



IEEE

INSTRUMENTATION AND MEASUREMENT SOCIETY

NEWSLETTER

IMS Newsletter, Issue 4

July, 2012

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Society News

Max Cortner, Industry Liaison



Recently, the Society's Administrative Committee (AdCom) appointed a new member, Max Cortner, as Industry Liaison Officer. This new role within AdCom was established to assist in improving the support of our industry members and to foster the



In May we held one of our most important conferences, the International Instrumentation and Measurement Technology Conference (I2MTC). This time the conference was held in Graz, Austria, in an excellent venue. Around 500 people attended the conference. At this time I would like to congratulate the Conference Chair, Georg Brasseur and the Conference Co-Chair, Imre Rudas for their efforts towards the success of such an important event.

The theme for I2MTC 2012 was "Smart measurements for a sustainable environment". Five tutorials about topics relevant to industry and academia were held during Sunday. Almost 150 people attended them which proved to be a very successful part of the conference.

Important people, coming from the US Department of Energy, the British Ministry of State for Science and Innovation and Volkswagen AG were selected as keynote speakers.

In this conference some new features were introduced so that we started improving the relation between measurement science and industrial applications. This is one of our Society's goals according to our strategic planning. This was achieved presenting industrial specialists during the tutorials, keynote presentations for industrial fields and special sessions where technical papers very useful to industry engineers were presented.

In order to promote the relation between our members and industry at the end of the meeting everybody had the chance to attend to any of the three company tours offered by the local

exchange of know-how between industry and academia, thereby accelerating transfer of novel scientific solutions into industrial applications. Max has suggested the following activities to be considered by the Industry Liaison Committee:

- Scholarship program for continuing education and designated for practicing engineers. The program will include: fund students in instrumentation and measurement coursework and connect scholars with I&M mentor/advisor.

- Instrumentation engineer certification program styled after ASQC or PMI with a defined curriculum or test for certification.

- Research registry dedicated to measurement with quick search by corporations of academic research, categorized by subject, author, institution and links to open fellowships, grants, and IP.

2012 I&M Society Officers

President: [Jorge Daher](#)

Exec. VP: [Reza Zoughi](#)

VP Finance: [Ruth Dyer](#)

VP Conferences: [Dario Petri](#)

VP Pubs: [Shreekanth Mandayam](#)

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VP Technical: [Mihaela Albu](#)

VP Education: [Ferdinanda Ponci](#)

Treasurer: [Frank Reyes](#)

Sr. Past Pres: [Alessandro Ferrero](#)

Jr. Past Pres: [Kim Fowler](#)

organization team. One of the companies was AVL GMBH offering instrumentation, test equipment and tools for the automotive industry. Another tour took us to Anton Paar GMBH which develops and manufactures analytical instruments for quality control. The third company tour allowed us to visit Austriamicrosystems AG, a global leader in the design and manufacture of high performance analogue integrated circuits.

This conference was supported by many local and national Austrian organizations which showed the importance they assigned to I2MTC. Also many private companies exhibited their products and services related to instrumentation and measurements.

I think it was a very successful event and I encourage you to attend this and other Instrumentation and Measurements Society's conferences. Next year, I2MTC will be held in Minneapolis, MN, during May 6 to 9. This time the conference theme will be "Instrumentation and Measurements for life". It will be focussed in de research and development of medical and biomedical instrumentation. You will also be able to attend the presentation of technical papers focused on industrial aspects of instrumentation and measurements, specifically related to medical and biomedical fields but you will also have the chance to hear presentation on regular topics as in previous I2MTC.

We are improving our conferences trying to broaden the interest and trying to attract not only people from universities but also engineers and technicians from industry. These events are a good opportunity to interact with other professionals coming from different parts of the world with a common interest on the science of measurements and its application to industry activities.

In this newsletter you can find a section about our industry liaison, Max Cortner, and our plans to strengthen the relation between our society and industry. Please feel free to contact Max or me if you have any contributions.

[Jorge Fernandez. Daher](#)

President, IEEE I&M Society

Chapters

Division Director Nomination
Process: Please see the following
documents:

[Division Director Job
Description](#)

[Division Director Nomination
Process](#)

Awards

The IEEE Instrumentation and Measurement Awards Committee is currently accepting nominations for the 2012 awards cycle.

These awards will be presented at the 2013 I2MTC. Nominations will be accepted through September 16, 2012.

To submit an award nomination, please visit the IMS website:
<http://iee-ims.org/node/add/nomination>

For more information, please contact:
[Daniel Rosenthal](#), I&M Society Awards Chair.

The I&M Society awards four Society-level awards annually:

* the Outstanding Young Engineer Award
- The I&M Outstanding Young Engineer Award recognizes an outstanding young I&M member who has distinguished him/herself through achievements, which are technical, of exemplary service to the I&M Society, or a combination of both early in their career. The nominee must not have reached their 39th birthday and must be an I&M member at the time of nomination.

IMS Chapter Highlights – featuring the Taipei Section Chapter

The I&M Society has over 40 Chapters representing all Regions within IEEE. Our Chapters are very important to the Society, as they provide a direct link between the Society and our membership. Members of the IMS Administrative Committee (AdCom) had the pleasure of meeting with a delegation of 18 members from the Taipei Section Chapter in May at I2MTC 2012 in Graz, Austria. This meeting provided the Taipei Section Chapter with an opportunity to share with the AdCom the growth this Chapter has seen since its' formation in 2009.

Additionally, the AdCom was able to see highlights of some of the Chapter's activities. The meeting was chaired by the Chapter Secretariat, Dr. Chi Hung Hwang on behalf of the Chapter Chair, Professor Din Ping Tsai.



Beginning in 2009, the Taipei Section Chapter has organized and provided technical sponsorship for the “i-One International Instrumentation Technology Innovation Competition”. This competition is held exclusively for students in high school through graduate school. In 2010, IMS helped support this activity through the Chapter Funding Program. 2010 also welcomed an annual workshop on instrumentation and measurements for graduate students. The Chapter promotes this workshop locally, and typical attendance of the workshop includes over 250 graduate students. Additionally, the Taipei Section Chapter also holds an Annual Chapter Meeting for the members of the Chapter, in addition the regular meetings and activities.

IMS is grateful to the Taipei Section Chapter for their wonderful support of the IMS member in their region. All Chapters are welcome and encouraged to

* the Technical Award
 - The I&M Society Technical Award is given to an individual or group of individuals for outstanding contribution or leadership in advancing instrumentation design or measurement technique.

* the Distinguished Service Award
 - The I&M Society Distinguished Service Award is presented each year to an individual who has given outstanding service to the Society and to the profession.

* the Career Excellence Award
 - The I&M Career Excellence Award is awarded to recognize a lifetime career of meritorious achievement and outstanding technical contribution by an individual in the field of instrumentation and measurement.

submit a short article for the Society Newsletter highlighting their activities and membership support. For questions or to submit an article, please contact the IMS Chapter Chair Liaison, [Kristen Donnell](#).



Conferences

I&M Society VP-Conferences report July 2012

Conferences are among the most important activities of the IEEE Instrumentation and Measurement Society (IMS) because they provide members with opportunities to share new research results and exchange technical information about the hottest topics, face-to-face contact with their peers, build communities of common interests, and help develop and grow their professional careers.

Thus, Conferences and Workshops are a perfect way to offer to our members a timely opportunity to become involved in advancements in the field of instrumentation and measurement science and technology, particularly in new, emerging areas and application domains.

Additionally, an appreciable amount of new scientific results presented at Conferences and Workshops, may find their way into the Society Transactions.

You can find the essential information concerning the 2012 Conferences sponsored by the IMS in the following Tables.

FINANCIAL SPONSORED CONFERENCES

Conference	Dates	Location

Technical Committees

The IEEE Instrumentation and Measurement Society currently has 36 Technical Committees. To learn more about each committee and how to get involved, go to the I&M Society website at:

<http://www.ieee-ims.org/main/>

and click "Technical Committees".

See the following semi-annual reports:

[TC - 2 DC-LF Measurement](#)

[TC - 15 Virtual Systems in Measurements](#)

[TC - 30 Security and Contraband Detection](#)

Membership

The I&M Society invites you to join their group on LinkedIn and Facebook! Network with colleagues and find information in the I&M Field of Interest.

Join today at:

[LinkedIn](#)

You must be a member of the IEEE I&M Society to join.

Not a member of the IEEE I&M Society?

[Join today!](#)

Do you qualify to be a Senior Member of the IEEE?

Senior Membership is the highest grade for which application may be made and shall require experience reflecting professional maturity; a candidate shall be an engineer, scientist, educator, technical executive, or originator in IEEE-designated fields in professional practice for at least ten years and shall have shown significant performance over a period of at least five of those years. An application for Senior Membership requires three references unless nominated by a Senior Member, and in that case requires two references.

For more information, go to the [IEEE website](#).

Congratulations to our latest Senior Members: **Niclas Bjorsell, John Daley, Luca DeVito, Kristen Donnell, Johan Driesen, Roger Ellingson, Mohammad Ghasr, Yong Hu, Chi Hung Hwang, Shahedul**

IEEE International Symposium on Instrumentation and Control Technology (ISICT)	11 July – 13 July	London, UK
IEEE International Conference on Imaging Systems and Techniques (IST)	16 July – 17 July	Manchester, UK
AUTOTESTCON	10 Sep – 13 Sep	Anaheim, CA
IEEE Inter. Symposium on Precision Clock Synchronization for Measurement, Control and Communication (ISPCS)	24 Sep – 28 Sep	San Francisco, CA
IEEE International Workshop on Applied Measurements for Power Systems (AMPS)	26 Sep – 28 Sep	Aachen, Germany
IEEE International Symposium on Haptic, Audio and Visual Environments and Games (HAVE)	08 Oct – 09 Oct	Pisa, Italy
IEEE International Symposium on Robotic and Sensors Environments (ROSE)	16 Nov – 18 Nov	Magdeburg, Germany

TECHNICAL SPONSORED CONFERENCES

Conference	Dates	Location
IEEE International Electric Vehicle Conference (IEVC)	04 Mar – 08 Mar	Greenville, South Car.
Intern. Multi-Conference on Systems, Signals and Devices (SSD)	20 Mar – 23 Mar	Chemnitz, Germany
Measurement Science Conference (MSC)	22 Mar – 23 Mar	Los Angeles, CA
IEEE Conference on Prognostics and Health Management (PHM)	04 Jun – 07 Jun	Denver, CO
IEEE Workshop on Complexity in Engineering (COMPENG)	11 Jun – 13 Jun	Aachen, Germany

Laskar, Zhen An Liu, Mang Ou-Yang, Eduardo Rubio, Glenn Wright, Feng Chu, Paul Forquer, Jan-Ming Ho, Dimitrios Georgakopoulos, James Gilbert, Teddy Surya Gunawan, Huang Chen Lee, Gerard Stenbakken, Gert Rietveld, and Yong Shin.

Publications

IEEE Transactions on I&M:

On December 31, 2011, the 5-year term of Reza Zoughi as Editor-in-Chief of the IEEE Transactions on Instrumentation and Measurement (TIM) expired, and Alessandro Ferrero was appointed Editor-in-Chief effective January 1, 2012. Thank you Reza for the wonderful work you did with TIM, and welcome on board Alessandro! The Transactions is our flagship journal and remains to be on solid foundation with respect to its overall operational, review process timeliness and various established metrics. "Quality" remains to be the paramount goal and an important part of every aspect of our operations, including: the daily submission and quality control process, the technical review process and finally the published papers.

The society publications underwent the scheduled five-year review by the IEEE Technical Activities Board (TAB) Periodicals Review and Advisory Committee (PRAC) in 2012 as well. This committee serves as an advisory body to the TAB Periodicals Committee on all matters relating to the review of IEEE Society/Council (S/C) sponsored periodicals. In preparation for this meeting on 16 February 2012 in Phoenix,

Conference on Precision Electromagnetic Measurements (CPEM)	01 July – 07 July	National Harbor, MD
Int. Symp. on Instrum., Sensor Networks and Automation (IMSNA)	25 Aug – 28 Aug	Sanya, Ainan, China
International Energy Conference & Exhibition (ENERGYCON)	09 Sep – 12 Sep	Florence, Italy
Symp. on Neural Network Applic. in Electrical Eng. (NEUREL)	20 Sep – 22 Sep	Belgrade, Serbia
Future of Instrumentation International Workshop (FIIW)	08 Oct – 09 Oct	Gatlinburg, TN
International Conference on Sensing Technology (ICST)	18 Dec – 21 Dec	Kolkata, India

The IMS Conferences Committee supervises the approval process of Society conferences. It reviews the Conference application form, which contains the Memorandum of Understanding and essential information about Conference motivation, organizing committees, location and other possible financial and technical sponsoring parties. Then the Conferences Committee assesses the Conference application form on the basis of the IMS requirements and decides for or against the approval. Applications for financial sponsored Conference require the AdCom approval. Also, the AdCom will review and approve any budget revisions for previously approved sponsored Conference budgets.

First Annual Women in Instrumentation and Measurement Panel Discussion

The Instrumentation and Measurement Society (IMS) strives to continually support the needs of our female members and conference attendees. This year, for the first time, at the 2012 International Instrumentation and Measurement Technology Conference (I2MTC), in Graz, Austria, the IMS was pleased to host the Women in Instrumentation and Measurement (WIM) Panel Discussion.

The WIM Panel Discussion provided an opportunity for conference attendees to address and discuss issues, concerns and professional topics that are not of a distinctly technical nature. All conference

Arizona, the Society prepared a comprehensive report regarding the quality, timeliness, relevance, financial health and plans for improvement of our two flagship periodicals, the *IEEE Transactions on Instrumentation & Measurement* and the *Instrumentation & Measurement Magazine*. Although we are awaiting the formal results of the PRAC review, the committee was fulsome in its appreciation for the enormous strides our publications have made in the last few years and are planning to publicize the methods we have adopted for quality improvement as “best practices” for other Societies to follow.

We also initiated a Special Issue on Measurement Principles, which is planned for publication in August 2012. This issue is related to the very fundamentals of the measurement science. The measurement practice is a scientific and technical activity and, as such, benefits of a systematic context into which it can be modeled and the different steps that have to be performed to retrieve a meaningful measurement result from the raw experimental data be defined. There are several international organizations (mainly National Metrology Institutes) and academic institutions around the world involved in conducting research on a variety of measurement-related issues aimed at defining such context and model. Collecting some the most interesting results of this work in a dedicated section of this journal will serve our readers and represent a valuable reference for those who approach the challenging I&M fields and wish to find a highly qualified guidance to frame their work in the proper context.

attendees were welcome to attend this special session of I2MTC 2012

The WIM Panel was chaired by Dr. Kristen M. Donnell, and featured Panelists from different career and geographic areas. Dr. Sarah Seguin, an Assistant Professor at the University of Kansas provided an academic perspective, as did Ms. Charna Parkey, a Sr. Signal Processing Engineer at Astronics DME Corporation, and a PhD Student at the University of Central Florida. Dr. Jenny Wirandi, a System Engineer at the Oskarshamn Nuclear Power Plant, in Oskarshamn, Sweden, provided an industry and managerial perspective. Dr. Marlene Fritz, a Process Engineer at EPCOS Company, also contributed to the industry perspective. The Panel was also able to compare and contrast life as a woman in engineering from a European and American perspective.

Over 20 conference attendees (both men and women) attended the WIM Panel, including a number of IMS Administrative Committee members. Throughout the Panel Discussion, the audience interacted with the Panelists, discussing topics including family leave, the influence of culture and career path (academia vs. industry) on the female experience in engineering, and challenges faced by women in a position of leadership. The perception of female managers and leaders by colleagues was also discussed, as was the importance of professional validation.

Plans are already underway for the WIM Panel at I2MTC 2013 in Minneapolis, MN. For more information, or if you wish to get involved, contact [Kristen Donnell](#).



Kristen Donnell, Sarah Seguin, Jenny Wirandi, Marlene Fritz, Charna Parkey

The following is the up-to-date, most recent summary of publications metrics and submission-to-publication timeliness data: 2011 Impact Factor (1.214), 2011 Impact Factor minus self-cites (0.888) and Five-Year Impact Factor (1.175); for regular papers the past twelve months average submission-to-initial decision (62 days), average submission-to-final decision (105 days), and percentage of accepted papers (46%); 2011 average for submission-to-e-publication (Xplore) (30 weeks), 2011 average submission-to-print publication (9.6 months); and as of June 2012 average for submission-to-e-publication (Xplore) (13 weeks) . Other and more detailed critical information including: upcoming issue table-of-contents of upcoming issues, submission guidelines, etc., is provided and regularly updated at <http://www.ieee-ims.org/publications/transactions-tim>.

As always none of our continued success would be possible if not for the tireless efforts of our associate editors, reviewers and our Transactions administrators (Ms. Cam Ingelin and Ms. Reta Wehmeier). We welcome your comments and suggestion for improving our overall process. Please contact [Professor Ferrero](#) with any comments, suggestions or issue of interest.

Alessandro Ferrero,
Politecnico di Milano
EIC, IEEE Transactions on I&M

Education

The [Education Committee of the IM Society](#) provides educational

Upcoming Conferences



IEEE AUTOTESTCON will be held 10-13 September 2012 in Anaheim, CA,, USA.

For more information, visit the website at:

<http://autotestcon.com/>



2013 IEEE
SENSORS APPLICATIONS SYMPOSIUM
The San Luis Hotel, Spa & Conference Center
Galveston, Texas, USA - February 19-21, 2013

2013 IEEE Sensors Applications Symposium (SAS) will be held 19-21 February 2013 at The San Luis Hotel, Spa & Conference Center, Galveston, TX, USA.

Abstract Submission Deadline

1 October 2012

Acceptance/Rejection Notification

1 November 2012

Final Manuscript Submission and Registration

10 January 2013

For more information, visit the website at:

<http://sensorapps.org/>

activities for the professional development of the Society membership and for the profession. The EdCom has held an in person meeting on May 17th, 2012, in conjunction with I2MTC 2012 in Graz, and the Administration Committee meeting of the Society. The Committee members have discussed and assessed some of the activities, sponsored by the IMS through the EdCom, organized primarily to cater to the membership. While during this meeting the focus was on the organization and review of ongoing, upcoming and future initiatives, the educational activities during the I2MTC week were very much tangible.

First of all our [Tutorials](#) were held on Sunday May 13 2012 and coordinated for the EdCom by Mike Gard. Some updates to the format proved very successful in attracting the 176 participants, that is 34% of conference attendees. The I2MTC Tutorials now make One Continuing Education Unit and Professional Development Hour (CEU/PDH) credits available to the participants. Another novelty of this year's edition is that tutorials are feeders to the conference tracks, particularly the Industrial Tracks, which promise to seed a new season of synergy between the Society, Industry and Academia. The 15 tutorials were organized in two academic tracks and three industrial tracks, on "Drilling and Mining", "Enabling Alternative Vehicles", "Protecting the Environment". Thanks to the efforts of the conference organizers, the cost of the Tutorials was included in the conference registration. The EdCom is striving to capitalize on the experience and develop a "golden" format for the I2MTC



2013 IEEE International Instrumentation and Measurement Technology Conference (I2MTC) will be held 6-9 May 2013 in Minneapolis, MN, USA.

Abstract Submission Deadline

1 October 2012

Acceptance/Rejection Notification

1 December 2012

Final Manuscript Submission and Registration

1 March 2013

For more information, visit the website at:

<http://imtc.ieee-ims.org/>

Graduate Student Panel Discussion 2012

The annual Graduate Student Panel Discussion at I2MTC aims to examine topics relevant to graduate students attending I2MTC as they move forward with forming goals and pursuing their careers.

Dr. Kristen Donnell of Missouri University of Science and Technology chaired this year's panel discussion, which had 11 attendees. The panelists included Dr. Sarah Seguin, of the University of Kansas, Mr. Erik Timpson of Honeywell, USA and a PhD student at the University of Missouri at Columbia, Mr. Jorge Fernandez Daher, President of the Instrumentation and Measurement Society (IMS), and Dr. Reza Zoughi, past Editor-in-Chief of the IEEE Transactions on Instrumentation and Measurement.

"What can involvement in the IEEE and IMS bring to a student?" Dr. Donnell described the major benefit of being a member of a professional society as having the opportunity to experience professional networking, mentoring, publishing, and attending conferences. Mr. Daher explained the organizational

tutorials. For the 2013 edition a tighter timing schedule should guarantee that the program will be available as early as December. This means more time to advertise to the membership and more time for the interested members to get organized to participate.

Then the I2MTC “Chapter Chair/Distinguished Lecturer Meet-and-Greet” event, which was held on Tuesday, May 15, organized by out DLP Chair Kristen Donnell. This was also a great opportunity for Chapter Chairs to meet other Chapter Chairs, for the Distinguished Lecturers to meet face to face with the coordinator of the Distinguished Lecturer Program. The [Distinguished Lecturer Program](#) supports the matching between the requests for Lecturers, which originate for the most part from the Chapters, with the availability and competences of the Distinguished Lecturers of the IMS. Our Lecturers voluntarily go the extra mile (often literally, as they deliver lectures throughout the world) to disseminate to the membership, them being students, professionals or researchers, the latest advancement in their disciplinary field. Besides being experts in their field, they are exceptional orators who prepare their talks to be informative and understandable to the audience. And the DL events may also be great opportunities for local networking. Among the most recent events, to mention just a few, Dr. Reza Zoughi lectured in New Zealand and China on Microwave NDT & Imaging, Dr. Wuqiang Yang lectured in Malaysia and Singapore, Dr. Shervin Shirmohammadi lectured in Oregon on Social Virtual Environments and Massively

structure of IEEE and also discussed the benefits of membership including the fact that IEEE provides a useful venue to demonstrate technical skillsets. In addition, job opportunities may result from such involvement.



Sarah Seguin, Erik Timpson, Jorge Fernandez Daher

Dr. Seguin spoke about life as an assistant professor. For those in the audience considering an academic career, her descriptive experience as a tenure track professor was very insightful. She was very candid about the challenges facing a young professor (e.g. learning how to manage students, projects, project funding, and time), and also spoke of the rewarding parts of the job such as educating and discovery. She noted that the key to success is organization, and that the best part about being in academia is having the freedom to explore and research across many different disciplines.

Mr. Timpson brought a unique perspective resulting from his experiences in industry. He spoke on topics that ranged from management styles and the importance of communication between colleagues to cognitive neuroscience and why learning from experience is so effective. He also talked about how earning a PhD is an important credential that is going to help him bring technical excellence to a high level of practicality in industry. In his experience, he said, “to truly be very successful, you must pool your resources and bring peoples’ expertise together” to find a solution.

Whether in academia or in industry, Dr. Zoughi explained, publishing is important for building a career. “Publishing your work is the ultimate statement of saying you’ve done something novel,”

Multiplayer Online Games.

In Graz we also had the pleasure to announce the recipients of the educational Awards of the Society for the year 2012. Two Graduate Fellowship Awards were granted, out of nine applications, for an amount of \$15,000 each, and two Faculty Course development Awards were granted, out of five applications, in amount of \$10,000 each. The Graduate Fellowship Awards went to Hai Xiao and Jie Huang, Missouri University of Science and Technology for the project titled "Novel Coaxial Cable Interferometric Sensors for Distributed Measurement of Large Strain in Structural Health Monitoring", and to Kurt Barbé and Lee Gonzalez Fuentes, Vrije Universiteit Brussel for the project titled "Density Estimation for the Disturbing Noise in Sampling Oscilloscopes".

The Faculty Course development Awards went to: Serge Demidenko and Moi-Tin Chew, Centre of Technology, RMIT International University Vietnam, in collaboration with Dr. Melanie Ooi and Dr. Ye Chow Kuang, Monash University Sunway Campus for the course titled "Electronic Testing, Instrumentation, and Measurement", and to Yang Wang, Kimberly Kurtis, and Dr. David W. Scott, Georgia Institute of Technology for course titled "Introduction to Non-Destructive Testing and Forensic Evaluation in Engineering Materials and Structures".

The EdCom members are working to improve the offer of educational activities and material, starting from the video tutorials, and to strengthen the

he said. He spoke about the mechanics of publishing including the peer review process, its importance, and how to get involved. He also offered his insights into publishing successfully.

The IMS is committed to supporting the involvement of students within the Society and our Conferences, and the next Graduate Student Panel discussion is already being planned for I2MTC 2013 in Minneapolis, MN. For more information, or if you wish to get involved, please contact [Sarah Hatfield](#).

Report on IEEE I&M Society New Zealand Chapter workshop Smart Sensors, Measurements and Instrumentation

Theme: Agricultural and environmental monitoring
Date of workshop: April 11, 12, 2012.
Venue: Lincoln University, Christchurch, New Zealand

The annual workshop of IEEE Instrumentation and Measurements Society New Zealand Chapter, entitled on Smart Sensors, Measurements and Instrumentation was held on April 11 and 12, 2012 at Lincoln University, and was attended by 27 researchers and students.

The IEEE Instrumentation and Measurement society supported the workshop technically and financially, and Lincoln Ventures Ltd ran the event and sponsored it financially. We also acknowledge financial support from the three NZ Sections, North, Central and South.

Dr Ian Woodhead welcomed all attendees and outlined the workshop theme and the relevance of I&M to agricultural and environmental monitoring and industry. Prof Subhas Mukhopadhyay promoted the I&M society and its activities, and also gave a brief history of the IEEE IMS NZ Chapter.

The two day workshop provided many interesting papers and in line with the workshop theme, a visit to the commercially operated Lincoln University dairy farm and presentation by Prof Keith Cameron provided valuable insight into sensors and management of production and, pasture and environmental impacts from a large modern dairy farm operation. Presentation titles were:

- From WSN to The Internet of Things: Where are

connection with the IEEE Educational Activities Board. Thanks to the involvement of the EdCom members in other committees, particularly the Membership Committee, the coordination and synergy is guaranteed.

And now, with the welcome to the IMS Industry Liaison Max Cortner as new committee member, the EdCom will shape the educational activities to address even better the needs of the industrial portion of the membership and to exploit at best the expertise of our professional volunteer speakers and lecturers.

The numerous responsibilities of the [Education Committee](#) are effectively sustained by a diverse group of active and enthusiastic members.

For ideas, suggestions, questions, visit our webpage or email the VP Education and EdCom Chair, [Ferdinanda Ponci](#).



we Today?

- A practical guide to the implementation of the Internet of things
- Time Series Analysis of Sensing Data for Smart Home
- Development of a laser based fruit firmness sensor
- Development of a Near Infrared Sensor Prototype for Prediction of Kiwifruit Quality Attributes
- Amperometric Biosensor Bacteria for the SciTox® Assay
- Engineering MFC Biosensor Biofilms
- Lactose at-line biosensor - 1st viable industrial biosensor?
- Audio recording and analysis of NZ bird calls
- New Type of Planar Interdigital Sensors for Detection of Lipopolysaccharide
- Phthalate Detection in Water Using Interdigital Sensor Based System
- TDR Imaging
- Time-gating free-space microwave reflection measurements
- Microwave Sensor for the Measurement of Stacked and Layered Dielectrics
- Predicting Moisture Distribution in Wood using RF Impedance Tomography
- Quantisation Noise in Measurement
- Loudness Management for Home Television Viewing
- The porosity of hygroscopic materials

The workshop was most successful. It provided a forum to present and discuss research and development projects and concepts, and since sensors and instrumentation is strongly cross-disciplinary, it provided an ideal venue for students to receive and contribute up-to-date knowledge of applications, technology and solutions.

Click here for the [Workshop Photo Gallery](#).

To submit new articles, please send an email with your article to [Judy Scharmann](#), subject line: "IMS Newsletter Article Submission". The next publication will be in October, 2012, deadline for submission is September 15, 2012.