

CIFA News 30

October 2001

Comité International
De Recherche et D' Etude de
Facteurs de l' Ambiance
Association Internationale
a but scientifique.
(Monit. belge, 28 Aug. 1969)

Editors in chief: *Piero Faraone, Baldassare Messina, Sabino Palmieri*

INDEX

- Editorial, *by B.Messina, V.Valenzi* Page 2
- Contribution of Giorgio Piccardi into progress of science, *by P. Faraone* Page 4
- Biophysical Experiments in Catania University, *by E. Giannazzo, D.Puzzo, S.Valenti* Page 7
- Evolution of Global Climate, *by V. Valenzi, B. Messina, S. Palmieri (abstract from "Clinica Termale")* Page 8

Editorial

by B. Messina, V. Valenzi

Starting from the present issue the Centre for Biometeorological Studies, takes up the charge of editing the *CIFA News*, which for over thirty years has been edited in Brussels. The first twenty-nine editorials were written by Giorgio Piccardi and Carmen Capel-Boute, who were, as Piero Faraone reminds in his article, the true leaders of this science, the pioneers who, only recently are earning the just praise. The huge amount of scientific activity was condensed by Piccardi in a key-concept: “*Heterogeneous systems out of their balance and sufficiently complex, respond to every external signal, even if this has the smallest amount of energy.*” Piccardi made valuable contributions to biometeorology (to which he devoted his book, “*The Chemical Basis of Medical Climatology*”) and opened the avenue to understanding interactions of low energy, which govern biological systems. He studied and verified these models on colloidal systems, which vary in phase according to the physical signals of various kinds. He accomplished this in Florence from 1 March 1951 until 1 November 1972, supervising the experiments personally until his death in 1972.

Faraone, on his turn, in a time span of twenty-two years (February 1970 - May 1991) utilized microbiological cultures in his experiments and found a negative correlation between the Sun's activity and the frequency variation of colonies with differentiated sectors. In this way he waked up the scientists attention in the area of fluctuating phenomena, including colloids (Piccardi) as well as microorganisms; but if these are cells bearing colloidal particles, moreover they are involved also in some possible mutation. Ormenyi, analysing the CSD data published by Faraone, confirmed the negative correlation with Sun's activity, showing also an analogous correlation with low frequency electromagnetic waves (*Cifa News no. 25*).

Our Group studied for several years the meteorological mediators responsible of clinical events, such as the appearance of primary and secondary meteor pathologies and the effects of climatotherapy. A convincing scientific support to Piccardi's experiences and in his theories was found. The founder of the Roman School of Medical Climatology, Mariano Messini, acknowledged the Piccardi's contribution, and of ten mentioned this Florentine chemist-physicist.

Piccardi's approach to biophysics is very important in order to understand the new technologies to study the coetaneous electrical circuits, which are emerging as an effective instrument to objectively assess and measure the biological responses to the atmospheric signals.

Moreover we found that the molecules of medicines are active not only chemically, but also physically, mediated by signals of a quantistic nature, able to induce variations in electrical parameters, with corresponding clinical variations of great importance.

We were supported in interpreting these phenomena by Giuliano Preparata (1942 - 2000) and Emilio Del Giudice, who showed the role of coherent quantistic electrodynamics (cQEU) in biological phenomena. Preparata and Del Giudice worked for several years on developing a new model of the structure of water, based on the law of coherence which tends to explain many properties of water of biological interest which were also carefully investigated in Piccardi's studies.

We confirm to the scientific community who happened to pay attention to the CIFA journal during the last thirty years, that the scientific adventure initiated by Piccardi, is actually going on. Moreover we would like to state in a low voice that attacking the complexity of these scientific questions is equivalent to hurl again the teaching of the great Florentine master, a man of great scientific rigour, and a thinking capacity not affected by complexes or prejudices. In this spirit, the Bio-meteorological Study Centre components draw the attention of the researchers of various scientific specialities to follow on the example of Giorgio Piccardi and his school.

CIFA NEWS offers a framework for an interdisciplinary and active cooperation.

Baldassare Messina
(Director of the Biometeorological Study Center)

Vincenzo I. Valenzi
(Resp. Editor of CIFA News)

Contribution of Giorgio Piccardi into progress of science

Piero Faraone, Vice-President of CIFA

Giorgio Piccardi began his study of chemistry in his native city of Florence, in 1913, when was eighteen years old. The First World War, 1915-18, forced him to abandon his studies, and he was sent to the Italian front as an officer in an Alpine unit. He was demobilized in the 1919, returned to Florence and completed his studies, obtaining his doctorate in chemistry. He began his teaching career as a university professor in chemistry and physics in 1926. Piccardi became a principal of the chemistry-physics department at the University of Genoa in 1938 after a competitive examination. Here he founded the Chemistry-Physics Institute with spectroscopy laboratory, where he studied atomic and molecular spectra of rare-elements.

The Second World War forced him to return to Tuscany, where he worked at the University of Florence. He was a principal of chemistry-physics department from 1945 through 1965. He founded the school of studies for surface and inter-phase phenomena, with subsequent applications in biological field. He conducted studies on chemical structures and spectroscopy, with industrial and archaeological applications.

Piccardi devoted his studies, in particular, to physical/chemical fluctuating phenomena, which he identified and examined. He invented his own methods of investigation, and become internationally recognized as authentic pioneer in this area of research. He successfully founded a university Center for the study of fluctuating phenomena (CUFF). The Center collaborated with similar other centers of the foreign countries, so investigations based on Piccardi's methods were spread out world wide, including Arctic and Antarctic.

After 1951 his scientific activity was directed mainly to fluctuating phenomena, which he investigated using his colloidal tests. He conducted those studies for twenty years and completed them with the following very impressive concept: *“Heterogeneous systems, out of balance and sufficiently complex, respond to every external stimulus, even with the little amount of energy.”* This theory regards a large group of the chemical reactions and biological processes. Piccardi was nationally and internationally recognized for his studies.

Piccardi founded the CIFA (1969), an International Committee for study of environmental phenomena, and was its first President until his death. CIFA head office was in Brussels (Belgium) under the aegis of the *“Libre Universite de Bruxelles”*. Piccardi increased his scientific activity,

publishing over two hundred publications, including a monograph printed in United States and in Russia (*"The Chemical Basis of Medical Climatology"*). He was active until 1972, the year he died.

During his ardent scientific career, where he devote himself to studies of fluctuating phenomena through his colloidal tests, he found an excellent collaborator in Dr. Carmen Capel-Boute, who worked at Free University of Brussels, and was a president of the International Center for Research and Study of Environmental Factors (CIREFA).

Dr. Capel-Boute was a researcher in electro-chemistry and metallurgy at the School of Applied Science at Brussels University. She met Professor Piccardi in 1950 in Florence. Prof. Piccardi wrote to her: *"It is very rare, Madame, to find himself completely at ease, with a person, met casually in his life."* And Dr. Capel-Boute, after this meeting, wrote about him, *"A pact of scientific trust was signed with an exceptional seal of esteem and reciprocal friendship, which is confirmed by the uninterrupted correspondence we carried on since that memorable encounter."* And again, *"I was, in this way, able to perceive Piccardi as a conscious Magister and I availed myself of him. I was about twenty years younger than he, to benefit from his vast scholarship, of his long experience, and his constructive criticism of my research."*

The result of the encounter between the two scholars was a solid and harmonious collaboration in research of fluctuating phenomena and features of water solutions and, considering the important role of physical properties of water, as well as the effects of solar activity in the variations of colloidal tests studied simultaneously, in Florence and Brussels.

Dr. Capel-Boute was president of CIFA after prof.Piccardi and was always of good inspiration with her inexhaustible passion and experience, for her collaborators and the other scientists, in every possible discussion on the years until to day. She never deflected in her efforts showing herself as the natural heir of prof. Piccardi, not only in her research but also in her human abnegation.

In the 1987 she left the presidency to Dr. E. P. Wedler (Biometeorological Institute of the Free University of Berlin). After his death in the 1990, Dr. Capel-Boute temporarily resumed the status of president of CIFA, in spite of her mature age. When she was eighty years old, she had extraordinary success in conclusion an agreement with the Institute of Biological Physics (Puschino, Moscow Region, Russia, 1993) where CIFA obtained the new head office.

Since 1993 CIFA has new president, professor Boris Vladimirsky, a physicist and astronomer (Crimea Astronomical Observatory in Nauchny, now Ukraine), new vice-president prof.

Simon Shnol, biologist (Institute of Biological Physics, Puschino University, Moscow State University), and other two vice-presidents, Dr. Imre Ormenji, biometereologist (National Institute for Rheumatism, Budapest), and Dr. Piero Faraone, micro-biologist, formerly Medical director (1976-1991) of the Lab. Ig. Prof. Prov. Roma.

Biophysical Experiments in Catania University

Prof. E. Giannazzo, Dr. D. Puzzo, Dr. S. Valenti.

Faculty of Biophysics at the Department of Physiological Science - Catania University

In the last years the Chair of Biophysics of the University of Catania, in collaboration with researchers of other Institutes of the same Athenaeum, has programmed an experimental series using biophysics methodic based on the interaction of living systems with electromagnetic waves of weak intensity (ELF: electromagnetic low fields). Particularly, the aim was to assay diagnostic and therapeutic techniques, not invasive, deprived of collateral effects and contra-indications, and with high compliance, which could give statistically reliable results.

New biophysics theories have opened ample horizons in medicine field by the informational theories, based on the presupposition that biochemical processes has not only regulated from hormonal, chemical and electric messages but also from specific performance of electromagnetic waves that the cells are able to decipher. Considering the cybernetic systems, the bioresonance phenomena and the theories on electromagnetic low fields, sophisticated electronic apparatuses were created to relieve the oscillations emanate by the patient and by different substances.

In our experimentation we used bioelectronic apparatuses to affect the diagnostic test of Voll's electroacupuncture according to Voll (EAV) and the bioresonance therapy. It was found that the results, either positive or negative, of EAV tests mostly overlap those of Prick tests (76% of 216 trials executed in double blind). The therapeutic treatment has caused a remarkable symptomatologic improvement and the elimination of pharmacological traditional therapy in the 90% of subjects.

Sight the significativity of both diagnostic and therapeutic results, a new experimental series has been programmed in allergologic (allergic dermatitis, alimentary intolerance in irritable colon and obesity), osteo-articulate (pain therapy in arthritic subjects), and in cellular field (pharmaco-electro-dynamic).

The expected results consist in the development of diagnostic and therapeutic, not invasive, methods in above-mentioned fields as well as in the development of theoretic models that could explain the interaction of the biological systems with the ELF.

GLOBAL EVOLUTION OF CLIMATE: POSSIBLE IMPLICATIONS

Vincenzo I. Valenzi*, B. Messina* Sabino Palmieri**

* Central Studio of Biometeorology/Laboratorio biometeorologico di Pietracupa(CB)

** Department of Physics of Rome University "La Sapienza"

Abstract

The interaction man-environment is of special interest, due to both the deterioration of the urban environment and the global warming. The latter is presumably due to the increase of greenhouse gases in the atmosphere. As a consequence thermal stresses as well as synergies with the urban pollution are becoming more and more serious. The Molise Region and the area of Medio Sannio in particular, have rather specific climate features such as fairly constant and active ventilation coupled with sunshine and rather dry conditions in the high ground. The associated lack of any pollution source leads to an high air quality standard and to a “*reinvigorating effect*” traditionally well known and appreciated.

The Biometeorology Lab of Pietracupa, in cooperation with the Italian Society of Applied Meteorology (SIMA), are promoting initiatives to study and analyse the human perception of climate comfort, as well as advanced studies of the human body energy balance, with the intent of contributing to the development of climatotherapy.

* *The paper is in press in “Clinica Termale”*