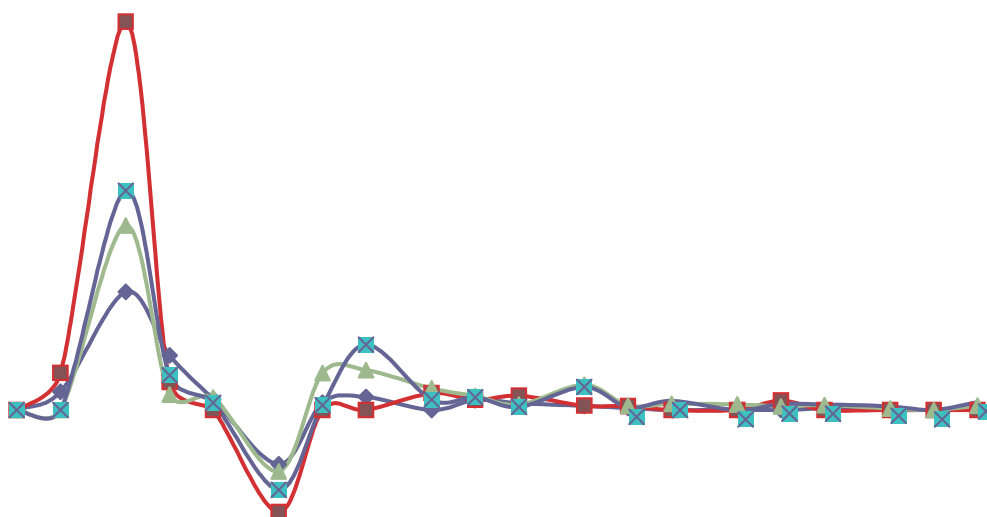




Leonardo Journal of Sciences

Issue 18

*January-June
2011*



ISSN 1583-0233



AcademicDirect
Publishing House

Leonardo Journal of Sciences

ISSN 1583-0233

Issue 18

January-June

2011

Leonardo Journal of Sciences

<http://ljs.academicdirect.org>

Edited by
AcademicDirect Publishing House

Tel.: 0766-239997

Chief redactor
Lorentz JÄNTSCHI

E-mail: lori@ljs.academicdirect.org

Editorial board

Gheorghe LAZEA, Prof. Ph. D. Eng. (automatics),
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

Lorentz JÄNTSCHI, Asist. Prof. Ph. D. Sci. Eng., (informatics),
T. Univ., Cluj-Napoca, RO

Maria MICULA, Prof. Ph. D. Sci., (mathematics),
A. S. V. M. Univ., Cluj-Napoca, RO

Tarek BOUKTIR, Prof. Ph. D. Eng., (engineering),
C.U. d'Oum El Bouaghi, DZ

Elena Maria PICA, Prof. Ph. D. Sci., (chemistry),
T. Univ., Cluj-Napoca, RO

Eugen CULEA, Prof. Ph. D. Sci., (physics),
T. Univ., Cluj-Napoca, RO

Tiberiu RUSU, Prof. Ph. D. Eng., (environment),
T. Univ., Cluj-Napoca, RO

Mircea SAVATTI, Prof. Ph. D. Eng., (agronomy),
A. S. V. M. Univ., Cluj-Napoca, RO

Anca BUTNARU, Asist. Prof. Ph. D. Med., (medicine),
"I. H." M. P. Univ. Cluj-Napoca, RO

Contents

1. **On Error Estimation in Runge-Kutta Methods**, by Ochoche ABRAHAM and Gbolahan BOLARINp. 1-10
2. **ParCop with New Capabilities and Efficient Scheduling Policies**, by Nidal Aabid AL-DMOUR and Mohammad Suleiman SARAIHEHp. 11-26
3. **Modified Direct Torque Control of Three-Phase Induction Motor Drives with Low Ripple in Flux and Torque**, by Vinay KUMAR and Srinivasa RAOp. 27-44
4. **Development and Characterization of a Carbonated Ginger Drink**, by Saka Ambali ABDULKAREEM, Habibu UTHMAN and Abdulfatai JOIMOHp. 45-54
5. **Corrosion Behaviour of Heat - Treated Al-6063/ SiCp Composites Immersed in 5 wt% NaCl Solution**, by Kenneth ALANEME.....p. 55-64
6. **Modelling of the Turbulent Effect on the Basis of Thermodynamics**, by Koros NEKOFARp. 65-74
7. **Fatty Acid Methyl Esters of Melon Seed Oil: Characterisation for Potential Diesel Fuel Application**, by Paul Madus EJIKEME, Chinedum Anthony Cemaluk EGBOUNU, Ikechukwu Daniel ANYAOGU, and Valentine Chinaka EZE..... p. 75-84
8. **Mathematical Model of Sorption Kinetics of Crude Oil by Rubber Particles from Scrap Tyres**, by Felix Aibuedefe AISIEN, Robert O. EBEWELE, and Fredrick K. HYMORE.....p. 85-96
9. **Optimal Reactive Power Dispatch Considering FACTS Devices**, by Ismail MAROUANI, Tawfik GUESMI, Hsan HADJ ABDALLAH, and Abdarrazak OUALIp. 97-114
10. **Performance Evaluation of Palm Oil as Biodiesel**, by Sunday Albert LAWAL and Ahmed BABAKANOp. 115-122

Leonardo Journal of Sciences

<http://ljs.academicdirect.org>

ISSN 1583-0233

AcademicDirect Publishing House

<http://ph.academicdirect.org>