

Foreword

The International Journal of Systematic Innovation (IJoSI) provides a platform to publish all systematic innovation related tools, knowledge, theories, and practices including technical aspects, strategic-managerial aspects, and computer-aided innovation areas. This includes but not limited to TRIZ (Theory of Inventive Problem Solving) and its extensions, non-TRIZ human originated systematic innovation, and nature-inspired systematic innovations in order to identify opportunities and solve problems systematically and innovatively.

The IJoSI publishes high-quality papers with academic rigor in theoretical and practical studies in the areas of systematic innovation. This issue consists of four papers that were gone through careful peer-review processes under the Journal's regular publication guidelines. The first paper introduces a two-loop recursive trimming process is introduced to maximize the extent of trimming. The proposed method is tested on a semiconductor equipment problem with significant improvements which include component count reduction, rebuild cost reduction, and operational energy savings. In the second paper, environmental requirements are taken into account with the life cycle assessment (LCA) and some TRIZ tools such as ideal final result (IFR) and the laws of technical systems evolution (TSE) for proposing a new method for designing more sustainable products. Third paper develops an open architecture process failure mode and effects analysis (PFMEA) Web-based system with TRIZ for automotive manufacturing firm in Malaysia, which fills the current gap of deficiencies in traditional FMEA, such as tedious data maintenance and updating. The fourth paper proposes a systematic method of course development for cultivating the innovative capability of students at university based on a knowledge chain model. In general, these four papers contribute in both ways, theoretically and practically.

Finally, we appreciate all the authors of the above four papers for their submissions to the IJoSI and reviewers for their hard works. In order to serve even better functions of the IJoSI, you are cordially invited to submit your original papers to IJoSI electronically through the website at <http://www.IJoSI.org>. Any feedbacks or questions, please send email to editor@systematic-innovation.org.

Prof. D. Daniel Sheu, Editor-in-chief

Prof. Hsin Rau, Executive Editor