

## OBITUARY

### **In Memoriam: Larisa Emilia Cheran (1962 –2015)**

This April, SSE Council Member Larisa Emilia Cheran transitioned to a world still unbeknownst to us. Dr. Cheran left strong and lasting scientific contributions to the world of bioelectrochemistry upon which much remains to be built after her passing.



Larisa's professional endeavors began by obtaining her doctorate in Microelectronics at the University of Bucharest, and meeting The Romanian Academy's most respected teachers in her fields of study. She immediately flourished as a prominent Romanian scientist as Chief of The Biomedical Applications Laboratory, at the Institute of Microtechnology in Bucharest, Romania.

Upon the invitation by Physics Nobel Laureate Ivar Giaever, who was credited for the discovery of tunneling phenomena in superconductors, Dr. Cheran came to the USA and continued her work on electrical properties of cells and tissues. From there, she was invited to the University of Toronto, and made it her home for the next two decades. While working there, she was credited with the invention of the Scanning Kelvin nano-probe, the first of its kind to detect non-invasively, and with high resolution, single base changes in DNA.

As a senior research scientist at the University of Toronto, Department of Bio-sensors and Bio-analytical Chemistry, Larisa promoted her Scanning Kelvin Nano-probe instrument for pioneering applications in the label-free detection of DNA, proteins, and living cells, particularly neurons. Her interest was focused on developing biosensors and new detection methods for neuroscience research, and on using vibrational fields and quantum physics in nano-neuromedicine and regenerative medicine, biomolecular electronic interfaces, bio-photonics, and organic semiconductor materials.

Larisa passionately and unrelentingly probed all aspects of the bioelectrochemistry of living cells. Her passing leaves a void in the quest for fundamental understanding in critical areas of consciousness research. She had the innate ability to amalgamate disparate concepts and was well-acquainted with the techniques and personnel in the fields of consciousness and parapsychology research. She applied her technological expertise to

many of the difficult and complex questions of mind–matter interactions and their direct applications to the fields of neuroscience.

Before passing, Dr. Cheran was performing research on the alteration of acoustic properties of mouse neurons as influenced by a healer’s directed attention. The effect was so strong that it merits replication. Unfortunately, this experimental program was interrupted by her untimely death just prior to carrying out initial control tests. If anyone has information and interest in continuing Larisa’s experiments, please contact George Hathaway, a collaborator in this effort. He can be contacted at Hathaway Consulting Services, Toronto, at [ghathaway@ieee.org](mailto:ghathaway@ieee.org)

**C. M. CHANTAL TOPOROW**

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