

# het beetje

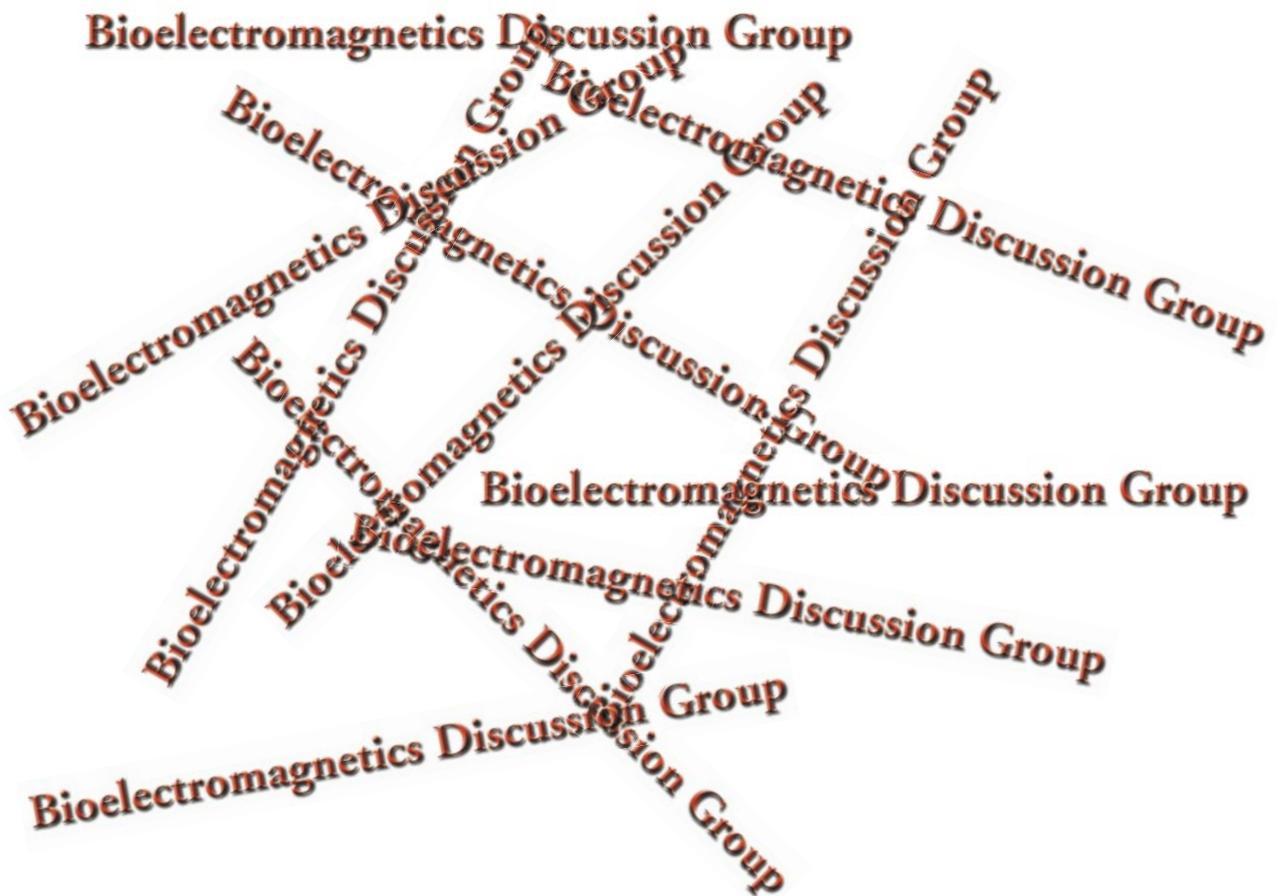
October 2006



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## English Version

### Bioelectromagnetics Discussion Group



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## Colodings & else

I do participate in several newsgroups.

It is interesting and one may learn a lot from others, who share their views and experiences. Because of my interests, not only regarding Elektrosmog, but also about the broader field of the application of frequencies for healing purposes, like bioresonance therapies, I follow lists like Rife, and also the famous Bioelectromagnetics Discussion Group .

Because of my work as a building biologist, I am supposed to know something about the exposure levels of all kinds of elektrosmog, and accompanying adverse health effects.

I have encountered people who are more than normal sensitive to radiation levels of fields. Those levels are hardly measurable.

A person, who gets a red head by a 9V blockbattery.  
If I did not see it myself, I would not believe it.

When visitors hold their mobile in their pocket, another person gets an allergic reaction all over his body within 15 minutes.

My wired telephone gave certain signals, just measurable on the display of the telephone, which caused some complaints at 2 meters distance to a sensible person.

Be also aware that many people do have different reaction times.  
Some people do have reactions today from what they are exposed to yesterday.  
But mostly the delay is about 8 hours. They cannot sleep!

Of course I am allergic to remarks that wireless phones etc. are harmless. Also when fairytales appear that electrosensibles do not exist.

\*Then the wrath of the phonebuster will come down hard.\*

On the next pages I want to illustrate what happens when somebody tells that phones are harmless to health. I reacted to that remark, and suddenly somebody from Motorola rebuffed my remark, which I could not let pass.

Then others came to my help, and an avalanche of posts came off.

Because I find these posts very interestingly and enlightening, I publish them here.  
In my opinion it is fascinating reading.

----- Original Message -----

From: "andrew449732"

To: <bioelectromagnetics@yahoogroups.com>

Sent: Tuesday, September 19, 2006 13:41

Subject: [bioelectromagnetics] Re: Milligauss and health (Cont.)

Hi All.

Ben is quite right, things can get a bit complicated.

Cellphones operate in the MHz region. These frequencies on their own are generally thought to have little or no biological effect.

However, they do give effects if they are amplitude modulated or pulsed at biologically-active lower frequencies.

This happens in cellphones. For example, ordinary cellphones in the UK carry digitally encoded speech in a series of pulses at 217Hz, which enables several users to take it in turns to share the same frequency. In addition, there are genuine low frequency fields coming from the battery circuits as they draw current to provide the energy for the RF pulses.

217Hz is well within the range that can give biological effects.

However, if you have a TETRA handset (used by the police and emergency services in the UK) the pulse frequency is very close to the ion cyclotron resonance frequency for potassium, which is especially good at giving biological effects.

This is probably because potassium is by far the most abundant positive ion in living cells. Exposure at its resonant frequency increases its chemical activity, which enables it to drive structural calcium from cell membranes and make them more prone to "accidental" tearing. This isn't a disaster since the membranes are self-healing, but when it occurs in brain tissue it's quite likely to generate false action potentials. This in turn would degrade the signal to noise ratio of the brain, reduce its ability to respond appropriately to stimuli and be a contributory factor to many cellphone-related automobile accidents.

So as you see, things are not that simple. Nevertheless, the message, at least from me, is not to worry too much; the normal use of a cellphone isn't very likely to cause any permanent harm to most people, but please don't use it when driving, especially if you are a policeman!

Best wishes to all

Andrew

\*\*\*\*\*

*Hello Andrew,*

*how can you write such a nonsense.*

*The normal use of a cellphone IS indeed very likely to cause any permanent harm to most people.*

*One may obtain tumors among other things.*

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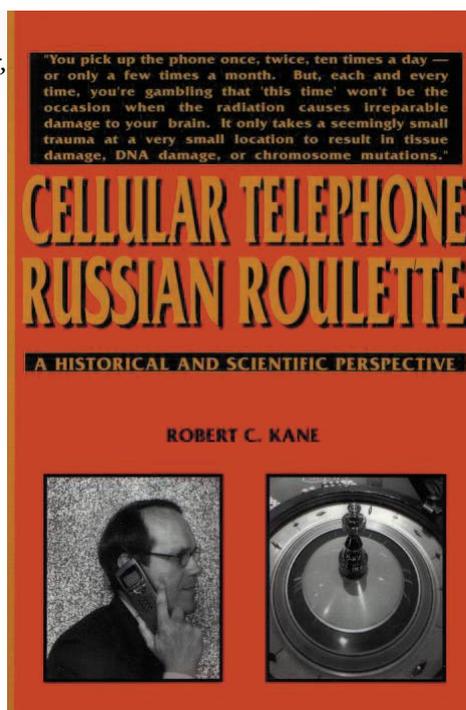
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*Do not hold a gun against your head when driving,  
especially if you are a policeman!  
That sounds also silly, and falls into the same category.*

*Robert C. Kane wrote this excellent book:  
\*Cellular Telephone Russian Roulette!\**

*Greetings,  
Charles Claessens*



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----- Original Message -----

From: "Moller Paul-WPM002" <paulmoller@motorola.com>  
To: <bioelectromagnetics@yahoogroups.com>  
Sent: Tuesday, September 19, 2006 15:54  
Subject: RE: [bioelectromagnetics] Re: Milligauss and health (Cont.)

To equate a cellular phone with a gun is spreading unfounded fear. Check out the literature, it is laden with studies showing NO effect what so ever of cellular phones or cellular phone like emissions on tissue. So far all of the studies that have shown an apparent "effect" have later been found to be scientifically flawed. Look at the now 1 billion people using cell phones around the world, if there was a health problem they would be dropping like flies. To spread such a connection is down right irresponsible in a scientific community.

Paul Moller

\*\*\*\*\*

-----Original Message-----

From: bioelectromagnetics@yahoogroups.com  
On Behalf Of charles  
Sent: Tuesday, September 19, 2006 9:23 AM  
To: bioelectromagnetics@yahoogroups.com  
Subject: Re: [bioelectromagnetics] Re: Milligauss and health (Cont.)

Hello,

*it is down right irresponsible to tell that cellular phones are safe.*

*Only people who are paid by the telecom industry say that they are harmless. There are many studies showing harmful effects.*

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*Btw. Robert C. Kane worked many years for Motorola, before he got his own tumor, as I recall.*

*You belong probably also to those people who deny that electrosensible persons exist.*

*But I can assure you, they do exist.*

*And quite a large number.*

*Greetings,*

*Charles Claessens*

\*\*\*\*\*

Look at the numbers man. IF cellular phones had some adverse health effect, it pales compared to other risks we routinely take, like getting in our autos and driving to work or the store. And on the specific case of Robert Kane, the courts threw out the case before it even went to trial on the basis of no viable evidence. So do you lump the courts into "people paid by the telecom industry" ?

Paul Moller

\*\*\*\*\*

-----Original Message-----

*From: bioelectromagnetics@yahoogroups.com com]*

*On Behalf Of charles*

*Sent: Tuesday, September 19, 2006 11:10 AM*

*To: bioelectromagnetics@yahoogroups.com*

*Subject: Re: [bioelectromagnetics] Re: Milligauss and health (Cont.)*

*Looking at the numbers I see other figures.*

*The recent swiss study by ETH regarding 3G (UMTS) showed that by exposure of 45 minutes per week a minimum of 3.4 % of the people got health problems.*

*Of course Motorola will deny that.*

*Many people at the moment are sick and cannot work because of this elektrosmog.*

*Dr. Gerd Oberfeld found that 19 % of the population does have health problems because of these phones and transmitters.*

[1] Bortkiewicz A et al. (2004), Subjective symptoms reported by people living in the vicinity of cellular phone base stations, *Med Pr.* 2004;55(4):345-51.

[2] Ronni Wolf M.D., Danny Wolf M.D. (2004), Increased incidence of cancer near a cellphone transmitter station, *International Journal of Cancer Prevention*, volume 1, number 2, April 2004.

[3] H. Eger et al. (2004), Einfluss der räumlichen Nähe von Mobilfunkseanlagen auf die Krebsinzidenz, *Umwelt-Medizin-Gesellschaft*, 17. Jahrgang, Ausgabe 4/2004, S. 273-356.

[4] E.A. Navarro et al. (2003), The Microwave Syndrome: A Preliminary Study in Spain, *Electromagnetic Biology and Medicine* Volume 22, Issue 2, (2003).

[5] Hutter, Moshhammer, Kundi, *Mobile Phone Base-Station: Effects on Health and Wellbeing*, Tagungsbeitrag Rhodos 2002.

[6] Santini R. et al. (2002), Investigation on the health of people living near mobile telephone relay stations: II Incidence according to distance and sex, *Pathol Biol (Paris)*. 2002 Jul;50(6):369-73.

[7] Dr. Germann, Einfluss der Mobilfunkbelastung auf die Retikulocytenreifung, Vorläufige Bewertung anhand von 1000 Analysen (juli 2004),

[http://www.buergerwelle.de/pdf/einfluss\\_mobilfunk\\_auf\\_retikulocyten\\_juli04.doc](http://www.buergerwelle.de/pdf/einfluss_mobilfunk_auf_retikulocyten_juli04.doc) .

[8] Oberfeld G, Navarro A E, Portoles M, Maestu C, GomezPerretta C (2004), *The microwave syndrome - further aspects of a Spanish study, presented at an International Conference in Kos (Greece), 2004, zie [4]*

*This study found significant ill-health effects in those living in the vicinity of two GSM mobile phone base stations. The strongest five associations found are depressive tendency, fatigue, sleeping disorder, difficulty in concentration and cardiovascular problems. Based on the data of this study the advice would be to strive for levels not higher than 0.02 V/m for the sum total, which is equal to a power density of 0.0001  $\mu$ W/cm<sup>2</sup> or 1  $\mu$ W/m<sup>2</sup>, which is the indoor exposure value for GSM base stations proposed on empirical evidence by the Public Health Office of the Government of Salzburg in 2002.*

*Just to name a few studies.  
Important is also the recent EMF Handbook by the German Ecolog Institute.*

*I am a building biologist and perform house surveys, in which I, among others, also measure the radiation from various sources. So I am quite familiar with the relation health complaints and levels of EMF.*

*Of course you will deny all that.*

*But it is really typical, that once those sources are avoided, the health complaints disappear.*

*The biggest and easiest examples are the cordless house phones according to the DECT/GAP principle. Cut the electrical current to the base station, and the health complaints disappear. In my opinion, the DECT phones are the number 1 sickmaker at the moment, followed by the wireless internet modem/routers.*

*So many people do have sleep disturbances, headaches, are tired, do have heart problems, sugar level problems, and pain in arms and legs (restless legs), etc. Not to mention erection problems and sterility.*

*I do not know what is going on in the USA, but overhere in Europe, a lot is happening. Many physicians have formed their groups and \*Appells\*, with which they protest.*

*I am sorry for you, but you got the wrong adversary.  
Cellular phones are the \*pest\* of this century.*

*Greetings,  
Charles Claessens*

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You have indeed shown a few studies, but not revealed the scientific flaws uncovered in those studies. These studies never investigate other causes of purported health issues, such as chemicals or noise in the environment. I suppose you also believe that George Bush authorized the bombing of WTC too. Conspiracy theories and skepticism are traits that go together. Enjoy your niche of researching the negative. That arena is probably large enough to support a few people for a lifetime. I prefer to live in the real world. When the millions of people using cell phones show real problems above the noise floor we can talk.

Paul Moller

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Good to see Mr Moller willing to offer the Motorola view of the biomedical literature.

I wonder whether he might want to tell the list how he rationalizes away the observed increase in acoustic neuroma after ten years of mobile phone use.

See:

<http://www.epidem.com/pt/re/epidemiology/abstract.00001648-200411000-00003.htm>

also:

<http://www.nature.com/bjc/journal/v93/n7/abs/6602764a.html>

Louis Slesin, PhD  
Editor, Microwave News  
A Report on Non-Ionizing Radiation  
New York, NY 10021, U.S.A.

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I have been going through Bioelectromagnetics Supplement 6 which serves as the justification for C95.1-2005's significant relaxation in areas that conveniently solve the compliance problem for the cell phone industry. Of course all based on the latest analysis of the RF literature with all those guys from Motorola kindly helping with the interpretation. Its understandable that Motorola take such an interest in influencing possible regulation of their activities but does this mean a possible conflict of interest or bias? It seems Bioelectromagnetics has solved that problem. Simply disclose your affiliations and all is okay. Sort of like accepting Jesus as your saviour and all past sins are forgiven.

Then fill up Supplement 6 with review papers by Motorola and military authors (with a few safe fellow travellers) and present it as state-of-the-art in expert advice, a body of sure and certain knowledge that is above reproach.

Really?

The problem of conflict of interest was examined in 2003 by the International Committee of Medical Journal Editors (ICMJE) and it is worthwhile to compare this to both Bioelectromagnetics Supplement 6 and the entire IEEE ICES peer review process. To quote from ICMJE's Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication:

“Conflict of interest exists when an author (or the author’s institution), reviewer, or editor has financial or personal relationships that inappropriately influence (bias) his or her actions. . . The potential for conflict of interest can exist whether or not an individual believes that the relationship affects his or her scientific judgement. Financial relationships . . . are the most easily identifiable conflicts of interest and the most likely to undermine the credibility of the journal, the authors, and of science itself.”

I think this puts Motorola's view of the literature in its proper context.

Don Maisch

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On Behalf Of Tony Fleming, Sent: 20 September 2006 02:53  
To: bioelectromagnetics@yahoo.com  
Subject: Re: [bioelectromagnetics] Re: Milligauss and health (Cont.)

Paul I don't always get all the traffic on the BEMS forum either, for instance , I missed Ben's email, I only got Andrew's and Charles' replies. But being down under I've learned to expect these issues given the satellite distances involved.

You said "Enjoy your niche of researching the negative". But YOU and the industry are the one's who are taking the negative side!!

Yours is a view honed BY the industry, FOR the industry; it is blinkered. I liken this industry "research" to shooting darts at a dartboard in a dark room and trying to hit the bullseye, or perhaps even anywhere on the board. Even if you do find a few darts on the dartboard you can't see them 'cos of those blinkers!!

Let me say this, you (the industry) have developed a fine piece of engineering. We all hear the cases where mobiles have saved people including kids from dangerous situations including kidnappings potential rapes, lost in the outback (in Oz this is what we call the countryside), etc, etc, there are many positives, and for this we can all be thankful.

But you have not yet solved the problems of emissions into the body; people ARE being exposed to sufficient energies to cause biological trauma of various kinds. I think we now know enough to be able to say that it is a combination of frequency and magnitude that is the cause of the biological traumas.

The issues are not just inside the cell but extracellular (arthritis, and a host of degenerative ailments). SO the levels we have on the books at the moment are too high; exposure limits are largely based on what might be able to reach within the cell. And in this digital age the transients in the signal proliferate the frequencies right across the spectrum. And who said anything about "dropping like flies"? Why not an illness that disables peoples to some other degree, such as headaches, and depression? Why is it only cancer that gets a look-in in these debates? We as a civilization have yet to come to grips with the fact that we are exposing ourselves in various harmful ways. I would like to see a return to a pristine environment, one that didn't have stray energies roaming around due to modern invasive technologies. Maybe it will take a legal challenge to who is responsible for intrusion upon one's body or property.

Solutions?? Why not a spread spectrum technology for a start? And why not redesign the receptor to be away from the head? such as MAXwell Smart's "shoe phone"? in other words relay the signal at minimal strength to anothe location where transmission occurs away from the head?

Charles and others involved in electrosensitivity know that there's a groundswell of people who ARE being affected and who cannot use mobiles because of their emissions. I suggest you read the papers he puts forward. AND you might like to read up on the work Liz Bauer and I have been involved with in using frequencies as a basis for medical therapies of varying kinds [http://www.unifiedphysics.com/Medical\\_therapy\\_cyma1000\\_racehorse\\_study\\_june\\_2005.pdf](http://www.unifiedphysics.com/Medical_therapy_cyma1000_racehorse_study_june_2005.pdf)

regards Tony Fleming  
<http://www.unifiedphysics.com>

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From: Bilovsky@aol.com  
 Subject: Unfounded Fear: Use of Cellular Phone, Date: September 19, 2006 3:59:21 PM  
 To: paulmoller@motorola.com Cc: bioelectromagnetics@yahoogroups.com,  
 cheemf@lists.healthandenvironment.org  
 Dear Paul,

Your post below was forwarded to me. I am curious, is your post your personal opinion, or the opinion of your employer, Motorola?

What are the studies that you state show no effects? If they are the early studies (e.g., Muscat et al., Inskip et al., etc.), say prior to 2004 or so, I would agree with you. This is because with brain tumors (and tumors in general) there is a long latency time, typically 25 years or more, between exposure and diagnosis. Many of these studies had an average cellphone use time of less than 3 years. Would a study of smokers who smoked for less than 3 years find lung cancer?

If you are referring to the more than a dozen studies by Hardell et al., then these must be the studies that (according to your allegations) "have later been found to be scientifically flawed" as all of them show an alarming risk of brain tumors from cellphone (and cordless phone) use. Of course, you know, as I do that the accusations of "scientifically flawed studies" comes from either industry or authors that did not find a risk. Further you know, as I do, that there is no evidence of scientific flaws that they presented that can explain away these alarming findings.

If you are referring to the cellphone industry funded Interphone studies (all use a common protocol) where 4 out of 7 studies have shown a risk of brain tumors after 10 or more years of cellphone use, then your allegation of "scientifically flawed" would hold for all of the Interphone studies, not just the studies that have shown an effect.

Clearly, as a Motorola employee, you have a vested interest in reporting that there is no risk of brain tumors. To more clearly see how industry studies compare to non-industry funded studies I have produced a set of scatter plots that compare these results in great detail. I invite you to go to [http://www.powerwatch.org.uk/columns/morgan/20060818\\_phones\\_tumours.asp](http://www.powerwatch.org.uk/columns/morgan/20060818_phones_tumours.asp). You can select any data point on these plots and it will show you details of the finding along with a citation of the study.

My fear, is that because the weight of the scientific evidence does show a risk of brain tumors after 10 or more years of cellphone use, that this may only be the tip of the iceberg. What if this risk of a brain tumor after 10 or more years of cellphone use is the tail of the distribution of a 25-year latency time?

Lloyd Morgan

Director, Central Brain Tumor Registry of the United States ([www.cbtrus.org](http://www.cbtrus.org))

[For identification purposes only. All statements are mine and mine alone and do not represent positions or opinions of the Central Brain Tumor Registry of the United States]

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on 9/19/06 8:54 AM, Moller Paul-WPM002 at paulmoller@motorola.com wrote:

>To equate a cellular phone with a gun is spreading unfounded fear. Check out the literature,  
>it is laden with studies showing NO effect what so ever of cellular phones or cellular phone  
>like emissions on tissue. So far all of the studies that have shown an apparent "effect" have  
>later been found to be scientifically flawed. Look at the now 1 billion people using cell phones  
>around the world, if there was a health problem they would be dropping like flies. To spread  
>such a connection is down right irresponsible in a scientific community.

> Paul Moller

Paul,

I'll accept your challenge. I was an expert witness in the legal case that the late Dr. Robert Kane brought against Motorola, unsuccessfully.

Kane was an engineer at Motorola when the prototypes of cell phones were being developed in the early 1980's. In fact, he was honored as engineer of the year for several years in a row. Eventually, he was asked to be a human guinea pig in an experiment in which he had to hold a mobile phone body on which a prototype antenna system was mounted (including the printed circuit equivalent of a tank coil) up to his head in various positions so that the effect of the human head on the antenna radiation pattern could be measured.

He was supposed to hold the "phone" in each position transmitting for one minute each time while the antenna pattern was being measured, and he did this for several hours each day. After a number of months (I don't know the number) he developed a brain tumor that grew from the outer part of the brain inward. Further, the pathologist who filed an affidavit on the case reported that the tumor occurred where he had been holding the "phone."

Kane had several brain operations over several years, but unfortunately, he died early this year.

Remarkably, he obtained his PhD in Electrical Engineering from Illinois Institute of Technology during his various convalescences. He also wrote and published the book that Charles mentioned in one of his posts to this list: Cellular Telephone Russian Roulette, which is an annotated bibliography of 50 years of research prior to 1995 that Kane stated should have alerted Motorola, Bell Labs, and other cellular phone pioneers to the dangers of this device before they released it to the public.

The Mobile phone body that was used in the experiments in which Kane participated had 3 watts output, whereas the analog cell phones in the US had Maximum output of 0.6 watt, and the pulsed digital phones of the present time have only 0.125 watt maximum output, but are pulsed. Also, the antenna assembly and printed circuit "coil" were all out in the open, so there were large electric fields at the apexes of the "zig-zags" that formed the tank coil. Because of the differences between this test device and the design of what eventually became the early cell phones, the judge in the case ruled that this case should not be considered pertinent to any other legal cases against the cell phone industry.

One reason there have been about 10 health cases brought unsuccessfully against the cell phone industry (over a period of years) is that the judges use a principle called the "Dauber Rule" when they decide whether to admit evidence or expert testimony into a lawsuit. This rule states that the testimony or evidence must be in accord with the prevailing view of at least half the experts in the field of testimony. If scientific journals used such a rule, innovative

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papers would never be accepted for publication.

Scientists with the stature of Henry Lai, the Swedish epidemiologist Mild, and other prominent researchers have been automatically excluded from consideration of their testimony because of the Dauber Rule in cases such as the 800 million dollar lawsuit brought against the industry by the now deceased psychiatrist Dr Newman. In my opinion, this is a great disincentive to any scientist to try to help assure justice in legal proceedings. I have turned down several other opportunities to be an expert witness since I saw how the system operated in the Kane case.

Here are just a few of the experiments that demonstrate adverse biological effects from absorption of RF radiation. The experiments that Henry Lai and Narendra Singh published in the early 1990's demonstrating excessive DNA breakage (both single strand and double strand) in brains of rats exposed to RF radiation have recently been verified in the REFLEX experiments carried out by a consortium of laboratories in Europe. In addition, micronuclei formation has been observed by several different investigators in lab animals exposed to RF radiation. Micronuclei are generally considered precursors of cancer. Also, leakage through the blood brain barrier when animals were exposed to RF radiation has been studied by Leif Salford and his colleagues at Lund University in Sweden for many years.

In 2003, the same group showed dramatic photomicrographs of neuron damage as a consequence of the RF induced BBB leakage of albumen in an article published in Environmental Health Perspectives. The biological implications of pulsed RF radiation are just beginning to be studied. Gerd Oberfeld and his colleagues in the Public Health Dept. of the Province of Salzburg in Austria and in the University of Salzburg measured brain wave changes in human volunteers exposed to the pulsed radiation from a GSM base station 80 meters from a school in which the volunteers were behind a set of screens which could be lower to shield them from the radiation and then raised to expose them to the radiation. During the exposure phase, the measured radiation density was only 0.3 microwatt per square centimeter, but the changes in relative strength of alpha 1, alpha 2, and beta brain waves were documented from EEG measurements. This experiment has not yet been published, but I have a press release and a power spectrum of the brain waves sent me by Oberfeld. These experiments constitute a verification of the prediction that G.J. Hyland made in the British medical journal The Lancet in the year 2000 that the pulsing pattern of GSM phone systems would resonate with the lower frequency human brain waves. Other scientists, one of whom is Carl Blackman of the EPA Laboratory, have found that RF exposure affects the level of the Melatonin peak around midnight. Melatonin is one of the body's most potent cancer fighters.

There are many other experiments that demonstrate the occurrence of non-thermal biological effects in radiation absorption experiments, but they are categorically excluded as "bad science" by the engineering panels that advise the regulatory agencies. One of the worst offenders is the ICES committee, in my opinion. I have read some of the white papers that appeared on the ICES web site prior to that groups final recommendations for regulatory standards, and I doubt that they meet the standards of objectivity that they proclaim so intently!

Regards to all, Bill Curry  
Retired former staff scientist at Argonne National Laboratory

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Andrew, if I get it right, you are one of those who correctly don't deny EMFs are biologically active and relevant, but think that "there is not enough evidence the impact is harmful"!?

You are obviously "at industry side", what makes you no less interesting correspondent, but such statements of yours are in "our" favour :-) ("we" = those who care about health more than about profits)!

If somebody said that adding some new program "have shown no harm to any computer, although we don't precisely know what the program really does", who would have accepted such a program to his computer!?

But you suggest taht we should more or less voluntarily accept the changes made by EMFs to our bodies, which are much more complex (and therefore more unpredictable) systems!?

Drasko Cvijovic

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Dear Paul and all,

Tony makes the comment that the cellphone industry has not solved the problem of ("putative") adverse health effects from chronic exposure to RF/MW radiation. He also concedes that cellphones are fine engineering, to which I add that the public is never going to abandon that technological advantage. So for some years we have been researching into effective radio-protection. The result is Asphalia, a plant derived natural product rich in melatonin (see www.asphalia.co.uk) Asphalia has now been granted permission for over the counter sale in the UK and is stocked by hundreds of health food shops here. It is effective in preventing the cell aberrations and radio sickness symptoms described so long ago by Charlotte Silverman allegedly caused by exposure to RF/MW fields and radiations. I personally would be pleased if the cellphone industry allowed cellphone retailers to stock this preventive product, and stopped their campaign of denial in the facing of mounting evidence that there is clearly a long term risk from excessive use.

In 1998 I brought a case (well publicised at the time by the world's media) against a UK cellphone industry retailer under the Consumer Protection Act 1987, and within 90 days the UK Govt announced the setting up of the Stewart Committere, which advised against use of cellphones by children (fat chance!). Now people all over the UK can protect themselves using this melatonin-rich plant derivative, and I think this is a better way forward than the adversarial confrontations and contraversial value judgements being offered by both sides in the issue.

Roger Coghill  
MA (Cantab) C Biol MI Biol MA (Environ Mgt)  
Coghill Research Laboratories

Visit our website: <http://www.cogreslab.co.uk>

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Actually, there is a DVD circulating around this country which does allege that the destruction of the WTC a few months after it was sold by Jewish group to an Arab group was indeed perpetrated by the US Administration in order to secure public support for the war on terror. There are lots of mysteries about that terrible event leaving suspicions in the minds of many UK citizens, Paul.

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Roger Coghill  
MA (Cantab) C Biol MI Biol MA (Environ Mgt)  
Coghill Research Laboratories

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“There is very little evidence that weak electromagnetic radiation can actually cause cancer > in healthy cells. What evidence there is suggests that its adverse > effects are by accelerating the growth of tumours that have already > formed or exist as dormant precancerous cells”.

I am unhappy at this statement. We have shown that electric fields at fields strengths routinely encountered near cellphones, appliances, and at any frequency, cause nitrites to form in voirtusally any aerated aqueous solution, and with chronic exposure (say 48 hours)acheive concentrations shown by a number of competent studies to de aminate DNA and impair oxidative phosphorylation. This simple exp[eriment can be performed in any lab, and demonstrates how tumours might derive from such non thermal exposures. We presented the data at Cancun and at Madeira before that, and will do so again at Crete this October.

Roger Coghill  
MA (Cantab) C Biol MI Biol MA (Environ Mgt)  
Coghill Research Laboratories

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Dear Andrew, dear list

According to our understanding of cancer risks by using cellphones, it needs indeed more prepositions for a cell to develop cancer. First of all, cancer only grows in acidic environment. (This is already recognised allopathic knowledge.) That means, if the lymph - the liquid in between the body cells - is acidic (below about pH 6), the acidic waste, which is created in every cell by the normal metabolism and causing the cell to become acidic inside, cannot be expelled by the cell. If the lymph is slightly alkaline as it is supposed to be, the difference in pH level causes diffusion to “suck” the acidic metabolism leftovers in the lymph so that it can be discharged. So if the lymph is acidic, it is as if the waste collector is on strike. The cell is full of acidic waste and therefore cannot “hear” the body information properly anymore - so it deteriorates. Adding to this, an acidic environment means also a lack of electrons. Normally, the cell tissue can withstand acidic environment, but electromagnetic waves have a stronger power then only the acidic environment and it “shoots” electrons out of the cell tissue. A damaged tissue now is weak and cannot withstand the acidic environment anymore, so the cell is “bombarded” from inside and outside by acidity and electron-stealing waves. So we are the opinion that the combination of electromagnetic waves and the hyperacidity in the body is at least one of the reasons to cause cancer. And since most of the people nowadays living in the so-called “civilised” world are over-acidic, electromagnetic waves can cause cancer in nearly every cell in every-body. Therefore, we do recommend drinking alkaline water regulary to bring the lymph pH back to an alkaline level and reducing the risk of being hit by sudden cancer.

Greetings from South Germany  
Dietmar Ferger

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October 2006  
het bitje

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Hello Charles, Drasko, Roger and Everyone,

Thank you all for your interest. Can I start by saying that I am not in the pay of any telecoms or power company. I am in fact a retired University Lecturer who has had an interest in bio-electromagnetics for many years and have never once held a grant from any of the said companies. Instead, I try to tell it like it is (or at least how I think it is) without fear or favour. Only that way can you be sure of annoying absolutely everybody!

Yes I agree that electromagnetic fields can in some circumstances promote the development of cancer but I am less sure that they have a significant effect in causing it as suggested by Roger (not even my daughters talk on the phone for 48 hours). I also agree with you Charles that there are deleterious effects on the nervous system (one of my daughters is hypersensitive) but these are usually temporary.

I think virtually all of these effects can be put down to changes in the permeability of cell membranes by electromagnetic exposure. I have recently published a surprisingly simple explanation for how these permeability changes occur. It explains why weak fields can be more effective than strong ones, why there are both amplitude and frequency windows for efficacy, why waveform is important and how pulsed or amplitude modulated radio frequencies give effects without the need for rectification. I have discussed it in Chapter 11 of "Plant Electrophysiology - Theory and Methods" edited by Alexander Volkov and published by Springer (July 2006) ISBN 3540327177.

The overall conclusion is that electromagnetic fields of the right amplitude and frequency selectively remove structural calcium from cell membranes, which weakens them and makes them more prone to temporary pore formation. When this occurs in excitable nerve cells it could promote the generation of spurious action potentials by direct depolarisation and/or calcium ingress from the outside and intracellular stores. This could account for many of the symptoms of electrosensitive people from headaches to pins and needles but my guess is that they do no permanent damage.

As I mentioned in an earlier posting, calcium ingress into the cytosol in ordinary cells would interfere with cell signalling and increase the rate of specific aspects of metabolism that they are programmed to carry out. For example, it could increase the rate of healing of injured tissues or promote the growth of cancer cells. So as you see, there may be both good and bad effects of electromagnetic exposure. The "good" effects are already being exploited in various forms of electrotherapy but they may also be induced fortuitously by our ele(k)tromagnetic smog, including the use of cellphones. I hear you Charles when you say that you have not heard of any good effects from cellphones, but that may be because no one has looked. You cannot miss the development of a tumour but good effects such as enhanced healing or increased life-span would not be obvious and may go unrecorded unless they are specifically

sought. To concentrate on just one aspect of health is unscientific.

I don't think I can be accused of bias towards the "industry" when I ask for all aspects to be considered.

Perhaps the best single indicator of overall health is life-span. It should be possible for the phone companies to correlate cellphone use with lifespan. Lifespan figures are in the public domain and are available from public records, whereas the phone companies themselves will have records of each individuals usage. The statistics ought not to be too difficult; the sample size is potentially enormous and should show any significant results. If representatives of the cellphone companies read these postings (and I bet they do) I would challenge them to do the necessary statistical analysis. They have all the information to do it in secret, but if the average cellphone user does live longer, I'm sure they will tell us all about it. Perhaps Paul Moller would like to comment on this one.

Best wishes

Andrew

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Hello Andrew,

I respect your viewpoint and find it interesting.

Also I would like to differentiate between direct carcinoma and the daily uncomfortables, where the medical establishment cannot find a cause for.

I mean headaches, sleeplesness, tinnitus, eye problems, heart problems, restless legs, urinary tract problems, etc.

From those complaints one does not die instantly, but can be a pest to live with.

And with avoiding the elektrosmog, those complaints can vanish. That is striking.

The frequencies and modulations used by the mobile phone industry, or better the wireless industry, is quite different from the natural radiation of earth.

With bioresonance therapies, the general Rife frequencies go from 0,5 Hz till 10.000 Hz.

The Hulda Clark frequencies go from 30.000 Hz till 1 MHz.

Now, the organisation channel of UMTS or 3G is pulsed with 15.000 Hz, when there is no traffic. (There is hardly any traffic, because UMTS is a commercial flop).

We do know what bioresonance frequencies can do to the body in a positive way to health.

People living in the radiation beams of UMTS or 3G are now constantly exposed to these signals.

I HAVE NEVER HEARD OF ANYBODY WHO HAD AN ILLNESS AND RECOVERED BY THIS RADIATION.

I only encounter health problems by UMTS exposed people.

So I do not see any health improvements by using cellphones.

But I am also curious what Paul Moller has to say.

Greetings,

Charles Claessens

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Andrew,

It is good that someone on the periphery of the discussion has a view different to what appears quite a strong consensus among the participants of this forum that all is not fine and dandy with the mobile phone emissions via its digital frequencies. Note that the BEMS journal appears to reflect something else. Can someone help me here with the stats?? I'm particularly interested in a time-plot vs in vitro and in-vivo studies over the past decade or so.

I wonder how much of that evidence you have examined Andrew has been the result of controlled experiments on living tissues as distinct from in vitro studies. Now this is a very different type of research even though on paper it looks almost identical - "in vivo-in vitro" - almost identical.

No wonder there are few effects on in vitro samples and cultures. Those porous membranes you talk about have probably totally shut down. The same type of thing happens with meat from recently slaughtered cattle and sheep. When a beast is slaughtered it's taste as a piece of cooked meat depends on whether the animal was scared or calm. Talk to any farmer about this, he will tell you that you must not slaughter a beast in front of its fellow beasts, because they understand what has happened and they react as you or I would.

This is just one comment I would make Andrew about your opinions.

Kind regards Tony Fleming

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Hi Tony,

It's good to hear from you again. Yes, visiting the forum is a bit like going into the lions' den, but that's what discussion groups are all about. If we all agreed, there would be no forum. Between us, we can get closer to the truth.

I wish you luck with your time plots, but as you must realise, the literature is both vast and confused, not least by vested interests specifically sponsoring research that they expect will find nothing detrimental to their activities.

Having said that, I think they may have shot themselves in the foot since, by being so obsessed by trying to prove that there are no physiological effects of electromagnetic fields, they have missed out on the possibility that at least some of them may be good!

What I am hoping to do to redress the balance, hence my call for a statistical analysis of the relationship between cellphone usage and life-span. I guess you might even be interested in doing this yourself if you could only get hold of the data.

Leaving that aside, you raised some interesting questions regarding holes in membranes in your last posting and I'm sure that others must share that interest.

It all dates back to the classic work of Suzanne Bawin et al. and Carl Blackman, starting in the 1970s, who discovered that electromagnetic exposure caused a non-metabolic release of calcium ions from brain cell surfaces with a peak at 16Hz (the ion cyclotron resonance frequency for potassium). Neither the mechanism nor its significance were understood at the

time and we are only now beginning to appreciate it.

I have suggested that alternating electromagnetic fields temporarily dislodge cations bound to cell membranes during each cycle, but if the fields are very weak only the more strongly charged ions (such as divalent calcium) are removed, with their places being taken by less strongly affected monovalent such as potassium (which is by far the most abundant alternative).

This effect would be increased if the field oscillates at 16Hz (the ion cyclotron resonance frequency of potassium in the Earth's magnetic field) which selectively increases the kinetic energy of potassium ions and enhances their ability to replace calcium on the membrane.

It is a generally-accepted fact that calcium ions help hold the phospholipid fraction of the membrane together by screening the mutually repulsive forces of the negatively charged phospholipids and cross-linking them. Their electromagnetic replacement by potassium would weaken the membrane and make it more prone to tearing and pore formation (see Ha B-Y (2001) Phys. Rev E 64:051902) for a theoretical treatment.

Temporary pore formation is common in membranes and has been measured as spontaneous transient changes in the conductance of artificial phospholipid membranes at near-physiological voltages (see Melikov KC et al. (2001) Biophys J 80: 1829-1836) . They estimate the mean size of the pores to be around 1nm and they may remain open for up to about a second. Even larger temporary pores can be formed by high voltage pulses applied to living cells, and these have been routinely used for the introduction of foreign DNA and plasmids for genetic modification. This "electroporation" does not kill the cells since the introduced genes can be subsequently expressed.

It is interesting to note that the electroporation of plant protoplasts (cells with their walls removed), even without foreign genes, resulted in a prolonged increase in vigour and ability to regenerate into new plants (see Ochatt BJ et al. (1988) Plant Science 54: 165-169). This could be due to the introduction of other materials from the culture medium (I would speculate calcium). Perhaps the apparent health-giving effects of weak electromagnetic fields on both animals and plants may be due to a similar mechanism.

It is also interesting that very low doses of ionising radiation (e.g. gamma rays), which also make tiny holes in membranes (this time by causing lipid peroxidation) can have similar effects to electromagnetic fields, including increases in vigour and longer lifespan in a wide variety of organisms (see Luckey TD (1982) Health Physics 43: 771-789 for an introduction and a review of the early work). This phenomenon has been called "radiation hormesis" and bears a remarkable resemblance to the effects of weak non-ionising electromagnetic fields, even down to their mediocre reproducibility.

I believe that the relatively poor reproducibility of bioelectromagnetic experiments on whole organisms (as opposed to the good reproducibility of calcium-release from brain cell surfaces) is due to the variable ability of intact cells to take counter-measures, such as an enhanced calcium expulsion from their cytosols. While this would not necessarily reduce the increase in membrane tearing, it could reduce its metabolic impact by keeping down the cytosolic calcium concentration and its consequent effects on intra-cellular cell signalling

So the overall message is that small holes in cell membranes not only repair themselves but

may actually be good for you. I hope this helps you understand my viewpoint and the urgent need to conduct an objective assessment of the effects of weak electromagnetic fields on overall health and life-span.

### Where are you Paul Moller?

Best wishes

Andrew Goldsworthy

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Andrew

You are right, we learn from each other. I am going to get those references you've kindly given me and do some homework to get a better insight into your ideas.

What I have gathered from your point of view in general is that like the two-edged usage of poisons, antibacterial agents, and the practical science of homeopathy, is that there is a "theory of opposites" at work across medical practice, or its wider application within biology and evolution. In other words there is a positive effect that can come out of a noxious effect. Chemotherapy can be looked at as another example of this. And as you rightly point out, the warming effect of EM radiations can be seen to be a positive.

Of course, we must realise that these usages must NOT be applied to the population carte blanche, willy nilly, as in the case of say induction heaters, where many spontaneous abortions have occurred to female workers who must sit at these machines.

Rather these two-way agents must be applied discriminately to those to whom the positive effect can be useful, i.e cancer sufferers as in diathermy. I think we do have some precedent of applications where dangerous substances ARE applied willy nilly, such as floridization of the water supply. But this is very controversial and we really do not know if the overall effect is good or bad UNTIL it is "too late", a bit like genetically modifying food. When corporations have historically exposed potentially dangerous agents upon a society, woe betide any corporation that gets it wrong and can be shown to cause harm, such as the tobacco and asbetstos industries. They end up paying a heavy cost in compensations to huge numbers of the innocent public. We know from theory and from experimental evidence that children should NOT be exposed to "excessive" levels of mobile carrier frequencies.

Bawin, Adey and Blackman are all names from the pages and pages of references of my own PhD thesis. I did a numerical study of diffusion within the membrane surface. This was a look at both an endogenous and exogenous exposures and was a small part of my overall thesis. A major concept in this work was to study the "asymmetry" of the cell's polarity in order to establish an ionic current "through" the cell, e.g microcurrents in at one end of the cell and out the other end. Thus the cell could organize cell wall growth and the cell would be "elongated" in the direction of the ionic currents. This study gave me an insight into how the endogenous electric and magnetic fields work in practice to cause growth and development within and without cells and the way cell-cell cooperation was required for cells to function properly. Froelich I seem to recall was one in the mid 1980's who was suggesting such cell-cell cooperation. Hence the integrity of a saline solution of cells is lost when we separate out all but a few cells. Like the atomic particles within a crystal lattice, we can only go so far by separating a single cell out and examining it in isolation. We lose all ability to examine the

cooperation that is part and parcel of the cell-cycle.

Self-field theory tells us that there is an overall endogenous dynamic balance occurring with a population of cells due firstly to their polarity, and secondly their ability to rotate, that gives any population of cells a dynamism that is vital of a tissue's overall integrity.

At the smaller domain of the DNA, we have the work of of Fritz Popp who demonstrates that the "biophoton" is crucial to our understanding of the cell cycle. This AGAIN is another level of Self-field theory at work, providing a dynamic balance as to what the DNA is going to do next in its life and death history.

Finally at the photonic level, there is a complete photon chemistry whereby different states of the hydrates attach themselves to the DNA bases in accordance with the signal-carrier-ions being sent from outside the cell. My recent work in obtain a theoretical estimate of the mass of the photon should enable us to estimate the transition energies associated with the various DNA within the realm of terrestrial biology. I will soon be placing a video up to the www.unifiedphysics.com site; look for this sometime in the near future. It will explain how the structure within the photon gives us a whole new way of looking at the mathematics AND the biology via photon chemistry.

Perhaps the most striking thing to me in terms of exogenous exposure studies is the number of in vitro studies that were around while I was doing my PhD and beyond. It seemed to me then, about 15 years ago now, that we were relying too much on these studies which were bound to show us little about a much more dynamic and subtle cooperative phenomenon. The fact that the levels of exposure were recently INCREASED, says to me that we scientists need to speak out against such a potentially dangerous decision being foisted upon an innocent public, especially the young, the infirmed, or the electrosensitive, not to mention the magnetosensitive.

Kind regards Tony

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Hi Tony,

Thanks for your interest in my ideas on how cells perceive weak electromagnetic fields. What I posted was just the bare bones. With just a little additional thought, we can see how they can explain the seemingly mysterious effects of waveform; why only low frequencies work, why pulses and square waves are more effective than sine waves, why there are often multiple windows for frequency and amplitude and last but not least how pulsed radio-frequencies produce their effects. The answers (or what I believe to be the answers) are published in my chapter in Volkov's book (ISBN 3540327177) but our readers might have some fun trying to work them out.

To reminisce just a bit, I share some of my background with you. When I was just a young lecturer, I was inspired by Ross Adey's work but was unable to get a grant to follow it up since it was at the time regarded in the UK as lunacy. So I did other things, including work on photorespiration, photosynthesis, action potentials in plants, vibrating probe studies on the relationship between hormones and electrical polarity in plants, and space research (I still do a bit of consulting for ESA). It wasn't until very late in my academic career that I returned to Adey's work. After nearly thirty years, I was surprised to discover that no one had really solved the problem of explaining it. I then had a lot of fun in the Electronic Journals Section of the

Imperial College Library (which had been improved out of all recognition by a newly-appointed Rector) delving into the literature. To my surprise, I found that all the information I needed to give a plausible explanation had already been published; all I had to do was put together the pieces of the jigsaw, and you now see the result. I must therefore thank all the authors that I have referred to, without which the theory would not have been more than a wild fantasy (I guess some people might still think it is, but you can't please everyone). It would be interesting to hear what other members of the Group feel. If I am right, this pioneering part of Adey's work may be more fundamental and important to our understanding of bioelectromagnetic perception than even he imagined and it is sad that he died before it was really fully appreciated.

Andrew Goldsworthy

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Dear Andrew,

Reading your recent post here I have to correct myself and apologize regarding my previous intonation about your standpoints!

Even an attempt of a balanced view is generally rather rare, so I had got used to label biases without much consideration, although I myself find it a disgusting manner.

Besides the apology, I wanted to comment your notes about completing the puzzle, being so curious to hear your thoughts regarding the issue of "magic protection devices".

Namely, trying myself to reach some understanding of Electrosensitivity (from more practical side, though), I got stuck with the fact that EMF stimuli and reaction are not coupled to the extent we would like them to be.

At least the supposed relation doesn't enable prediction of an ES response in a certain environment. I would have still considered different theories about strength and frequency windows, rotating fields etc., if I hadn't been assured that "miraculous devices" (different "neutralizers", "harmonizers" etc.) do make objective effects to an ES response, while having no effect to any measurable field characteristic. There seems to be a stimuli parameter involved with ES phenomenon, that can not be reduced to any measurable field parameters. That is a possible opportunity to make a significant step towards fitting the puzzle.

I have still seen no sane explanation of that fact but it doesn't make the fact less real. I assure you it is real and easily demonstrable. Just give it a chance it could have been real - would it than have made a completely new insight and present the "missing link"?! I am aware that the stories associated with the "neutralizer" issues are so weird that for an uninformed scientist they promise too little chance of being related to anything sane, but if the prize is extremely high, it is worth playing even under low chances!

So what do you say regarding my suggestion to give this some more serious objective consideration!?

By the way, could you please somehow share with us your paper from Volkov's book, you mentioned?!

Drasko Cvijovic

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Hi Drasko,

Thanks for the posting and your interest. I think I would be wary of so called neutralisers that are supposed to protect you against electromagnetic fields, especially if they are not supported by experimental evidence and are backed only by pseudo-scientific gobbledygook and potentially forged testimonials.

I can however give you some science-based means to neutralise the effects of electromagnetic fields that may help, at least in researching the problem, and may be worth testing on electrosensitive people.

For example, there is well documented evidence that exposure to the ion cyclotron resonance frequency for calcium (32Hz in the Earth's magnetic field) gives opposite biological effects to 16Hz (the potassium resonant frequency). For example, the potassium frequency stimulates locomotion in diatoms, but the calcium frequency inhibits it (McLeod et al. 1987. J. Bioelectr. 6: 153-168). The potassium frequency stimulates the germination of radish seeds but the calcium frequency inhibits it (Smith et al. 1993. Bioelectrochem. Bioenerg. 32: 67-76). The potassium frequency stimulates multiplication in yeast but the calcium frequency inhibits it (Mehedintu and Berg 1997. Bioelectrochem. Bioenerg. 43: 67-70). We can now explain these findings since any resonating free calcium ions near the membrane will have a greater ability to compete with potassium, bind more frequently and reduce leakage. A practical corollary from this is that if there are any adverse effects of weak electromagnetic fields on human or animal health, it should be possible to reverse them by simultaneous exposure to 32Hz.

Another trick that may be worth trying is where people are particularly sensitive to cellphone pulse frequencies near 16Hz (e.g. TETRA at 17.6Hz) it should in theory be possible to partially mitigate these effects by attaching a strong permanent magnet to the hand-set. This would shift the resonant frequency of the potassium ions in the brain to a higher value (the resonant frequency is directly proportional to the strength of the local dc field) and make them no worse than regular cellphones. I hope this might help some people at least.

I will do my best to share with you the relevant parts of my chapter in Volkov and will post a short summary outlining its salient features and what I believe to be the solutions to the "puzzle" I posed in my last posting. I'm afraid I do not yet have any reprints or pdf versions of the whole chapter though.

Best wishes

Andrew

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Hi Andrew,  
Thank you for your kind response!

Regarding 16 / 32Hz, thank you very much for an interesting suggestion, I am myself at the moment trying to find a proper LF generator as I would like to see what it does to people, at different frequencies.

Interestingly, alleged effects of such generators are reported at "Schumann frequencies" what, being close to 8Hz, could have been (rather speculatively) related to a harmonic of "your"

16/32Hz..

Also, if such a generator had an option of LF (white or whatever) noise, I might also test the theory that an LF signal strength is relevant only relatively - as signal / noise ratio... (That theory seems to have significant support by works of late Prof. Litovitz.)

Regarding neutralizers, I perfectly understand your disgust, but please tell me: if just one of such devices really worked, would it have been worth investing a lot in understanding? I wouldn't have even mentioned that weird issue, if not been assured by objective tests - blind guessing, EEG, etc..

Not to mention that I felt it myself, despites my previous reluctance. For the sake of truth, besides ridiculous explanations, the practical effect of neutralizers is not even near to what the producers claim. At least such devices seem to diminish the impact with time.

But the theoretical significance is enormous.

To make you (and potentially some other objectively oriented people) interested, I might offer a bet!! If there would be any replicable evidence of just one of such devices (making any objective change such as EEG shift without subject's awareness of the device presence), I win. Otherwise, if I fail to document such phenomenon, I lose. What is the prize, could be negotiated.

You might have asked me why hadn't I already published such findings - let me just say that the phenomenon of Electrosensitivity has stil not gained "official" recognition despites numerous works that clearly document it's reality, while that phenomenon is in much less incoherence with the current system of knowledge than neutralizers are.

I would be looking forward to further correspondence, including all your insights you would be kind to share with us!

Drasko

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Hello Drasko,

I am sorry, but a proper LF generator will not do.  
And will not be enough.

The effects by mobile phone signals, or all wireless digital signals, are not the high frequency carriers alone, or the low frequency digital information which is the pulsrate over the HF carrierwave alone, but a combination of both.

My wife has recovered in such a way, that she is no longer bothered by mobile phone masts or DECT phones.

She *\*feels\** them still, but does not have any health complaints anymore.

But, she may have reactions to some DECT phones, when we walk on the streets in our neighbourhood.

Now, the frequency carriers are between 1880 and 1900 MHz, so a span of 20 MHz.

The pulsrate of a DECT phone is 100 Hz.

And I found, that some DECT signals, she reacted to, were of less strength, than other DECT signals which were much stronger.

So I think that her *\*biological window\** now has been *\*narrowed\**, but that the opening at the moment is for perhaps 1883.6 MHz and for instance 1891.3 MHz, and both with the pulsrate.

That is what I think.

I believe that the HF carrier plus the pulsrate do give another resulting and different waveform, which triggers the reactions.

Therefore I think that people who do not have adverse reactions to elektrosmog do have a \*biological window\* of zero.

And heavy electrosensibles do have a wide open \*biological window\*.

There are several \*things\* that seem to work for electrosensibles.

There are many people developing \*things\* that seem to work.

But some stop working after a while!

Some do have an idea, others have found in practice that something works.

But nobody knows exactly why it works.

Nobody knows that.

Because some unexplained phenomena are involved.

Some speak about \*longitudinal waves\*, others about left- or right turning vortexes, others discuss \*photon chemistry\*, again others have investigated special materials, which do have a shielding function.

There seems to be something going on at an atomic level.

Normal people do not have something in their body that can react.

Be aware that EHS people are not normal. And they have something in their body that reacts, and some may react heavy!

Silvio Hellemann wrote a book: \*Handbuch fuer Elektrosensible\* in which he described a number of \*things\* and \*machines\*, which would help with electrosensibility.

I asked him which one he found the best and could recommend me.

He told me: \*None, because they all suck up the negative energy, and after a while, they start transmitting it.\*

That is something that indeed occurs, especially with stuff that contain crystals.

(We found out with for instance the BioElectrical Shield, which helped in the beginning, but later on caused troubles, which disappeared after we cleared it by let it rest for a few days on a \*Purple Plate\*)

I have also found, that stone bricks may suck up HF signals (like those of a cordless DECT phone) and after 1 ½ years start emitting/reflecting those signals.

(The signals coming TO the bricks were in the beginning 140 uW/m<sup>2</sup>, and later 200 uW/m<sup>2</sup>. In the beginning, no reflection came FROM the wall. After 1 ½ year it was 40, than 80 and half a year later the reflection was 140 uW/m<sup>2</sup>. At the backside of this wall were no HF sources. Other people in Germany have experienced this effect also)

I have found that by healing the health status of EHS persons, (by getting rid of heavy-metals f.i.) the sensibility to EMF fields may decrease.

And then the \*thing\* which helped in the beginning, now becomes a burden and may give adverse effects.

Be also aware that most EHS persons do have a different level of electrosensibility.

Let us say a level from 1 to 10.

A level 3 person may go down to level 1 with a certain \*thing\*.

But a level 8 person, with the same \*thing\*, will not go down to 6, but only 7.5 or even higher.

So, a classification of electrosensibility is needed.

The level of electrosensibility of a person also determines if a certain \*thing\* may help or not.

I know people where nothing helps.

I know people who react to a 9Volt battery.

The Motorola boys do know a lot about all this, but they keep their teeth together.

And let us invent the wheel again.

My 2 cents.

Greetings,  
Charles Claessens

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Drasko

You are looking for a good LF-generator to test some ideas.

How are you going to “attach” the LF-signal to your testobjects?

And at what levels and waveform shapes?

Wille Borlin  
SWEDEN

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At 10:01 AM 9/26/2006, Drasko Cvijovic wrote:

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>[...] Namely, trying myself to reach some understanding of Electrosensitivity (from more practical side, though), I got stuck with the fact that EMF stimuli and reaction are not coupled to the extent we would like them to be. At least the supposed relation doesn't enable prediction of an ES response

>in a certain environment.

Do you really know what “a certain environment” actually is?

Have you monitored the microorganisms (bacteria, fungi, etc.), many of which colonize (rather than “infect”) the human body, or ride “within” the air that is breathed ?

Have you checked what EM frequencies induce these organisms to multiply, disintegrate, or to manufacture and dump their endotoxins and mycotoxins at various rates -- within the body, lungs, sinuses, intestines, etc. ?

Bill Kingsbury

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Good questions Bill...

I have been looking at these variables for years and have never had a straight answer from the "experts."

Thanks,

Liz

\*\*\*\*\*

Hello,

I am sure that Drasko meant \*certain environment\* with regard to other fields of elektrosmog.

Of course microorganisms play a part.

But we found that in the exact same spot the health complaints stopped immediately when the elektrosmog source was shut off.

And this goes for many different locations (villages, cities) where the air is different, so one may assume that the contents of the air is also different, I mean different microorganisms.

On the other hand, it is found, that placing a bottle with \*energetic\* water close to a bottle with Legionella bacteria, the Legionella bacteria die.

We assume, that this may be explained by \*longitudinal waves\*, coming from the \*energetic\* water.

Yes, the more we know, the more questions do arise.

Some researchers found, that by exposing worms to HF radiation, those worms did multiply much faster.

And the heavy-metals, stored in our body, play also an important part in this elektrosmog thing.

Greetings,  
Charles Claessens

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**Obviously Paul Moller is still lost in the Motorola archives in search of some reports, which he can not find.**

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In the Finnish study (Mobile phone radiation causes changes in gene and protein expression in human endothelial cell lines and the response seems to be genome- and proteome-dependent (p NA) Reetta Nylund, Dariusz Leszczynski Published Online: 28 Jul 2006 DOI: 10.1002/pmic.200600076) Leszczynski and colleagues used two variants of a human culture from Endothel-cells, with a lightly changed genstructure. Both were exposed by GSM-telephones with 900 MHz, and then by checking the present RNA, looking which Gene developed further (Transcriptomics). In a second test the cells were investigated for changes in the number of developed Proteines (Proteomics).

In both cellsamples changes occurred in genetranscription and proteindevelopment compared to the controlgroup, which was not exposed to radiation. But which genes and proteines were indeed involved was very differential. The thesis out of that: Small genetic differences can influence the cellresponse to radiowaves. The scientists did show this in numerous tests.

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het bitje October 2006

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Painter IX, KPT 5, S-Spline 2.2 en veel fantasie [1938 was toch wel een goed jaar].

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Als u het met bepaalde artikelen niet eens bent, mag u uw mening best aan de redactie mededelen. Dan hebben we meteen weer kopij voor het volgende nummer!