

Dear ISIE Student Members,

Thank you for participating in the elections for the 2018-2019 ISIE Student Chapter Board (SCB). We have ten candidates (in alphabetical order) for two types of positions:

	<b>Joe Bozeman III</b> Institute Country: United States Positions sought: Board Member At-Large; Diversity & Inclusion Officer (DIO)
	<b>Osvaldo Broesicke</b> Institute Country: United States Position sought: Board Member At-Large
	<b>Paul Currie</b> Institute Country: South Africa Position sought: Board Member At-Large
	<b>Amanda Gcanga</b> Institute Country: South Africa Position sought: Diversity & Inclusion Officer (DIO)
	<b>Matthew Gordon</b> Institute Country: United States Position sought: Board Member At-Large
	<b>Yang Guo</b> Institute Country: China Position sought: Board Member At-Large
	<b>Dominik Noll</b> Institute Country: Austria Position sought: Board Member At-Large
	<b>Desire Sekanabo</b> Institute Country: Rwanda Position sought: Board Member At-Large
	<b>Nathalie Spittler</b> Institute Country: Iceland & France Position sought: Board Member At-Large
	<b>Zhengyang Zhang</b> Institute Country: Japan Position sought: Board Member At-Large

Please read through the candidates' statements, and then vote for who you would like to see on the board using this voting link: <https://is4ie.org/survey/8>. You may only vote once.

The ballots will remain open until the 20th of October. Announcement of the newly elected members will be made public on or before the 24th of October. The candidates that receive the most votes will join the board in early November, and we promise to put them to work!

Due to privacy concerns, the number of votes for each candidate will not be publicly released but they will be promptly made available to the contenders upon request.

**Thanks again!**

The 2017-2018 board: Christoph (current president), Reed (incoming president), Steffi (incoming Vice President), Ana Rosa, Dana, Hanjiro, and Yuwei

PS: If you have any questions, please email us at [isiestudentchapter@gmail.com](mailto:isiestudentchapter@gmail.com)

# Candidates for Diversity & Inclusion Officer

Vote for one (1) candidate:



**Joe Bozeman III**

Institute Country: **United States**

Positions sought: **Board Member At-Large; Diversity & Inclusion Officer (DIO)**



**Amanda Gcanga**

Institute Country: **South Africa**

Position sought: **Diversity & Inclusion Officer (DIO)**

**2018 ISIE Student Chapter Board  
Diversity & Inclusion Officer (DIO) Candidates**

**Joe Bozeman III**

Institute Country: **United States**, Nationality: **American**  
Current Institute/Organization: **University of Illinois at Chicago**  
Subject of study/degree: **Climate Change Adaptation as it relates to the Food-Energy-Water Nexus/Environmental Engineering**  
Duration of the current program: **from 2016 to 2020 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

I've been interested in becoming a board member of the ISIE Student Chapter since attending the 2017 ISIE/ISSST conference in Chicago, Illinois (USA). It wasn't until after I had a chance to meet and speak with board and student chapter members I felt compelled to contribute formally. I came away from those conversations with the sense that there was sincere enthusiasm towards addressing issues that can sometimes hinder progress on industrial ecology matters. I want to become a board member so that I can help facilitate continued conversation on these matters - such as data uniformity, global economic theory and its effect on industrial ecology, and cross-disciplinary research approaches among others.

I have a myriad of professional and academic experiences that could bolster the board's membership. As a professional, I have over eight years of experience as an energy and environmental program manager, implementing strategic plans and industrial-ecological initiatives at local, regional, and national levels. As an academic, I have performed and published studies related to climate change, renewable and clean energy, and environmental engineering. I have also been an engaged member of and have chaired groups that are diverse in culture, socio-economic status, and discipline. I intend to use this wealth of experience to influence how I execute tasks.

If given the opportunity, I intend to accomplish several things that I believe will benefit ISIE and its student chapter broadly. Foremost, I will work to employ the vision and strategy of the board President. Secondly, I hope to particularly assist in bridging the gap between attaining meaningful research collaborations and networking at conferences with gaining employment. Last but not least, I hope to bring vigor to an already strong board that enthuses us all to continue working diligently throughout our terms.

**Please describe activities and ideas for the ISIE-SCB as Diversity & Inclusion Officer:**

Diversity and inclusion are issues that I hold near and dear. I know it can be frowned upon to express emotion in certain scientific settings for fear of bias, but in this context, I feel expressing sincere human emotion and perceptions of social dynamics without fear are key to progressing matters of diversity and inclusion. As the world grapples with recent social and cultural dilemmas - e.g. India's striking down of their long-held gay sex ban or the culture of sexism being challenged by the "Me Too" movement in the U.S. and around the world, the world also finds itself at a critical juncture regarding global climate change, natural resource management, and the socio-political dynamics that affect industrial ecology progress. In my opinion, none of the aforementioned matters can be effectively addressed unless we seriously begin to name and identify what impediments there are to valuing diversity of thought, culture, scientific discipline, and identification in tangible ways.

I have a background that uniquely suits the position of DIO. As a professional, I have more than five years of experience formally and informally improving race and gender relations. I cannot go into great detail on these matters for the sake of keeping my stakeholders and ongoing activities confidential, but I have formally served as a race relation facilitator trained by Region V of the Department of Justice. I also have developed and employed diversity and inclusion training for a local faith-based group. Lastly, I have performed research with social scientists on industrial ecology subject matter. I can speak from experience on the challenges and benefits of framing and performing cross-disciplinary studies.

If chosen to be DIO, I would work with the board to develop a survey to gather the thoughts of our students as it relates to their perceived barriers to excelling in industrial ecology research, the academe, and/or industry. I also would invite experts to speak on issues of diversity and inclusion as it relates to environmental justice and social equality via webinar. Other initiatives could be developed during board proceedings contingent upon resource and time constraints.

**2018 ISIE Student Chapter Board  
Diversity & Inclusion Officer (DIO) Candidates**

**Amanda Gcanga**

Institute Country: **South Africa**, Nationality: **South African**

Current Institute/Organization: **Stellenbosch University**

Subject of study/degree: **Urban Water Resources Management and Governance**

Duration of the current program: **from 2017 to 2020 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

I would like to become a board member of the ISIE student chapter as the Diversity and Inclusion Officer. I am passionate about inclusion and diversity as I have struggled with black female in a predominantly white male dominated space. Most of my career life as a young academic in post-apartheid South Africa and Europe has involved having to grapple with these issues and having to seek spaces where I will feel understood and welcomed. These experience have taught me how to navigate the system and constantly find or create inclusive spaces where I can discussion whatever obstacles I'm facing. As a result of my experiences, I am passionate about diversity and inclusivity, particularly in research spaces.

For the past five years, I have been conducting research in urban water metabolism in South African cities. My interest has been understanding the flow of water in cities, and how climate change and the growth of African cities will affect the flow of water in cities.

For my PhD research, I am focusing on the Cape Town water crisis, the governance dynamics of water in the industrial cities and how these decisions are likely to influence future flows of water in African cities. With my lived experiences and good understanding of the global south context I would ensure that global industrial ecology trends are taken into consideration and that the team is not biased towards a certain region of the world. This would entail putting networking channels that reach students in different parts of the world and bringing in worldviews from other parts of the world.

**Please describe activities and ideas for the ISIE-SCB as Diversity & Inclusion Officer:**

Most scholars work in silo's, in which they have a narrow focus on their specific area of specialisation within the industrial ecology space. This therefore means that creating platforms that are diverse and inclusive will allow for greater diversity of thought when approaching challenging questions and allow for the creation of comprehensive solutions that glean from a broad set of perspective. The issues of industrial ecology are critical to ensuring sustainable communities and therefore should be tackled thoroughly. A diverse group of scholars and combined with other stakeholders would facilitate this process of well.

In Stellenbosch, I am part of a young professionals network (StelliesHive) that is made up of a diverse group of professionals in the corporate as well as academic space. The platform facilitates meaningful conversations (around politics, socio-economic issues, entrepreneurship, etc.) through monthly speaker events. Engaging on this platform has developed in me a deep appreciation for spaces of diversity of thought and inclusivity. At Stellenbosch University, I also take part in diversity and integration colloquiums which take place every three months. In these colloquiums, we discuss and come up with ways for making Stellenbosch University more inclusive.

Both platforms have allowed me to grasp a better understanding of issues around the importance of inclusivity and diversity and how we could work towards achieving that. If my nomination as a Diversity and Inclusion Officer is successful, I would make use of these skill to broaden the fabric of the students that are part of the ISIE community. This would entail reaching out to young academics that are not represented in the current ISIE community and putting in place platforms to enable members from diverse backgrounds to become members. Prior to this, I would look at some of the issues that have prohibited the ISIE student chapter from reaching its desired level of diversity and inclusivity. This would guide me to develop a strategy for improving the status. I believe that a diverse ISIE student chapter membership would allow for inclusive discussions on global industrial ecology trends and issues.

# Candidates for Board Member At-Large

Vote for four (4) candidates:

	<p><b>Joe Bozeman III</b> Institute Country: United States Positions sought: Board Member At-Large; Diversity &amp; Inclusion Officer (DIO)</p>
	<p><b>Osvaldo Broesicke</b> Institute Country: United States Position sought: Board Member At-Large</p>
	<p><b>Paul Currie</b> Institute Country: South Africa Position sought: Board Member At-Large</p>
	<p><b>Matthew Gordon</b> Institute Country: United States Position sought: Board Member At-Large</p>
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	<p><b>Desire Sekanabo</b> Institute Country: Rwanda Positions sought: Board Member At-Large</p>
	<p><b>Nathalie Spittler</b> Institute Country: Iceland &amp; France Position sought: Board Member At-Large</p>
	<p><b>Zhengyang Zhang</b> Institute Country: Japan Position sought: Board Member At-Large</p>

**2018 ISIE Student Chapter Board  
Board Member At-Large Candidates**

**Joe Bozeman III**

Institute Country: **United States**, Nationality: **American**  
Current Institute/Organization: **University of Illinois at Chicago**  
Subject of study/degree: **Climate Change Adaptation as it relates to the Food-Energy-Water Nexus/Environmental Engineering**  
Duration of the current program: **from 2016 to 2020 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

I've been interested in becoming a board member of the ISIE Student Chapter since attending the 2017 ISIE/ISSST conference in Chicago, Illinois (USA). It wasn't until after I had a chance to meet and speak with board and student chapter members I felt compelled to contribute formally. I came away from those conversations with the sense that there was sincere enthusiasm towards addressing issues that can sometimes hinder progress on industrial ecology matters. I want to become a board member so that I can help facilitate continued conversation on these matters - such as data uniformity, global economic theory and its effect on industrial ecology, and cross-disciplinary research approaches among others.

I have a myriad of professional and academic experiences that could bolster the board's membership. As a professional, I have over eight years of experience as an energy and environmental program manager, implementing strategic plans and industrial-ecological initiatives at local, regional, and national levels. As an academic, I have performed and published studies related to climate change, renewable and clean energy, and environmental engineering. I have also been an engaged member of and have chaired groups that are diverse in culture, socio-economic status, and discipline. I intend to use this wealth of experience to influence how I execute tasks.

If given the opportunity, I intend to accomplish several things that I believe will benefit ISIE and its student chapter broadly. Foremost, I will work to employ the vision and strategy of the board President. Secondly, I hope to particularly assist in bridging the gap between attaining meaningful research collaborations and networking at conferences with gaining employment. Last but not least, I hope to bring vigor to an already strong board that enthuses us all to continue working diligently throughout our terms.

**Please describe activities and ideas for the ISIE-SCB as an At-Large Member:**

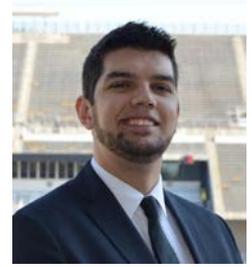
Besides the recent efforts that have already improved student engagement with the ISIE Student Chapter Board, I would suggest a few things that could further improve things. I think it would be beneficial for the board to have a semi-annual webinar. Specifically, one could be held roughly three months before the 2019 ISIE conference to encourage student abstract submissions and to assuage some of the anxiety attendees may have about traveling and presenting at professional conferences. Another could be held shortly before the 2019 ISIE Conference. This webinar could highlight important proceedings of the ISIE Student Chapter. If preapproved by the board, this webinar could promulgate details surrounding a student gathering where student attendees can "Meet the Board" in a more casual setting.

I believe I can add value to the organization, engagement, and promotion of the 6th Symposium in Industrial Ecology for Young Professionals. I was honored with being chosen Chair of the 2020 Gordon Research Seminar. One of the benefits of having this role is that I am to receive formal training on conference organizing and management well before the 6th Symposium, albeit, not all of the training received there will be directly transferable. Furthermore, as a professional, I have served on organizing committees that hosted and performed energy and environmental conferences and training. The culmination of these affords me the ability to help the board craft content in a way that widens appeal while maintaining student engagement. These skills can be applied to most of the other duties required of board members.

**2018 ISIE Student Chapter Board  
Board Member At-Large Candidates**

**Oswaldo Broesicke**

Institute Country: **United States**, Nationality: **American**  
Current Institute/Organization: **Georgia Institute of Technology**  
Subject of study/degree: **Environmental Engineering**  
Duration of the current program: **from 2015 to 2020 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

As a researcher of urban infrastructure systems, I have learned that the principles and tools of industrial ecology (IE) enable the study of the interdependencies, flows, and opportunities that exist within our cities so we may improve their sustainability. When I attended the Gordon Research Conference on Industrial Ecology, I was amazed by the variety of work, methods, and thoughts employed within the ISIE community. I think ISIE has the potential to facilitate collaboration amongst researchers and practitioners across disciplines in order to tackle the complex challenges our generation will face. As a board member, I want to help develop the interdisciplinary diversity in the student population to enable the creation of new methods, new thoughts, and new questions that will help our generation develop a more sustainable future.

Over the past two years, I have served as the Regional Student Representative for MAES (Latinos in Science in Engineering). Accordingly, my experiences include engaging and supporting student chapters, enabling communications between students and industry partners, as well as identifying and mentoring the next generation of student leaders from within the organization. I believe that all of these experiences can directly transfer to ISIE

As a 4th year Ph.D. student in Georgia Tech's Brook Byers Institute for Sustainable Systems (BBISS), I have interacted and collaborated with IE researchers in life cycle assessments (LCA), material flow analyses (MFA), and network analyses. My research builds upon IE principles to understand the interactions between the energy-water nexus and the built environment, with the aim to inform designers and decision-makers on technology and/or policy adoption.

**Please describe activities and ideas for the ISIE-SCB as an At-Large Member:**

Within the transdisciplinary IE field, researchers use a variety of tools to assess the sustainability of technologies and processes; however, many students are not exposed to these until later in their academic career. I would like to suggest that the Student Chapter Board aid in the development of an open IE toolbox. This toolbox could contain tutorials, applications, and resources that students can access to improve their understanding on how to use these tools, their advantages and limitations. This toolbox would be helpful to students and professionals alike. Furthermore, being a student initiative would ensure that this toolbox remains updated and relevant for future generations. The toolbox can be a set of pamphlets, online flyers, or a live database that is housed within the ISIE network.

From my previous experience as president of the American Society of Civil Engineers (UTEP Chapter), I learned that fostering an inclusive environment where all people feel welcome is vital to the success and continued growth of an organization. What has made my previous organizations successful in the past, is a sense of belonging and community. In order to create the same feeling of community amongst our members, the student board can host an informal gathering, where all members can discuss their work or personal interests. Similarly, given the amount of free time participants were given in the 2018 GRC in Switzerland, the student board can host or organize excursions to allow bonding between the members.

**2018 ISIE Student Chapter Board  
Board Member At-Large Candidates**

**Paul Currie**

Institute Country: **South Africa**, Nationality: **South African**  
Current Institute/Organization: **Stellenbosch University**  
Subject of study/degree: **Sustainable Development: Sustainable Urban  
Metabolism in African Cities**  
Duration of the current program: **from 2017 to 2020 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

I have a fascination with cities: getting lost in the ebb and flow of people, noise, light and the general ambience which gives the city its intangible essence. For the last few years, I have been researching what the resource implications of rapid urbanisation might be across a number of African cities. My explicit area of interest is on the concept of urban metabolism, and I am hoping to extend my understanding beyond resources and infrastructure as foundations for urban living, to include socio-political inequality and urban planning systems. Particularly, I am interested in how we track resource flows in contexts of data-scarcity and in contexts in which decentralized and/or informal infrastructures are the dominant conveyor of resources.

In my work for ICLEI: Local Governments for Sustainability, I have the opportunity to engage with city managers and decision makers to help them implement their sustainability visions, initiatives and projects. Here, I am hoping to ensure that industrial ecology methods are made available for city planners and that the outcomes of this research are presented in ways that policy makers and city directors can use.

As students, we are all trying to ensure that our research will have a tangible impact on our field and subjects of study - as a Student Chapter Board Member I would hope to contribute to building a community of change-making students, who offer mutual support to improving our work, and making is resonant with real-world actors. I see this position as an opportunity to become more involved in the ISIE and I look forward to engaging with you all further!

**Please describe activities and ideas for the ISIE-SCB as an At-Large Member:**

The members of the student chapter have a wide set of skills, experiences and knowledge sets. As a Student Chapter Board Member, I would like to draw on these capacities for mutual learning. While cultivating a community from a distance can be difficult, I believe there are a few ways to do this, which I think would be effective:

- Monthly webinars in which members volunteer to present their work, a skill they are developing, or a paper for critique - the member will benefit from diverse input, and the participant will learn. These could be restricted to members if the topic is still in progress, or advertised to wider practitioners/policy makers for their input
- A matching service for peer review of articles, in which members can request review of their work, and the Chapter will provide the platform for review (anonymously if desired)
- A chapter communications portal, such as slack or WhatsApp, could be valuable for linking our wide membership in a more active manner, and allow us to be social around the year, instead of only at conferences.
- We need to make the most of the Youth Symposium to build strong social links and showcase the skills and talent in the Chapter - rapid-fire presenting of work, perhaps in Pecha Kucha style, intermixed with capacity workshops requested by members, and social games for ice-breaking and paradigm shifting.

I would look forward to engaging and promoting your ideas in this platform.

**2018 ISIE Student Chapter Board  
Board Member At-Large Candidates**

**Matthew Gordon**

Institute Country: **United States**, Nationality: **American**

Current Institute/Organization: **Yale University - Center for Industrial Ecology**

Subject of study/degree: **Industrial Ecology**

Duration of the current program: **from 2017 to 2022 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

Thank you for considering me for the ISIE student board! I am excited to see you all in Beijing this summer and to see what everyone has been working on. I loved my introduction to the international IE community last spring at the GRC, and I am excited to get more involved by serving on the board.

I am relatively new to studying Industrial Ecology in a formal sense - my previous coursework was in Philosophy and Economics, but I've always been motivated by questions of sustainability and human flourishing. After getting a master's degree from the London School of Economics, I went to work for the City of New York, where I analyzed infrastructure projects that would shape the city for decades to come. However, the city rarely considered a rigorous analysis of the environmental impacts of the projects. Interested in analyzing the sustainability of these complex system changes, I returned to get my PhD at the Yale Center for Industrial Ecology.

Lately my research interest focuses on waste infrastructure in developing countries, and how we can avoid locking in the same unsustainable infrastructure of the past. My work is strongly informed by the social sciences and methods in economic development, as well as my experiences in India and a sense of global environmental and economic justice.

I believe in order to continue to grow, Industrial Ecology must work to include new domains of knowledge, true to its interdisciplinary roots. As a board member, I would work on building both the breadth and depth of the membership base. It is important to reach out to students outside of the traditional IE research centers, and find more people like myself, who are interested in questions of sustainability, and could both benefit from and add to the tools IE has to offer. This especially includes reaching out to institutions outside of Europe and North America to better reflect the geographic and disciplinary diversity of current sustainability research. I think we should offer one year free membership to students from developing countries, in a concerted effort to grow and diversify our membership base.

**Please describe activities and ideas for the ISIE-SCB as an At-Large Member:**

Aside from recruitment, I hope to use my term as board member to create a stronger digital and virtual community, and increase the value of the group to students in between the annual conferences. I'd like to start a simple message board or google group specifically for ISIE student members - a private and informal Stack Exchange or Reddit of sorts. This would be a space for students to share and discuss the latest research, ask for advice, and share job and grant opportunities. Students have different interests and needs than faculty and it would be useful to have a private discussion forum to reflect that.

I'd also like to organize a series of webinars where student members could sign up to present their research. This would be valuable for receiving feedback from scholars all over the world and an opportunity to practice presentation skills. I imagine this would be especially valuable for researchers at schools that don't have a large Industrial Ecology community, and those who can't afford to travel to conferences, but we would all benefit from learning more from each other.

Finally, I'd like to build upon many of the existing scholar exchange programs that our universities have for faculty and promote more opportunities for visiting student exchanges. I strongly believe that more collaboration across countries and cultures will make our research better and more interesting.

Thanks and see you in Beijing!

**2018 ISIE Student Chapter Board  
Board Member At-Large Candidates**

**Yang Guo**

Institute Country: **China**, Nationality: **Chinese**  
Current Institute/Organization: **Tsinghua University**  
Subject of study/degree: **Environmental Science & Engineering**  
Duration of the current program: **from 2014 to 2019 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

My research focuses on greenhouse gas mitigation in Chinese industrial parks. I have worked in IE field since the third year of my undergraduate period. I have taken several IE courses during my PhD, and serviced as a teaching assistant in the course of "Introduction to Cleaner Production". Now I have seven peer-reviewed articles as the first author, and three of them published in ES&T. Recent progress of my work cooperated with Prof. Marian Chertow from Yale University, has been published in JIE and ES&T. Please find more details in ResearchGate website, [https://www.researchgate.net/profile/Yang\\_Guo39](https://www.researchgate.net/profile/Yang_Guo39). Moreover, I have minored computer science during undergraduate period, and I am good at environmental modeling. Now I have developed three softwares and gained the copyrights.

I am a member of ISIE and Chinese Society for IE. I have great passion on organizing student activities. I have attended ISIE 2017, GRC IE 2018 and ISIE AP 2018. I was in organization board for "International Forum on Sustainable Solutions for New Era of Ecological Civilization 2017" (<http://ecoforum.env.tsinghua.edu.cn/>), and also the chair of "Youth Workshop"; in the conference (the only one student chair). Moreover, I led a student team to develop conference website and broadcast on social media. The conference website can be used for registration, posting information, and submitting & reviewing manuscripts. I also have organized other events, such as national college environmental innovation competition.

Next conference will be held in Tsinghua University, China. This is a great convenience for me to host activities. Here are some plans for next conference. First, I will spread some interesting works related to Chinese topics among ISIE students, to show the "Chinese picture" of IE. Next, I plan to organize wonderful tours to help attendees get in-depth understanding of Tsinghua University and Beijing, the most historical university and city in China. Moreover, warming-up activities will be set to help students networking with others and integrated in the community, including some interesting games. At last, I will make efforts to gain more financial support for student scholarship. I would love to contribute to IE community and make it better.

**Please describe activities and ideas for the ISIE-SCB as an At-Large Member:**

For regular activities:

- 1) Organizing online group chatting of the students in the same research field (3-5 students each group, and every two weeks or every month), to help the ISIE students make friends and research partners;
- 2) Creating a BBS section in the ISIE website for students to post their recent research progress to others and get comments for their research. The BBS can be also used for discussion on technical details of methods and softwares;
- 3) Matching each student with a pen pal (by email) randomly, to promote the collision of ideas from different cultural backgrounds and research fields.

For the 6th Symposium:

Next conference will be held in Tsinghua University, China. This is a great convenience for me to host activities. Here are some plans for next conference. First, I will spread some interesting works related to Chinese topics among ISIE students, to show the "Chinese picture" of IE. Next, I plan to organize wonderful tours to help attendees get in-depth understanding of Tsinghua University and Beijing, the most historical university and city in China. Moreover, warming-up activities will be set to help students networking with others and integrated in the community, including some interesting games. At last, I will make efforts to gain more financial support for student scholarship. I would love to contribute to IE community and make it better.

**2018 ISIE Student Chapter Board  
Board Member At-Large Candidates**

**Dominik Noll**

Institute Country: **Austria**, Nationality: **Austrian**

Current Institute/Organization: **Institute of Social Ecology, University of Natural Resources and Life Sciences (BOKU), Vienna**

Subject of study/degree: **Societal stocks and flows on the Greek island of Samothraki**

Duration of the current program: **from 2016 to 2020 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

My career path has started from a practical technical background, completing an apprenticeship in roof construction. Engaging increasingly in nature conservation in different world regions brought me to do bachelor's studies in Biology. There I felt increasingly dissatisfied, missing a framework capturing environmental pressures caused by human activities. Such a theoretical framework I finally did find at the Institute of Social Ecology in Vienna. For my master's thesis I spent a year Mumbai, India, where I conducted a socio-metabolic study on the manufacturing of clay bricks burnt from fertile agricultural soil to be used for stock expansion in the Mumbai Metropolitan Region. I am currently doing my PhD at the Institute of Social Ecology, dealing with societal stocks and flows on the Greek island of Samothraki, and acting also as organizer assisting Marina Fischer-Kowalski in a project aiming at a comprehensive socioecological system analysis of this island community plus practical transition management in collaboration with many partners.

I attended the Gordon Research Conference and Symposium for Industrial Ecology in Stowe, Vermont, USA, in 2016, and this first contact convinced me that I had found "œmy" scientific community. As spokesperson for the doctoral students of Social Ecology here in Vienna, I learned about their needs and woes and how to organize and represent them towards the supervisors and the university at large.

If I were to become a student board member, I would like to focus on the needs of student members regarding their current situation and their integration into the community of Industrial Ecology. I would focus on what the Student Chapter can do to help its members in the process of finding and consolidating a suitable professional identity for themselves and at the same time providing innovative ideas to the field of Industrial Ecology at large. In this way I would like to carry the successful history of the student chapter forward and deepen and extend the network within the Society for Industrial Ecology.

**Please describe activities and ideas for the ISIE-SCB as an At-Large Member:**

Initially I would like to get a better idea about the members of the Student Chapter and their expectations from the community. In order to do so, a small survey could be conducted from which we can get a good picture of what the Student Chapter should fulfil for its members and how much they actually feel part of their community. I would like to reach out to those who don't participate regularly in conferences or other events and try to find a way to bring them closer to the community. I really appreciated the implementation of the networking event in April 2018 that enabled a specialized exchange between post docs and PhDs regarding their research. I would definitely support a continuation of events of this kind and would also like to go further and engage with the question what other topics might be of use for ISIE students. A virtual network could then not only enable specified exchange about our research but also for example our careers. This leaves room for exploration but could be accomplished by the invitation of senior members of the Society for Industrial Ecology and beyond to share their career paths or talk about how careers in science have changed and what will be important for young scientists in the future.

Regarding the 6th Symposium in IE for Young Professionals in Beijing in June 2019, I can draw from my experience as spokesperson for the doctoral students of Social Ecology and my role as a coordinator in a transdisciplinary project. During my time as a spokesperson I planned and coordinated 2 workshops with PhD students that were dedicated to the strengthening of the student network and the integration of students into the larger research community of Social Ecology in Vienna. Due to my tasks regarding project coordination I know that I am good at organizing communication processes between different partners and generating concrete results that make a difference. I will closely work with other board members in order to facilitate the most suitable framework for us students.

2018 ISIE Student Chapter Board  
Board Member At-Large Candidates

**Desire Sekanabo**

Institute Country: **Rwanda**, Nationality: **Rwandese**

Current Institute/Organization: **University of Rwanda-African Center of Excellence in Energy for Sustainable Development (ACE-ESD), College of Science and Technology (CST)**

Subject of study/degree: **Economics**

Duration of the current program: **from 2017 to 2021 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

My background in Industrial ecology as economist is predicated on the idea that industrial systems have much characteristic ecology. This reflects the concepts of Cleaner production and Pollution prevention. These ecologies are defined by the metabolism of energy and materials in interrelated and interactive industrial and consumer patterns.

Analogous to field ecology is that industrial ecology provides a useful framework for evaluating the operational aspects of industrial activities. Currently, I can say that it is being applied to guide the alteration of industrial ecosystems toward greater environmental and economic sustainability.

After making a careful observation, I found that application of the field ecology analogy to industrial systems has a noticeable social impact in a biological ecosystem for some organisms use sunlight, water, and minerals to grow, eliminate waste products, and die.

Another view is that most company leaders did not emphasize on the issue of global warming because environmental degrading is not their business concern.

Analysis extracted from a conference held in Kigali between 1st - 4th October, 2018 in Convention Center, about Africa Smart Grid as a key for Development shows that research and results have increased significantly leading to a desire for better utilization of the accumulated data in more sophisticated analyses taking an issue of environmental degradation.

**Please describe activities and ideas for the ISIE-SCB as an At-Large Member:**

Today chemical industry is highly causing the catalytic destruction of the ozone compounds such as hydrogen fluoride (HF), numerous types of pesticides and indirectly more than a hundred toxic isomers of dioxins and dibenzofurans result from incomplete incineration. As solution to environmental problem, is that technological improvement of making goods and service is also perceived as part of the solution.

Being part of the community provides quick and easy access to share knowledge with fellow researchers around the world helping you achieve more of your goals.

As economist, the use of economic modeling techniques in industrial ecology research will provide distinct advantages over the customary approach, which focuses on the physical description of material flows.

I would like to accomplish my term as board member by providing polices relating to modeling techniques for Industrial Ecology as economist. Being part of the industrial ecology community can provide quick and easy access to share knowledge with fellow researchers around the world helping us achieve more of our goals.

I would also like to accomplish my term as board member by supporting outreach to other students in Africa and connecting them with students in other parts of the globe, and sharing ideas related to modeling techniques for Industrial ecology and economics.

## Nathalie Spittler

Institute Country: **Iceland & France**, Nationality: **Austrian**

Current Institute/Organization: **University of Iceland – School of Environmental and Life Sciences & University of Clermont Auvergne – CERDI (Research Centre for International Development Studies)**

Subject of study/degree: **Energy**

Duration of the current program: **from 2016 to 2019 (expected)**



### Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:

I am currently pursuing my PhD as part of the Marie Curie ITN project “Adaptation to a New Economic Reality II” (AdaptEconII), which aims at better integrating physical and social realities for sustainable development. I started my PhD journey in March 2016 at the University of Iceland, where I focused on the physical and economic aspects of energy systems. Along the way I got to stay at the University of Clermont Auvergne in France, where I got to spend more time on the social implications of energy system developments, as well as I will have a research stay at the Wuppertal Institute in Germany in the winter 2018. In my research I am focusing on assessing the implications of renewable resources dynamics (specifically hydro and geothermal) for short- and long-term sustainable development of national energy systems by looking at two cases, namely Iceland and Kenya. Hence, I try to address the issue of sustainable energy system development from an interdisciplinary perspective. During my master studies in Socio-Ecological Economics and Policy at the University of Economics and Business in Vienna I gained first insights into the field of Industrial Ecology. This year I attended the GRC on Industrial Ecology. I found that although my research might not represent the classical Industrial Ecology research, I still fit within the community as I try to comprehensively address one of the major challenges of future sustainable development. I would like to be an ISIE Student Board member to be able to contribute to the community by facilitating exchange of experiences and insights to support the achievement of personal, research and sustainable development goals.

### Please describe activities and ideas for the ISIE-SCB as an At-Large Member:

I think the existing activities (i.e. newsletter, fundraising, information about opportunities, etc) are already good initiatives. Additionally, I would suggest:

- **Forming peer groups:** These groups can be either based on topical or methodological interests and would serve as a platform for exchanging ideas and providing feedback to each other’s work. Ideally, this group would be able to meet once a semester and otherwise have regular skype meetings.
- **Creating links to non-academic practitioners:** Reach out to relevant industries, businesses, organisations, institutions to enhance awareness about the field and research of Industrial Ecology and facilitating a dialogue between their interests/ needs and possible collaborations with students in the field of Industrial Ecology.

I have organized Symposiums and Workshops of different size before. Therefore, I can help with the administrative tasks of setting up the 6th Symposium in Industrial Ecology for Young Professionals. I also have experience in moderating panels and various workshop styles, which means I can also facilitate and take care of sessions during the event.

Additionally, to inviting Industrial Ecology seniors from academia to share their experiences, I think it would also be interesting to invite practitioners to share their experience. A discussion among the Young Professionals, in which they can share their experiences, success stories and obstacles they have or expect to encounter, should be part of the event as well.

2018 ISIE Student Chapter Board  
Board Member At-Large Candidates

**Zhengyang Zhang**

Institute Country: **Japan**, Nationality: **Chinese**

Current Institute/Organization: **Tohoku University, Graduate School of Environmental Studies**

Subject of study/degree: **Evaluation of Dissipated Alloy Elements in Alloy Steels from Automobile Recycling**

Duration of the current program: **from 2017 to 2020 (expected)**



**Please describe your background in Industrial Ecology and what you will bring to the ISIE-SCB:**

My background and discipline as an environmental scientist have opened my eyes to the importance of various global issues dealing with sustainability and the role of industrial ecology plays in achieving them. I was delighted to know that such an organisation (ISIE) existed and that by joining, as a member gain access to several members working in the same field from all over the world. After going over the information that introduced the ISIE and it's goals and activities, I realized that how much the organisation's objectives are in line with my own, and the possibility of getting an opportunity to connecting with fellow scientists, and what results such collaborations may bring. This opens up a new realm of possibility of sharing and receiving feedback from fellow researchers interested in the same field, and the possibility of teaming up for future research opportunities.

Before starting my PhD journey, I have accumulated four years of on job training and experience working for a recycling company in Japan. This has motivated me to conduct projects involving material recycling along with considering the different ways of how that would factor into modern day strategies for achieving sustainability targets, utilising concepts such as that of the industrial ecology and many of the tools that go along with it.

With an emphasis on the methodology, I am currently working on utilizing input-output based dynamic material flow analysis which traces the fate of multiple materials incorporated within different end-of-life products over successive rounds of open-loop recycling. It coupled with my working experience would allow me to give feasible ideas when it comes to actively participate in bridging the gap between students working in the academic field and the industry leaders that would provide the data.

During this I would like to bring more attention to the quality and spread the message of the goals that this association "holds, brings, aims for", and play the role of a catalyst between stakeholders and researchers. As mentioned working and doing research in the field puts me in a unique position with a wide perspective to understand and view things.

**Please describe activities and ideas for the ISIE-SCB as an At-Large Member:**

Taking full advantage of social media to accelerate students participation would be a good idea. For example, if we could make a short video clip to introduce ISIE and the functions in the organization of SCB, and then post it on facebook, twitter, and other social networking websites, it would be much more easier to attract the young professionals to know and join us soon. Besides, If more photos and videos of previous student activities could be posted on social websites instead of just sharing information, professionals would get some hints about what benefits they might take and give back to others in the field. Furthermore, creating a permanent feedback channel on ISIE homepage and Facebook allowing followers to ask questions, make suggestions and tell their expectations, not only the SCB would get more information to promote their activities but also the next coming board members could have a good grasp of communication records instead of asking the predecessors. Finally, it would contribute to the quality control of the SCB's service.

Based on the feedback messages, we can plan and host a regular online dialogue session, especially talk to the students working on the industrial ecology field but rarely have a chance to see the world with their own eyes. Thus, the operational costs could be saved, and participants would get motivated to promote the innovation and development of concepts in their research design at the same time.

To promote the student community, we can organise young researchers meeting including flash presentations and network events (dinner, tea reception, etc.). The rules of flash presentations are introducing individual research topics within 2 minutes by using 1 slide, and no questions as well. Most importantly, using free real-time communication tools during the conference to provide more opportunities for the participants to chat with speakers and others. They can ask questions and have discussions freely without time limits; speakers can answer what participants most like to know as soon as possible.