Electric Machines: UPT selected contributions (1970-2020)

Scope:

To present, synthetically by a group of coauthors, selected UPT contributions to electric machines topologies, modeling, design, testing and control that have reached/touched national and international audiences and produced in the last 50 years.

Motivation

Electric energy, a paramount agent of properties is "obtained" mostly through electric generators and used to do mechanical work in industry (60%).

The environmental constrain have lately lead to the extension of electric energy use via more renewable primary sources (wind, wave, hydro etc.) to ever more applications from electric transport (road vehicles, rail road vehicles, marine vessel, air craft) to home/residential appliance and in to gadgets (the cellular phone, sports 3 electric micromotors).

The recent formidable progress in power electronics and digital control, in new better materials, design, testing and fabrication, methodologies are contributing to a new revival of electrical machines. The present monography, authored by our faculty, describes some selected representative contributions to electric machines technology that have touched national and international audience in Academia and industry, as a small token of appreciation of our Alma Mater: University Politehnica Timisoara, at its 100th anniversary.

Editor

Acad. Ion Boldea

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