



NEWSLETTER

Endpoint

OF THE AUSTRALASIAN SOCIETY FOR ECOTOXICOLOGY
(now SETAC-AU)

Volume 18 Number 1

September 2011

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Message from the Editor

This month we have another very full issue of Endpoint. Thanks to all those who have contributed; especially the regional and student representatives who continue to produce submissions for Endpoint. Great things are planned for SETAC AU in the next twelve months or so and there have been equally exciting developments since the June issue. A taste of what has happened and what is planned is contained in this month's issue so please enjoy and get excited as you read on.

In June's issue of Endpoint a number of members collaborated on a very moving tribute to our friend and colleague Dr Tony Roach. This month there are a couple of announcements that will ensure the preservation of his name and legacy in the Australian ecotoxicology community. On page 9 there are details of "The Tony Roach Memorial Presentation", the first of which will be given in next year's conference – Brisbane 2012. The second is the announcement from the Sydney Institute of Marine Science (SIMS) and the New South Wales Office of Environment and Heritage (OEH) of the "Tony Roach Prize in Marine Environmental Science"; see page 19.

Grant has also returned from Science Meets Parliament and by all accounts got a lot out of his trip. See the report from Grant on page 13. If you ever need to interact with the political level of government (read ever need grant funding) this event will stand you in great stead. I was the lucky representative last year and can definitely vouch for the benefit of this event to a young scientist's career. SETAC AU will no doubt be looking to send at least one representative next year, if you have recently completed or are nearing the end of your studies make sure you do not miss the opportunity to apply to be SETAC AU's representative to this event next year.

Of course the really big news for this issue is that we are ready to start making announcements about our next conference which will be held in Brisbane in July 2012. Fred has drafted the announcement of Brisbane 2012 which can be seen on pages 16 and 17. Enter these dates in your diary as the time will fly between now and the conference.

Other great reading in this issue includes our regular reports from our regional and student reps, a profile from Ana Miranda and report by Grant on Milan 2011. Please enjoy.

David Everett (david.everett@derm.qld.gov.au)

Editor-in-Chief

Sustaining Members



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This is my first report as President of ASE/SETAC-AU and it will be brief since Ross Smith our illustrious past President was kind enough to submit a report for the last issue of Endpoint. It is indeed an honour to have been elected to this position and I thank you all for your endorsement of my nomination.

I would like first to thank Ross Smith, the first ever President of SETAC-AU very much for leading first ASE since 2006, then successfully managing the merger of the ASE with the global SETAC community to create SETAC-AU. His last report aptly described all the achievements we made during his leadership and he has moved onto membership of the Board of SETAC-AP while he is of course still on our Council (though unfortunately unavailable for our very first meeting). As I said at the AGM, Ross actually "funds" himself as a private consultant and was the first ASE President from Industry which in itself is a laudable contribution to our Society and we are very grateful to him. We hope more members from Industry will step forward to join Council in future years.

1. Tony Roach

It is with deep sadness that we record the passing away of one of our very active long-term members Tony Roach. We discussed a SETAC-AU memorial tribute to him at the last Council meeting and you can see the results of this discussion outlined in the article contained herein describing the Tony Roach Memorial Presentation.

2. SETAC-AU and Science & Technology Australia (formerly FASTS)

FASTS has been rebranded Science & Technology Australia and is working on improving its profile. However I have not been receiving notices from them as President of SETAC-AU as I believe they are still going to Ross who is diligently forwarding them to our members.

We were fortunate (at the 11th hour) that Grant Hose registered and represented us at Science Meets Parliament and has provided a report which can be read herein. We did not act in time to have an early career researcher enrolled for SmP from SETAC-AU and I regret this missed opportunity.



3. SETAC-AU and ACTRA

I have done nothing to follow up on ACTRA however it maybe wise to inform ACTRA of our new Council and I would recommend that we send details to Jack Ng and ask him to keep us informed.

4. Conferences

Envirotox 2011 was a great success and we thank Rick van Dam and Michelle Iles the co-chairs for organising this. It was my first ever visit to Darwin (in 18 years in Australia!) and the ambience of the venue and surroundings made the excellent scientific presentations even more enjoyable.

I attended SETAC Europe 2011 in Milan (together with 2000 others!) and noted that there were only 6 (or so) SETAC-AU members there, which is less than usual. Grant Hose has provided a brief review of the conference – thanks Grant. I met informally with the immediate past and new Presidents of SETAC Europe and with several members of the SETAC World Council and discussed my proposed SETAC workshop in Sri Lanka with Paul Van Den Brink President, SETAC World. He has agreed to represent SETAC at this proposed workshop (at his own expense!) since he ran a comprehensive EU funded research project on pesticides in Sri Lanka some years ago. Kenny Leung, President SETAC-AP is also supportive and I will meet up with him again next week. I held discussions with colleagues at the University of Colombo and University of Moratuwa, Sri Lanka and with the Environmental Authority in Colombo en route back to Australia and we are hoping to organise this end Jan/early Feb 2013 depending on funding approval and commitment from Sri Lankan potential participants. It will be a simple 1-2 day event along the lines of the successful In-

dian workshop organised by Rai Kookana last year. We will have some members join up from Sri Lanka, unfortunately they will be directly under SETAC -AP and not SETAC-Au.

Vin Pettigrove (proposed Chair for Melbourne) and I discussed the proposal to host the SETAC-Au 2012 conference and decided that if we organised it, it would have to be Nov/Dec which was not convenient for most academics, since Melbourne in July would not be attractive! Also Brisbane should have first pick anyway, so we would propose Melbourne for 2013 instead. Fred agreed to continue the Brisbane proposal with a change of date from Sep to July.

I presented a paper at ISTA (International Symposium on Toxicity Assessment) in Hongkong July 2011. It was a very interesting conference with a small group of ecotoxicologists and chemists from >30 countries presenting including 5 from Australia. Jenny Stauber who presented (as did Di Jolley and Leonie Anderson) despite being struck down by flu on the 1st day is on the Scientific Committee of ISTA and I will ask her to provide a summary of the Symposium to the next issue of Endpoint to highlight this bi-annual conference to our members. It will be held again in South Africa in 2013 – well worth noting in your diary.

5. The BERLIN BEAR

The organisers of the SETAC World 2012 Berlin Conference have sent a "Berlin Bear" to all regional SETAC groups. This bear is to be autographed by all SETAC members and posted back to Berlin where it will be displayed. I have it signed by as many Victorian members as possible and will now post it to Grant Hose to be signed by NSW SETAC members who will then post it to Fred Leusch in Brisbane. Please liaise with them and sign the bear. It seems however to be a breakable bear! It is bare bear and I wonder if we should have a SETAC-Au cap made for it! I hope several of our members will attend the Berlin Conference with reduced conference fees available to us.

6. Subscriptions and Website

I am aware that when we access the SETAC web page, SETAC-Au cannot be tracked which was a bit embarrassing when I tried this in Sri Lanka to show what we were about to my co-organisers for the workshop there. The old ASE webpage has of course not been updated so that was not of use either. Anthony, Grant and I were supposed to work on the rewording of the web page in Milan – however we did not even meet up (with 2000 people at the conference) until the day after, and Grant as progressed this and Anthony and I are working on it now.

Munro and Ross have a confirmed list of all SETAC-Au members now and Munro has included membership as part of his Treasurer's report. The discounted subscription for PNG members was approved by a vote at the AGM and will be continued after discussions with SETAC.

7. Other Matters

The Water Quality Guidelines revision is proceeding and you can find details on the EPHC website (<http://www.ephc.gov.au/taxonomy/term/102>).

Ross Smith is on the panel for the revision of the National Code for the Care and Use of Animals for Scientific Purposes which has largely finished and he will provide an update when it is available. He did what he could to ensure that the science of ecotoxicology was not overlooked when outlining the general principles of the use of animals for scientific purposes and I am sure has helped our case.

I welcome all new members and returning members of Council and look forward to an active and interesting year.

Dayanthi Nugegoda
(dayanthi.nugegoda@rmit.edu.au)



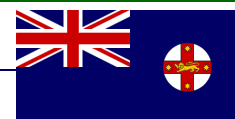
Ecotoxicologists in the West continue to be busier than a one armed miner in the Pilbara. The Ecotoxicology Group at Curtin University continue their work with industry and government in the development and application of contaminant biomarkers in fish. Monique Gagnon and Chris Rawson have co-authored a number of reports (now available on the SEWPaC website) on the impacts of the Montara oil spill and the group is excited by the work of an honours student (Belinda Gerard, supervised by Diane Webb) researching the effects of a key climate change parameter on the impacts of EDCs in fish. Congratulations to Sajida Bakhtyar! Sajida has recently completed her PhD project (Development of Novel, Environmentally Friendly, Drilling Muds) at Curtin University with five publications in International journals. She used biochemical markers of fish health to explore the toxicity of drilling muds and their individual components on fish health. Sajida is currently working as an analytical chemist at National Measurement Institute (NMI), and at University of Notre Dame as sessional lecturer in Pollution & Ecotoxicology and Physical Sciences. She is supervising a third year student Anthony Egitto who is investigating the presence and bioavailability of trace element contamination in local waters and sediments.

Geotechnical Services, (a member of the Intertek worldwide group of companies) have recently expanded their Fremantle based ecotoxicology laboratories in response to the growing demand for water and sediment quality assessment services in Western Australia. The laboratories have been re-designed to facilitate cus-

tomised marine, estuarine and freshwater bioassays covering the range of temperate and tropical conditions on the west coast – a challenging task considering it is geographically the longest coastline of any Australian state. In other news, Geotechnical Services are pleased to welcome Hollie Harvey as their enthusiastic new technician. Hollie graduated with honours in Environmental Studies from the University of Huddersfield, England, and is excited to be pursuing her interest in marine environmental impact assessment. Also, congratulations to divisional manager David Strom who has submitted his PhD entitled 'The development of a sediment quality guideline for copper'. Dave aims to further develop the research findings at Geotechnical Services to enhance their sediment quality assessment capabilities.

Dr Christopher Rawson
(C.Rawson@curtin.edu.au)





Macquarie University (Correspondent – Grant Hose)

Winter has been a busy time for ecotox at Macquarie. Steph Gardham has been having some down time from sampling her mesocosm experiments, which means she has been busy analysing water and sediment samples for copper and playing crazy birds on the Ipad that she won at the Darwin conference. Lois Oulton is pushing through winter and is continuing to run in situ experiments to test the efficiency of urban stormwater treatment devices in reducing the toxicity of stormwater. To do this she is using some novel and potentially sensitive biomarkers and behavioural endpoints, with some great results starting to emerge.

The freshwater ecology and ecotoxicology lab has had an international guest, with Heloise Gourraud visiting as an intern from the University of Bretagne Occidentale in France. Heloise has been working with Josie Lategan and Grant examining the responses of groundwater microbial assemblages to metals using molecular fingerprinting approaches. Heloise has been a fantastic member of the team and we will be sad to see her return to France in August. Josie is continuing her work on microbial responses to metals and constantly testing her groundwater isolates to new toxicants.

Alex Michie is a research assistant with the group and is assisting across all lab projects, but particularly focussing on developing a toxicity test protocol using groundwater rotifers. Over winter Alex will be conducting feeding trials and culturing the animals for later testing.

Dan Kilgore has returned from a European adventure after presenting at the Milan SETAC conference. He is working in the CSIRO labs with Simon Apte and has developed a method for analysing lipid soluble metal complexes. He will be busy hitting the field

to test out his method, doing some tox tests on these complexes as well as madly writing thesis chapters over the coming months.

Cath Choung is on the verge of submitting her PhD thesis on pesticide mixtures (atrazine, terbufos and breakdown products) and their effects on freshwater biota. Supervisors Mark Stevens (DPI), Ross Hyne (NSW OEH) and Grant have been busy reviewing thesis chapters. Cath is hunting for postdocs and after submission will be heading to South America for some well-earned R&R.

Brendan Pitt (supervised by Damian Gore) recently submitted his Hons thesis on the leaching of metals from shales in Northwest Territories, Canada. This project involved some detailed and long term lab leaching experiments and Brendan did a first class job. He is now hunting for a first class job that pays.

Grant is busy managing the ecotox lab, and is working with CSIRO colleagues to develop a groundwater ecology/ecotoxicology research hub. He is also about to start a new ARC Linkage project with the Australian Plague Locust Commission and Wollongong and Flinders Unis to look at the effects of fipronil and Metarhizium pesticides on Mitchell grass ecosystems in western NSW and Queensland.

Emma Thomson and Daisy Taylor (working in Dave Raftos' Lab) both presented at the SETAC conference and are now back to the grind of thesis writing. Emma is in the final few months of her PhD looking at developing potential biomarkers to assess the effects of low levels of Cd, Cu, Pb and Zn on the Sydney Rock oyster using changes in protein expression (proteomics). She has found that there are unique sets of proteins which respond to each metal and concentration tested.

Regional Reports

New South Wales (Cont'd)

Ellen Woolfenden is also writing up her work on pollution of Antarctic marine sediments. Working with Simon George and the AAD, Ellen's PhD has generated a large amount of GC-MS data on sediments artificially polluted by SAB diesel and returned to the Antarctic seabed (15 m deep) for up to 5 years, and from this she has identified the main processes by which diesel is removed from sediments in polar environments.

Australian Catholic University (Correspondent – Cliff Seery)

ACU has re-newed its link to ecotox with Cliff Seery heading up a small group of projects out of the North Sydney campus. One of the projects, looking at toxicity of anti-scalants used in desalination plants to inland systems, earned Ashleigh Keast a First Class Honours as well as the University medal for an Honours thesis. Another project underway may be familiar to readers from the presentation Cliff gave at the Darwin conference: Cliff and an Honours student, Nic Pradella, are assessing the effects of ocean acidification and warming, in combination with toxicant stress, to near-shore invertebrates. Nic is due to submit his Honours thesis this month, but is keen to continue the project and produce his first publication.

Wollongong University (Correspondent – Dianne Jolley)

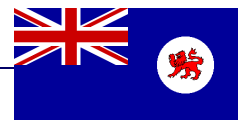
Four SETAC-AU members (Jenny Stauber, Dianne Jolley, Leonie Andersen and SETAC-AU chair Dayanthi Nugegoda) recently participated in the fifteenth meeting on the International Symposium on Toxicity Assessment (ISTA 15) which was held at the City University of Hong Kong, from 3 to 8 July 2011. There were approximately 200 participants for 33 countries, creating a wonderful cultural diversity mixed with topical science. The meeting was chaired by Doris Au from City University, Hong Kong, with an enthusiastic local organising committee who

ensured that the meeting ran smoothly. The symposium provided a platform for scientists to discuss the forefront development on current issues in regulatory toxicology, "omics" technologies and bioinformatics in (eco) toxicology, toxic mechanisms of chemicals of global and emerging concerns, as well as the risk of these synthetic and natural chemicals pose on public health and environmental safety. Current advances in the fields of toxicity assessment, biomarkers and bioindicators, environmental chemistry and green chemistry, remediation and mitigation technologies were also presented. There were 15 invited speakers from around the world, including Christian Blaise (Environment Canada, Montreal, Canada), Tracy Collier (NOAA Oceans and Human Health Initiative, USA) Philippe Garrigues (University of Bordeaux, France), Stephen Klaine (Clemson University, USA), Paul Lam (City University of Hong Kong), Claude Amiard-Triquet (Directeur Recherche CNRS in Nantes, France), Paule Vasseur (University of Metz, France) and Rudolf Wu (University of Hong Kong). The banquet dinner was a personal highlight, with a diverse menu that included a range of quintessential fine dining tastes of Hong Kong. The next meeting (ISTA 16) is being planned in South Africa.

Dianne Jolley (djolley@uow.edu.au)

Regional Reports

Tasmania



Hello from down south! Our small but busy state has been very active in ecotox work over the last few months with new and current students striving on with their respective doctoral and masters projects as well new technologies and collaborations being developed.

At the Australian Antarctic Division, Tom Mooney has been tackling hours of microscope work sorting his collembolan samples from Macquarie Island, and is starting to write up his PhD thesis in terrestrial ecotox. Bianca Sfiligoj has been trying to make sense of her metal concentration data and learning all things "toxcalc" in generating results from her experiments, and is also busily starting the write up process for her PhD. UTAS masters students Lara Marcus and Sarah Payne have been busy with course work after their lengthy Antarctic field season investigating metal and fuel effects on copepod survival and plankton community structure and are now beginning to analyse their data. Ashley Cooper and Paul Armstrong have recently joined the AAD's Risk Assessment and Guidelines team. Ashley has eagerly taken up the role of resident ICP guru and is gradually getting through the backlog of samples as well as training up students to use this instrument. Jane Wasley has been preparing a number of data sets for analysis and has been working with an AAD-based quantitative methods group to learn some new techniques (using R). Catherine King has had a much deserved break from work, escaping from the biting Tasmanian cold to the warmer, monsoonal mountains of Thailand for a few weeks. And work commitments have been hectic as usual, with strategic planning for the next round of Antarctic research grants (see the advertisement in this issue) and

the upcoming field season, which will take teams to Casey, Davis and hopefully Macquarie Island stations, well underway.

Catriona McLeod convened a session of the Derwent Estuary Heavy Metals Interest Group in July to present a technological development by Paulo De Souza and Jeremy Breen from CSIRO which adds a component to automated underwater vehicles enabling a mini x-ray fluorescence spectrophotometer to be deployed. This technology can qualitatively assess the metal loadings of surface sediments and they are interested in linking this research with any other projects or existing data dealing with the metal loadings in Hobart's Derwent estuary.

Bianca Sfiligoj
(Bianca.Sfiligoj@aad.gov.au)





Hi all,

There is not too much to add to the last update except perhaps changing the future tense into the present tense. Visiting students Justin Jasper, Maja Karlsson and Laura Carter are furiously experimenting and producing more samples than our instruments can keep up with. So many bright young minds, so many questions, so many experiments, so many samples...so busy! However, each one is bringing such a great deal of knowledge on a wide range of subjects (mainly relating to terrestrial and aquatic fate and bioavailability) that I think only the LC-MS/MS will be glad to see them go.

On another note, I'd like to congratulate Stuart Khan and Fred Leusch (and everyone else involved) for putting on a great show in Sydney for Micropol. For such a small meeting, there were a relatively high proportion of big hitters in the field in attendance, giving a rare chance to have one on one discussion with them.

So it seems we have managed to pull through another financial year reasonably unscathed and we can all start getting simultaneously excited and worried about where the next round of project schedules are taking us!

Take it easy,

Mike Williams (Mike.Williams@csiro.au)

The Tony Roach Memorial Presentation



In memory of Dr Tony Roach, who passed away in May 2011, SETAC-AU is sponsoring a visiting speaker to deliver a memorial Plenary or Keynote address to future annual conferences. The topics are to cover aspects of at least one of the following issues: persistent organic pollutants and their effect on aquatic biota, bioaccumulation and food web transfer of organic contaminants in the marine environment; biomarkers of ecosystem health, emerging research in aquatic ecotoxicology.

Student Representatives Report

The student representatives have been busy trying to recruit new members to the society this month and have prepared an A4 flyer to distribute to universities offering environmental science programs, both undergrad and postgrad. We would be very grateful if the academics within the society would contact us (e-mail addresses below) so we can send you our flyer to e-mail or pass out to your students. We currently have 19 members of the new SETAC-AU Facebook site. If you know any student members who use Facebook and haven't yet joined, point them to the [Facebook group](#) page.

For this issue of Endpoint, we are going to introduce a new feature which we hope will become a regular addition to our report:

In this feature, we hope to offer some advice and experiences from established career scientists on making the transition from study to employment. To kick off this month we are very pleased to have the insights from Mr. Gary Fan from the Department of Agriculture, Fisheries and Forestry, Canberra and Dr. Sharon Hook from CSIRO Land and Water, Sydney.

Gary Fan (Gary.Fan@daff.gov.au)

"When I finished my M.Sc. degree in aquatic ecotoxicology from the University of Guelph in Canada, I was very lucky to have had Dr Keith Solomon as my supervisor, because he had numerous connections with the aquatic ecotox community in the federal government in Environment Canada. He got me my first job as a consultant working on Canadian Water Quality Guidelines for pesticides, and as government jobs go, eventually I landed a permanent position in that section. Interestingly, Keith got me that job without me even having met or spoken to my new boss, because Keith's recommendation was good enough for him. That is the power of knowing people who know people!

So the best piece of advice I could give to

students close to finishing up their degrees (or anyone else for that matter) is to make the best use of your network of contacts that you would have developed during your degrees. I'm constantly amazed as I go through my working career that so many doors have opened for me not necessarily just because of what I know, but WHO I know. Never underestimate meeting someone (at a conference, through research collaborations, work, etc) and maintaining good contact with people, because you never know when you might get a call from that person with whom you've managed to make a good impression on."

Sharon Hook (Sharon.Hook@csiro.au)

"I got my post doc (at the Skidaway Institute of Oceanography in Savannah, GA, USA) by networking at meetings. I'd met my advisor at meetings, was familiar with his work, and ensured that he was familiar with mine. As I was finishing up my dissertation, we put in a fellowship application that was successful, so off I went! I'd recommend this approach because most post docs aren't advertised. The one thing I did that I wouldn't recommend is that I turned my dissertation in on Friday, got in my car and drove south for two days, then started my new job on Monday. I was pretty burnt out. I'd suggest taking at least a little time off."

If you have some advice or a particular experience you would like to offer the SETAC-AU student members, please get in touch with us. Good luck to all those students who are submitting your final pieces of work (or at least preparing to at the beginning of next year).

The SETAC-AU student representatives.

Bianca Sfiligoj (Bianca.Sfiligoj@aad.gov.au);
Tristan Stringer (tristanjstringer@gmail.com);
Tom Cresswell (Tom.Cresswell@csiro.au)

Name: Ana Miranda

Institutions: RMIT University

Degree: Doctor of Philosophy
(Environmental Science)

Supervisors: Prof. Dayanthi Nugegoda
(RMIT), Dr. Vin Pettigrove (CAPIM)

Estimated time of Completion:
November 2013

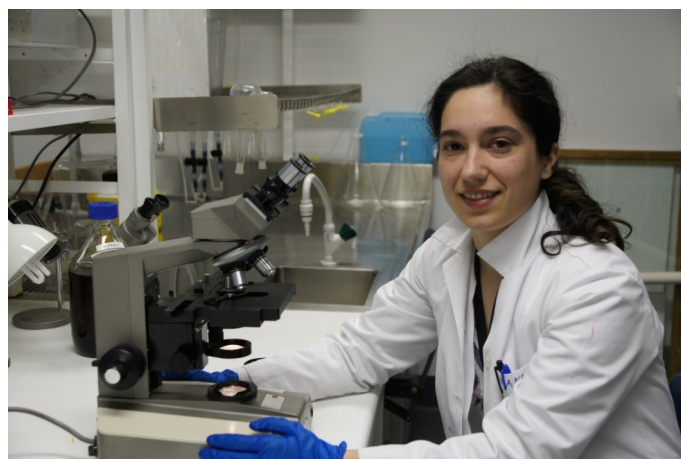
Thesis title: Developing a freshwater fish
biomonitor for endocrine disrupting chemicals
(EDCs) in South Eastern Victoria

Email: ana.miranda@rmit.edu.au

How did you get involved in ecotoxicological research?

I was always passionate about nature. I grew up in the countryside, so I was privileged to grow up observing animals and plants rarely seen by others. The engagement with school groups that visited the forest and valued the natural resources alerted me to the need to protect the environment. Therefore when the time to go to university came I decided to enrol in a course in biology.

At the end of my third year I was not sure of what to do however I was not anticipating a career in ecotoxicology. Then Prof. Amadey Soares, the Ecotoxicology group leader at the University of Aveiro, offered me the opportunity of doing honours. They were very enthusiastic, full of ideas and worked well as a team. During one year I studied the genetic adaptation of *Daphnia* sp. populations to Acid Mine Drainage. After completing my honours I was willing to continue in the area but I wanted to grow more as scientist. So, in 2006 I secured a mobility scholarship (Leonardo da Vinci) from the European commission to do a project in another country. I spent about 18 months with Dr. Carlos Barata in Barcelona where I learnt a lot as scientist.



What led you to your Ph.D. project and what's the importance of your work?

I arrived in Australia in 2009 and met Prof. Dayanthi Nugegoda and her laboratory staff at RMIT. After my first visit to Prof. Dayanthi's laboratory I came away impressed with the work environment and laboratory conditions. I was captivated by Prof. Dayanthi's professional and personnel qualities and found her to be particularly dedicated and committed to science. She is probably the most enthusiastic, communicative and passionate person that I ever met in my life.

Later, I did some work with Prof. Dayanthi as a research assistant and then in 2010 the opportunity of doing a PhD appeared. The project is co-supervised by Dr. Vincent Pettigrove and funded by CAPIM (Victorian Centre of Aquatic Pollution Identification and Management). This PhD aims primarily to develop a native freshwater fish biomonitor for Endocrine Disrupting Chemicals in South Eastern Victoria. I think that this PhD is an important step for endocrine disruption research in Australia and in Victoria in particular. The development of a new biomonitor species that lives in areas of concern and that allows researchers to cover a wide area in terms of biomonitoring of EDCs is one of the contributions that I expect to make with my PhD.

What experimental work have you undertaken so far?

The first step of my project was to select 2 or 3 native fish species suitable as bio-monitors of Endocrine disruptive effects. This was a very important first step since in South East Victoria there are no studies that have considered the potential effects on native fish. After establishing the key criteria of a good biomonitor species for EDCs I have selected 3 native Australian freshwater fish species: Australian smelt; Flathead gudgeon; and southern Pigmy perch. For each of these species I am trying to develop or to optimise biomarkers of endocrine disruption. Currently I have Southern Pigmy perch juveniles collected from the field; after initial difficulties adapting them to captivity they seem to be doing fine. With this species I am currently doing baseline studies.

Where to from here with your work?

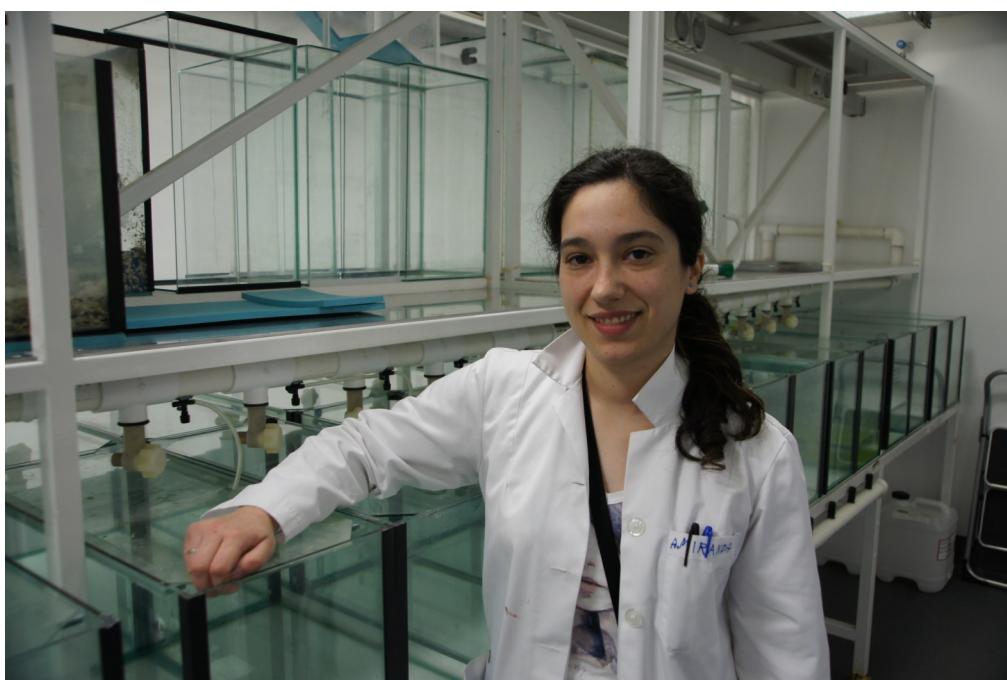
I am trying to optimise and analyse different techniques to assess estrogenic effects on laboratory exposed fish such as Vitellogenin expression. Currently I am using

Murray rainbowfish to screen the advantages and disadvantages of techniques such as histology, histochemistry and others to assess those effects as well as to compare to the other selected native fish. The Murray rainbowfish has been used because it is available from the aquarium industry and it is already adapted to captivity.

Later, I will use these techniques with my fish collected from the field.

What are your plans for the future?

My plan for the future is to finish my PhD however there is a lot of water to go under the bridge before I am finished. So, for the next two or three years I need to dedicate myself to that task while at the same time continuing to enjoy and learn with everyone from CAPIM and RMIT. Then I hope to secure a Post Doc position to assist in the development of a career in research.



Special Report

Science meets Parliament

On June 20 and 21, I had the good fortune to represent SETAC AU at Science meets Parliament (SmP). SmP is an annual event hosted by FASTS (now Science & Technology Australia, STA) which is an umbrella organisation representing scientific societies in Australia, and providing a united lobby group (see www.sta.org.au). Our very own Ross Smith is now the STA Vice President.

SmP runs over 2 days, the first is an information day on the political and budgetary process, how to present your research (or your 'message'), how to engage politicians and the public and what to expect from your meeting with a Parliamentarian (which occurs on day 2). Much of the discussion focussed on the climate change debate, with the recognition that the science has now gone from this issue and it is now a social, political and economic debate, with the science long forgotten. The need for science to re-establish its credibility in the eyes of the public was also discussed. To this end, STA initiated the 'Respect the science' campaign, to engage the public and enlighten them on the rigour of science, the peer review process and the importance of science. I encourage you to visit www.respectthescience.org.au and have a look at the resources that are available. Many of you might find this useful for conveying science and scientific process to students and lay audiences.

On Day 2 we spent some time watching the circus that is Parliament question time, and afterwards had lunch at the National Press Club with an address by our new Chief Scientist, Ian Chubb. On returning to Parliament House I had an appointment with Senator Simon Birmingham, a young Liberal senator from SA who is the shadow Parliamentary Security (Junior Minister) for the Environment and the Murray Darling Basin (MDB). He was interested (or at least appeared so) in our brief discussions of water quality and environmental impacts in the MDB, but as is often the case, our 30 minute interview was cut short by 25 minutes as he had to return to the senate for a vote. Alas, in my 2 days in Canberra I shared 5 mins with a junior polliie.

Having been to SMP before I knew what to expect and certainly didn't expect to come away with a new best friend on Capital Hill. Nevertheless, the experience was very worthwhile and I recommend it to others when it comes around again next year. What I found particularly useful was the 'training' day on day 1, and I really enjoyed meeting the representatives from other societies. My thanks to SETAC AU for supporting me to attend this event.

Grant Hose (grant.hose@mq.edu.au)



Photo courtesy of JJ Harrison

Conference Report

SETAC-Europe, Milan 2011

The 2011 SETAC Europe conference was held in Milan, the fashion capital of Italy, from May 15-19. The theme of the conference was "Ecosystem Protection in a Sustainable World: A Challenge for Science and Regulation". The good mix of sessions, including a focus on ecosystem services and (not surprisingly) the implementation of the EU water framework directive ensured that the good mix of hard science and policy applications and outcomes.



The conference coincided with AC Milan winning the Serie A (the Italian soccer championship) so the city had a buoyant, party atmosphere. The conference had a great international mix, that included a strong SETAC AU contingent, led by our President Dayanthi Nugegoda and Vice Pres Anthony Chariton, with a good number of members from Australia and NZ, particularly from Macquarie, Canberra, Melbourne, Otago, Lincoln, RMIT and Queensland Universities and CSIRO.

The opening ceremony was filled with the usually speeches and SETAC fanfare, most of which was in Honour of our VP Anthony who celebrated his birthday that day. Day 1, Monday, saw a few of the SETAC AU team in action and finished with an interesting keynote address on ecosystem services by Lorraine Maltby.

Day 2, Tuesday, was packed with scientific goodness including morning presentations by David Fox, and students Dan Kilgore and Emma Thompson. On Tuesday and Wednesday Ben Kefford was busy speaking and chairing multiple sessions on improving risk assessments and SSDs. Tuesday night's student party in the vault of a 1920's bank was quite an event, and introduced the European student body to the ways and moves of the SETAC antipodeans .

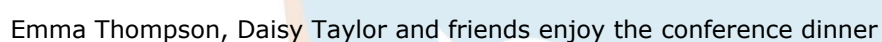
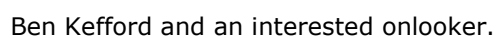
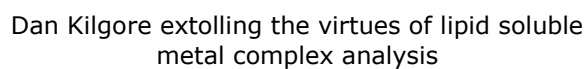
On Day 3, Wednesday, Anthony Chariton chaired an interesting and popular session on 'Environmental OMICS'. Wednesday afternoon's keynote by Robert Costanza was excellent, and great to see the man who (I think) put ecosystem services on the global scientific stage (see Costanza et al 1987, Nature vol 387).

The poster sessions every day were always well attended and a great opportunity to mingle, sample Italian wine, and check out some great science. There were plenty of posters by SETAC AU members, including Macquarie, UQ, CSIRO and CAPIM/Melbourne Uni students. As always, the conference dinner at the Enterprise Hotel was a highlight, with SETAC President Paul van den Brink burning up the dance floor while the non-dancers closely guarded drinks from over-zealous bar staff who were pouncing on any unattended glass or bottle.

The final day was for many shrouded in a post-conference-dinner haze that mirrored the Milan air quality. Nevertheless, the standard of the presentations was high and the program included a number of highlights, including presentations by Karen Lavin and Vin Pettigrove. The closing ceremony concluded a fantastic conference and paved the way for the upcoming SETAC world conference in Berlin in 2012.

Grant Hose (grant.hose@mq.edu.au)

SETAC-Europe, Milan 2011



Conference Announcements



Navigating through extreme weather events in a changing environment: Implications for environmental toxicology and chemistry

4th – 6th July 2012, Brisbane, Qld

Welcome!

It gives us great pleasure to invite you to Brisbane to participate in the 2nd SETAC Australasia Conference, July 4th to 6th, 2012.

SETAC Australasia is a regional chapter of the Society of Environmental Toxicology and Chemistry (SETAC) established in 2010 by the merger of the former Australasian Society of Ecotoxicology with SETAC.

The meeting aims to bring together environmental toxicologists and chemists and promote knowledge sharing to achieve a healthier environment. As a tribute to the 2010/11 summer floods and cyclones, which affected many parts of Australia including the host city Brisbane, the special conference theme this year is on the impacts of extreme weather events and climate change on our fields. Of course all the usual suspects are still on the agenda – see the list of topics below.



Who should attend

This SETAC Australasia conference would be of interest to:

- SETAC members
- Environmental scientists, including environmental chemists and ecotoxicologists
- Environmental policy makers and managers

Session topics

- Impact of extreme weather events and climate change (special conference theme)
- Water quality
- Air quality
- Soil and sediments
- Mixtures and multiple stressors
- Micropollutants and emerging contaminants
- Metals
- Salinity
- Environmental monitoring
- Biomarkers and biosensors
- Environmental policy and guidelines
- Risk assessment
- Statistics and computational techniques

Conference Announcements

Organising committee

Frederic Leusch (Griffith University), Beate Escher (Entox - The University of Queensland), Erik Prochazka (Griffith University), Munro Mortimer (Entox - The University of Queensland), Ross Smith (Hydrobiology), Di Jolley (University of Wollongong), Maud Achard (The University of Queensland), Reinier Mann (Hydrobiology), David Everett (Qld Department of Environment and Resource Management) and Scott Wilson (Central Queensland University).

Abstracts submission

Abstracts submission is now open and closes on the 30th of November 2011. Only a short (max. 300 word) abstract is needed, please use the template provided on the conference website <http://www.setac.org/sapau/brisbane2012>. Abstracts are to be emailed to brisbane2012@setac.org no later than the 30th of November 2012.

Conference venue

The conference will be held in Brisbane at the St Lucia campus of the University of Queensland. St Lucia campus is easily accessible from the Brisbane CBD either by bus (12 min from Southbank Busway) or river ferry (25 min on the CityCat). On and off campus accommodation packages will be available.

Registration fees

The registration fees are listed below. Early-bird registrations will open in December 2011, and close by April 2012. Check the conference website for more information.

	Member*	Non-member		
	Early-bird	Standard	Early-bird	Standard
Full	\$700	\$840	\$910	\$1,092
Discounted (e.g., student)	\$350	\$420	\$455	\$546

* SETAC membership details can be found at <http://www.setac.org/node/2>. Membership fees must be up to date before member rates can be applied.

Expressions of interest – pre/post conference workshops

The organising committee would like to invite expressions of interest from SETAC members who would like to conduct pre/post conference workshops. The workshops should be complimentary to the themes of the conference. Please email brisbane2012@setac.org for further information.

For further information

If you would like further information, please visit the official conference website at <http://www.setac.org/sapau/brisbane2012>, or send us an email at brisbane2012@setac.org.

Tony Roach Prize



Office of
Environment
& Heritage

The Tony Roach Prize in Marine Environmental Science

The Sydney Institute of Marine Science (SIMS) and the New South Wales Office of Environment and Heritage (OEH) are pleased to announce the *Tony Roach Prize in Marine Environmental Science*. The prize is in memory of Dr. Tony Roach and his long career and contributions to marine science in New South Wales.

The prize will be given to the best paper by a young scientist on any aspect of marine or estuarine environmental science, for research done in NSW. The winner will be decided by a selection panel of SIMS and OEH scientists, and will receive a cash award of \$1500. The first award will be in April/May 2012, for papers published in 2011. Further conditions of the award are:

- The paper must be in a peer reviewed scientific journal published in the relevant calendar year (2011 for this first prize). The date of publication shall be taken as the date of publication of the paper in print, except for online only journals.
- The awardee must be the primary author of the paper, and they must be within 3 years of the award of their PhD or equivalent. The primary author will typically be assumed to be the first author. However, differences in publication protocols among disciplines will be taken into account, such as for applicants in "senior" or "group leader" positions.

Applications should consist of a pdf of the paper and a short (1-2 paragraphs) cover letter with the applicant's contact details, a statement that they are within 3 years of the award of their PhD and a brief statement on the significance of the research.

Applications should be sent via e-mail to:

Ms. Catherine Maher
Sydney Institute of Marine Science
Catherine@sims.org.au

For further information or questions contact:

Professor Peter Steinberg
Director and CEO, Sydney Institute of Marine Science
p.steinberg@sims.org.au

2012/13 Australian Antarctic Research

Research applications for the 2012/13 Antarctic field season and beyond are now open. Stage 1 of the application process for participation in the Australian Antarctic Science Program is an Expression of Interest (EOI), which is to be completed online and submitted by 31 August 2011.

What is new?

The [Australian Antarctic Science Strategic Plan 2011–12 to 2020–21](#), with four research themes and a strong focus on delivering project and program outputs to the end user community.

There is now a two-stage application process with an Expression of Interest for everyone, followed by a full application for EOIs that are assessed favourably by the Antarctic Research Assessment Committee.

There are new [Guidelines for participation in the Australian Antarctic Science Program](#).

[Theme and Stream Leaders](#) are available to provide researchers with guidance on developing their project applications.

The Australian Antarctic Science Grant Program has some great new additions:

- Increased funding to \$1,050,000;
- Multi-year grants up to 5 years;
- Maximum grants up to \$150,000; and
- Two categories of grants:
 - i) research projects; or
 - ii) a co-funded post-doctoral fellowship.

Further information on the application process is available at <http://www.aad.gov.au/applications> <http://www.antarctica.gov.au/science/information-for-scientists>

To discuss ideas for potential projects in Ecotoxicology, Risk Assessment and Guidelines in Antarctica, please contact Catherine King at cath.king@aad.gov.au or phone (03) 6232 3515.

For further information on strategic directions within the Terrestrial and Nearshore Ecosystems program, please contact the Program Leader, Dr Martin Riddle at martin.riddle@aad.gov.au

For assistance in completing your EOI, please contact Science Planning and Coordination at planning@aad.gov.au or phone (03) 6232 3530.



Australasian Bulletin of Ecotoxicology and Environmental Chemistry (ABEEC)

In the last issue of Endpoint (towards the back), there was a call for ideas for subject matter for the inaugural issue of the Australasian Bulletin of Ecotoxicology and Environmental Chemistry (ABEEC). I had no responses in its wake, so I subsequently targeted numerous individuals within SETAC AU who I thought might have some ideas. However, it became clear to me that there was still some confusion among our members as to the direction that the new Bulletin was taking, and I want to take this opportunity to clarify a few things about the new Bulletin and the direction it will take. First, the SETAC AU constitution states the following:

"The Chapter owns and publishes a scientific bulletin named the Australasian Bulletin of Ecotoxicology and Environmental Chemistry."

The Bulletin is a regional publication dedicated to publishing original, scientifically-sound research dealing with all aspects of ecotoxicology and environmental chemistry relevant to Australasia. Papers published may be research reports, review papers, short communications, descriptions of new techniques and equipment, thesis abstracts, and comments on previously published papers.

Second, earlier this year, a subcommittee was established to refine the scope of the Bulletin. The sub-committee members were Reinier Mann (Chairperson and Associate Editor of AJE and now Editor of ABEEC), Scott Markich (Editor in Chief of AJE), John Chapman (Founding Editor), Alex Pulkownik (Associate Editor of AJE), and Cath King (outgoing Endpoint Editor). The deliberations of the subcommittee were presented at the AGM in Darwin, and the main points are summarised below.

There was recognition (Mann, Chapman, Markich) that the new Bulletin needs to be more creative in the kinds of articles that it should attract. One of the biggest issues with AJE was the difficulty of attracting consistent "cutting-edge" manuscripts, as most researchers tend to go with an ERA rated journal, or a journal with an ISI Thomson Impact Factor. Ideas for increasing the appeal of the Bulletin included:

- A depository of technical databases which are otherwise difficult to publish.
- Conference proceedings. The Bulletin may be depository for student papers presented at SETAC AU conferences, or proceedings of special sessions (requiring a guest editor).
- Proceedings of Pellston style workshops, which could be linked to the annual SETAC AU conferences, but that are convened as a separate workshop to discuss specific issues (again requiring a dedicated guest editor/chairperson).

There was also agreement (Mann, Chapman, Markich) that ABEEC should be an exclusively online publication for reasons of timely publication (it's quicker) and economics (it's cheaper). In the current Volume & Issue format, articles are not published until an issue is complete, and even as a regular journal, this had led to long delays between submission and final publication. As an "irregular" publication, there is some risk that individual articles may be in limbo for even longer periods while they wait in line for publication of complete issues. However, as an online publication, there is no reason why individual articles cannot be published immediately and be available online. There may be some resistance to this idea if society members still desire to receive hard copies of the Bulletin sent to them.

ABEEC update (cont'd)

There is no reason why this discussion should not continue if SETAC AU members would like to contribute to the discussion. However, in the meantime, I, as editor will continue to kick-start the evolution of the new Bulletin. I have had a few interesting suggestions for future issues, including issues dedicated to:

- climate change;
- the sensitivity of Australian species;
- field studies; and
- salinity.

For the moment we are pursuing option #4, and hope to convene a special symposium on salinity issues at the 2012 Brisbane conference. Please contact me if you would like to be involved with that. However, the call remains open for any ideas that are:

- specific or of importance to Australian environmental conditions;
- under-represented in the literature and in need of greater exposure; and
- able to draw authors from Australia and overseas.

Reinier Mann (Reinier.Mann@hydrobiology.biz)

Editor



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