

2020 ISIE Student Chapter Board Personal Statements: Board Member At-Large

Name: Akshi Singh

Nationality: South African

Current Institute/Organization: University of Cape Town (UCT)

Current Institute/Organization Country: South Africa

Current Status: Master's student

Subject of study/degree: M.Sc. chemical engineering: Circular Economy Analysis

Duration of the current program: from 03/20 to 12/21 (expected)



1. Short statement for all candidates

After completing a B.Sc. degree in Chemical Engineering, I went on to work at an asset management company for a year. The relationships between humans, the economy and the environment fascinate me. I think that it is important to have a holistic view of situations and the interaction of variables in order to appreciate their impacts on an ecosystem. I am passionate about sustainability, inclusivity and creative problem solving.

I came across the field of industrial ecology through a start-up accelerator aimed at creating circular industries – and was immediately intrigued. This inspired my decision to explore the concept of circular economies via the lens of the automotive industry, with particular focus on material flow analysis. I joined the student chapter of ISIE after watching interesting webinars related to these topics and engaging with resources available on the website. My experience with industrial ecology motivates me to make meaningful contributions through research and interactions with community members. As a first-year master's research student in the field of industrial ecology, I hope that my unique outlook and enthusiasm for the field will contribute to strengthening the student community by promoting innovative thinking and mutual support through learning initiatives. I hope to build on the current student chapter initiatives to create a creative space where ideas and advice can be shared between members of diverse backgrounds.

2. Short statement for At-Large candidates only

In addition to the current initiatives by the ISIE student chapter and in consideration of the impacts of the Covid-19, I hope to focus on the following initiatives if elected:

- Student-hosted monthly/fortnightly webinars with target topics, promoting engagement in peer groups.
- Development of study groups via the virtual peer groups – to create a less formal space for communication. This could include a scheduled 'catch-up' call for members to share findings and progress with research.
- Career advice webinar series to help orientate students on skill development and potential paths.
- A podcast based on the respective peer-group topics, to help students engage and share information in a creative way. This could also help spread awareness of the Industrial Ecology field and current research.

The online Symposium in Industrial Ecology for Young Professionals in 2021 will create a unique space for students to engage with information and build meaningful networks with members of the Industrial Ecology community, especially taking to account the impacts of Covid-19 this year. Perhaps, creating an interactive platform with webinars/workshops selected by the individual – in a "build-your-schedule" format would benefit the unique interests per member. There could also be "specialization paths" with predefined topics. Students could share their research through these respective specialisation paths. Gamification of elements in the online conference could also increase engagement and open the space for more effective communication.

2020 ISIE Student Chapter Board Personal Statements: Board Member At-Large

Name: Brent McNeil

Nationality: Canadian

Current Institute/Organization: Norwegian University of Science and Technology

Current Institute/Organization Country: Norway

Subject of study/degree: Industrial Ecology: Metal and Mineral Cycles

Duration of the current program: from 08/2020 to 06/2022 (expected)



1. Short statement for all candidates

Like many Canadian settlers, I've always had an awkward relationship with the environment. We take pride in the endless wilderness that is our backyard, yet many of our livelihoods are built around exploiting it. Failing to disown my heritage, I somehow ended up as a geological engineer working in tailings and mine waste. Over four years this would lead me to mining communities in Canada, Alaska, Zambia, Panama and Australia. I came to realize that under the current socio-economic paradigm, a necessary move away from a carbon intensive economy would lead to an incredible increase in demand for metals from all these different corners of the world.

Since transitioning to industrial ecology, my specific areas of interest have been a) how this demand can be effectively managed from a systems perspective at country levels, and b) identifying the potential of critical metals to cause regional resource conflicts and environmental degradation. Applying these technical strategies to inform policy in areas with low data availability is also a key focus of mine.

My motivation for getting involved with the Student Chapter Board stems from my long-standing belief that social engagement and transformation are just as important as technical innovation. I would like to not only continue collaboration within our membership and discipline, but also increase communication with those in other fields and segments of society. The ISIE provides a great platform for knowledge exchange and I look forward to working with you all in the future!

2. Short statement for At-Large candidates only

In the world of working from home and remote learning, I think we risk losing the engagement and enthusiasm of our peers. Because of this, I believe the upcoming two years will be particularly important for communication via the student newsletter and social media. As well as delivering content, we should also strive to let student members share their work. A continuation of webinars is a great avenue. Even if attendance is low, there is still a large value for the presenter. Recruiting experts and professionals in the field to provide feedback could help reduce the "academic isolation" that some of us may feel while spending less time in socially active settings.

The online format of the 7th Symposium during the ISIE Conference would allow more young professionals to join in. If we provide ample opportunity for webinar participation before then, we may find ourselves with a greater number of refined presentations that could better attract the student body and provide a more fulfilling experience. By 2021 we may all be fatigued by virtual work and this may be looked at as just another online event. It will be especially important this time to excel at our delivery and make it memorable.

Despite being easy to access, the one thing I've come to notice about the peer groups section is that the sheer number of groups overwhelms me. Because of the strong links between different areas of industrial ecology, I think that a reduced-section or single student forum with the ability to "tag" and sort posts with set labels would allow for increased exposure. Finally, recruiting more students at all levels is something that would increase the effectiveness of the ideas I have presented above.

2020 ISIE Student Chapter Board Personal Statements: Board Member At-Large

Name: Fernando Aguilar Lopez

Nationality: Guatemala / Germany

Current Institute/Organization: NTNU

Current Institute/Organization Country: Norway

Current Status: PhD Student

Subject of study/degree: Industrial Ecology

Duration of the current program: from 09/19 to 11/23 (expected)



1. Short statement for all candidates

I am a second year PhD student at NTNU investigating the resource availability for electric vehicle batteries. By training, I'm not an industrial ecologist, but the exciting thing is that many of us at ISIE aren't! Industrial ecology (IE) presents an exciting field where physicists and energy engineers like myself can sit down and work together with social scientists, architects, and yes, engineers from almost any background to create innovative and holistic approaches. It is here where my main motivation for becoming a board member lies. I think that interdisciplinarity and inclusion prevail at the heart of IE and if given the opportunity I would like to embody this spirit.

With this in mind, I would like to highlight some previous experience that underlines my ability to pursue this goal. During my master's at EPFL I was an active member of the "Young students in energy and sustainability - Europe" student organization and was responsible for organizing events and outreach in Switzerland. I learned a lot about the importance of including the industry in sustainability discussions and how to make these events fruitful for them as well. Recently, I have visited the online conference "Talk Nerdy To Me" organized by EIT Raw materials which focuses on communicating research and science to a wide set of audiences with a focus on online events. I am convinced that these experiences give me a solid basis to contribute to ISIE's outreach and online event organization activities.

2. Short statement for At-Large candidates only

The two main issues I would like to focus on would be 1) increasing the outreach and exposure from IE to other fields and engage in multilateral discussions with students, industry, and current members and 2) create a vibrant online environment as a platform for collaboration and discussion.

To achieve this, I think the following options would be viable approaches:

- 1) In a coordinated effort with the student group, tailored symposiums could be organized regularly in an online semi-formal context to help researchers in similar fields get in touch with each other and create synergies. This could be done within the scope of the existing Peer Groups where the discussions can be continued in a dynamic and engaging way through concepts like pre-recorded poster presentations followed by a discussion and bi-directional interactions.
- 2) Collaborating with student associations beyond the field of IE. Organizing online events where ISIE members present their work and have discussions with students from various fields or including students and industrial partners in some of the existing online seminars would increase the exposure of the IE field to other disciplines and would further enhance the interdisciplinary approach. Thesis projects and job opportunities could also be presented in these events leading to potential collaborations and strengthening the international and inclusive environment of IE.

2020 ISIE Student Chapter Board Personal Statements: Board Member At-Large

Name: Jan Streeck

Nationality: German

Current Institute/Organization: University of Natural Resources and Life Sciences, Institute of Social Ecology

Current Institute/Organization Country: Vienna, Austria

Current Status: PhD student

Subject of study/degree: The stock-flow-service nexus in national case studies

Duration of the current program: from 2018 to 2021 (expected)



1. Short statement for all candidates

Hey, my name is Jan! Currently I am situated at the Institute of Social Ecology in Vienna, Austria where I am doing a PhD on economy-wide material flows and stocks. On the one hand I work on country case studies (UK, USA, France) on long-term developments of material stocks and their connection to wellbeing, and on the other hand on synergies between inflow-driven MFA and input-output analysis.

Last year I participated in the Socio-Economic Metabolism (SEM) Section Conference in Berlin and first got in touch with the ISIE student community. It was great and encouraging to meet some of the people behind the names on the papers and to exchange informally. This year, for the first time, I participated in the virtual networking event organized by the ISIE student board. I was very excited to be talking to like-minded people on three different continents while casually sitting on my sofa at home. It really boosted my motivation to realize that people all around the globe care for similar topics. I would like to join the student board to help with the organization of more events like this. I believe that, especially in the light of current travel restrictions, we need more virtual occasions to mingle and exchange and I would like to help set these up. Besides more frequent virtual networking events and the Peer Groups, a format like the Perpetual Online Conference of the ISIE-SEM might be well suited for us to exchange and receive peer-feedback.

2. Short statement for At-Large candidates only

The ISIE student chapter already offers great initiatives to connect students globally, e.g. the virtual networking events. I think that the networking works well, as it just takes little time but yields many positive outcomes (e.g. motivation, network). For the Peer Groups, outcomes might yet be slightly unclear and engagement more time-demanding. Therefore, I would suggest to support peer group initiation in kick-off events and clarify potential outcomes. To be more specific, some of the following ideas might help:

- Increase the frequency of virtual networking events (3-4 times a year)
- In preparation for virtual networking, include one more feedback loop, so that participants may not only choose areas of interest but also suggest networking partners from the list of participants (the potentially closer match of research areas might benefit peer group formation)
- Have kick-off events for the formation of peer groups: this might for example be a session in which students pitch their work and jointly develop a Peer Group goal (e.g. a collaborative opinion piece/paper)
- A lot of conferences did not happen this year – a format like the Perpetual Online Conference of the ISIE Socio-Economic Metabolism Section with slots reserved for students might be a good opportunity to get and give feedback
- Organize a training-workshop once a year: the topic of the training could be evaluated via student surveys (e.g. career counseling, scientific communication) and either be conducted by (senior) ISIE members or outside experts

2020 ISIE Student Chapter Board Personal Statements: Board Member At-Large

Name: OLEKSANDR GALYCHYN

Nationality: Ukraine

Current Institute/Organization: Parthenope University of Naples

Current Institute/Organization Country: Italy

Current Status: PhD student

Subject of study/degree: Environment, Resources and Sustainable Development

Duration of the current program: from 11/18 to 02 /22 (expected)



1. Short statement for all candidates

I have been interested in becoming a board member since attending Actionable Science for Urban Sustainability conference. By the end of this event I was satisfied with contributing my knowledge and by learning new concepts, methodologies and case studies from others. I understood from this event that community reports on real-world issues can be used to cure urban diseases towards human health and happiness even in the age of COVID. I intend to apply for a membership to use my knowledge and experience to contribute to the solution of global environmental issues such as internal metabolism of cities from socio-ecological perspective and to overcome socio-cultural barriers during events.

I had a prior experience in urban planning and civil engineering. I studied the transformation of gated communities towards sustainable neighborhoods in Turkey and assessed urban transportation system development from socio/ecological perspective in Ukraine and Finland before discovering urban metabolism concept. I published studies on those topics and worked in cross-cultural environments and in interdisciplinary teams and with different social groups while I was living in those countries. I intend to use this experience to find to engage everyone in discussion and to ensure that everyone will be open and happy to contribute.

If I am selected, I plan bring to ISIE and student chapter more equality in terms of background, nationality, status and experience of each member. In addition, I aim to shorten the gap between the theoretical and experimental part of research for those that do not have experienced staff in their universities guide them or other barriers to their future. employment. Lastly, I hope to assist the students in preparing for their scientific carriers with relevant knowledge, collaborations and networking opportunities.

2. Short statement for At-Large candidates only

I noticed that the biggest problem with ISIE-SCB is a miscommunication because the events organized rarely. Much more non-traditional conferences in informal style are required before the formal event. This virtual conferences where all are presenters from different fields of study can be used to monitor the progress of work and to provide feedback on each stage of the article preparation, and collective learning by using the different visual or audio materials. Those conferences should bring together students not only the students but as beginner reviewers, scientists or members of their local communities. Role change applied to each conference should be a valuable experience for students to improve the quality of the research, allow them prepare for their carries early on.

At the start of each new year could be beneficial to organize webinar to check to knowledge and experience of each student by putting them with the students from different backgrounds. Then, from the first conference their knowledge on interrelated subjects could be boosted by sharing with their peers.

Finally, when the students filling that they cannot longer contribute or to learn from others, they could be matched with people from neighborhood discipline, and so on. Thus, this approach towards the organization of events will provide members with the opportunity for efficient learning, and, ultimately, for virtual innovation network consisting of students, professionals and policy-makers for productive and sustainable future.

2020 ISIE Student Chapter Board Personal Statements: Board Member At-Large

Name: Ramin Ghamkhar

Nationality: Iranian

Current Institute/Organization: University of Wisconsin-Madison

Current Institute/Organization Country: USA

Current Status: Ph.D. Candidate

Subject of study/degree: Environmental Engineering (+ minor in Sustainability)

Duration of the current program: from 05/18 to 05/21 (expected)



1. Short statement for all candidates

Since the start of my PhD in the area of Industrial Ecology and Life Cycle Assessment, I realized the importance of systems thinking and integrating different perspectives in problem solving. Doing so will enable us to come up with systematic solutions to address systematic challenges. Being a student board member at IS4IE will provide the opportunity to exchange ideas and outlooks with other students and experts, who are working in the area of Industrial Ecology with different approaches and outlooks.

My research is on Food-Energy-Water nexus & Sustainability of Closed-Loop Food Production Systems, focusing on aquaponics. In my research, I use Life Cycle Assessment as the main tool to evaluate the environmental impacts of food production processes. I also compile economic analysis & mapping techniques to incorporate fiscal and spatial factors in sustainability evaluations of closed-loop food processes. This provides the opportunity to have a better understanding of implementing industrial ecology in food systems, by symbiotic integration of production cycles.

If selected to be in the student chapter board, I will be more than happy to contribute to the activities that are associated with At-Large. In addition, I will actively contribute to provide a welcoming platform to connect students and professional experts in the community. With the current pandemic situation, it is becoming more challenging for students to reach out to the experts of their fields (and vice versa). I will be happy to organizing virtual events (e.g. talks and presentations, discussion sessions, etc.) to enable the community to stay active and connected.

2. Short statement for At-Large candidates only

Considering the current pandemic situation, online activities are one of the best platforms to engage and serve the student chapter board and fulfill its mission to help connect student researchers across the world. In order to elevate the engagements, it is necessary to extend efforts beyond the Email announcements. Active promotion of the Student Chapter Board events in social media (especially on Twitter) can significantly help student researchers to stay connected and involved. Furthermore, organizing discussion sessions and talks with the topics that are in-demand and appealing to the student researchers will elevate the student community involvement and participation. If selected for this role, I will do my best to provide a welcoming and engaging student chapter, which uplifts the students and young professionals' involvement.

2020 ISIE Student Chapter Board Personal Statements: Board Member At-Large

Name: Simone Della Bella

Nationality: Italian

Current Institute/Organization: University of Southern Denmark

Current Institute/Organization Country: Denmark

Current Status: PhD student

Subject of study/degree: The Material Constraints of the Energy and Climate Transition

Duration of the current program: from 06/20 to 05/23 (expected)



1. Short statement for all candidates

Since I was a child, my passion and curiosity about the environment grew with me. While I was studying energy engineering at the university, the idea of helping our world finding a solution regarding the climate change remained in my mind. Today, as a PhD student I finally have the possibility to deal with such a complex issue, as it requires a multidisciplinary approach. This is what the ISIE does, becoming a student board member would be for me the opportunity for me to put my skills at the service in order to help them, but also to develop my knowledge and to interact with student and experts in my field.

I am willing to give my contribution to make our world ecologically viable and thus let us be more optimistic about the future. It is possible with everyone cooperation creates a more sustainable society.

2. Short statement for At-Large candidates only

In order to better serve and engage the student group, especially during this difficult time related to COVID-19, I think it's important to start by defining the objectives of ISIE student Chart Board as we must work differently.

Defining the objectives, potentiality and capacity of the ISIE student chapter board is essential, especially during an exceptional time like the one that we are living, where old strategies and preconception does not work anymore.

Social media, teamwork software and any new technology will be at the core of this change. In a world getting complex every day, communication is the key. Becoming a better science communicator, creating high quality scientific contents may be a solution to involve more students and creating network. For example, to promote the Peers Groups, it could be interesting to create a video that shows how it works and which benefits student members can find in it.

A problem can have different solution, this is why teamwork is fundamental according to me. Thanks to my experience in different fields, I am ready to support and participate in the student chart board, to find the best solutions together and improve the SCB.