Candidate

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

---

Term Length: 2 years

Name: Dr. Richard Morris
Affiliation: Faculty of Agriculture & Life Sciences, Lincoln University, New Zealand

Phone: +64 20 40839877
E-mail: richard.morris@lincoln.ac.nz

Education and Expertise

- **1992:** Bachelor of Building Science, Victoria University of Wellington
- **1995:** Bachelor of Architecture (with Honours), University of Auckland
- **1996–2020:** Architectural practice across New Zealand, United Kingdom, Ireland, Poland, Russia, Australia, Cambodia, Thailand, Myanmar, and Afghanistan
- **2023:** PhD in Agricultural Science, Lincoln University
- **2023 - present:** Living Futures Accredited professional, International Living Future Institute
- **2024–present:** Postdoctoral Fellow, Lincoln University

Research and Teaching

I am a **practitioner-researcher**, integrating emergy analysis into my everyday design and engineering work. My research spans **Architecture 2.0**, the explicit spatial design of **Nature-based Solutions (NbS)**, and the emergy-based evaluation of such systems.

A critical outcome of my work is the ability of emergy analysis to facilitate **systems thinking**, particularly for lay audiences. This paradigm shift is essential in fostering the kind of holistic perspectives necessary to engage meaningfully with the concepts supporting a **Prosperous Way Down**.

Although the complexity of transformity calculations and emergy data analysis is extensive, I chiefly approach emergy as a **macroscopic organising framework**—a tool for understanding the interconnectedness of complex systems and their economic, social, and environmental dimensions. This perspective is particularly valuable in sustainability discourse, as emergy provides a scientifically rigorous, quantitative method for evaluating system resilience and long-term viability.

My research contributions include:

- **Geospatial analysis** – Maximisation of regulating ecosystem services through landscape configuration, including the development of the **ESMAX model**.
- **Ecosystem services science** – Integration of ecosystem service-based design into urban, rural, and peri-urban contexts.
- **Indigenous knowledge systems** – The convergence of **mātauranga Māori** and Western science to enhance environmental sustainability and resilience.

Vision for ISAER

Public Engagement and Accessibility

- Developing strategies to **communicate emergy principles to broader audiences**. One approach could be simplification—such as a **10-flows-per-diagram** rule—to enhance public comprehension.
- Revisiting and expanding on **Betty Odum's work** in emergy popularisation, making it even more accessible and engaging.

Professional Engagement and Knowledge Exchange

- Cultivating an **emergy culture** within research and practice. Encouraging professionals from diverse disciplines to share insights on how emergy informs their day-to-day decision-making beyond academic lecturing. And what is your emergy elevator pitch?
- Establishing an interactive platform—a **forum for emergy practitioners**—where members can share research, projects, and emergy-related discussions in real time.

Policy and Legislative Integration

- Investigating the potential for **emergy and transformity to serve as unifying metrics** in policy and decision-making at local, national, and global levels.
- Exploring how emergy analysis can **inform regulatory frameworks** for sustainability and resilience, particularly in climate adaptation strategies.
- Understand the implications / opportunities for the Emergy Society Database for Transformities (ESD) and the National Environmental Accounting Database (NEAD), as well as ISO certification.

Personal Vision for ISAER

The **dissemination of emergy theory** and the preservation of **Howard T. Odum's insights** must remain a core priority. The urgency of navigating toward a **Prosperous Way Down** should inform the Society's activities. Working closely with **indigenous communities**, I have come to appreciate the sacredness of knowledge. Emergy theory represents a fundamental framework for understanding the complexity of our world. As stewards of this knowledge, we have a responsibility to ensure its appropriate application and integration into research and practice.

Short-Term Priorities for Advancing ISAER's Mission (Next 2–4 Years)

1. **Social Outreach** – Expanding ISAER's **web presence and social media engagement**, including the development of an internal **forum platform** (must be simple - e.g., WhatsApp).
2. **Funding and Collaboration** – Seeking international, multidisciplinary research grants that bring together **highly skilled teams** from the diverse fields of ISAER membership to advance emergy research and application.

By joining the ISAER Executive Council, I aim to contribute my expertise in **spatial design, ecosystem services, and indigenous knowledge systems** to enhance emergy's reach, application, and impact in both academic and practical domains.