Department of Physics

One Week Hands on Training on "MATLAB and its Applications in Physical Sciences"

> Invitation



2020 - 2021

Sponsored By



Department of Biotechnology Ministry of Science & Technology, Government of India

One week Hands on Training on

MATLAB and its Applications in Physical Sciences

Organized by







Marian Star Centre

School of Physical Sciences

St. Mary's College (Autonomous),

Re-accredited by NAAC with 'A +' Grade Thoothukudi - 628 001.

Resource Person

Dr. S. Kulandai Therese,

Assistant Professor, PG and Research Department of Mathematics St. Mary's College (Autonomous), Thoothukudi – 628 001.

Date: 15.04.2021 - 20.04.2021 | Time: 9.30 to 12.30 PM

Contact Mail id: marianstarcentredbt2020@gmail.com

ONE WEEK HANDS ON TRAINING ON MATLAB AND ITS APPLICATION I PHYSICAL SCIENCE

Organised by

Marian Star Centre Department of Physics

St.Mary's College (Autonomous), Re-accredited by NAAC with 'A+' Grade Thoothukudi - 628001.



Sponsored by Department of Biotecnology

Ministry of Science & Technology. Government of India



CERTIFICATE OF PARTICIPATION

Ms. SELCIA III B. Sc Physics

St .Mary's College (Autonomous), Thoothukudi

has successfully completed the ONE WEEK HANDS ON TRAINING ON MATLAB AND ITS APPLICATION IN-PHYSICAL SCIENCE organised from 15.04.2021 to 20.04.2021 by Department of Physics, St. Mary's College (Autonomous), Thoothukudi, Tamilnadu, India.

Aroccia Jeneuro Alphonse

Dr. Sr. A. Arockia Jenecius Alphonse **DBT** - Overall Coordinator

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Dr. Sr. Jessie Fernando Convenor

Dr. Sr. A. S. J. Lucia Rose Principal

> Report

From 15th to 20th April 2021 a very informative One Week Hands on Training on "MATLAB and its Applications in Physical Sciences" was organized by the School of Physical Sciences under the Star Scheme sponsored by the DBT. Dr. Sr. S. Kulandai Therese, Assistant Professor, PG and Research Department of Mathematics, St. Mary's College (Autonomous), Thoothukudi was invited as the MATLAB Instructor who, on the first day gave a brief talk on introduction to MATLAB and its applications. She highlighted the applications during the practical session.

On the second day of the session, the following topics were covered: Basics of MATLAB, introduction to arrays and vectors, options in MATLAB, creating scripts, arrays and plots, introduction to figure window, working with vector operators and creating matrix and extracting sub matrix. On the third day of the session, there source person spoke on solving mathematical equations, usage of parenthesis, entering multiple statements, introduction to miscellaneous commands, solving linear equations, computing higher order derivatives, Performing task of differentiation. On the fourth day of the session, the address was on the headings - Curve fitting tool, plotting complex function, introduction to physics application, calculating requirements of simple pendulum, Jacobian transformation, canonical momentum in spherical co-ordinates and coding for potentiometer. On the fifth day of the session, the following topics were covered Programming with 3D plot, introduction to MATHLAB semilog, working with pie, compass and stairs, introduction to stem, surf, pcolour and waterfall, Coding using comet, slice, ellipsoid and quiver, finding hydrogen molecular orbital crosssection and finding the level of liquid in a tank. 110 participants from St. Mary's College, 29 participants from Mentee Colleges and an Infotech programmer participated actively and enthusiastically.

YouTube Link

https://youtu.be/DnsDTCuL-oc

https://youtu.be/hQA8Zg9aLR0

https://youtu.be/00XjlxLHdmo

https://youtu.be/VXHWazcDx5c

https://youtu.be/Gj gqvqlBVI

Head of the Department

HEAD

Department of Physics, Mary's College (Autonomous). Thoothukudi - 628 001.

B. Serena Margaret **IQAC** Coordinator

IQAC Co-ordinator St. Mary's College (Autonomous) Thoothukudi

Principal

St. Mary's College (Autonomous) Thoothukudi - 628 001.