To read more about the sentinel tests, please click [here](#).



- **Subsea tests** on coatings are gaining interest, particularly for companies that supply products for the subsea market—underwater sensors, pipelines and subsea structures. To read more about this testing program, please click [here](#).

- **Wood protection against *Teredo* worms.** Basic research studies are underway at the new test station to develop practical methods to test efficacy of wood protection products to prevent shipworms from damaging wooden structures, such as pilings and wooden boats. Correlation between size of exterior boreholes

made by the shipworm and the total length of the actual *Teredo* inside the tunnels can now be more reasonably estimated. You can read more about this [here](#).



- **Guide to Biofoulers** was formally launched last January and we have received much interest from academic and industrial organizations. Biofouling is very diverse across the globe and even within each site. Understanding the fouling pressures exerted by locally endemic hard and soft fouling organisms will provide better understanding of why some coatings may fail under certain conditions. The Guide also helps coatings chemists understand the ‘biology’ side of the problem during the coatings development process. Please click [here](#) to read more information about the Guide.

Poseidon Sciences is participating as speaker in the following coatings related conferences during the next six months. Should you be attending any of these conferences, we certainly would like to have a chance to speak with you about ongoing research at Poseidon Sciences.

GENERAL TOPIC AREA	CONFERENCE	SPEAKERS/ AUTHORS
Biofouling and covalently bound biocides	European Coatings Congress 2011 March 28-30, Nuremberg, Germany	JR Matias
Biocides	European Coatings Conference “Novel Biocide V” Berlin/ Germany, April 12, 2011	JR Matias
Marine coatings for aquaculture, ships and subsea structures	Asia Coatings Congress 2011. May 18-19, 2011 Windsor Plaza Hotel, Vietnam	A Mary, AQ Adrias, JR Matias
Biocides, hydraulic fracturing, environmental issues in oil/gas extraction	10th Gas Shales Summit June 7-8, 2011, The Renaissance Worthington Hotel, Fort Worth, TX	JR Matias