



## EDITORIAL

**W**elcome to the first ASSTA Newsletter for 2012. The President reminds us that SST is just around the corner and also a timely reminder to ensure that our ASSTA memberships are up-to-date. Janet, Lesley, and John have provided a fitting tribute to the late Roger Wales. Catherine Watson has received the latest ASSTA Research Event Award and a report on the 2nd International Conference on Medical Bionics follows that was supported by a previous award. Finally, Ingrid Jafari, a recipient of a ASSTA travel award, regales us with her time at ICASSP 2012.

Don't forget, when you have news and information to publicise, this is the place to do it. So keep sending information and updates about your work and upcoming events.

**Trent Lewis**

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## ASSTA INFORMATION

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### Contributions

Contributions should be sent to the newsletter team via email as plain text or as an attachment in Rich Text Format (RTF) or Microsoft Word (DOC).

### ASSTA Corporate Members

Appen Pty. Ltd.

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CRC for Cochlear Implant and Hearing Aid Innovation

<http://www.bionicear.org/crc>

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<http://www.assta.org/>

# PRESIDENT'S REPORT

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## 14th Australasian International Conference on Speech Science and Technology



The *14th Australasian International Conference on Speech Science and Technology (SST)* looms; it will be with us at Macquarie on December 3 to 6, 2012. And the organising committee ably led by Felicity Cox and Katherine Demuth, along with the contributors, look to present the “best SST yet”.

As has been the case since the first SST in 1986 (which, incidentally was before the advent of *Eurospeech* in 1989 or *ICSLP (International Conference on Spoken Language Processing)* in 1990), the conference will embrace the broad spectrum of SST disciplines – linguistics, phonetics, phonology, forensics, engineering,

psychology and psycholinguistics, language acquisition, as well as technology and clinical applications of speech science. Sponsors include HCSNet, Cochlear, the Centre for Cognition and its Disorders (CCD), the Macquarie Centre for Language Sciences, Phonak, Advanced Bionics, Oticon, the MARCS Institute, the Hearing CRC, Macquarie University and Appen Butler Hill!

For the three top student authors presenting full oral papers at SST'12 there will be three \$500 prizes. There will also be up to ten student scholarships of \$220 each towards payment of their conference registration.

Registration is a very modest \$330 for members and \$220 for student members, with higher registration charges for non-members or for late registration. So make sure (a) your membership is up to date, and (b) you register before September 1.

On the first day of SST'12, Monday December 3, there will be complementary workshops, one on ‘Speech Perception’ presented by Professor Anne Cutler, and the other on ‘Speech Production’ presented by Professor Stefanie Shattuck-Hufnagel in the morning and afternoon respectively. In addition, registration at SST'12 automatically entails complimentary registration to an official satellite event of SST, the *UNSW Forensic Speech Science*



# PRESIDENT'S REPORT

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## 14th Australasian International Conference on Speech Science and Technology

*Conference 2012*, which will also be held on December 3 at UNSW. This is a relatively informal conference aimed at providing a venue for presentations on work that has not previously been published or submitted to other forums.

On the remaining days Tuesday, Wednesday, Thursday, December 4 to 6, there will be oral papers and posters along with 3 keynote addresses by:

- Associate Professor Janet Fletcher (University of Melbourne) who specialises in articulatory and acoustic modelling of prosody, consonant and vowel articulation in Northern Australian languages, and intonational variation in Australian English.
- Dr Jim Patrick (Cochlear) who is responsible for Cochlear's global research programme, exploring how novel signal processing can improve cochlear implants, and how biology and electro-neural advances can be applied to implant design.
- Professor James Scobbie (Queen Margaret University), who works in speech pathology, phonology, phonetics, acquisition and sociolinguistics to address issues in developmental speech disorders, dialects, and child language acquisition.

As ever, SST'12 will provide the opportunity to see and hear about the latest advances in

speech science, catch up with old friends and colleagues, and make new ones. For research students attending for the first time, this is a great opportunity to become involved in the speech science and technology community.

I look forward to seeing and hearing you all there.

Denis Burnham



## A Tribute to ASSTA Member Roger Wales

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Our dear friend, colleague, and mentor Roger Wales died peacefully on 29th January 2011 in Melbourne of cancer-related causes. Roger Wales was well known and much loved as one of the key figures in promoting speech science and psycholinguistics in Australia and abroad. Roger completed his BSc at University College, London, and then went on to do a PhD in Psychology at the University of Reading in 1967. He held a number of academic positions at the Universities of Edinburgh, St Andrews, and Sussex, and at the University of Melbourne where he served as Head of the School of Behavioural Science and Associate Dean of Medicine, Dentistry and Health Sciences. During this time he oversaw a major rejuvenation of psycholinguistics and cognitive psychology at Melbourne. Through his central involvement in the Cognitive Science initiative at the University in the '90s, he also forged important research and teaching links with a number of other University Departments, including Linguistics and Applied Linguistics, Otolaryngology, and Computer Science. Roger was always the most supportive of colleagues and a true mentor to a number of us who at that time were junior researchers in speech science and cognitive science.

Roger in the latter part of his career was Dean of the Faculty of Humanities and Social Sciences at La Trobe University, and was subsequently coaxed out of retirement to lead the Research Centre for Linguistic Typology at that University. There he was able to influence and encourage a different group of young scholars. He never stopped taking an active interest in developments in speech science and psycholinguistics even though he had an ever increasing administrative load. He continued to supervise a number of PhD projects and was an active participant in a range of NHMRC and ARC research projects. He also served for some time on the ARC Expert Advisory Committee (Social, Behavioural and Economic Sciences). Roger was visiting fellow and member of numerous institutions over the years, most recently the Max Planck Institute, Nijmegen, Laboratoire de Sciences Cognitives et Psycholinguistique, Paris, and the Macquarie Centre for Cognitive Science.

Roger was one of the great “Universal” scholars of speech and language research who made many lasting contributions to the study of psychology of language and psycholinguistics within the context of Cognitive Science. He published extensively in the areas of language acquisition, speech and language processing in adults, and was also a great contributor to various areas of applied clinical research, including studies of aphasia, speech production in children with cochlear implants, and psychosis. Roger’s list of various collaborators and co-authors over the years reads like a speech science and psycholinguistics “who’s who” and includes Anne Cutler, Mike Garman, Stephen Crain, John Clark, Paul Warren, Anne Christophe, and Gerry Altmann to name just a selection.

Roger’s charm and sincere concern and support for his colleagues, especially the junior collaborators he made his friends, was a bright light in our navigation of the sometimes murky halls of academe. He was ready with a warming beverage when we visited him in the upper reaches of the Redmond Barry building and always willing to take relatively impoverished co-researchers out for a meal. Many breakfast research meetings at University Café on Lygon Street and, later, lunches at the John Scott Meeting House at La Trobe University were the setting for wise counsel about problems as diverse as last minute statistical analyses, ARC grant rejoinders, departmental politics or career crises. He is now, and will remain, sadly missed.

Janet Fletcher, Lesley Stirling, and John Hajek



## ASSTA Research Event Award

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ASSTA is delighted to announce that **Dr Catherine Watson** has been awarded \$5000 to fund a workshop on the phonetic analysis of rhythm in Indigenous languages. The workshop is expected

to be held in University of Auckland, 30th of November, 2012, together with the Language and Society Conference.

(see <http://www.assta.org/?q=rhythm-workshop>)

## ASSTA Research Events

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### 2nd International Conference on Medical Bionics

Linda Peterson  
*Bionics Institute*

The Bionics Institute (BI, formerly The Bionic Ear Institute) organised and hosted the 2nd International Conference on Medical Bionics at Silverwater Resort, San Remo, Victoria from Sunday 20 to Wednesday 23 November 2011.

The four-day scientific program featured eminent and early career researchers, students, clinicians and industry representatives working in the diverse field of medical bionics. Their work was presented during eight oral sessions (comprising three to five talks each) and two poster sessions.

In addition, a professional development workshop was held specifically for students and early career researchers, along with numerous networking and social functions.

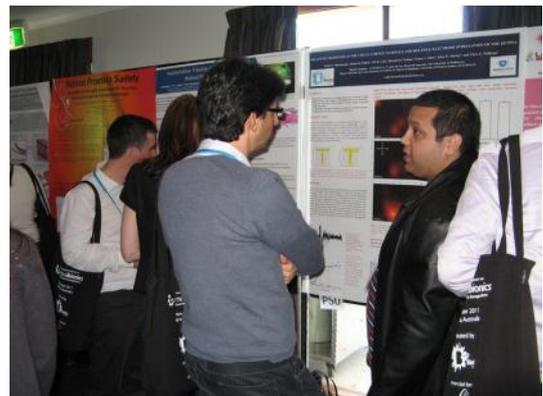
The event was an overwhelming success based on feedback both during and after the event. The Conference achieved its financial objective of achieving a break-even (or small surplus) budget.

A total of 18 organisations pledged support to the 2nd International Conference through a number of select packages and grants.

The Bionics Institute greatly appreciates the support of ASSTA in the form of a \$5000 grant to support Dr Fallon and the Lunchtime poster session.



*Dr James Fallon (back, far right)*



*Poster Session*

## ASSTA Travel Award Reports

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### **IEEE International Conference on Acoustics, Speech and Signal Processing 2012**

Ingrid Jafari

*The University of Western Australia*

The 37th IEEE International Conference on Acoustics, Speech and Signal Processing, (ICASSP) was held in the city of Kyoto, Japan, from the 25-30 March 2012. ICASSP is the world's largest and most comprehensive technical conference for signal processing and its applications. Over 1,350 papers were presented at ICASSP, taken from more than 2 700 submissions. The papers were divided into 15 categories ranging from audio/acoustic signal processing to information forensics and security to signal processing education (just to name a few!).

Each day, the conference commenced with a plenary talk, including: Prof. Karlheinz Brandenburg from Technische University Ilmenau in Germany with his talk entitled "Audio and acoustics signal processing: the quest for high fidelity continues". Prof. Chin-Hi Lee from Georgia Institute of Technology in the USA also presented: "From signal processing to information extraction of speech: a new perspective on automatic speech recognition". Other speakers included Prof. Stephane Mallat from Ecole Polytechnic in France, and Dr. Mitsuo Kawato from ATR Computational Neuroscience Laboratories in Japan; their speeches were entitled "Can signal classification speak mathematics?" and "Computational neuroscience, brain decoding and neurofeedback" respectively. The plenaries

were quite diverse in topics, which ensured that all attendees at ICASSP had something relevant to their field of expertise.

Prior to the commencement of the regular technical programme, fifteen tutorials were scheduled over the first two days of the conference. Each tutorial was of a half-day duration covering a broad range of topics. I attended the tutorial entitled "Reverberant Speech Processing for Human Communications and Automatic Speech Recognition", jointly presented by leading researchers from NTT Laboratories (Dr. Tomohiro Nakatani) and University of Erlangen-Nürnberg (Prof. Walter Kellermann and Dr. Armin Sehr). This tutorial proved to be highly useful and relevant to my current field of research (reverberant blind source separation and recognition). The technical programme commenced on the 27 March, with parallel oral, poster and special sessions at any given time. There was also a show-and-tell session which spanned over two afternoons, these included hardware/software demonstrations by leading research groups in industry, academia and government.

I had the opportunity to present my research, entitled "A robust approach to reverberant blind source separation in the presence of noise for arbitrarily arranged sensors", in a lecture format. This was definitely a very good experience as it allowed me to present my work to leading experts in the same field. I also had the opportunity to meet and discuss my work with some researchers who I had met at Interspeech 2011 last year.



## ASSTA Travel Award Reports (cont)

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Being only the second time in ICASSP history that the conference has been hosted by Japan (the previous time being in 1986), it was a very special conference with a high emphasis placed upon the attendees experiencing the Japanese culture. For example, the conference packs contained some traditional Japanese sweets, as well as a special cloth (with detailed instructions for use by the foreigners!), and various maps/tour guides. This was complemented by a comprehensive social programme - including a welcome reception, banquet and traditional tea ceremony. The welcome reception was hosted on the Monday of the conference week, with the traditional Kagamibiraki, opening of the Japanese sake cask, performed. The ICASSP banquet was truly an affair to remember - the evening commenced with traditional Japanese dance/music performances by Maiko and Geiko, followed by a delicious multi-course dinner. The evening concluded with a lively, passionate performance by some Taiko drummers and musicians. Additionally, for the ladies of the ICASSP, there was a "Women in Signal Processing" Luncheon sponsored by Raytheon which enabled the women to meet and discuss various topics surrounding the field in which we all are involved. The social programme of ICASSP was designed very well with the events complementing each other, and thus allowing the attendees ample opportunity to meet each other in a social environment.

The attendees of ICASSP were also fortunate to be blessed with good weather - at least for the last couple of days! We all experienced a cold start to the conference but this soon disappeared with some weather more reminiscent of spring; however there was an obvious lack in presence of "hanami" (Japanese cherry blossoms) - many of the native Japanese at ICASSP apologized to

us for this! However, we were lucky enough to see a few blooms on the conference grounds.

In conclusion, the 37th ICASSP was a most enjoyable and beneficial experience for me. Not only was I able to see the cutting-edge research that is being conducted in my field of research, I had the opportunity to meet with other researchers who I had previously met, as well as make valuable new contacts. Many thanks must be extended to ASSTA for the assistance in my attendance to ICASSP - it is greatly appreciated, and this experience has had a most positive influence on my research as a whole.



# CONFERENCE LISTING

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**IEEE ICASSP2013: The 38th International Conference on Acoustics, Speech, and Signal Processing 26**  
May 2013— 30 May 2013 Submission deadline: Nov 19, 2012  
Location: Vancouver, Canada  
<http://www.icassp2013.com/>

**INTERSPEECH 2012:13th Annual Conference of the International Speech Communication Association**  
September 9-13, 2012  
Submission Deadline: Closed  
Location: Portland, Oregon  
<http://interspeech2012.org>

**SST 2012: 14th Australasian International Conference on Speech Science and Technology**  
Dec 3, 2012 - Dec 6, 2012  
Submission Deadline: Closed  
Location: Sydney, Australia  
<http://clas.mq.edu.au/sst2012/>

**ACL 2012: The 50th Annual Meeting of the Association for Computational Linguistics**  
Jul 8, 2012 - Jul 14, 2012  
Submission Deadline: Closed  
Location: Jeju, Korea  
<http://www.acl2012.org/>

**The Forensic Voice Comparison Laboratory**  
Dec 3, 2012  
Submission Deadline: Oct 5, 2012  
Location: Sydney, Australia  
<http://sydney2012.forensic-voice-comparison.net/>

**INTERSPEECH 2013:14th Annual Conference of the International Speech Communication Association**  
August 25-29, 2013  
Submission Deadline: TBA  
Location: Lyon, France  
<http://interspeech2013.org>

**INTERSPEECH 2014:15th Annual Conference of the International Speech Communication Association**  
September 14-18, 2014  
Submission Deadline: TBA  
Location: Suntec City, Singapore  
<http://interspeech2012.org>

**LabPhon 13: The 13th Conference on Laboratory Phonology**  
July 27-29, 2012  
Submission deadline: closed  
Location: Stuttgart, Germany  
<http://www.labphon13.labphon.org/>