

IMT Ground Floor Seminar Room and ONLINE

For „Development of novel nanocomposite materials with tunable conductivity for electromagnetic shielding and potential uses in electronics and optoelectronics applications” **Project members and whoever else wishes to attend**

**Seminary in the framework of the project
PNRR/2022/C9/MCID/I8 CF 23/14.11.2022**

**” From raw data to advanced data analysis:
an introduction to OriginPro software”**

Monday 11th of March 2024

14:00-16:00

***Dr. Pericle Varasteanu*, IMT Bucharest**

Link for ONLINE attendance:

<https://meet.google.com/mde-mmoo-bbd>

Presentation summary

From raw data to advanced data analysis: an introduction to OriginPro software

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Effective research hinges on proficient data visualization and analysis, enabling researchers to uncover hidden insights and communicate findings clearly. This lecture is a quick introduction on how to import, process, and analyze experimental data using OriginPro software. The tutorial is divided in three parts as follows: i) *data import*, in which several importing techniques will be covered starting from basic data types to more advanced ones; ii) *data process and visualization*, this section will be focused on how to perform statistics on columns, perform mathematical operations on columns, use basic python scripting, and how to plot the data points; iii) *data analysis*, which will cover the fitting procedures and methods for different kind of analysis starting from basic linear fitting for Tauc plots and Kubelka Munk to nonlinear fitting of XRD/Ramman peaks and several analysis methods for electrochemical measurements. In conclusion, this tutorial will be an introduction to OriginPro and will serve as a good starting point for every researcher who wants to learn the software.

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