

# The Porto Alegre Resolution

We, the undersigned scientists, were honored to participate in a workshop organized by the Universidade Federal do Rio Grande do Sul and the Public Ministry of Rio Grande do Sul and sponsored by the Brazilian Health Ministry, the International Commission for Electromagnetic Safety, the Porto Alegre Environmental Council (COMAM/PA), the Rio Grande do Sul Center for Health Vigilance (CEVS/RS) and others, entitled, "International Workshop on Non-Ionizing Radiation, Health and Environment" which took place on May 18 and 19, 2009, in Porto Alegre, Brazil.

This resolution follows several international resolutions agreed to by concerned scientists and medical doctors over the past decade, including resolutions developed by the International Commission for Electromagnetic Safety [1], based on evidence and consideration on documents such as the BioInitiative Report [2] and a special issue of the journal Pathophysiology on electrical and magnetic fields, published in August 2009 [3].

We agreed that the protection of health, well-being and the environment requires immediate adoption of the Precautionary Principle, which states, *"when there are indications of possible adverse effects, though they remain uncertain, the risks from doing nothing may be far greater than the risks of taking action to control these exposures. The Precautionary Principle shifts the burden of proof from those suspecting a risk to those who discount it"*, until new scientific discoveries are recognized as the only criterion for the establishment or modification of non-ionizing radiation exposure standards;

We recognize that, in Brazil as well as all over the world, where there has been an unprecedented explosion in the availability and use of non-ionizing electromagnetic fields for electrical and wireless communications technologies (mobile and cordless phones, WiFi and WIMAX networks, RFID, etc.), as well as major electrical grid and wireless broadband infrastructure changes, this assessment should inform risk management to take proper steps to protect the public from long-term, low-level exposure to extremely-low frequency as well as radiofrequency electromagnetic fields that have substantially increased in the ambient environment in recent years.

We are concerned about the body of evidence that indicates that exposure to electromagnetic fields interferes with basic human biology and may increase the risk of cancer and other chronic diseases. The exposure levels at which these effects have been observed are many times lower than the standards promulgated by the International Commission for Non-Ionizing radiation Protection (ICNIRP) [4] and the IEEE's International Committee on Electromagnetic Safety (ICES) [5]. These standards are obsolete and were derived from biological effects of short-term high intensity exposures that cause health effects by temperature elevation and nerve excitation discovered decades ago. Recent research indicates that electromagnetic fields could cause detrimental health effects even at very low levels of exposure. The ICNIRP and IEEE/ICES standards are being supported and promoted by interested parties to avoid precautionary technical planning, precautionary laws, and precautionary advice to the public.

We are deeply concerned that current uses of non-ionizing radiation for mobile phones, wireless computers and other technologies place at risk the health of children and teens, pregnant women, seniors and others who are most vulnerable due to age or disability, including a health condition known as electromagnetic hypersensitivity. We strongly recommend these precautionary practices:

1. Children under the age of 16 should not use mobile phones and cordless phones, except for emergency calls;
2. The licensing and/or use of Wi-Fi, WIMAX, or any other forms of wireless communications technology, indoors or outdoor, shall preferably not include siting or signal transmission in residences, schools, day-care centers, senior centers, hospitals or any other buildings where people spend considerable time;
3. The licensing for siting and installation of infrastructure related to electrical power and wireless broadband telecommunications, particularly, cellular telephony, Wi-Fi and WIMAX, should only be approved after open public hearings are held and approval granted with full consideration given to the need to apply the Precautionary Principle. Sensitive areas should be avoided to protect vulnerable populations;
4. Mankind shall be encouraged to continue to discover new means of harnessing non-ionizing electromagnetic energy, aiming at bringing benefits to society, through definition of new standards of human exposure, which are based on the biological realities of nature and not solely on the consideration of economic and technological needs.

We, therefore, urge all nations to join Switzerland, Italy, Belgium, Russia China, the U.S. (for the FCC standard for partial exposure of the head) and other countries and regions that have chosen to adopt a more precautionary strategy, aiming to assure more safety to the public while maintaining good service quality.

We make an urgent call to all nations to convene a panel of experts, selected from candidates recommended by civil society groups (not only those preferred by the affected industries) to discuss precautionary technology, laws and advice in order to develop policies that reconcile public health concerns with further development of wireless communications technology such as mobile phones as well as electric power transmission and distribution systems.

Citations:

- [1] ICEM's Benevento Resolution (2006) and Venice Resolution (2008) [www.icems.eu](http://www.icems.eu).
- [2] BioInitiative Report [www.bioinitiative.org](http://www.bioinitiative.org)
- [3] A Special Issue of Pathophysiology on the science and public health/policy issues regarding Electromagnetic Fields was published March 2009, and is the only peer reviewed scientific journal referenced on this list. It is now available online at <http://www.sciencedirect.com/science/journal/09284680>
- [4] International Commission on Non-ionizing Radiation Protection [www.icnirp.de](http://www.icnirp.de)
- [5] Institute of Electrical and Electronics Engineers. [www.ieee.org](http://www.ieee.org).

For further information, please contact [info@icems.eu](mailto:info@icems.eu).

Signed by:

Franz Adlkofer, Prof. Dr. Med., Verum Foundation, Germany  
Carl Blackman, PhD., CFB, USA  
Martin Blank, PhD. Prof. Columbia Univ., USA  
Devra L. Davis, PhD , MPA , Founder, Environmental Health Trust, USA  
Om P. Gandhi, Sc.D. , Univ. of Utah, USA  
Elizabeth Kelley, M.A., Electromagnetic Safety Alliance, USA  
Michael Kundi, PhD. , Medical Univ. of Vienna, Austria  
Henry Lai, PhD., Univ. of Washington, USA  
Leif Salford, MD, PhD., Lund Univ., Sweden

Carlos E. C. Abrahão, M.D. , Campinas, SP, Brazil  
Adilza C. Dode, M. Sc., MRE, MG, Brazil  
Claudio R. Fernández, M. Sc., IFSUL, Pelotas, RS, Brazil  
Robson Spinelli Gomes, Dr., MP/RJ, Brazil  
Sergio Koifman, M. D., ENSP/Fiocruz, RJ, Brazil  
Renato R. Lieber, Dr., UNESP, Guaratinguetá, SP, Brazil  
Anaiza H. M. Miranda, Public Official, Ministerio Publica, Rio de Janiero, Brazil  
Ana Maria M. Marchesan, Public Official, Ministerio Publica, Rio do Sul, Brazil  
Alvaro A. de Salles, Ph.D., UFRGS, RS, Brazil  
Solange R. Schaffer, M.Sc., Fundacentro, SP, Brazil  
Cintia Schmidt, environmental lawyer, OAB/RS, Brazil  
Helio A. da Silva, Dr., UFJF, MG, Brazil  
Francisco de A. Tejo, Dr. , UFCCG, Pb, Brazil  
Geila R. Vieira, M.D., CGVS/SMS, P. Alegre, RS, Brazil

**Additional scientists signing on to the Porto Alegre Resolution after September 15, 2009:**

Rodrigo Jaimes Abril, Vice Dean, Electrical Engineer, National University of Colombia, Bogota, Col.  
Betânia Bussinger, M.D., Biological Effects of Non Ionizing Radiation, UFF, RJ, Brazil  
Simona Carrubba, PhD, Louisiana State Univ. Health Science Center, Shreveport, La, USA.  
Christos Georgiou, PhD., ICEMS, Prof. Biochemistry, University of Patras, Greece  
Magda Havas, PhD. Prof. Environmental Science, Trent University, Peterborough, Ontario, Canada  
L. Lloyd Morgan, Electronics Engineer (retired), USA.  
Wilhelm Mosgoeller, MD, Prof. Medical University of Vienna, Austria  
Jerry L. Phillips, PhD. Prof. Dir. Science Learning Ctr. Univ. Colorado, Colorado Springs, USA.  
Nesrin Seyhan, PhD., ICEMS, Prof. Medical Faculty of Gazi University, Chair, Biophysics Dept.  
Turkey Rep/WHO EMF IAC, Panel member, NATO RTO, HFM, Turkey  
David Servan-Schreiber, MD, PhD. Clinical Professor, Psychiatry, Univ. Pittsburgh USA  
Stanislaw Smigielski, MD, ICEMS, Military Institute of Hygiene & Epidemiology, Poland  
Stelios A Zinelis MD, ICEMS, Hellenic Cancer Society, Cefallonia, Greece

**Other signers who are advocates, organizations or members of the general public:**

Dea Emilia Carneiro de Andrade, Sou Presidente do Comitê de Cidadania Comissão Justiça e Paz - da Arquidiocese de Juiz de Fora – MG, Brazil

Jose Maria Tiburcio Barroso, engineer, Niteroi, RJ, Brazil

Elizabeth Barris, Director, The Peoples Initiative Foundation, USA

Elaine S. A. Cabral, M. Sc., Education, Environmental Law; member, Human Rights Commission of Attorney Association-OAB, J. de Fora, MG, Brazil -

Kerry Crofton, PhD, Health Educator, Canada

Sergio A. Pereira De Borja, Prof. Direito Constituciona, PUC/RS e da Instituicones de Direito, UFRGS

Bill Curry, PhD. Physics, ret. Argonne National Labs, Board Member, EMR Network, USA

Frances Fox, Psychic Counselor, Florida, USA

Cristiano M. Gallep, Prof. Dr., DTT, Unicamp, Brazil

Carol C. Georges, PhD. Psychologist, Italy

Margaret M. Glaser, USA

Andrew Goldsworthy BSc PhD, Lecturer in Biology (retired) Imperial College, London, UK

Sissel Halmøy, Principal advisor electromagnetic radiation, Norges Miljøvernforbund, Norway

Dr. Carrie Hyman, L.Ac., O.M.D, USA.

John Kristensen P. Biol., VP Technical, RETA (Responsible Electricity Transmission for Albertans), - Alberta, Canada

Ellen Marks, Lafayette, California, USA

Zack Marks, CEO, The California Brain Tumor Association, USA

Sandi Maurer, EMF Safety Network, California, USA

Luiz Roberto Santos Moraes, Professor Titular em Saneamento, Universidade Federal da - Bahia, Brazil

Eileen O'Connor, Director, Electromagnetic Radiation Research Trust, UK

Jorge Panazio. Telecommunications Engineer, MCT (retired), Brazil

Luiz Jacques Lüderitz Saldanha, Porto Alegre, RS/Brasil.

Rodrigo Borsu de Salles, Economist, Porto Alegre, Brazil

Fanny Helena Martins Salles, psychologist, public official, Prof. University of Bage, RS, Brazil.

Judi Shils, Teens Turning Green, Marin County, California, USA

Sarah J. Starkey, PhD. Neuroscientist, UK

Carmen Ruth Stangenhaus, Arquiteta MSc, Associação Brasileira de Materiais e Tecnologias - -  
Não Convencionais - Rio de Janeiro - Brasil

Alex Swinkels, National Platform on Radiation Risks, Netherlands

Alex W. Thomas, Ph.D, CIHR University-Industry, Chair, Bioelectromagnetics, Lawson Health Research - Institute, University of Western Ontario.

Ana Maria Daitx Valls Atz, Farmacêutica, Porto Alegre/RS, Brasil

Cesar Nicolau Vargas, Tecg° Eletroeletrônica, Federação Nacional dos Urbanitários - FNU/CUT, Brazil

Isabel Wilke, Dipl.-Biologin, KATALYSE Institut für Angewandte Umweltforschung e.V., Köln, DE

Sandra H. Wilkinson, Hamilton Township Residents against Pensyll Creek Tower, PA, USA

---

**To request that your name be added to this Resolution as a scientist, advocate, organization or member of the general public, we welcome you to notify ICEMS at [info@icems.eu](mailto:info@icems.eu). Please indicate your name, title, affiliation, city and country (1-2 lines at most.)**

