

I am quite honored to serve as the current ISAER President and I hope that in the coming years the society can have a real impact in promoting energy to the wider scientific community.

Dan Campbell tells me that this little speech is my opportunity to put my personal spin on the goals of the society. If I have a spin in mind, it goes something like this. We've heard in this conference about some beautiful advances in energy research, especially about technical improvements to energy analyses.



My suggestion would be that it might be time for society members to return a little to the roots of the society and of energy. For the newer members, energy may seem to be a sophisticated accounting project, aimed to replace naïve economic analyses of engineering and economic practice. So it is.

But energy is first and foremost, in my mind, a product of an even more sophisticated systems science, originally developed Dr. Odum and his earlier students, and as part of the scientific milieu of the 60s and 70s, and given new life in the 80s and 90s by the many strands of science now lumped under labels like complexity or complex systems science.

Dr. Odum's systems science revolves around the concept of maximum power, of course, but also hierarchy, scale, energy dissipation, and on and on. Systems diagramming, for instance, is not only a precursor to energy analysis, but it is a way of thinking. It is an exercise that forces users to understand problems in specific ways, again related to energy and its transformation. When we use the systems language, every problem or question that we ask is automatically placed in those terms. We are forced to think about the world in ways that incorporate fundamental systems principles.

For the newer energy researchers, this may be news. So I will make a suggestion. Especially for new energy researchers, we need to develop more training opportunities for learning the very sophisticated systems theory that underlies the accounting of energy analysis. Energy analysis is a great tool. But without a deep understanding of its intellectual roots, there is the potential for researchers to

wonder off course, to miss the implications of their research, or worse, to struggle unnecessarily with designing research projects of your own.

So that is one that I think is important. I'll list a few other initiatives, and these are not my ideas for the most part, but I want to put them all together here. There are things that I think the society should support or is already taking steps to promote. These are all part of the new website, most in preliminary form, or they could be added to the website. Dan will give us a thorough tour of the beautiful new website in a minute. But here's the way I describe these pieces and how they could be incorporated in the website.

- ♦ Promote 'emergy foundations' scholarship
 - Odum 1988, etc
 - Brown and Ulgiati 1997, 1999, etc
 - Others
- ♦ Promote the production of 'emergy tools'
 - UEV Database
 - NEAD Database
 - Emergy LISTSERV
 - Dr. Brown's excel file simulations
 - Enrique's simulation website
 - My newly revised simulation environment
- ♦ Promote 'alternative channels' of emergy information dissemination
 - PWD website
 - Enrique's Emergy Society Newsletter
 - Torbjorn's Clearinghouse
- ♦ Promote 'scientific conference participation'
 - Emergy Synthesis 9
 - EcoSummit
 - The International Conference of Environmental Accounting in Beijing
- ♦ Promote and encourage younger scholars with various 'awards'
 - Poster awards
 - Travel awards
- ♦ Promote 'emergy scholarship'

What is 'emergy foundations' scholarship? Rather than write a great deal of new content for the website, it could be better to showcase a few foundational papers, with citations and links possibly. It would include, of course, a few of HTs papers.

It could include review papers that cover existing scholarship to create summaries. It could include some true meta-analyses?, which have become extremely popular and highly valued in most disciplines. Some of these things have already been done. I'm trying to encourage more people to take on these kinds of projects.

Next, 'emergy tools'. The NEAD website and the UEV database might be the top tools created so far (though they need more visibility and better procedures for updating). The listserv is another valuable but underused tool. Mark's website has Excel files for simulations. Enrique has a website that can run systems simulations. This year, my simulation environment is undergoing a re-write, and it's going to be good, I think. Enrique has a simulation environment.

Next, 'alternative channels' of information dissemination on emergy. The good example here is Mary's PWD website. Another is the online meeting 'Forum', which apparently is a feature for holding meetings online. There is Enrique's newsletter, and the Clearinghouse idea of Torbyorn's for linking potential students with researchers.

Next, 'promote scientific conference participation'. This refers to both organizing our own conferences, of course, but also producing sessions in other conferences. We are doing this, of course, with these upcoming conferences.

Next, promote and encourage young scholars with various awards. We are doing so.

Last but not least, 'promote emergy scholarship'. What do I mean, how could we do that? As a society of scholars, scholarship is our #1 occupation. Personally, I don't have any idea how many new papers have been published in recent years. If you are a Resilience researcher all you need is notification of a new edition of Energy and Society. But the emergy community has chosen to publish widely, to try to talk to other research communities. This has clear advantages, I believe, but also the one main disadvantage that we all miss the publication of valuable research. The website can be the place to pull all that together and announce it in one place. You will see that there is the beginnings of this type of feature in the new website. I think that this should be a running list of all emergy or systems papers produced by our community, most recent papers on the top of the list. Maybe in bibliography form, perhaps with an abstract that expands if selected. Now I say, ideally, we should be able to use the UEV database as the source for such a list. When

someone updates the UEV database, this list would be updated automatically, and the same information would not need to be kept in two different places. That would probably require some small changes to the website to allow it to hold all papers by the community, not just those that contain a new UEV, but that could be discussed.

To me, this accomplishes two things. Essentially this feature gives authors a chance to show off, a chance to announce what they've done. A way to inform us all about their hard work. To me, this should be highlighted on the website. Everyone wants and needs to hear about scholarship. The other thing that it does, as I said, is to provide a single place where we, and others, can see all energy and systems research together.

Again, what ties all these pieces together? That would be the website. I see a website as a place to talk to ourselves (with perhaps outsiders listening, if we do a good job). To my mind, we need a website that features these types of categories, and you will see that it already does, for the large part. Furthermore, the website needs to talk to us, as does the PWD website. If you choose to be notified of changes, it will automatically email an announcement to you when something changes. When someone creates a new tool, it is added to the tool category, and it is 'featured' at the top of the category, until it is replaced by something new. When someone develops a new program, same thing. 'New scholarship', same thing. And each update triggers a notice.

Ok, that would be my spin, or my wish list. Again, you will see how the website is doing much of this, or is on the way to doing it.

I do have one last comment that more directly regards the society. When I was an undergrad, I had a sign over my desk that really annoyed some of my upper classmates. They had sent out a flyer that had said something like 'Stamp out Apathy! Join us in this club something-or-other!' I had cut out the word 'Apathy' and taped it over my desk in my dorm. I was too busy studying, I thought, to be involved in extra-curricular silliness, as I saw it, and I disliked the typical group ra-ra politics which it seemed gave too much attention to personal self-promotion, etc.

The point of that story is to say, the energy society is a service society intended to promote energy science. Personally, if you don't care much about the activities of the society, I understand. I really do. Your research is what matters. That is

everybody's focus. We are academics or practitioners; we are pushing science; that is what we should do. As for the society, some of you really enjoy getting involved. Please, please continue to do so. But for others of you, follow your hearts. Choose as much or as little involvement in the society as you wish. But do stay tuned; we will be making efforts to do useful things. Use the website and join the listserv to stay informed, and do make use of the services that we provide that fit your needs. The society is fortunate to count this wonderful scientific community as members, and we will continue to do what we can to serve it.

Thank you.