Energy Institute seeks PhD proposals to raise energy industry safety performance

The Energy Institute (EI) seeks PhD proposals into new research to help the energy industry improve its safety performance. Tuition and subsistence fees will be available for a three year full time study to commence 2020, using profits from the sale of the *Hearts and Minds* safety culture toolkit ([www.energyinst.org/heartsandminds](http://www.energyinst.org/heartsandminds)).

**Background**

The *Hearts and Minds* toolkit was developed by Shell, based on research funded between 1980 and 2000 (key texts referenced below). The Toolkit was published by the EI in 2004, and is used extensively in the energy industry and other industries to help improve safety culture, by engaging the workforce to help improve behaviour. Within the broad remit of safety culture, the Toolkit focuses on issues such as supervision skills, managing rule breaking, and risk assessment.

The EI is a non-profit organisation, and will use some of the profits from the sale of the *Hearts and Minds* Toolkit to fund new research to energy industry improve its safety performance. This new research may potentially turn into a new tool and form part of the Toolkit.

**Topic area**

The theme of the research should be on **improving health, safety, and environment (HSE) performance, with a focus on heuristics and biases.**

The impact of cognitive biases (including system 1 and 2 thinking) on decision making are well known. This PhD should progress this topic with a focus on the safety implications of biases, and on how biases can be overcome.

- Explore various solutions for overcoming or mitigating biases, e.g. raise awareness of biases, encourage inquiry and dissenting voices, promote collaboration (to see biases in others).
- Consider the applicability of ‘Nudge Theory’ to this topic, including in solutions.
- Consider risk normalisation.
- How to measure biases, and how to measurably make a difference.
- Can focus on frontline workforce or leadership, or both.

While the research is valuable for its own sake, the intention is that the research will form the basis for a practical tool to help industry improve safety performance.

**Proposal format**

Proposals should:

- Be set out clearly and succinctly, and be no more than 10 pages A4 in total.
- Identify the proposed university of study.
- Include a full CV of programme supervisor.
- Include a full CV of the PhD candidate (if available).
- Identify the level of engagement with industry (e.g. requiring just an external supervisor or also case study sites).
- Describe the topic of study, the problem it intends to address, the hypothesis, the method of research, the expected deliverables, and a bibliography of key texts the project will draw upon.
- Provide project cost, including tuition fees, student bursary, and disbursements.
- Provide start/completion dates.

**Selection criteria**

Proposals that garner the interest of the EI’s industry partners will be shortlisted, at which stage the
selection may be narrowed further through interview. Only one study can be funded, with an expected start date of second half of 2020.

**Submittal instructions**
Please submit your proposal, via email (PDF or MS Word document) to Stuart King e: sking@energyinst.org  tel: +44 (0)207 467 7163

**Closing date for submission is 29th June 2020**
Bibliography of key 'Hearts and Minds' texts

Doctoral theses


M. Lawrie, Developing measures of organisational safety culture and readiness to change in a multinational organisation., Thesis Manchester U. January 2004


Murphy, V. L. Learning from incidents and implementing action: Exploring expectations and contradictions in the energy sector. Thesis. The Open University, UK. 2020

Key published papers


Murphy, Victoria L.; Littlejohn, Allison; Rienties, Bart and King, Stuart (2019). Reflecting on incidents: Barriers and tactics. Petroleum Review


Littlejohn, Allison; Margaryan, Anoush; Vojt, Gabriele and Lukic, Dane (2017). Learning from Incidents Questionnaire (LFIQ): The validation of an instrument designed to measure the quality of learning from incidents in organisations. Safety Science, 99(A) pp. 80–93.


Margaryan, Anoush; Littlejohn, Allison and King, Stuart (2014). Learning from incidents. Petroleum Review, 68


Lukic, Dane; Littlejohn, Allison and Margaryan, Anoush (2012). Transferability of learning from incidents. In: Proceedings of the International Conference on Organisational Learning, Knowledge and Capabilities (OLKC), OLKC.


Lukic, Dane; Margaryan, Anoush and Littlejohn, Allison (2011). Key factors in effective approaches to learning from safety incidents in the workplace. In: Hazards XXII, Symposium series, IChemE.


**Plenary Addresses**


P.T.W. Hudson *7th International Conference on Health, Safety and Environment*. Calgary. 2004