

Candidate

Executive Council of the International Society for the Advancement of Emergy Research

Term Length: **2 years**

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Education

- PhD in Physics (University of Padua, 1992).
- Excellence Postdoctorale (Université Laval, Québec City, Canada, 1993-94).
- Visiting Scientist/Professor at the Vanderbilt University (Nashville, USA, 1995), Tokyo Institute of Technology (Tokyo, Japan, 2009-10), University of Florida (Gainesville, 2014).
- Present position: Full professor of Physics, Ca' Foscari University of Venice, Italy.

Teaching

- University courses (for both undergraduate and graduate students of Environmental Sciences) of General Physics, Science of Complex Systems, Systems Thinking, Systems for the Energy and the Environment, Epistemological Foundations of Modern Physics, Photonics.
- In 2013 and in 2015 Director of the "International School on Emergy Accounting", Ca' Foscari University.

Positions of responsibility and appointments

- 2015: Director of the Graduate School of Ca' Foscari University.
- 2012-2014: Elected member of the Academic Senate of the Ca' Foscari University.
- 2003-2006: Rector in Commission for orientation, tutoring and stages.

Research

- H-index=33 (2015, Scopus).
- Research interests: Experimental study of glasses for application in energy technology, photonics and cultural heritage. Systems thinking and emergy accounting.
- Author or co-author of about 150 publications in international peer-reviewed Journals.
- Organizer of international Symposia, Workshops and Congresses in Europe and Asia.
- Next Chairman of "Complementing monetary evaluations by means of comprehensive environmental assessment of resources and services. The Emergy Accounting method", Special Session of the 12th Conference of the European Society for Ecological Economics, Budapest, Hungary, June 2017.
- Invited lecturer in Universities in the United States (Cornell, Vanderbilt), Canada (McGill, Laval), Germany, France, Japan, India.
- Member of the Advisory Board of International Conference on Education and New Learning Technologies. Member of the Scientific Committee of International Conference of Education, Research and Innovation. Member of the Scientific Committee of SDEWES, Conferences on Sustainable Development of Energy, Water and Environment Systems.

Personal Vision Statement for the Emergy Society

Overall

I had not the privilege to meet personally HT Odum, but his cultural legacy has been much inspiring me since I have started studying systems thinking and emergy. I met many of you people that have had the luck of learning by or working with HT. Reading and listening to your stories about him make me really understand that he was unique, and that emergy is a unique conceptual tool. In this respect, I do think that there is a conceptual legacy -along with the more "technical" aspects of emergy- still waiting to be fully spread and exploited, requiring the likewise setting up of epistemological aspects, and the Emergy Society should have a fundamental role in this operation. In my opinion, the involvement of communities or scholars not directly working with indicators should help to avoid the risk of making the emergy research output too much self-referenced (as partially happened for example with complex systems science). Connected to this point, I think that an effort must be made in the field of Higher Education, trying to spread emergy through Conferences (see the memberships reported in my CV) and working groups active on that (EU has a couple of them). To summarize, I think that the Emergy Society should not be (only) the room where emergy people meet each other and discuss (very little of that is anyway happening), but the place where other people

arrive at, finding a lot of scientific stuff but also the opportunity for a cultural step further. The general points I would like to be addressed by the Emergy Society in the next future are therefore:

- Supporting the standardization and the refining of emergy accounting methodology, along with the continuous updating of database, by promoting data collection and dissemination as well as the sharing of the work in progress.
- Involving scholars from other disciplines in the emergy debate, deepening the study of its conceptual foundations for the potential cultural importance besides the more scientific aspects.
- Exploring the field of international Higher Education as a possible way for a new outcome of emergy (participation in International Congresses as well as in international working groups).
- Directly facing the criticisms (like for example HT, but also Mark Brown and Sergio Ulgiati already did in some occasions), both in the technicalities and in the foundational aspects, so stimulating a broader debate.

Short term (important priorities)

- Society website: now the appearance and the functionality are both of quite high level, so we can start using it in a more effective way. For example (as suggested me by a couple of other members), a newsletter delivered by e-mail could be very welcome.
- Try to discuss and plan a global action for School organization and location, such to rationalize the efforts, with the aim at covering in both space (at least North America, South America, Europe and Asia) and time (every year) with some initiative.
- Plan participation in international Conferences and plan organization of Workshops and thematic symposia.
- Support dissemination of emergy by dedicated Special Issues of international Journals.
- Activate some kind of fund-raising action, at least in terms of sponsorships for meetings, etc., but also by promoting participation and coordination of multidisciplinary projects (like for example those from H2020 EU calls).
- Start discussing on a possible move of the Biennial Conference from Gainesville to elsewhere (this suggestion emerged recently; personally, I think this should happen -if at all- not before 2020).