

LISTA DE LUCRĂRI

Teză de doctorat

Contribuții privind optimizarea structurii și regimurilor de funcționare ale sistemelor de repartiție și distribuție a energiei electrice.

Cărți, manual și monografii

1. Georgescu Gh., **Neagu B.**, *Proiectarea și exploatarea asistată de calculator a sistemelor publice de repartitie și distribuție a energiei electrice*, Vol. 1, partea I^a, Ed. Fundației Academice AXIS, Iași, 2010, (452 pag), ISBN 978-973-7742-87-2.
2. Georgescu Gh., **Neagu B.**, Ciobanu R. *Proiectarea și exploatarea asistată de calculator a sistemelor publice de repartitie și distribuție a energiei electrice*, Vol. 1, partea a-II^a, Ed. Pim, Iași, 2011, (586 pag), ISBN 978-606-13-0148-5.
3. Georgescu Gh., **Neagu B.**, *Proiectarea și exploatarea asistată de calculator a sistemelor publice de repartitie și distribuție a energiei electrice*, Vol. 2, Editura Pim, Iași, 2012, (566 pag), ISBN 978-606-13-088-6-6.
4. **Neagu B.**, *Transportul și distribuția energiei electrice. Lucrări de laborator*, Publicare online, Iași, 2014, www.ee.tuiasi.ro/~bogdan.neagu (580 pag).
5. Georgescu Gh., **Neagu B.**, *Analiza regimurilor permanente de funcționare ale rețelelor electrice din sistemul electroenergetic*, Vol. 1, Ed. PIM, Iași, 2014, (568 pag), ISBN 978-606-13-2127-8.
6. Georgescu Gh., **Neagu B.**, *Analiza regimurilor permanente de funcționare ale rețelelor electrice din sistemul electroenergetic*, Vol. 2, Ed. PIM, Iași, 2014, (596 pag), ISBN 978-606-13-2128-5.

Buletinele universităților și reviste de specialitate

1. Georgescu Gh., Varvara V., **Neagu B.**, *Possibilities of Survey and Shape the Consumption from the Electric Energy Distribution Systems*, Buletinul Institutului Politehnic din Iași, Tomul LIV (LVIII), F. 3, pp. 139-146, 2008(B).
2. Georgescu Gh., Varvara V., **Neagu B.**, *The Impact of the Electric Energy Transmission Lines on the Telecommucation Lines*, Buletinul Institutului Politehnic din Iași, Tomul LIV (LVIII), F. 1, pp. 147-154, 2008(B).
3. Georgescu Gh., Varvara V., **Neagu B.**, *The Estimation of the Voltage Level in Public Electric Energy Repartition Networks Using Artificial Neuronal Networks*, Buletinul Institutului Politehnic din Iași, Tomul LV (LIX), F. 3, pp. 111-122, 2009(BDI).
4. Georgescu Gh., Varvara V., **Neagu B.**, *The Estimation and Time Evolution of the Distortion State in Public Electric Energy Repartition and Distribution Systems*, Buletinul Institutului Politehnic din Iași, Tomul LV (LIX), F. 4, pp. 99-111, 2009(BDI).
5. Georgescu Gh., **Neagu B.**, *Aspects Regarding the Improvment of Supply Quality in Public Electricity Distribution Systems*, Buletinul Institutului Politehnic din Iași, Tomul LVI (LX), F. 3, pp. 83-94, 2010(BDI).
6. **Neagu B.**, Georgescu Gh., *Load and Energy Forecast on a Proximate, Medium and Long Horizon in Public Electricity Repartition and Distribution Systems*, Buletinul Institutului Politehnic din Iași, Tomul LVI (LX), Fasc. 3, 2010, pp. 71-82(BDI).
7. **Neagu B.**, Georgescu Gh., Gușă M.D., *Load Curves Characteristics of Consumers Supplied from Electricity Repartition and Distribution Public Systems*, Buletinul Institutului Politehnic din Iași, Tomul LVII (LXI), F. 1, 2011, pp. 141-157(BDI).

8. Georgescu Gh., **Neagu B.**, *Opportunities Evaluation in Operation of the Technical Losses Under Load from Low Voltage Networks in Symmetric State*, Buletinul Institutului Politehnic din Iași, Tomul LVII (LXI), F. 5, pp. 159-174, 2011(BDI).
9. **Neagu B.**, Georgescu Gh., *The Load Curves Profiling and their Parameters of Different Consumer Categories Supplied from Electric Energy Repartition and Distribution Systems*, Bul.Instit. Polit. Iași, Tomul LVII, F. 4, 2011, pp. 167-178(BDI).
10. Georgescu Gh., **Neagu B.**, *Some Aspects Concerning the Mathematical Models and Software Application for Evaluation of Technical Losses in Operation of Medium Voltage Public Distribution Networks*, Buletinul Institutului Politehnic din Iași, Tomul LVII (LXI), F. 4, pp.129-144, 2011(BDI).
11. Georgescu Gh., **Neagu B.**, *Power Quality and Reactive Power Sources Management from Distribution Dispatch Point of View at Distribution Operator Level*, Buletinul Institutului Politehnic din Iași, Tomul LVIII (LXII), F. 1, pp. 125-138, 2012(BDI).
12. Georgescu Gh., **Neagu B.**, *Aspects Regarding the Power Quality in Electric Energy Repartition and Distribution Systems*, Buletinul Institutului Politehnic din Iași, Tomul LVIII (LXII), Fasc. 3, pp. 265-270, 2012(BDI).
13. **Neagu B.**, Georgescu Gh., Gușă M.D., *Distorting State Analisys in Electric Energy Distribution Networks*, Buletinul Institutului Politehnic din Iași, Tomul LVIII (LXII), Fasc. 4, pp. 97-108, 2012(BDI).
14. **Neagu B.**, Georgescu Gh., *Optimization possibilities for radial electric energy distribution network routes*, Buletinul Institutului Politehnic din Iași, Tomul LIX (LXIII), Fasc. 1, pp.133-142, 2013(BDI).
15. Georgescu Gh., **Neagu B.**, Pavelescu E., *The Economic Usability Factor Analysis of Power Transformer from Electric Energy Repartition Systems*, Buletinul Institutului Politehnic din Iași, Tomul LIX (LXIII), Fasc. 1, pp. 119-132, 2013(BDI).
16. Georgescu Gh., **Neagu B.**, Pavelescu E., *The Economic Usability Factor Analysis of 110 kV Lines from Electric Energy Repartition Systems*, Buletinul Institutului Politehnic din Iași, Tomul LIX (LXIII), Fasc. 2, pp.75-92, 2013(BDI).
17. **Neagu B.**, Georgescu Gh., Ivanov O., *A New Aproach for Electric Energy Distribution Network Routes Optimization*, Buletinul Institutului Politehnic din Iași, Tomul LIX (LXIII), Fasc. 3, pp. 129-142, 2013. (BDI)
18. **Neagu B.C.**, Georgescu Gh., Gușă M.D., *Aspecte privind o serie de modele matematice și programe de calcul destinate evaluării în exploatare a pierderilor tehnice în elementele rețelelor publice de distribuție în regimurile simetrice*, Revista Tehnologiile Energiei. Producerea, transportul și distribuția energiei electrice, nr. 7, pp. 7-17, 2013 (B).
19. Scarlatache Fl., Grigoraș Gh., **Neagu B.C.**, *Impactul generării distribuite asupra reglajului de tensiune în rețelele electrice de distribuție*, Revista Energetica, nr. 3, vol. 62, pp. 105-110, 2014, ISSN 1453-2360 (B).
20. **Neagu B.C.**, Georgescu Gh., *Possibilities of Load Curves Modelling in Electric Energy Distribution Networks*, Buletinul Institutului Politehnic din Iași, Tomul LX (LXIV), Fasc. 1, pp. 89-102, 2014. (BDI)
21. Georgescu Gh., **Neagu B.**, *Monitoring Possibilities and Stedy-State Analisys of Electric Energy Repartition Networks* Buletinul Institutului Politehnic din Iași, Tomul LX (LXIV), Fasc. 2-3, pp., 2014. (BDI).
22. **Neagu B.C.**, Grigoraș Gh., Scarlatache Fl., *Managementul sarcinii în contextul integrării contorizării inteligente în rețelele electrice de distribuție*, Revista Energetica, nr. 4, vol. 71, pp. 82-88, 2015, ISSN 1453-2360 (B).

Conferințe internaționale din țară și din străinătate

23. Georgescu Gh., Varvara V., **Neagu B.**, , *The Outline of the Energy Consumers from the Distribution Electric Systems*, The Second International Symposium on Electrical and Electronics Engineering, Galați, Romania, pp. 150-154, 2008 (B).
24. **Neagu B.**, Georgescu Gh., *Remarks on Power Flow Optimization in Public Electricity Repartition Systems*, The 4th edition of the Interdisciplinarity in Engineering International Conference – Inter-Eng 2009, Târgu Mureș, 2009(BDI).
25. **Neagu B.**, Georgescu Gh., *Some Aspects Regarding the Distortion State in Public Power Distribution Systems*, The 4th edition of Interdisciplinarity in Engineering International Conference – Inter-Eng 2009, Târgu Mureș, 2009(BDI).
26. **Neagu B.**, Georgescu Gh., *Reduction of Power Losses in Public Distribution Systems for Increase the Energetic Efficiency and the Quality of Delivered Energy*, The 7th National Conference on Industrial Energetics with International Participation – CNEI 2009, Bacău, pp. 197-202, 2009(B).
27. Georgescu Gh., **Neagu B.**, *The time Behaviour and Compensation Methods of the Distortion State in Electric Energy Repartition and Distribution Public Networks*, The 7th National Conference on Industrial Energetics with International Participation – CNEI 2009, Bacău, pp. 163-168, 2009 (B).
28. Georgescu Gh., **Neagu B.**, *Power Losses in Public Repartition and Distribution Networks in Distortion State*, The 7th National Conference on Industrial Energetics with International Participation – CNEI 2009, Bacău, pp. 169-176, 2009(B).
29. Georgescu Gh., **Neagu B.**, *The Estimation and Time Evolution of the Distortion State in Public Electric Energy Repartition and Distribution Systems*, The 7th International Conference on Electromechanical and Power Systems, Iasi, pp. 55-58, 2009(B).
30. Georgescu Gh., **Neagu B.**, *Optimal Power Flow in Public Electric Energy Repartition and Distribution Systems*, The 7th International Conference on Electromechanical and Power Systems, Iasi, pp. 59-62, 2009(B).
31. Georgescu Gh., **Neagu B.**, *Possibilities of Surveying Electric Load and Daily Load Curves for the Profiling of Consumption in Public Energy Repartition and Distribution Systems*, The 3rd International Symposium on Electrical Engineering and Energy Converters – ELS2009, Suceava, pp. 245-250, 2009(BDI).
32. Georgescu Gh., **Neagu B.**, *The Pollution with Harmonics in Public Electric Energy Repartition and Distribution Systems*, The 3rd International Symposium on Electrical Engineering and Energy Converters – ELS2009, Suceava, pp. 245-250, 2009(BDI).
33. Varvara V., Georgescu Gh., **Neagu B.**, *Analysis of the Distortion State in Public Electrical Power Supply Systems*, The International Conference on Engineering of Modern Electric Systems - EMES'09, Analele Universității din Oradea, Fascicula de energetică, vol.15, pp. 148-153, 2009 (B+).
34. **Neagu B.**, Georgescu Gh., Olariu M., *Software Package for Elaboration, Storage and Inversion of the Nodal Admittance Matrix*, The 6th International Conference on Electrical and Power Engineering, Iași, pp. 139-142, 2010(B).
35. Georgescu Gh., **Neagu B.**, Socotar D., *The Evaluation of Additional Active Power Loss in Electrical Distribution Networks Working in Distorting Regimes*, The 6th International Conference on Electrical and Power Engineering – EPE2010, Iași, pp. 143-146, 2010(B+).
36. **Neagu B.**, Georgescu Gh., *Issues of Load Forecast and Consumption Proffiling Process in Electricity Repartition and Distribution Systems*, The 4th International Symposium on Electrical Engineering and Energy Converters – ELS 2011, Suceava, pp. 215-220(BDI).

37. **Neagu B.**, Georgescu Gh., Gușă M.D., *Mathematical Methods for Technical Active Power and Energy Loss Evaluation in Operation Using Typical Load Profiles of the Consumers from Repartition Systems*, The 4th International Conference on Modern Power Systems – MPS 2011, Cluj, pp. 139-142, 2011(BDI).
38. **Neagu B.**, Georgescu Gh., Gușă M.D., *The Profiling of Load Curves and Main Parameters for Different Tertiary Consumer Categories Supplied Through Electricity Repartition and Distribution Systems*, The 8th International Conference on Industrial Power Engineering – CIEI 2011, Bacău, pp. 82-87, 2011(B).
39. **Neagu B.**, Georgescu Gh., Elges A., *Monitoring System of Electric Energy Consumption to Users*, The 7th International Conference on Electrical and Power Engineering – EPE 2012, Iași., pp.265-270 (*ISI Web of Knowledge*).
40. **Neagu B.**, Georgescu Gh., Gușă M.D., *Issues Regarding a Series of Mathematical Models and Software Application for Technical Losses Evaluation in Operation of Public Distribution Networks Elements in Symmetric State*, FOREN 2012, Neptun - Olimp, România, pp.1-10, 2012(B).
41. **Neagu B.**, Georgescu Gh., *The Optimization of Reactive Power Sources Placement in Public Repartition and Distribution Systems for Power Quality Improvement*, 12th International Conference on Optimization of Electrical and Electronic Equipment - OPTIM 2012, Brasov, Romania, pp. 200-207, 2012 (*IEEE Explore*).
42. **Neagu B.**, Georgescu Gh., *A Comparative Study Regarding the Efficiency of Technical Losses Evaluation Methods in Low Voltage Electricity Networks*, The 4th International Symposium on Electrical Engineering and Energy Converters – WESC 2012, Suceava, Buletinul AGIR nr. 3, pp. 603-610, 2012 (BDI).
43. Georgescu Gh., **Neagu B.**, Pintea A., *Aspects Regarding the Power and Energy Losses Evaluation from Public Electricity Repartition Systems*, The 7th International Conference on Electrical and Power Engineering, Iași., pp. 253 - 258, 2012 (*ISI Web of Knowledge*).
44. Georgescu Gh., **Neagu B.**, Astărăstoiae D., *Reactive Power Sources Management in Public Repartition and Distribution Systems with the Purpose of Power Quality Improvement*, The 7th International Conference on Electrical and Power Engineering, Iași., pp. 259 - 264, 2012 (*ISI Web of Knowledge*).
45. **Neagu B.C.**, Georgescu Gh., *A New Tool for Load Monitoring of Consumers Supplied from Public Distribution Networks*, The 5th International Conference on Modern Power Systems – MPS 2013, Cluj, pp. 318-324, 2013(BDI).
46. Ivanov Ovidiu, Gavrilas Mihai, **Neagu B.C.**, *Intelligent Monitoring and Control in Transmission and Distribution Networks*, Proceedings of the 14th International Conference on Optimization of Electrical and Electronic Equipment (OPTIM 2014), Brasov, Romania, May 22-24, 2014, pp. 195-191, 2014 (*ISI Web of Knowledge*).
47. Vicol B., Gavrilas M., Ivanov O., **Neagu B.C.**, Grigoras Gh., *Synchrophasor measurement method for overhead line parameters estimation in MV distribution networks*, Proceedings of the 16th International Conference on Harmonics and Quality of Power (ICHQP), București, Romania, May 25-28, pp. 862-865, 2014. (*ISI Web of Knowledge*).
48. Kriukov A., Grigoras Gh., Gavrilas M., Scarlatache F., **Neagu B.C.**, *An analyze of slow voltage variations from the electric distribution systems with a clustering based approach*, Proceedings of the 16th International Conference on Harmonics and Quality of Power (ICHQP), București, Romania, May 25-28, pp. 689-693, 2014. (*ISI Web of Knowledge*).
49. **Neagu B.C.**, Georgescu Gh., *Aspects Regarding the Monitoring Possibilities and Steady-State Analysis of Electric Energy Repartition Networks*, The 8th International Conference on Electrical and Power Engineering – EPE 2014, Iași, pp. 1000-1003 (*ISI Web of Knowledge*).

50. Neagu B.C., Georgescu Gh., *Wind Farm Cable Route Optimization Using a Simple Approach*, The 8th International Conference on Electrical and Power Engineering – EPE 2014, Iași., pp. 1004-1009 (*ISI Web of Knowledge*).

Granturi/Contracte de cercetare

1. Contract cercetare **nr. 1265P/2010**, *Analiza structurii și a posibilităților de reconfigurare în regimurile post avarie a rețelelor electrice, a calității energiei electrice livrate consumatorilor, prognoza sarcinilor, dimensionarea optimă din punct de vedere tehnico-economic a elementelor componente, precum și calculul regimurilor simetrice, a regimurilor de avarie (scurtcircuite) și a regimurilor deformante care apar în sistemele de repartiție și distribuție a energiei electrice.*
Colectivul de cercetare: Directori proiect Gheorghe Georgescu și Mihai Gavrilaș. Membri: **Bogdan Neagu**, Ovidiu Ivanov, Gheorghe Grigoraș.
2. Contract cercetare **nr. 3564P / 01.11.2011**; beneficiar: E.ON Moldova Distributie S.A, Iasi: *Studiu de determinare a consumului propriu tehnologic in retelele de joasa tensiune aferente jud. Bacau*, aparținand E.ON Moldova Distributie S.A.
Colectivul de cercetare: Director proiect Mihai Gavrilaș. Membri: **Bogdan Neagu**, Ovidiu Ivanov, Gheorghe Grigoraș.
3. Contract de cercetare nr. **7-042/09.05.2011 (MAGBOND)** - *Tehnologii inovative de asamblare – dezasamblare a componentelor nemetalice industriale, bazate pe adezivi electro - activi nano-structurați*, beneficiar Universitatea Tehnică „Gheorghe Asachi” din Iași, durata contractului 2011-2012.
Colectivul de cercetare: Director contract: Radu Damian. Membri: **Bogdan Neagu**, Cristina Brătescu, Marius Olariu s.a.
4. Contract de cercetare nr. **7-038/13.05.2011 (CARBIOSENSE)** Desvoltarea de biosenzori prin intermediul unei tehnologii inovative de electro - acoperire a structurilor carbonice cu polimeri activi, beneficiar Universitatea Tehnică „Gheorghe Asachi” din Iași, durata contractului 2011-2013.
Colectivul de cercetare: Director contract: Cristina Schreiner. Membri: **Bogdan Neagu**, Cristina Brătescu, Marius Olariu s.a.
5. Contract de cercetare nr. **4-002/2012 (CheTherDel)** - erapie hipertermo-chemoterapica combinata pentru controlul tumorilor hepatice, bazata pe activarea cu microunde a unor nanostructuri functionalizate imobilizate subendotelial (Chemo-Hypertermal Delivery - Combined chemo-hypertermal control of hepatic tumors, based on microwave activated subendothelial - targeted nano-assemblies), beneficiar Universitatea Tehnică „Gheorghe Asachi” din Iași, durata contractului 2012-2014 (32 luni).
Colectivul de cercetare: Responsabil TUIasi: Prof. dr. ing. Romeo Cristian Ciobanu. Director de proiect: Dr. Mihail-Gabriel Dimofte, Membri: **Bogdan Neagu**, Cristina Brătescu, Marius Olariu s.a.