
Synthesis of devices with the required frequency properties

O.P. Petrosyan¹, A.K. Gorbunov¹, A.B. Kozhevnikov¹,
E.A. Gorbunov², A.O. Petrosyan¹

¹ Kaluga Branch of Bauman Moscow State Technical University, Kaluga, 248000, Russia

² KADVI, Public Corporation, Kaluga, 248018, Russia

The article describes the developed methods and algorithms for constructing active RC-filter with the required frequency properties with minimal constructive complexity. In the process of solving the tasks we used algorithmic procedures of optimal spectral approximation of the numerical results.

Keywords: *actuators, the amplitude frequency characteristics, phase frequency characteristics, algorithm for calculating the active filters.*

REFERENCES

- [1] Kozhevnikov A.B., Petrosyan O.P. *Ezheksiya i sushka materialov v rezhime pnevmotransporta* [Ejection and drying of materials in pneumatic transport mode]. Moscow, BMSTU Publ., 2010, 132 p.
- [2] Kozhevnikov A.B., Petrosyan O.P. Effektivnaya identifikatsiya tekhnologicheskikh ob"ektov vodopodgotovki [Effective identification of water treatment technological objects]. *Materialy IV Mezhdunarodnoi nauchno-prakticheskoi konferentsii "Tekhnologii ochistki vody"* [Proc. of the IV Int. sci.-pract. conf. "Water Treatment Technologies"]. Kaluga, 2008, pp. 140–143.
- [3] Kozhevnikov A.B., Petrosyan O.P. *Programma spektral'noi optimizatsii chislennykh rezul'tatov* [Spectral optimization program of numerical results]. Cert. gov. reg. No. 2010615194, Rospatent, 2010, 70 p.

Petrosyan O.P. (b. 1950) graduated from Lomonosov Moscow State University in 1978. Ph.D., Assoc. Professor of the Physics Department at Kaluga Branch of Bauman Moscow State Technical University. Scientific interests include automation of technological processes. e-mail: petrosyan-kravt@mail.ru

Gorbunov A.K. (b. 1947) graduated from Moscow Institute of Physics and Technology in 1971. Dr. Sci. (Phys.&Math.), Professor of the Physics Department at Kaluga Branch of Bauman Moscow State Technical University. Scientific interests include automation of technological processes. e-mail: gorbunov@kadri.ru

Kozhevnikov A.B. (b. 1942) graduated from Lomonosov Moscow State University in 1970. Ph.D., Assoc. Professor of the Physics Department at Kaluga Branch of Bauman Moscow State Technical University. Scientific interests include automation of technological processes. e-mail: kravt@kaluga.ru

Gorbunov E.A. (b. 1974) graduated from Bauman Moscow State Technical University in 1998. Ph.D., deputy head of the Economics Department at the Public Corporation "KADVI". Scientific interests include automation of technological processes. e-mail: gorbunov@kadri.ru

Petrosyan A.O. (b. 1993) is a student at the Industrial Ecology and Chemistry Department of Kaluga Branch of Bauman Moscow State Technical University. Scientific interests include automation of technological processes. e-mail: petrosyan-kravt@mail.ru
