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**Computer Studies Course  
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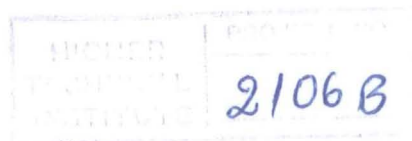
***UPGRADE & EXTENSION OF  
LabVIEW SOFTWARE LIBRARY***

**USER'S MANUAL**

**CS/091**

**by  
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# UPGRADE & EXTENSION OF LabVIEW SOFTWARE LIBRARY

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This Project is submitted to the  
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## **PREFACE**

"Upgrade And Extension of LabVIEW Software Library" in the area of Neurophysiology allows you to perform certain Neurophysiology experiments, specifically for the four signals examined, Twitch Force, Tetanic Force, Electromyograph (EMG), and Neurogram (NG). These experiments involves calculations of the above Signals Measurements.

The purpose of this User Manual is to teach you how to use this Program. Every Research Scientist using this program it is preferable to have an experience using Macintosh and be familiar with Apple Operating System.

# 1. INTRODUCTION

## 1.1. Introducing the system

Welcome to the Research Project which deals with Neurophysiological experiments implemented in LABVIEW, an Object Oriented Language. This User Manual is a fully explanatory and easy to use guide for all the functions of the program. You can use it either as a lesson, to give you hands on practice in learning the program or, as a quick reference when you want to find out how to react at hard times.

The system allows only to authorized researches to obtain various types of information about the four(4) signals examined, Twitch Force, Tetanic Force, EMG and NG, e.g. display their graphs, calculate and display their measurements.

## 1.2. What Neurophysiology Research Project Developed in LabVIEW Can Do

When working with this Research Project the environment is very friendly and you can:

- ➡ Open and use more than one Virtual Instrument at a time (Parallel Processing)
- ➡ Size and move a Virtual Instruments window.
- ➡ Copy and paste information between Virtual Instruments(VI).
- ➡ Access many Apple O/S commands through the VIs.
- ➡ Calculate Signals Measurements and pass their values from one VI to the other.

Bare in mind that the above facilities are available by LabVIEW and so they are supported and by this Project.

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