

*Scientist, Professor and HSI Trailblazer to Discuss New Engineering
and Ergonomics Alliance*



Guy André Boy, Ph.D.

Organizational success in the 21st Century depends on the harmonious, sustainable and holistic integration of technology, organizations and people. Consequently, Human Systems Integration (HSI) has become a field of research and practice in its own right. At the intersection of human factors/ergonomics, systems engineering, and information technology, HSI examines the technical, societal, environmental, human, and economic aspects of organizational performance. Its goal is to identify new principles, methods and tools to promote human and organizational well-being, performance, safety, and security.

In his IEA2021 keynote, Guy André Boy, Ph.D. will speak about ***Human Systems Integration: The Right Mix of Technology, Organization and People*** in the context of a recent partnership between the IEA and INCOSE (International Council on Systems Engineering). This groundbreaking alliance seeks to apply a systemic perspective to bridge the gap between engineering and ergonomics. Dr. Boy's talk will unpack several challenges that the alliance will confront, including: design flexibility, user experience, system knowledge, autonomy of humans and machines, human-centered life-cycled systems, and engineering.

“This alliance seeks to find the right interface between disciplines, such as human factors and ergonomics, systems engineering, and information technology. It is bound to produce many

new ideas and perhaps some antagonistic interactions – but that is what change is all about!”
notes Dr. Boy.

Currently employed as FlexTech Chair Institute Professor at CentraleSupélec (Paris Saclay University) and ESTIA Institute of Technology, Dr. Boy is a Fellow of the Air and Space Academy and a senior member of the Association for Computing Machinery. He also serves as Chair of several committees and boards including: ESTIA Science Board, IEA Aerospace Technical Committee, and the Human-Systems Integration Working Group of the International Council on Systems Engineering. His vast experience includes eight years at the Florida Institute of Technology, where he served as University Professor and Dean of the School of Human-Centered Design, Innovation and Art, and eight years as a Senior Research Scientist at the Florida Institute for Human and Machine Cognition. He has also worked as a research scientist at NASA Kennedy Space Center and Ames Research Center, the European Institute of Cognitive Sciences and Engineering, and ONERA, the French Aerospace Lab. He is a proud ambassador of the new alliance between IEA and INCOSE.