# **CALL FOR PAPERS - SPECIAL SESSION**

# "Petri nets for control and optimization"

for CODIT 2023

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#### **Session Co-Chairs:**

Prof. Achraf Jabeur Telmoudi, University of Tunis, Tunisia - (email: achraf.telmoudi@ieee.org)

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### Session description:

Important challenges for researchers and engineers are related to planning, modeling, analysis, verification, control, scheduling, and implementation of systems. Petri nets introduced by Carl Petri as a mathematical tool of describing activities, resources, and system states are extensively used for discrete (concurrent) systems. They have a graphical representation being possible to see the token game facilitating the understanding of system behavior. In order to adapt these models to specific domain applications, a variety of extensions of Petri nets have been defined (e.g., timed, colored, object oriented, continuous, labeled,...).

Considering the performance of the Petri Net in terms of modeling synchronizations, parallels, conflicts and sharing of resources, this tool is an important research way for the modeling and evaluation of systems. This special issue focuses on the usage of Petri Nets tool for the Modeling, Optimization, Evaluation, Control and Analysis.

## The topics of interest include, but are not limited to:

- Diagnosis methods based on Petri nets,
- Petri nets for control,
- System design decisions using Petri nets,
- Petri nets for analysis,
- Monitoring of systems using Petri nets,
- Reliable computation using Petri nets,
- Reliability and maintenance engineering,
- Security issues with Petri nets,
- Applications and case studies
- ..

#### **SUBMISSION**

Papers must be submitted electronically for peer review through PaperCept by January 27, 2023: <a href="http://controls.papercept.net/conferences/scripts/start.pl">http://controls.papercept.net/conferences/scripts/start.pl</a>. In PaperCept, click on the CoDIT 2023 link "Submit a Contribution to CoDIT 2023" and follow the steps.

**IMPORTANT:** All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

#### **DEADLINES**

January 27, 2023: deadline for paper submission April 15, 2023: notification of acceptance/reject May 20, 2023: deadline for final paper and registration