Proposal of an invited session for the coming ICAMechS 2014

1) Session Title: Nonlinear Control System Design and Fault Detection

2) Organizer: Shin Wakitani*, Mingcong Deng**Tokyo University of Agriculture and Technology

3) Correspondence:

Shin Wakitani Department of Electrical and Electronics Engineering Tokyo University of Agriculture and Technology 2-24-16 Nakacho, Koganei-shi, Tokyo 184-8588, Japan Tel +81-42-388-7060 E-mail:wakitani@cc.tuat.ac.jp

4) Purpose and Abstract of the session:

In recent years, a lot of attention has been attracted to advanced controller design and fault detection schemes. These approaches are important to guarantee robustness of these systems. There are schemes which unify a fault detection and controller retuning schemes. The aim of this session is to present the new research ideas and results on advanced controls design and fault detection schemes which deal with control problems for complex controlled systems.