

# An Original Approach to the Biological Impact of the Low Frequency Electromagnetic Fields and Proofed Means of Mitigation

Dr. George A. Florea , *Senior Member, IEEE* , Professor Ancu Dinca

Dr. Stelian I. Alexandru Gal

**Abstract** — It has been very clearly asserted that the electric and magnetic fields produced by the electric network may cause physiological effects due to the currents induced into the human tissues exceeding certain levels, but the magnetic fields with inductions lower than 1.2  $\mu\text{T}$  may also produce biological impacts, decreasing the immune capacity, as resulting from the laboratory analyses correlated with epidemiological studies.

This paper presents a new approach to the biological effect of the 50/60 Hz electromagnetic field on humans therefore using the concept of bioenergetic fields.

Prof. ANCU DINCA's discovery consists in the drastically reduction of the effects of the electromagnetic field on the people placed in their neighborhood by placing passive autoconvertors close to the electromagnetic field generators. Reduced effects can also be obtained by applying some personal devices to regenerate the energo-informational field of the person within zones characterized by relatively high values of the magnetic induction.

The measurements made in different locations with high values of magnetic field inductions, i.e. close to post transformers or inside the extra high voltage substations, have shown the advantages of both protection devices used.

**Index Terms** — biological effects, biological systems, magnetic field, magnetic flux density, torsion field.

## I. INTRODUCTION

WHETHER in as much as the electric field is concerned it has been settled by the international scientific community since the 90's that there are no direct biological effects, only physiological effects caused by densities of the currents higher than 10 mA/sq.m. induced into the human body. When considering the impact of the magnetic component of the electromagnetic field of industrial frequency, the situation is somehow different.

The maximal values recommended for the magnetic flux density in professional and residential exposure situations have been established by international and national organizations. ICNIRP, IEEE and the European Community propose the limit of 100  $\mu\text{T}$  and 500  $\mu\text{T}$  for the residential exposure and the quasi-permanent professional exposure, respectively; these limits have been determined starting from the physiologic effect of the magnetic field based on a maximum density of

current induced into the human body of 10 mA/sq.m., under the conditions of different safety factors for the two types of exposure. Higher values of the limit are accepted in case of a short time professional exposure. The limits previously mentioned are considered valid for most countries, as resulted from the Euroelectric synthesis [1].

However, the impact of the magnetic field is not only physiological, but also biological, inducing the development of some diseases or the aggravation of some anterior diseases in the case of exposure to relatively low values of the magnetic flux density [2]. Thus, as resulting from the conclusions of California Health Report – June 2002 [3], in situations of exposure to very low values of the magnetic flux density ranked between 0.2 and 1.2  $\mu\text{T}$ , a decrease of the immune capacity of the human body occurs due to the decrease in melatonin secretion.

The biological impact can also be explained by the interaction between the torsion field underlying the EM fields and the electromagnetic and bioelectromagnetic phenomena, such as it was mentioned by Bohm and Aharonov [4,5], and further details obtained by other scientists such as W. Cook, W. Tiller, A. Dinca et al. brought to the possible mechanism of causation.[6,7]

## II. INDUCTION OF THE MAGNETIC FIELD IN RESIDENTIAL ZONES AND IN THE VICINITY OF ELECTRIC POWER INSTALLATIONS

Considering that the dwellings are at relatively long distances from the lines, the electric stations of high tension or the posts of medium tension, the interior magnetic field is determined by the circulation of low tension currents through the interior installations and by the function of housework devices. The latter produces a magnetic field characterized by magnetic flux densities ranking between 0.01 and 26  $\mu\text{T}$ , at a normal distance of running [8]. However these magnetic flux densities decrease severely with the distance so at a distance of 1m they are practically neglected [6]. Without these housework devices the magnetic flux densities in houses rank between 0.01  $\mu\text{T}$  and 1  $\mu\text{T}$  [9].

The typical values of the magnetic flux density at the ground level in the vicinity of the electric power installations are:

- 5-10  $\mu\text{T}$  under an overhead line of 400 kV simple circuit;
- 0.5-10  $\mu\text{T}$  at a distance of 30 m from the axis of the above mentioned line;
- 0.2  $\mu\text{T}$  at a distance of 65 m from the axis of the above mentioned line;
- 10-50  $\mu\text{T}$  inside the perimeter of an electric station exterior to the high tension line;
- 100-150  $\mu\text{T}$  over a subterranean electric line formed of mono-phase cables;
- 10-70  $\mu\text{T}$ , inside the interior electric stations;
- 2-5  $\mu\text{T}$ , in public buildings that have transformer posts inside;
- 0.04-0.8 mT in the vicinity of overhead electric lines, under the conditions of working under the potential tension.

### III. TORSION FIELD

The torsion field (also called axion field, spin field, spinor field and microlepton field ) was first introduced by Elie Cartan in 1922 who extended the Einstein's general relativity to include the affine torsion of space-time continuum [10]. In the Einstein-Cartan theory all the rotating bodies produce waves of torsion which spread through space-time. This research was neglected by the physicists, the torsion field being considered very weak to may get an use from. The first scientist who saw the importance of the torsion fields from the point of view of their effects in macroscopic world was the Russian researcher Nikolai Kozyrev, in 1967[11]. In 1980 the Russian scientists Anatoly Akimov and Gennady Shipov succeeded to gather experimental and theoretical proofs concerning the existence and the importance of the torsion fields. Kozyrev results were confirmed by the Belarus Academy member, A. I. Veinik at the end of 80s. Other very important scientists involved in torsion field theory have to be mentioned: in Russia - E. S. Fradkin, D.M.Gitman, V.N.Ponomarev, J.N.Obuhov, in U. S. A. - T. Bearden, E. E. Green, R. T. Hammond, G. Rein, T. M. Srinivasan and W. A. Tiller, in Germany - R. T. Hell, in Italy - B. D. Sabbota and K. Sivaram, and in Israel - M. Karmeli [12].

All physical amorphous objects have their own torsion field resulting from the spins of all the intrinsic particles, but the resulting field may be modified if the objects are influenced by an external torsion field. Under such an influence, the new configuration of the torsion field will be in a meta-stable state and will remain even after the external source disappears. The resultant torsion field can be positive or negative [12].

Taking into account Akimov's work [13] the following conclusions may be considered:

- The electromagnetic fields always contain the torsion component ;
- the torsion field is observed both in an electrostatic field and in electromagnetic radiation;
- electromagnetic and gravitational fields have central symmetry and the torsional fields have axial symmetry;
- the static torsion fields have an action radius and the field intensity inside this radius ( nearby zone) is almost constant ;

- the wave torsion field actions are not limited to a nearby zone, their intensities do not depend on the distance from the source;

- the torsion fields pass through environment loss free.

The tests conducted at The Ohio State University Engineering Microwave Lab. detected wave emissions in the range of radio (4 MHz) and micro (2 GHz) in the proximity of a torsion field generator [14] and these informations can be very useful for the further researches on torsion field detection. As a component of the electromagnetic field, the torsion field may influence the physical characteristics of different objects or substances, but may have a good or bad impact on living bodies as well. The latest one may be positive or negative depending on the field's sign: right or left [15, 16, 17].

The torsion fields transmit information without transmitting energy, but alter the spin state of the physical media and this is the explanation of the mentioned health problems. W. A. Tiller's statement must be mentioned: "preliminary research data indicate that the subtle energies somehow influence the electric and/or magnetic fields of the body and which influence have demonstrable effects on the structure, function, chemistry and the mind" [8].

Strong torsion fields are generated by high electrical potentials and equipments based on circular or spiral electromagnetic processes. The electric generators from power stations are generating high negative torsion fields and these are traveling on the transport and distribution networks directly to the industrial, commercial or residential consumption centers. The negative torsion fields were found to worsen the health of people exposed to them. This resulted from the laboratory analysis of the blood performed in Saint Petersburg[15] and in Kiev [18]. The first ones have shown a major increase of 4-5 times in erythrocytes sink speed and the last ones a 40-50% reduction of lymphocytes and of 45% for leucocytes.

### IV. TORSION FIELD MEASURING EQUIPMENT

The torsion field magnitude can not be measured directly as there are no sensors to sense it, but its existence and size can be measured indirectly, by determining its effects, such as: radio-aesthesia, Kirlian photos, aura vision bioluminescent emission from the biological systems, refraction, spectral colorimetry, etc.

The following known equipments have to be mentioned:

- TCM-030, invented by Viktor Shkatov (Russia) with differential torsion input and orthogonal torsion outcome [16];
- SADAF-08LC, invented by Viktor Shkatov (Russia) with two laser beams contacting the studied object and LPT port for computers, which can obtain the electronic image of the field [16];
- SEVA, invented by Mark Krinker and Larry Pismenny (U.S.A.) in 2007 has a sensor with three mutually orthogonal electrodes, each detecting a component of the external electric vector. The signals enter through band-pass filters, the central frequency of the filters matching that of the maximum energy supported by the ground-ionosphere bottom resonator, i.e.

6208 Hz [19, 20].

- IGA- 1, invented by Youry Kravcenko (Russia) in 1997, measures the phase shift of the Earth's own electric field within the 5- 15 kHz band, supported by the natural ground-ionosphere resonator [F]. This apparatus [19, 21, 22] is composed by: an antenna that can be positioned over the surface to be investigated, a converter of the antenna signal and an analog measuring device. Most of the manufactured IGA- 1, like the one that has been used in the experiments described in this paper, show if the torsion field has a magnitude which can be dangerous, based on the inventor's experience. A new type is under developing and will be equipped with an interface allowing the transfer of the output signal to a computer. The IGA- 1 apparatus was tested and used frequently by the scientists in Russia, Ukraine, France, U. S. A.

- Aura Video Station is an equipment based on the interactive multimedia feedback. It is not an apparatus to measure the torsion field directly, only indirectly, showing the influences of the torsion field on humans in particular. It uses the hand biosensor to measure the biofeedback data. The input data are: the electro dermal activity, the electrical conductivity of the hand and its temperature in real time. The programs measure, analyze and process the biofeedback data and correlate them to the specific emotional – energetic state, developing the images of the aura and chakras [7, 23, 24].

These last two apparatus were used in the tests performed and described in this paper.

## V. NEUTRALIZERS

All the researches trying to discover some materials to reduce or even to neutralize the torsion field had no results, except the aluminum screening which was found as efficient in some cases [11].

Some successes came from researches led to find some patterns which could deviate or even cancel the torsion field. The first one was developed in Russia as "Neutralizer" and is made of two mirror like positioned multiphase spirals of Archimedes using the thin film technology. The spirals are made of gold-silver-copper alloy. These may be used to neutralize the torsion field of indoor geo-pathogenic areas, electric home appliances and others. The same conception was used in Ukraine to get the Torser pattern. A different approach was that of Ancu Dinca (Romania) who invented the DIEE patterns, auto-converters that contain liquid crystals obtained from 40 different plants gathered from all over Romania, from zones at altitudes between 0 and 2500 m. The component plants are dry ensuring the conservation of both the energo-informational matrix and the biochemical structure (liquid crystals). The very large distribution of these liquid crystals enables a relatively high probability that one of these component plants corresponds to the perturbing dominant wave. The field neutralizing patterns come into action when stimulated by the perturbing factors, and neutralize the subtle field by de-modulating the emission of the generating source

through the de-phased interface. The auto-converting passive devices conceived to neutralize the subtle field emitted by the electric power installations, such as the transformers, the mechanisms of the controls, the bars of the stations and transformers and also the monophasic cables charged by high value currents have the dimensions of 120 x 85 mm [10] and have to be attached to the respective subtle field sources or very close to it.

The personal portable patterns have been conceived to regenerate the energo-information field of the person and meanwhile protect the person who works in surroundings with high values of the magnetic flux density. These devices are made of different plants, about 20% being the same, but have reduced sizes (25 x 25 mm). They function on the homeopathic resonance principle at the level of the corresponding energo- informational traps that they activate in the organism.

## VI. THE HUMAN BODY IS BIOLOGICALLY AFFECTED WHEN INSIDE A TORSION FIELD UNDERLYING A RELATIVE HIGH MAGNETIC FIELD

The measurements were performed by Aura Vision System (Fig. 1) on a person situated in a surrounding characterized by a magnetic flux density of 0.62  $\mu\text{T}$  and inside an electric station of 110 kV with a magnetic flux density of 19.7  $\mu\text{T}$ , respectively, and are shown in Fig. 2 and 3. The magnetic field flux density was measured using the Aaronia Spectran 5030 analyzer (Fig. 4).

The aura size, the aura - chakra balance and the main seven chakra energies (1- base chakra, 2- navel chakra, 3- solar plexus chakra, 4- heart chakra, 5- throat chakra, 6- third eye chakra, 7- crown chakra) were determined. Aura is the popular name for human energy field surrounding the body and can be viewed using special photographic equipment [24]. It is characterized by magnitude and color. The chakras are the spherical whirlpools in the ether body acting as energy transmitters, and influencing the physical activities through the function of endocrine glands.



Fig. 1. The photo of the Aura Vision System equipment

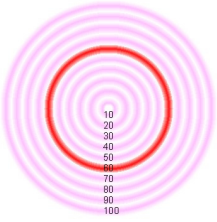


Fig. 2(a). Aura size

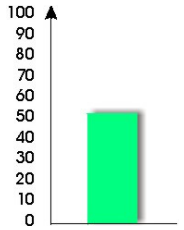


Fig. 2(b) Aura - chakra balance

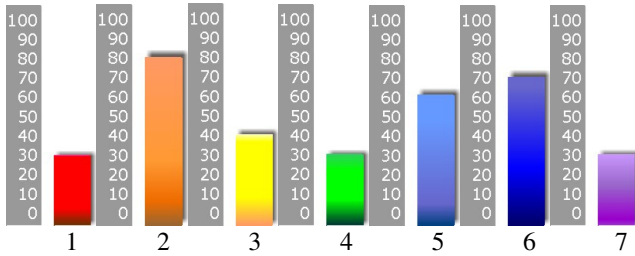


Fig. 2(c) The chakra energies

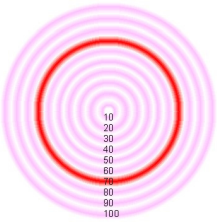


Fig. 3(a) Aura size

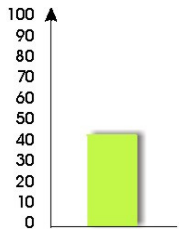


Fig. 3(b) Aura - chakra balance

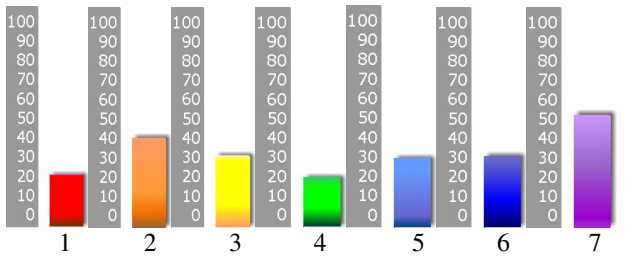


Fig. 3(c) The chakra energies



Fig. 4. The photo of the Aaronia Spectran 5030 analyzer

In case of exposure to a high magnetic field an increase in the aura size can be stated, but this increase is not real as long as the aura shows non-homogeneities. A reduction of the aura-chakra balance and an important reduction of the energies of 6 chakras take place concomitantly.

### VII. THE EFFECT OF THE PASSIVE AUTOCONVERTING PATTERNS

The effect of using personal portable patterns of energy-informational regeneration, one on each palm backs of the person mentioned in chapter IV results from the measurements made in the case of exposure to a magnetic field of 19.7  $\mu\text{T}$  density, rendered in Fig. 5 (a, b, c).

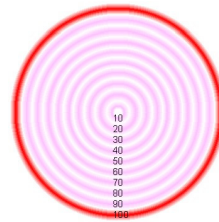


Fig. 5(a) Aura size

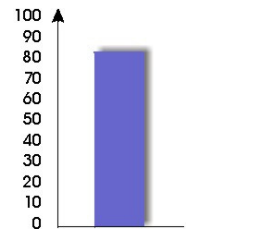


Fig. 5(b) Aura - chakra balance

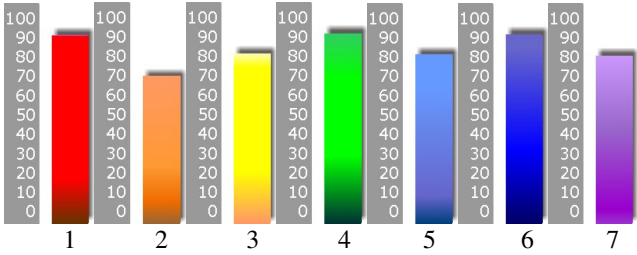


Fig.5(c) The chakra energies

The effect of using auto-converters for neutralizing the subtle field emitted by transformers can be stated from the analysis of measurements performed over an underground transforming station, an area where the magnetic field has a flux density of 5  $\mu\text{T}$  at the floor level. These measurements are presented without the pattern in Fig. 6(a, b, c), and in Fig. 7(a, b, c) with the pattern applied over the transformer.

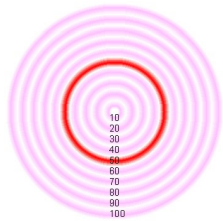


Fig6(a) Aura size

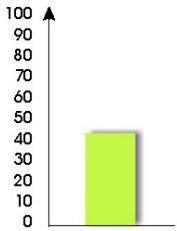


Fig.6(b) Aura chakra balance

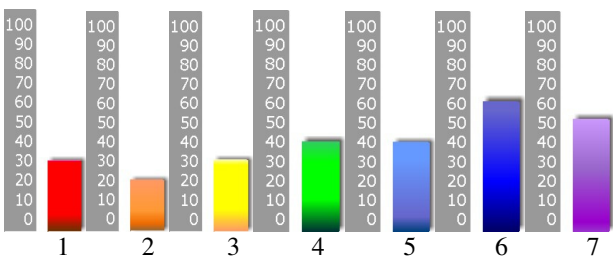


Fig. 6(c) The chakra energies

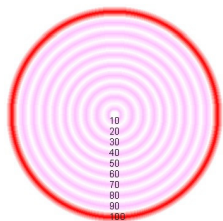


Fig. 7(a) Aura size

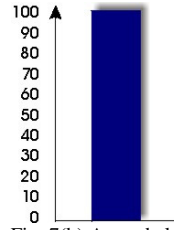


Fig. 7(b) Aura chakra balance

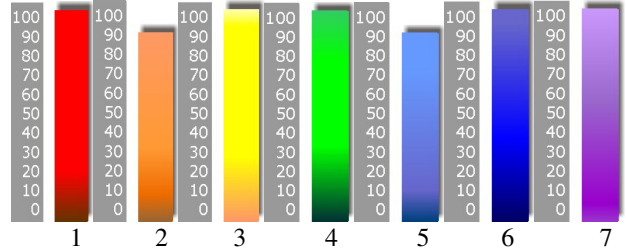


Fig.7(c) The chakra energies

The effect of using the devices is obvious from all points of view: the aura size, the aura-chakra balance and chakra energies that reach their maximal values except chakra energies 2 and 5, for which the values surpass 90 units.

The following is another case of a person exposed to a magnetic field of 18  $\mu\text{T}$ , commonly working in a room situated in the same building with an indoor substation, from which it is separated only by a wall. Without any type of device, the measurements obtained are shown in Fig.8 (a, b, c).

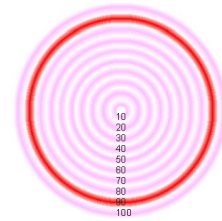


Fig. 8(a) Aura size

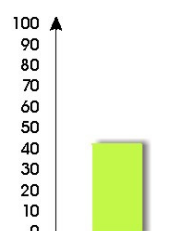


Fig.8(b) Aura chakra balance

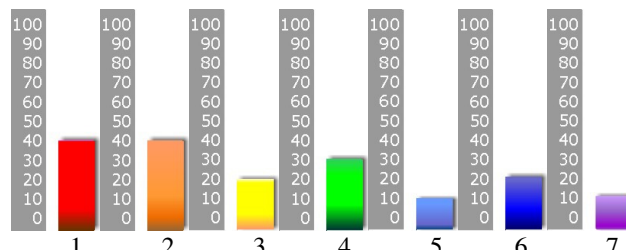


Fig.8(c) The chakra energies



After applying a passive autoconverter on his desk new measurements were made and the results are shown in Fig.9 (a, b, c).

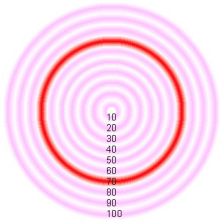


Fig. 9(a) Aura size

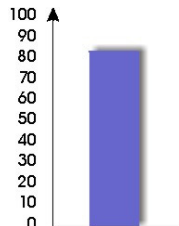


Fig. 9(b) Aura chakra balance

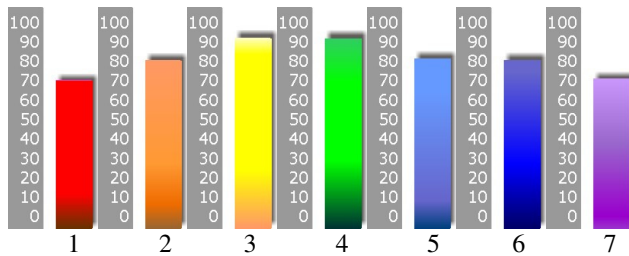


Fig.9(c) The chakra energies

Spectacular increases of aura - chakra balance and of chakra energies result, but also a decrease in the aura size. This decrease is real as when without device, the aura size is not veritable, the aura having a non-homogenous composition.

IGA-1 was used too in all the above cases (Fig. 10). It indicated the existence of negative torsion fields with bad impact over the health of the people working in those places, but after applying the autoconverter pattern, the IGA-1 has practically shown the cancellation of the left torsion field (i.e. or at an intensity lower than the dangerous one, as explained in III).



Fig. 10. The photo of the IGA-1 analyzer

A personal pattern was applied on each outer side of the palms of the same person, while the passive autoconverter on the desk was kept on, and the new results of the measurements are presented in Fig. 11(a, b, c). It can be noticed that there are no modifications compared to Fig. 9(a, b, c).

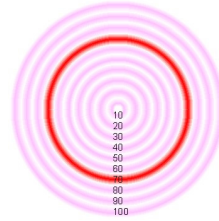


Fig. 11(a) Aura size

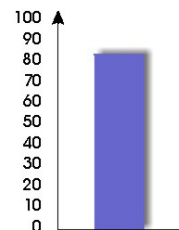


Fig. 11(b) Aura charka balance

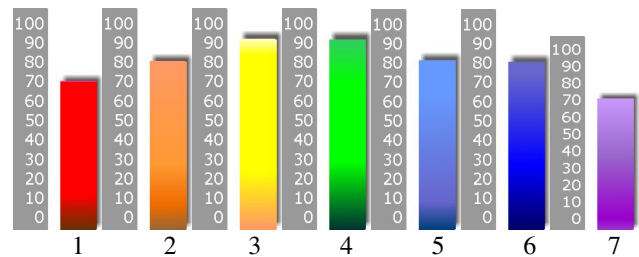


Fig.11(c) The chakra energies

### VIII. CONCLUSIONS

Human exposure to magnetic fields of low frequency, as is the case of industrial frequency, with not very high values to reach the threshold of physiological perception, stresses the human body by its subtle surrounding field. This is clearly evinced by the performed measurements on the aura size, the aura - chakra balance and the main chakra energies. On the background of such a stress that appears both in the cases of professional and residential exposure, if there are houses too close to the electric power installations of high voltage currents, to the electric power stations of high tensions or to the transforming posts, the incidence of certain diseases increases or the existing ones are aggravated.

The employment of fixed passive autoconverters by applying them in the near vicinity of the respective electric power installations leads to a significant decrease of the effects of the magnetic field and of its subtle surrounding field. The personal patterns used proved to be of a great importance. The results show their usefulness for the workers in electric stations, transformers posts and moreover for those working live-line close to the high voltage power line conductors.

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## IX. BIBLIOGRAPHIES



**Ancu Dinca** was born in 1951 in Lisa, Romania. He graduated from the Physics Faculty Pitesti in 1975.

During his entire professional life he was busy with his creating activity concluded by the big number of diplomas and premiums of different national and inventions getting many awards from the different national and international forums.

In 2005 he had received a special diploma and the Officer Croix from the Belgian Government for his special merits.

He is the president of the Biosynergetical Studies and Researches Center “Ancu Dinca”, Bucharest, Romania.



**George Alexandru Florea** (M’2001, SM’2002) was born in Bucharest, Romania, on 1<sup>st</sup> of October, 1947 and received a Diploma in Electric Power Engineering in 1970 and a Doctor’s degree in High Voltage Engineering in 1985, both from University Politehnica Bucharest, Romania. His employment

experience includes the Institute of Power Studies and Design, Bucharest, Romania, Romelectro Foreign Trade Company, Bucharest, Romania, Tehnorob Ltd, Bucharest, Power & Lighting Thnorob S. A., Bucharest Romania. His special fields of interest include the design of power lines, surge propagation on transmission and distribution lines, electromagnetic field of electric network on biological systems and live-line maintenance methods.



**Stelian Iuliu Alexandru Gal** was born in Jimbolia, Romania, on 2<sup>nd</sup> of July, 1947 and received a Diploma in Electromechanical Engineering in 1970 and a Doctor's degree in Digital Distance Protection for Power Systems in 1994, both from University Politehnica Timisoara, Romania.

His employment experience include: Romania National Power Grid Company "Transelectrica"- S. A. – Sibiu Regional Branch and Headquarter, Romania. His special fields of interest include the live-line maintenance work technologies and different protection systems of electric network.