

## CALL FOR BOOK CHAPTER CONTRIBUTIONS

**Book Title:** Power Factory Applications for Power System Analysis

**Publisher:** Springer

Power system modeling and simulation have gained a renewed interest in recent years due to the dramatic changes experienced in structure and operation of modern systems. With increasing complexity, there is a need to understand the interaction and impacts associated to the addition of new components. This task can be accomplished nowadays thanks to the emergence of powerful computational resources and analysis methods. Among these resources is DIgSILENT PowerFactory, an advanced power system simulation software package, which is being extensively used for academic and research purposes in recent years. This book is intended to provide a variety of reference applications of this package for different modeling and simulation purposes in power engineering field. Considering the diversity of the issues to be covered, we would like to kindly encourage those interested expert users and developers to submit proposals concerning, but not limited, to the following topics:

- Design of overhead line and cable parameter calculation.
- Optimal power flow calculation for transmission and distribution networks with emphasis on application of modern optimization algorithms.
- Reliability and contingency analysis.
- Fault analysis and implementation of protection functions.
- Assessment and enhancement of power system stability: Voltage stability, rotor angle stability, and frequency stability.
- Network reduction and equivalencing.
- Parameter identification of power system components.
- Power quality: Harmonic and flicker analysis.
- Modeling of new components by using DSL language: renewable energy generating systems, multi-terminal HVDCs, FACTS devices, hierarchical and wide-area control schemes.
- Advanced applications of DPL language: Automatic scenario creation and management of results.
- Interfacing DIgSILENT PowerFactory with other packages, e.g. Matlab.
- New test networks for analysis of large scale systems and microgrids.

## Abstract submission

Prospective authors are invited to submit abstracts not exceeding one A4-sized page (which should include the title of the chapter, keywords, authors' names and affiliations) as word or .pdf document to Dr. Francisco M. Gonzalez-Longatt ([fglongatt@fglongatt.org](mailto:fglongatt@fglongatt.org)) and Dr. Jose L. Rueda ([jose.rueda@uni-duisburg-essen.de](mailto:jose.rueda@uni-duisburg-essen.de)). An author kit will be sent to the authors of the accepted proposals for the preparation of final manuscripts. Please contact us if you have any inquiry.

## Important dates

**Deadline for submission of abstracts: 14 December 2013**

**Acceptance/rejection notification of abstracts: 10 January 2014**

**Deadline for full chapter submissions: 15 March 2014**

## Editors

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