

ANNUAL REPORT FOR YEAR 2004

IEEE AP-S SOCIETY

Chapter Name: Georgian Chapter

1. BASIC INFORMATION

A. Societies that your chapter is joint with, if any: AP-S, EDS, MTT

B. Chapter Web address, if any: <http://ewh.ieee.org/r8/Ukraine/Georgian>

C. Officers for 2004 (please fill in the table below):

	Chair	Vice Chair	Secretary
Name	Prof. Revaz Zaridze	Dr. Zaur Tchakhnakia	Dr. Nina P. Khuchua
Address	3 Chavchavadze Ave., TSU, Laboratory of Applied Electrodynamics (LAE), 380028, Tbilisi, Georgia	13 Chavchavadze Ave., TSU, RPC "Electron Technology", 380079, Tbilisi, Georgia	13 Chavchavadze Ave., TSU RPC "Electron Technology", 0179, Tbilisi, Georgia
Phone	+ 995 32 29-08-21	+ 995 32 22-06-36	+995 32 220626
Fax	+ 995 32 29-08-45	+ 995 32 22-06-26	+995 32 220626
Email	rzaridze@resonan.ge rzaridze@lae.icts.tsu.edu.ge	zaur@gol.ge	nt@gol.ge

D. Officers for 2005 (if known at this time):

	Chair	Vice Chair	Secretary
Name	Prof. Revaz Zaridze	Dr. Zaur Tchakhnakia	Dr. Nina P. Khuchua
Address	3 Chavchavadze Ave., TSU, Laboratory of Applied Electrodynamics (LAE), 0128, Tbilisi, Georgia	13 Chavchavadze Ave., TSU, RPC "Electron Technology", 0179, Tbilisi, Georgia	13 Chavchavadze Ave., TSU RPC "Electron Technology", 0179, Tbilisi, Georgia
Phone	+ 995 32 29-08-21	+ 995 32 22-06-36	+995 32 220626
Fax	+ 995 32 29-08-45	+ 995 32 22-06-26	+995 32 220626
Email	rzaridze@lae.icts.tsu.edu.ge	zaur@gol.ge	nt@gol.ge

3. CHAPTER ACITVITIES DESCRIPTION

(This information is used in the selection of the Best Chapter Award).

During this period five seminars have been held in Georgian Chapter. Also five meetings have been held on which the following questions were discussed and the following decisions were performed:

- Reelections of Chapter Officers have been performed on January 2004. The Chapter Chair Prof. R. Zaridze, The Chapter Treasurer Dr. D. Karkashadze, Chapter vice Chair Dr. Z. Tchakhnakia and Secretary Dr. N. Khuchua were re-elected for next term.
- The rotation of IEEE Georgian Chapter members for 2004 year had been discussed and was held. 10 members were elected to support by the new MFS Program and question of the participating in the annual EDS Chapter Subsidy Program were discussed.
- Dr. David Karkashadze and Prof. Faik Bogdanov had attended “Progress in Electromagnetics Research Symposium“, PIERS 2004, which was held in Pisa, Italy on 28-31 March, 2004.
- A meeting on preparation of Georgian Chapter’s activity report for 2004 MTT-S Chapter Chairs' Meeting Reg.8 has been held on August 2004.
- The question of a candidature for the participation in this Meeting has been considered. It has been decided to send the Chapter member Dr. D. Kakulia at MTT-S Chapter Chairs' Meeting Reg.8 in Amsterdam. Dr. David Kakulia is going to attend the meeting in Amsterdam and present Georgian Chapter activity report.
- The preparation of the Symposium “Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory”, which will held on October 11-14, 2004 Tbilisi, Georgia, has been discussed.
- Prof. Revaz Zaridze has attended the East-West Workshop: Advanced Techniques in Electromagnetic which was held in Warszawa, Poland on May 20 –21, 2004 and 2004 IEEE AP-S International Symposium, which has been held on June 20-26, 2004 in Monterey, California.
- The results from workshop and symposium mentioned above had been acquainted and discussed.
- The rotation of IEEE Georgian Chapter members for 2005 year had been discussed and was held. 6 members were elected to support by the MFS Program and question of the participating in the annual EDS Chapter Subsidy Program were discussed.

The Georgian Chapter and its Management make efforts to disseminate information on the scope of the IEEE activity, deliver seminars and lectures devoted to scientific achievements in various field of technology, distribute periodicals, exerting thereby feasible assistance to Georgian scientific institutions. This Chapter activity gives Georgian scientists an opportunity of preparing projects to participate in various scientific international programs and thereby to integrate into the international scientific community. For example, today several tens of scientific subjects have been approved and funded under the auspices of ISTC, CRDF/GRDF, NATO Science for Peace Program, Eurocommission Programs.

Both the IEEE MTT/ED/AP/CPMT/SSC West Ukraine Chapter and MTT/ED/AP/EMC Republic of Georgia Chapter annually in autumn organize the International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), which is held in Ukraine or in Georgia.
<http://www.ewh.ieee.org/soc/cpmt/ukraine>

3.1 Summary Information for 2004

A. Number of technical meetings (in which a technical presentation is made)

1. Presentations from student members of your chapter: 1
2. Presentations from non-student members of your chapter: 4
(A member of your chapter is one who belongs to the AP-S Society and who lives within your Section. Do not include IEEE Distinguished Lecturers)
3. Presentations from outside speakers: 5
(This includes speakers from outside your chapter. Do not include IEEE Distinguished Lecturers.)
4. Presentations from IEEE Distinguished Lecturers: _____

TOTAL numbers of technical meetings: 5

B. Average total attendance at the technical meetings: 13
(Average over all of the technical meetings held during the year.)

C. Number of non-technical (organizational) meetings held: 5

D. Number of workshops, short courses, or conferences organized or co-organized by your chapter: 1

3.2 Technical Meeting Information for 2004 (use additional pages if necessary)

Note: For “Category”, please use the following:

S: speaker is a student member of the chapter

M: speaker is a non-student member of the chapter (but do not include IEEE Distinguished Lecturers)

O: speaker is from outside the chapter (but do not include IEEE Distinguished Lecturers)

D: speaker is an IEEE Distinguished Lecturer.

	Title of Presentation/Name of Speaker	Attendance			Category
		AP-S	Other	Total	
1	MAS-MoM hybrid method with wire's image using in excitation problems / D.Kakulia	4	10	14	S
2	Contactless photonic crystal microcircuit based method for dielectric body remote exploration / D.Karkashadze	5	10	15	M
3	Simulation of the thermal effects in the human head due to the RF exposure / A. Bijamov	5	8	13	M
4	Calculation of 3D capacitances of wires with hybrid MoM/MAS approach / R.Jobava	3	8	11	M
5	Solving large scale EMC problems using Linux cluster and parallel MoM / F.Bogdanov	4	9	13	M
6	Adaptive frequency sampling for solution of transient problems in frequency domain / R.Kvaratskhelia	4	10	14	O
7	Analysis of thermal effects in human exposed to EM radiation (2D case) / E.Nikolaeva	4	9	13	O
8	Simulation and optimization of waveguide junctions with artificial discontinuities including conducting strips and dielectric layer / G.Jandieri	5	8	13	O
9	About one case of matching of waveguide branches in E-plane T-junction / G.Kekelia	3	8	11	O
10	A hybrid MTL/MoM approach for investigation of radiation problems in EMC / D.Topchishvili	5	10	15	O

3.3 Summary of Workshops, Short Courses, and Conferences for 2004

Include below a list of each workshop, short course, or conference that was organized or co-organized by your chapter. Include the title of the event, the dates of the event, a description of the event, and an indication of the level of involvement of your chapter. Please be specific about the role of your chapter in the event.

IXth International Seminar/Workshop Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED – 2004), organized and sponsored by IEEE MTT/ED/AP/EMC Republic of Georgia Chapter, IEEE MTT/ED/AP/CPMT/SSC West Ukraine Chapter in cooperation with Tbilisi State University, Tbilisi, Georgia, Pidstryhach Institute of Applied Problems of Mechanics and Mathematics, NASU, Lviv, Ukraine in Technical Co-Sponsorship with IEEE EDS in cooperation with IEEE MTT, AP, CPMT, and SSC Societies, was held on October 11-14, 2004, Tbilisi, Georgia.

The 32 papers from China, Georgia, Germany, India, Iran, Israel, Mexico, Russia, USA, and Ukraine were presented at the Seminar in the plenary and 5 oral sessions:

- Scattering in Non-homogeneous Media
- MAS and MoM Approach
- EMC and Communication Systems
- Antennas and Waveguide Systems
- Acoustics and Backward Scattering

Young scientists, students, and Ph.D. students participated in the DIPED as well. The Organizing Committee traditionally awards the young speakers for the best papers. This year three young speakers were recognized for their presentations. They were: Giorgi Ghvedashvili, Tbilisi State University, Tbilisi, Georgia (Experimental and Numerical Investigation of Pear-shaped Antenna), and Myron Voytko, Physico-Mechanical Institute, NASU, Lviv, Ukraine (Wiener-Hopf analysis of the elastic wave diffraction by the finite crack located at the plane interface between the elastic isotropic slab and half-space medium).

For more information, please, visit the web site: <http://www.ewh.ieee.org/soc/cpmt/ukraine/>

3.4 Special Projects

Give a description of any special projects that your chapter participated in during the year, and indicate any funding that was obtained from AP-S or other sources. If possible, indicate how your chapter was improved as a result of the special project.

No special Projects.

4. DESCRIPTION OF OTHER ACTIVITIES

(This information is used in the selection of the Best Chapter Award)

4.1 Are there any ways in which your chapter has improved over last year?

Possibilities include increased attendance, number of meetings, level of activity, special activities, etc.

1. Dr. David Karkashadze and Prof. Faik Bogdanov had attended “**Progress in Electromagnetics Research Symposium**“, **PIERS 2004**, which was held in Pisa, Italy on 28-31 March, 2004.
2. Prof. Revaz Zaridze has attended the **East-West Workshop: Advanced Techniques in Electromagnetic** which was held in Warszawa, Poland on May 20 –21, 2004 and **2004 IEEE AP-S International Symposium**, which has been held on June 20-26, 2004 in Monterey, California.

4.2. Were there any unique or innovative activities within your chapter?

Some possibilities that you might want to include are:

- Collaboration with other IEEE societies and chapters
- Student involvement and new member recruitment
- Interaction with industry or the community
- Educational activities

Collaboration with MTT/ED/AP/CPMT/SSC West Ukraine Chapter. Annually organize the International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), which is held in Ukraine or in Georgia.

Involving students and recruitment new members

4.3. Miscellaneous information, elaboration on any of the above topics, or special factors to be considered.

5. SUGESSTIONS FOR AP-S

Please use this space to describe any suggestions you have regarding how the AP-S Society can better serve your Chapter (or all AP-S Chapters).
