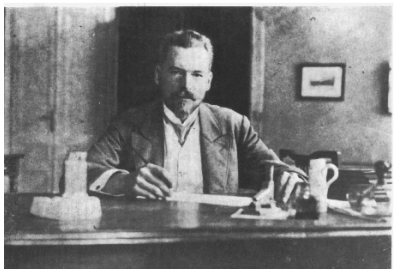

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Determination of psychotic behaviour using a network of chemical oscillators

Thursday, 3 December 2020 18:21 (1 minute)

Schizophrenia is the most common form of psychotic behaviour where patients experiences hallucination, dillusion or chaotic speech. Schizophrenia is difficult to detect and easily go undetected for years. Here we propose the idea of detecting schizophrenia by a network of interacting chemical oscillators. We optimized a classifier based on six interacting oscillator using genetic algorithm and obtained 82% accuracy of schizophrenia detection on a selected training dataset.

Keywords: Schizophrenia, EEG signal, chemical computing, oscillatory network, Oregonator model, genetic optimization

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