

# How to script.... Digital Micrograph Scripting Handbook

by

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## **Preface**

#### Introduction

Digital Micrograph is an image processing and acquisition software by Gatan Inc.<sup>1,2</sup> primarily but not exclusively used in connection with Electron Microscopy. The software features a simplified programming language commonly referred to as DM scripting.

Over the recent years I have been compiling task oriented tutorials on the use of DM scripting into this handbook. The book is not meant as a course book and it does not offer a well-structured way of learning scripting. It is aimed at no particular audience or experience level but rather concentrates on certain tasks and how one could achieve them. The different tutorials may differ in complexity but my aim was to cover enough of the basics in each of them to help beginners to understand what is going on. However, some basic understanding of computer programming such as the concept of variables, if-conditions and loops is assumed. There is no specific order of the tutorials, and the reader – whether beginner or expert – is invited to jump to any topic of current interest. Total beginners, however, might want to start with the first introductory tutorial.

This handbook is also under permanent review and I would appreciate any feedback, corrections or suggestions. Though I can't promise immediate response, I am trying to be rather responsive to emails. I may best be contacted at how.to.dms@tavernmaker.de.

## **Digital Micrograph versions**

The tutorials have been created over a time period of several years during which DigitalMicrograph and its scripting language has constantly evolved. For this reason, not all tutorials will work as described in all versions of DigitalMicrograph. Whenever I was aware of a version difference, I have commented the text accordingly, but I might have missed out on some points. Also: Some script commands are only available if certain plugins are installed in addition to the base version of DigitalMicrograph. Again, I have tried to highlight such commands whenever used.

#### **Disclaimer**

All tutorials are written based on my own knowledge, experience and understanding of the scripting language, which I have used but not created. As a result, all statements in this book do not necessarily have to be the full truth and I might have misunderstood things. I am also not taking any responsibility for any problems arising by following up the instructions in the tutorials. Furthermore, Gatan Inc., although very helpful in general, has not cross-checked any of these tutorials and is in no way responsible for the content.

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This version of the e-book has been created on 20/09/2014 for personal use only.

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<sup>&</sup>lt;sup>1</sup> Official Gatan Inc. homepage: http://www.gatan.com/

A full basic version of Digital Micrograph can be obtained from the the Gatan Homepage. Quick link: http://getDM.tavernmaker.de

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