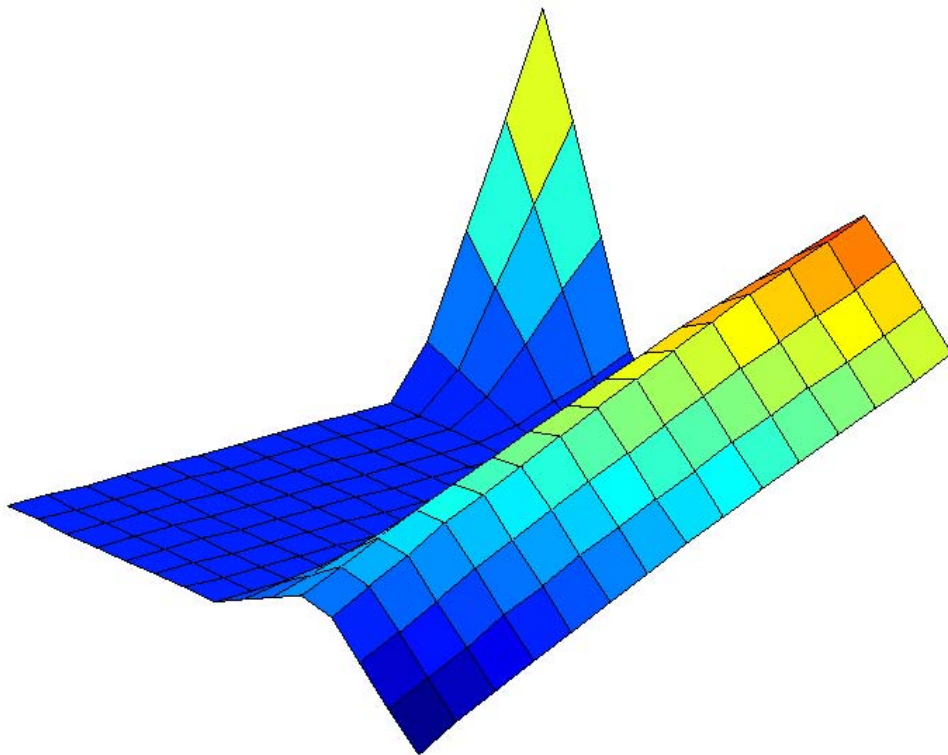




*Leonardo Electronic Journal
of Practices and Technologies*

Issue 15

*July-December
2009*



ISSN 1583-1078



AcademicDirect
Publishing House

Leonardo Electronic Journal
of Practices and Technologies

ISSN 1583-1078

Issue 15

July-December

2009

Leonardo Electronic Journal of Practices and Technologies

<http://lejpt.academicdirect.org>

Edited by
AcademicDirect Publishing House

Tel.: 0766-239997

Chief redactor
Lorentz JÄNTSCHI

E-mail: lori@lejpt.academicdirect.org

Editorial board

- Mircea SAVATTI, Prof. Ph. D. Eng. (agriculture),
A.S.V.M.U. Cluj-Napoca, RO
- Gheorghe LAZEA, Prof. Ph. D. Eng. (automatics),
T. Univ., Cluj-Napoca, RO
- Elena Maria PICĂ, Prof. Ph. D. Eng. (chemistry),
T. Univ., Cluj-Napoca, RO
- Elena ZAHARIEVA-STOJANOVA, Asist. Prof. Ph. D. Eng. (computer sciences),
T. Univ., Gabrovo, BG
- Ivan SIMEONOV SIMEONOV, Asist. Prof. Ph. D. Eng., (computer systems),
T. Univ., Gabrovo, BG
- Rosen STEFANOV IVANOV, Asist. Prof. Ph. D. Eng., (computer technologies),
T. Univ., Gabrovo, BG
- Tarek BOUKTIR, Prof. Ph. D. Eng., (engineering),
C.U. d'Oum El Bouaghi, DZ
- Tiberiu RUSU, Prof. Ph. D. Eng., (environment),
T. Univ., Cluj-Napoca, RO
- Radu Emil SESTRĂȘ, Prof. Ph. D. Eng., (horticulture),
A. S. V. M. Univ., Cluj-Napoca, RO
- Lorentz JÄNTSCHI, Assoc. Prof. Ph. D. Sci. Eng., (informatics),
T. Univ., Cluj-Napoca, RO
- Ștefan ȚIGAN, Prof. Ph. D. Sci., (mathematics),
"I. H." M. P. Univ. Cluj-Napoca, RO
- Anca BUTNARU, Asist. Prof. Ph. D. Med., (medicine),
"I. H." M. P. Univ. Cluj-Napoca, RO
- Eugen CULEA, Prof. Ph. D. Sci., (physics),
T. Univ., Cluj-Napoca, RO
- Amarendra Narayan MISRA, Prof. Ph. D. Sci., (biotechnology),
F.M.U. Orissa, IN

Contents

- 1. Neuro-Fuzzy DC Motor Speed Control Using Particle Swarm Optimization**, by Boumediene ALLAOUA, Abdellah LAOUFI, Brahim GASBAOUI, and Abdessalam ABDERRAHMANIp. 1-18
- 2. Semi-Empiric Algorithm for Assessment of the Vehicle Mobility**, by Ticusor CIOBOTARUp. 19-30
- 3. Optimal Design of TCR/FC in Electric Arc Furnaces for Power Quality Improvement in Power Systems**, by Rahmat Allah HOOSHMAND and Mahdi TORABIAN ESFAHANIp. 31-50
- 4. Energy Optimization Mechanism for Mobile Terminals using Vertical Handoff between WLAN and CDMA2000 Networks**, by Nathaniel SALAWU and Elizabeth Nonye ONWUKA.....p. 51-58
- 5. Suitability of Periwinkle Shell as Partial Replacement for River Gravel in Concrete**, by Olufemi Isaac AGBEDE and Joel MANASSEH .p. 59-66
- 6. Effects of Rice Husk Ash on Some Geotechnical Properties of Lateritic Soil**, by Fidelis O. OKAFOR and Ugochukwu. N. OKONKWO.....p. 67-74
- 7. Development of a Software Based Firewall System for Computer Network Traffic Control**, by Okonigene Robert EHIMEN and Ikhajamgbe OYAKHILOME.....p. 75-80
- 8. Observation vs. Observable: Maximum Likelihood Estimations according to the Assumption of Generalized Gauss and Laplace Distributions**, by Lorentz JÄNTSCHI and Sorana D. BOLBOACĂp. 81-104