## Keynote Speech II

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Title: The Changing Landscape of Science and Technology in the 21<sup>st</sup> Century: Implications for Science-Technology-Innovation Indicators

Science and Technology has emerged as a key driver for creating economic wealth and addressing developmental challenges. This is leading to disruptive changes in the conduct of science, its engagement with industry, and society. Moving from Triple Helix to Quadruple Helix, loci of scientific activity getting more dispersed, the emergence of various forms of science-society interfaces, including social media engagements and scientific research becoming more international and networked are the new contours of the changing landscape of science and technology. This calls for critical introspection of extant STI indicators and demands the development of new indicators that can capture the changing landscape of science and technology and its engagement more effectively.

New tools and techniques of science measurement and mapping are providing opportunities for development of sophisticated STI indicators and mapping/visualization. These tools and techniques, however, are largely getting misused as their easy interfaces and automated executions are leading to their indiscriminate use, resulting in questionable outcomes. The study will draw attention to these various facets and how more promising pathways can be reached to capture the changing structure and dynamics of the STI ecosystem and the implications of the shifts in the research and policy context.