

Message from the President

Dear TIES Members and colleagues,

The 2019 has been a wonderful year for TIES. We are celebrating 30 years of uninterrupted activity, since the first TIES conference held in Cairo, Egypt in 1989. The initiative of Professors **Abdel El-Shaarawi**, as first President, and **Ian McNeill** (In Memoriam), as first Vice-President, and many other visionaries who conformed the first Board of Directors, has resulted in a great harvest of a very active and productive community and network of great statisticians and practitioners around the world, working in a variety of innovative statistical methods and applications to solve the most pressing environmental problems of our times. These pioneers should feel very proud for their achievements and determination to have reached this milestone. It is our duty to continue their efforts to improve the role of TIES as a vibrant, productive and agile scientific, educational and professional community working for better environmental conditions as a human right.



Lelys Bravo de Guenni

Board renewal: I want to thank **Alessandro Fassò** for being a great TIES president during the past two years (2017-2019). He will continue to be an inspiration and guidance for me as incoming TIES president, and for other presidents in the future. The new board join **Marta Blangiardo** (Europe), **Ashley Steel** (N. America) and **Petra Kuhnert** (Global) as current regional representatives to form the board for 2019-21. I also want to congratulate the new Board elected members during this past Summer:

President-Elect - **Yulia Gel** (United States);
Secretary - **Claire Miller** (United Kingdom);
Treasurer - **Leticia Ramirez** (Mexico);
Publications Officer - **Elena Naumova** (United States);
Communications Officer - **Patricia Menendez** (Australia);
Regional Representatives:
Europe - **Francesco Finazzi** (Italy);
North America - **Hao Zhang** (United States);
Rest of the World - **Hsin-Cheng Huang** (Taiwan).

It is already a pleasure to be working with you, and I look forward to your support and enthusiasm in all future TIES activities.

Environmetrics Journal: I want to thank **Walter Piegorsch** for his amazing job as Editor-in-Chief of TIES journal Environmetrics for the past 10 years. Please read Walter's report on Environmetrics in this TIES News issue. We will be forever grateful for

Walter's contribution to our society and for the value he has added to our journal. Our best wishes to **Alessandro Fassò** as new Editor-in-Chief of Environmetrics starting in January 2020.

TIES/ISI Conferences: According to the new TIES conference system, we will run general meetings on even years and regional meetings in odd years, with important contribution to sessions at the World Statistics Conferences of the International Statistical Institute that are also held in odd years.

Year 2019 was a very active year for TIES, with a very successful [Regional TIES conference](#) in Pescara, Italy, 15-16 July 2019, organized by **Eugenia Nissi** from Università di Chieti-Pescara, as chair of the Local Organizing Committee, with **Alessio Pollice** from Università di Bari as chair of the Scientific Committee. We also had a great participation at the ISI WSC 2019 in Kuala Lumpur, 18-23 August 2019 with the support of TIES representative **Giovanna Jona Lasinio**, who organized several TIES Invited Paper Sessions (IPS), including the TIES President's session, and the Young Researcher Award Session, where the AEEI Award 2019 was presented to **Amanda Hering** (USA).

There was also the Wiley's Environmetrics session, including the presentation of the 2018 Wiley-TIES [best paper](#) award delivered by **Joshua Hewitt** (USA).

As a Satellite meeting of ISI WSC 2019 in Kuala Lumpur, we had the Regional TIES conference in Kunming, Southern China, 26-27 August 2019, organized by Yunnan University and Peking University. This conference had **Song Xi Chen** and **Alessandro Fassò** as co-chairs. I want to thank all organizers and contributors to these important meetings, which makes TIES visibility higher and helps broadening our network of collaborators.

We are very excited to announce that our 29th TIES general meeting will be held at the Imperial College in London during 14-16 September of 2020. This conference is organized by **Marta Blangiardo** as chair of the Local Organizing Committee, and **Michela Cameletti** as chair of the Scientific Committee. Please check the [conference website](#) for keynote speakers, invited and contributed sessions and more information about the conference.

We look forward to seeing you in London in 2020!!! And it is never too soon to start planning for the next regional TIES meetings in 2021, or satellite meetings of ISI WSC 2021, that will be held in The Hague, Netherlands. Your inputs are most welcome!

TIES/ISI membership: The last TIES President's report presented at the Annual General meeting in Kuala-Lumpur, 2019 showed that the TIES membership has been steady for the past four years. The new call for the 2020 membership renewal through the ISI web shop is due very soon!!! TIES membership fees will be the same as last year's fees. We look forward to your TIES membership renewal, or your TIES + ISI regular membership, or your TIES + ISI elected membership. Please note that this last formula is the most convenient for TIES finance, because ISI does not charge a fee to TIES for an ISI elected member. Please check the [link](#) for more details about differenced fees. If you are interested in the prestigious status of ISI elected member, please take a look at the [ISI webpage](#).

There is an exciting road ahead, and I look forward to your contributions and support to keep strengthening TIES and the ISI mission.

Best wishes,

Lelys Bravo de Guenni
TIES President 2019-2021

Environmetrics Editor's Report

The Society's journal, *Environmetrics*, continues apace in its goal to attract and publish the highest-quality research that advances environmetric science. Having an active Editorial Board with 46 highly dedicated Associate Editors helps us maintain our aims and scope. The [journal's website](#), presents a variety of innovative features to keep TIES members and other readers up to date on the journal's activities. These include:

- links to "Early View" articles in press
- "Virtual Issues" collecting together past articles to highlight a special topic area
- formal special issues on focal topics in environmetrics
- some of our top discussion papers

and a slew of other content-related components. Published articles are available as PDF or viewable HTML and include links to article Altmetric "Attention Scores", Twitter demographics, Mendeley readers, and other social media information. Our publisher, John Wiley & Sons, also distributes "Layman's Abstracts" for some of our articles, which are used to inform readers with more-general interests about the work that we do. These appear on Wiley's very successful ["Statistics Views"](#) website.



Walter W. Piegorsch

In concert with our Wiley publisher, the journal and TIES also highlight an annual Wiley-TIES Best *Environmetrics* Paper. The award recognizes a published paper from each calendar year/volume, the authors of which are invited to present their work at the following year's TIES or ISI conference. All regular submissions to *Environmetrics* that are accepted in a calendar year are considered eligible for that year. Selected papers must meet the following criteria:

- present novel theory or methodology for a relevant and current environmental application;
- be well written with large potential for impact; and
- provide a significant contribution to environmetric research.

The 2018 winning paper was "[Remote effects spatial process models for modeling teleconnections](#)," by Joshua Hewitt, Jennifer A. Hoeting, James M. Done, and Erin Towler and was presented by Dr. Hewitt at the 2019 ISI World Statistics Conference in Kuala Lumpur, Malaysia.

***Environmetrics*, by the number**

For calendar year 2018 (vol. 29) the journal published:

Number of issues (including a special double issue celebrating the 25th TIES conference):	8
Number of articles and other items:	43 (5.375 items/issue)
Number of pages:	659 (15.3 pages/item)
Number of articles with online Supplementary/Supporting Information:	20
New submissions received:	150-160 new papers per year

Editorial data from papers submitted Jan. 1 - Dec. 31, 2018:

Total (new) submissions:	149
Decisions complete:	147/149
Papers accepted:	61/147 (41.4%)
Total (new, non-Special Issue) submissions:	126
Decisions complete:	124/126 (32.3%)
Papers accepted:	40/124 (32.3%)
Average time from submission to decision:	
Original submission papers:	32.8 days
Revised submission papers:	22.3 days

A number of new special issues are planned for 2020 and beyond. In particular, a special memorial issue in memory of Ian MacNeill focusing on change-point methods for environmental monitoring and assessment is in its final stages of preparation and should appear early in 2020. Prof. MacNeill was a founding editor of *Environmetrics* and this special issue memorializes the work he did to so effectively establish and expand our field of research.

See the [journal's website](#) at for more information and for [forthcoming articles](#) to be published in *Environmetrics* to keep up with every issue!

Walter W. Piegorsch
Environmetrics Editor

Meet Amanda "Mandy" Hering - the Recipient of AEEI Award 2019

I am an [associate professor](#) in the Department of Statistical Science at Baylor University in Waco, Texas. My good colleague Jane Harvill nominated me for the AEEI award, and I want to thank the TIES executive board for changing the award requirements from one based on age to one based on number of years since completing terminal degree. For people like me who took a few detours on the way to a PhD, the change meant that I was eligible to apply for another two years than I would have been otherwise, so I hope that other people will take advantage of this change.



Amanda Hering and Alessandro Fasso

I was really honored to be selected for the award; it's definitely a boost to one's career and confirms good work being done in the area of environmental statistics. I admire all of the prior individuals selected for the award, so to be among such a group is very humbling for me. I've been very fortunate in my career to work with many excellent scientists and researchers who have presented me with interesting statistical problems. I've also had the opportunity to advise many very talented graduate students who love a challenge. Finally, the universities that I have worked at, both Baylor currently and prior to that at Colorado School of Mines, have provided supportive environments for me to pursue my interests.

The presentation of the award was at the World Statistics Congress (WSC) in Kuala Lumpur, Malaysia. It was my first time to attend the WSC, and it was a beautiful venue with a distinct culture. I appreciate all of the time and effort that TIES invests in sponsoring this award and presenting it because it is a unique opportunity for environmental statisticians to have their work showcased to the statistical community.

Best,
Mandy

Meet TIES Board Member – E. Ashley Steel

On a new position at the Food and Agricultural Organization of the United Nations

Just over a year ago, I left my position as Lead Statistician with the US Forest Service's PNW Research Station in Seattle, WA, USA for a position with the Forestry Department at the Food and Agricultural Organization of the United Nations in Rome, Italy. I am now transitioning my primarily scientific publication and inference-based experience to identifying opportunities for improving official statistics and global statistical capacity building.

I began with a project to quantify the collection and consumption of foods from forests including mushrooms, wild tubers, wild fruits, freshwater fish, and edible insects across Zambia. The work should be an initial step in developing guidelines for collecting national data in any country on this topic - challenging because such a large proportion of these products are informally collected and traded. Quantification of wild foods from forests is essential to give a clear picture of the role of forests in supporting diet and nutrition, particularly of rural people, and to supporting local communities or collecting cooperatives in developing sustainable value chains for their products. The work, carried out in cooperation with the Center for International Forest Research (CIFOR), was accomplished through a household survey. Beyond the small sample size and lack of information for designing a sampling strategy, the multiple types of products involved, and language barriers, I was warned about the challenge of "non-standard units" and still it took me completely by surprise. Households in rural areas collect



Ashley Steel

forest products in their own collecting containers which, of course in hindsight, vary by house and which have no common or known size. Our innovation was to purchase plastic buckets and pitchers, mark them with standard units, and supply them to our enumerators along with a bag of old peanut shells to measure the collecting units used in each household. This simple system allowed us to interview heads of households



Clockwise from upper left corner: Example non-standard collecting buckets; Alice Likando Masheke, CIFOR Research Assistant, an experienced enumerator, using a graduated bucket and peanut shells to measure household collecting devices; Charcoal - for sale in the Monze market, Zambia; Edible caterpillars for sale in non-standard buckets.

across Zambia in the units they actually use, their household buckets and baskets. In December, we presented the first, to our knowledge, quantitative data for multiple regions of Zambia on collection and consumption of wild foods to a multi-disciplinary group of stakeholders. While it seems a relatively small innovation, a combination of buckets, permanent markers, and peanut shells, it took statistical boots on the ground and willingness of the entire team to try something new.

In other projects, I am working to design a revised methodology for estimating national production of charcoal and fuel wood. Accurate estimates of these products link human health outcomes, e.g. lung disease, human nutrition, e.g. ability to cook nutritious foods, and deforestation. Globally, about

half the wood extracted from forests is used for energy, mostly for cooking and heating. In Africa, some estimates reach 90%. Official data on wood fuels and charcoal are available for less than 50% of countries and models for filling gaps were built in 2005. Plenty of exciting work there, beginning with the compilation of a database of available figures.

Over time, I am hoping to expand and enrich the statistical capacity-building program in forest product statistics and more generally. I am hopeful that, during my time at FAO, I can bring simulation thinking, early education, and statistical communication to statistical capacity building globally. The work is exciting and potentially rewarding. The challenges of nudging a large international agency in any direction and of learning new mechanisms and networks for funding and accomplishing meaningful work are

real. I would be particularly happy to hear from TIES members with UN and capacity-building experience.

Before closing, I note that the views and ideas expressed here are my own and do not represent those of any agency – past or present. Additionally, as one of two North American Representatives to the TIES Board, I am happy to continue representing North American statisticians, even from Italy, and to finding ways to expand the opportunities for and impact of TIES globally.

E. Ashley Steel
North American Regional Officer, TIES

Meet Joshua Hewitt



Joshua Hewitt

I study Bayesian hierarchical models and computational methods for climate and ecology applications. My models account for complex dependence structures, like climate teleconnections, which arise from the interplay between local and global climate processes. The TIES award brought me to the 2019 ISI World Statistics Congress to share my work on climate teleconnections. As an early-career investigator, the conference helped me meet and begin to work with more statisticians who study problems in

climatology and statistical computing. I also got to see and discuss hierarchical models across a wide range of environmental applications. Successful modeling relies on balancing statistical, scientific, and computational needs. The TIES community has a wealth of expertise and examples in these areas that I hope to continue to draw on as I build my career.

Best,
Josh

Note from Elena Naumova, the Publications Officer

I just come back from Quito Ecuador, where I was running a 3-day workshop on improving research output, writing and reviewing scientific papers at the Central University of Quito (UCE) in December of 2019. I am enjoying long-lasting and productive ties with UCE leadership: Drs Fernando Sempertegui, UCE Rector, and Bertha Estrella, Director for Research for almost 20 years. We worked together on several NIH funded projects with the focus on environmental health and public health policies. During the workshop we had identified several topics for expanding future collaborations. These topics include emerging and re-emerging problems that plague Latin and Central America: forced, climate change induced, and economy-based

migration and displacement, urban air, water, soil and noise pollution; plastic waste management. We aim to foster interdisciplinary collaborations powered by data visualization tools, spatial statistics, and spatiotemporal modeling. The UCE leadership is committed to invest in creating the environment boosting innovations and research creativity.

I am happy to hear from TIES members interested in building collaborations and sharing own experience and research networks in Latin America.

As Publications Officer I am committed to making stronger ties among TIES members, to help all getting to know each other, our passions, achievements, needs, and inspirations.

Elena Naumova
TIES Publications Officer 2019-2021



Clockwise from upper left corner: Participants of the writing workshop; Bertha Estrella and Elena Naumova in front the UCE; Poster for the workshop.