

# Andrzej Szromba

Academic degrees: doctor habilitatus in Electrical Engineering

Position: Professor of CUT

Engineering - technical field

Discipline: Automation, electronics and electrical engineering

## Academic qualifications:

Member of the CUT Senate, member of the Senate Education Quality Commission, member of the Scientific Council of WIEiK PK, member of the College of WIEiK PK

## Membership in professional and academic boards :

Association of Polish Electrical Engineers (SEP)

## Academic merits :

Monograph: Active power compensator controlled by a conductance signal, CUT Publishing House 2016 and 38 other scientific publications in journals and conferences.

## Professional qualifications/language skills

English

## Research field :

Power quality and power electronic converters to improve the power quality.

## Address

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## Useful links :

List of publications: <http://suw.biblos.pk.edu.pl/userHomepage&uid=608&rel=BPP-author>

## PhD Themes

Power electronic nonactive current compensator

Power electronic active filter to improve the quality of the load voltage

Power electronic series-parallel active filter to improve the power quality

The PhD research area includes the analysis of the operation of power electronic compensators (active filters) used to improve power quality (or waveforms of the supply current and/or voltage). The research is focused on the observation of the load power, which can be characterized by an appropriately developed signal of its equivalent conductance. On this basis, it is possible to build a power electronic converter, improving selected parameters of the waveforms supplying electrical devices. In particular, this method is considered in the context of the operation of power quality

improvement devices: Shunt Active Power Filter (SAPF), Unified Power Quality Conditioner (UPQC) and Dynamic Voltage Restorer (DVR).