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Laboratoire de Simulation des Systèmes
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- IRT-

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Dear Colleague,

Dr Roman POZNANSKI is a renown mathematical neurobiologist who has worked on various problems with well-known researchers. He has mainly developed his research using analytical and mathematical approach of the nervous tissue on biophysical bases rather than the limited-non integrative approach.

His current work is important and open: 1) the interpretation of learning rules on biophysical bases; 2) Modeling very large-scale biophysical neural networks for signal processing in the sensory pathways: (i) On the neural circuit underlying motion perception in the rabbit retina and (ii) On the neural circuit underlying vocal processing in the guinea pig primary auditory cortex. Although these researches are conducted on animals because of the experimental validation, they will be applied to the human. His present project concerns an important problem in cognitive science: the Functional Integration Through Structural Complexity. The ultimate objective is of major importance because they lead to developing new techniques in bioengineering.

In addition (and in relation) to his research, Roman has initiated and helped considerably in the creation of a new international journal (*J. of Integrative Neuroscience*) devoted to the mathematical AND experimental of physiological integration in the neuroscience. As an Associate Editor, he has initiated and established the organization of this journal and proved that he was able to find out a solution to practical difficult problem. Also, he has edited a very interesting book that updates our knowledge on biophysically-based neural networks.

More and more researchers think that the future of neuroscience is in the development of new concepts that will be able to provide explanation of how complex systems, such as the brain, work. Roman's work are perfectly in this new way, however now still a difficult way to follow because of the lack of positions offered by the scientific community.

For all these reasons, and as the Chief Editor of the *J. of Integr. Neurosci.*, I wish that Roman will find a position appropriate to his high level skills, allowing him to pursue his activities. His dynamism will ensure his perfect integration in the best research teams.

Professor G.A. Chauvet