



**SIOPSA**



**IOP 4.0**

Ahead of our time

Meaningful & Connected Life  
Ethics, Human, Machine, Interface  
Reinventing the World at Work  
Reactive...Proactiveness

**THE 21<sup>st</sup> ANNUAL SIOPSA CONFERENCE**

22-24 JULY 2019 | CSIR International Convention Centre, Pretoria  
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**Building on from the Art of Collaboration, viewed through lenses of complexity, capability and social processes, we explore our voice and impact in the Fourth Industrial Revolution. The SIOPSA Executive Team is pleased to announce the theme for our 21st annual conference:**

## Embracing the Fourth Industrial Revolution- the IOP Way

The first three industrial revolutions saw initial growth driven through mechanisation (1st Rev.), followed by mass production made possible by electricity and production lines (2nd. Rev.) and ended with automation spurred on by technological advancements such as electronics and computers (3rd. Rev.) Now, machines are being made to be more human-like. Cyber-physical systems, networks and the internet of things are developing rapidly. The debate seems to be around the responsible use of artificial intelligence and these technological advancements have important implications for people. Thought leaders suggest that growth in the Fourth Industrial Revolution will not revolve around machines, but rather human creativity, collaboration and resilience and thus propels us to re-imagine our role as IOP's for human health and thriving societies.

For society, the 'good' of technology is often expressed in economic terms but as we move into the Fourth Industrial Revolution and the digital transformation of life, as we know it, the potential risks and benefits remains an open narrative. How should the humanitarian sectors and behavioural experts respond to the Fourth Industrial Revolution? How does the Fourth Industrial Revolution impact on the IOP's role, mode of working and competencies?

The Fourth Industrial Revolution, a term coined by Klaus Schwab, founder and executive chairperson of the World Economic Forum, describes a world where individuals move between digital domains and offline reality with the use of connected technology to enable and manage their lives (Miller, 2015).

The speed and impact with which this is happening, as well as shifts in power, wealth and knowledge, cannot be ignored and responsibility should be taken to ensure the benefits to all. Leading researchers argue that the Fourth Industrial Revolution will shape the future through its impacts on government and business. Steven Pinker posited that due to the technological advances, human prosperity seems to be on the increase. The end-user of technology does not always have control over either technology or the disruption that comes with the Fourth Industrial Revolution. However, we can predict the opportunities that come with the Fourth Industrial Revolution: 1) lower barriers between inventors and markets, 2) more active role for the artificial intelligence (AI), 3) integration of different technics and domains (fusion), 4) improved quality of our lives (robotics) and 5) the connected life (Internet) (Xu, David and Kim, 2018).

**"We are on the cusp of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before. We do not yet know just how it will unfold, but one thing is clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academic and civil society." (Schwab, 2015). Enriching human dignity must be at the center of solutions" (Aikman, 2017).**

Through collaborative research and practice within and outside the IOP profession, we invite strategic partnerships to contribute to the "4th IR-the IOP Way". We invite contributions to this dialogue from the field of cognitive, neuro and behavioural psychology, which touches on machine learning, deep learning, neural networks, talent, organizing, vulnerability, singularity, disruptive education and learning and disruption of the ethics dialogue, to name but a few. The conference theme for 2019 includes reaching both scientific and practical experiences of participants who collaborate daily with clients, academic institutions, organisations and other industry leaders.