P24 - Governance of user-inspired basic research through collaborative PhD projects in engineering

10. TECHNOLOGY and INNOVATION POLICY

Rögnvaldur Saemundsson^{1, 2, 3} (rjs@hi.is)

Maureen McKelvey² (maureen.mckelvey@handels.gu.se)

- ¹ Department of Industrial Engineering, University of Iceland, Reykjavik, Iceland.
- ² Unit of Innovation and Entrepreneurship, Department of Economy and Society, School of Business, Economics, and Law, Gothenburg University, Gothenburg, Sweden.
- ³ Department of Engineering and Innovation, Halmstad University, Halmstad, Sweden.

Track summary: A classic dilemna for R&D managers, which is highly relevant in today's turbulent times characterized by digitalization, artificial intelligence, and the sustainability crisis, is to find the balance between attending to the known needs of today and preparing for the unknown needs of tomorrow. From an organizational perspective, scholars have viewed these two conflicting demands of today and tomorrow, either as separate processes, e.g. as exploration and exploitation, or else as special attributes which can be combined at the individual and organizational levels through ambidexterity, dynamic capabilties, or boundary spanning.

In parallel similar distinctions have been made in the ongoing discussion among scholars about the role of science for industrial development. On the one hand, there is basic research, which is concerned with basic understanding that may, or may not, be useful in the long term, and, on the other hand, there is applied research, which is concerned with solving current problems and is therefore useful in the short term. These two separate processes have been combined into the notion of user-inspired basic research where the considerations of use are the main guidance in the quest for fundamental understanding.

This track is concerned with the governance of user-inspired basic research, with a focus on collaborative PhD projects in the engineering sciences. We invite both conceptual and empirical papers and especially welcome papers that concerned with how firms are responding to contemporary challenges, including, but not limited to, digitalization, artificial intelligence, and sustainability.