

## 7th International Conference on Human System Interaction (HSI'2014)

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## Special Session on Technology Assessment (TA) of Human-Robot Interaction (HRI)

Special Session Organizers (names and contact emails):

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## Technical Outline of the Session and Topics (100-200 words):

In recent years, robotic technology has been studied and developed more intensively while expanding the application fields. The potential of new capacities are also offering new challenges to society. They are covering the traditional working environments, the health systems, rescuing capacities, defense and also leisure. All of them are demonstrating evidences on societal impacts. Especially the work and health environments are those where the developments and challenges are more significant. However, many issues are not yet solved. The dimensions of complexity and risk are crucial when the demands for responsible innovation imply new research approaches. The function of work in the technology design is very important, but not sufficiently known. One of the examples is the human-robot interaction (HRI) systems. The machine function in the work context seems still under-estimated. Based on autonomous systems that change the work systems in different contexts, there is a need for new conceptual approaches that relate those frameworks: technology and work. Technology assessment of the different HRI levels at the different types of robot technologies can give information on the needs of technology developments and limitations. This session will discuss these issues under the frame of recent outcomes from social sciences and engineering research.