

## MULTI-MODEL SYSTEM WITH NONLINEAR COMPENSATOR BLOCKS

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*Structurile de reglare multimodel sunt o soluție viabilă pentru conducerea unor sisteme cu neliniarități importante sau cu regimuri de funcționare multiple. Una din problemele specifice structurii este determinarea numărului de modele. Cu cât numărul de modele este mai mare, cu atât performanțele sunt mai bune, dar și complexitatea structurii crește. Lucrarea propune o metodologie originală pentru reducerea numărului de modele fără reducerea performanțelor sistemului.*

*Soluția are o valoare practică fiind ușor de implementat pe structurile hardware bazate pe automate programabile și calculatoare de proces. Rezultatele experimentale probează performanțele structurii.*

*The multi-model control structures represent real solutions to control the systems with important nonlinearities or different functioning regimes. One of structure's specific problems is determination of models number. An increased number determine superior performance and very complex structure. The paper proposes a original methodology for reducing the model number without performance decreasing.*

*This solution has practical importance being facile to be implemented on PLC and process computers. Experimental results prove structure's performances.*

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