

# ***Climamorphosis, a Contemporary Electro-Acoustic Musical Work by Mauricio Duarte-Neira***

**Performance at the Opening Reception, *Digital Dialogues Exhibition*, Acadia Art Gallery, September 11, 2003 – 7PM**

## **About the Composer**

Mauricio Duarte-Neira is a recent graduate of Acadia, with a Bachelor of Arts in Music with concentration in Technology (Class of 2003). Mauricio is currently enrolled in Computer Science. He describes his passion for music and computers as "intense". He has a strong interest in Musical Instrument Digital Interface (MIDI) and Digital Sound Processing (DSP) and wants to further his knowledge on both subjects. Mauricio plans to build a career as a computer music composer, a computer programmer for music, a researcher in the field or all of the above. "My dream is to create or at least help create, research or design music equipment using the newest technology and finding out even newer technology." I am into the DJ scene, I am into the Contemporary artist scene, I know about all types of music, I have been expose to all sorts of recording equipment and computers. I know what is popular, and I know what people want. Climamorphosis is just an example of how technology has enabled us to explore new digital sound frontiers".

## **The Composition**

The composition "Climamorphosis" draws on a numerical data set of weather changes (hourly temperature changes) in the Bay of Fundy. These data values and algorithms were programmed and converted to music data using the PCM (Pulse Code Modulation) wav protocol. Each numerical parameter then creates a unique sound pattern which is fed into the Variphase processor (triggered via the Roland XP-30). The Variphase processor can then slow down, speed up, pitch up, pitch down and digitally format the weather sample in real-time. The "Variphase" technology, developed by Roland Corporation, is the latest for sampling in real time. The modified sound then travels to the Roland JP-8080 where it is electronically modelled and enhanced by the artist. Notch filters, parametric filters, panning, arpeggio, and wave (sine, square, tooth) modulation are a few of the thousands of possibilities, not to mention the vocoder (a realtime voice effect modulator) to which the sound is being fed. Everything is connected via MIDI using RX channel routing. Please note that it was all created using equipment from ROLAND Corporation, one of the leading companies in Music, sound, recording and even video equipment, software and many other electronics and technologies.

## **Listening to Contemporary Electro-Acoustic Compositions**

"The sound is totally contemporary, and the key of this composition is to listen for the changes in sound. There is no rhythm, there is no musical key, there is no defined pitch class or set. It is all up to the artist, and the weather."

