



Central Ukraine Chapter ACTIVITY REPORT

from September 1, 2012
to June 1, 2013



- Center Ukraine IEEE joint Chapter
ED/MTT/CPMT/SSCS/ComSoc
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Chair of Central Ukraine Chapter
Vice Chairman
Vice Chairman
Chapter Secretary
Chapter Treasure
Responsible for student activity

Dr. Yuriy V. Prokopenko
Prof. Yuriy M. Poplavko
Prof. Vladimir I. Timofeev
Dr. Victor A. Kazmirenko
Kostyantyn G. Savin
Pavlo Y. Serhiienko



Administrative activities

■ Chapter expansion & development

- 5 young scientists and engineers were promoted to the IEEE (45 members in total). Some of them have already become ComSoc members.

■ Support of IEEE members with information.

- Some members of Central Ukraine Chapter were supported by the periodical IEEE additions.
- Members of Central Ukraine Chapter were regularly informed about scientific meetings organized by IEEE all over the World.
- Four technical meetings took place in Kiev during reported period



Scientific meetings

Supported International Conference

“XXXIII International conference "ELECTRONICS AND NANOTECHNOLOGY”

16-19 April, 2013, <http://www.elnano.kpi.ua>

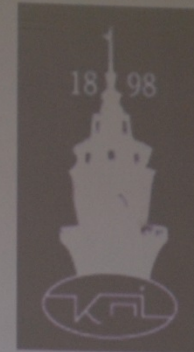
co-chairmen: Academician Yuriy I. Yakimenko

Professor Vladimir I. Timofeev

25% of chapter financial involvement, informational and technical support.

Other entities involved: National Technical University of Ukraine “KPI”, National Aviation University, Utas, Teleoptic,

EINano-2013 open



Welcome to
33rd International Conference
Electronics and NANOTEchnology '2013
April 16-19, 2013, Kyiv, Ukraine

Prof. Dr. Klaus-Jürgen Wolter, TU Dresden
Co-Chair of Steering Committee

EINano-2013





Supported International Conference “Microwave & Telecommunication Technology” (CriMiCo-2012)

- **Sevastopol, 10-14 September, 2012.**
- ***Chairman:* Dr. Pavel P. Yermolov**
- ***Presentations:* ~ 500 reports from 18 countries**
- ***IEEE members participation:* 25 reports and 3 members of Organizing Committee (including the Chapter Vice Chair Prof. Poplavko)**



Scientific seminars

“Design and investigation of algorithms for postprocessing of tomography images of juvenile angiofibroma”


attendance: 28



Low-amplitude ECG components pattern recognition

attendance: 67





Electron transport and quantum-dimensional effects in resonant-tunneling diode

attendance: 43

New method is developed which allows taking into account electron transport through metastable energy levels in the emitter quantum well; physical based approximation of heterobarriers was realized for the first time.

Adaptive numerical algorithms, realizing each model, is developed and programmed. Checking of correctness of the developed algorithms and respective codes is done by comparison with models, based on transfer matrix formalism. Based on numerical model, simulation tool is developed within Matlab GUI.

The influence of the model's level on quantitative and qualitative agreement with experimental data is analyzed. Verification of the model is done by comparison with experimental I-V curves, and it is observed excellent qualitative and quantitative agreement within 5% at the characteristic points.

The microwave filters based on composite dielectric resonators

attendance: 46



Lunched web site

<http://cua.ieee.org.ua/>





The activities which are planned for the next year:

- Support of International Conference
“Electronics and Nanotechnologies 2014”
- Support of International Conference
“CriMiCo 2013”
- Support of Student Conference
“Electronics 2014” in Kiev
- Three technical meetings



Main problems

- ❖ Maintaining the current level of members
- ❖ Expansion in the industrial field



Thank you!