Preface

This volume contains the papers presented at ADECS2014: International Workshop Petri Nets for Adaptive Discrete-Event Control Systems held on June 23, 2014 in Tunis. There were 8 submissions. Each submission was reviewed by at least 2, and on the average 2.4, program committee members. The committee decided to accept 6 papers.

The new generation of Discrete-Event Control Systems (DECS) is addressing new important criteria as flexibility and agility. To reduce the development cost, these systems should be changed and adapted to their environment without any disturbance. Several academic and industrial research works have been made in recent years to develop reconfigurable adaptive systems. We distinguish in these works two reconfiguration policies: static and dynamic reconfigurations such that static reconfigurations are applied off-line to apply changes before any system cold start, whereas dynamic reconfigurations are dynamically applied at run-time. Two cases exist in the second policy: manual reconfigurations applied by users and automatic reconfigurations applied by intelligent agents.

Relevant topics include, but are not limited to, the following:

– Adaptive Discrete Event Control System,
– Static and Dynamic Reconfiguration,
– Petri Nets for Intelligent Systems,
– Petri Nets for Autonomous Systems,
– Reconfigurable Petri Nets-based Models,
– Validation and Execution,
– Optimal Verification of Adaptive Nets,
– Tests and Simulations of Adaptive Systems,
– Benchmarking, Adaptive Applications.

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June 15, 2014
Tunisia

Mohamed Khalgui
Zhiwu Li

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