

**Department of Science and Technology, New Delhi  
sponsored Training on  
“ PHOTONICS For Women Scientists”**

**Introduction:**

“PHOTONICS” deal with the electronics by flow of photons. Many applications are realized by using LASER as the source, Optical Fiber as the medium with different detector mechanisms. Optical fiber has replaced one important segment of applications of technology as on date. The optical fiber has been used extensively for the purpose of communications and also as sensor for various applications. It can be widely used in analytical chemistry, biology, physiology, Hydrocarbon industries and other areas. They are not subject to electrical interference, do not require a reference electrode, and are potentially stable with respect to calibration. Therefore, in this training programme, different applications in PHOTONICS shall be explored.

**Objectives:**

Training Programme PHOTONICS is a skill development training programme to attract the attention of young researchers, academicians and industry people towards the advances and challenges in the field of optical fiber technology and application. PHOTONICS programme is sponsored by the Department of Science and Technology, Government of India. The training programme includes fiber optics test and measurement techniques, fiber slicing, fiber characterization, hands on practice on use of OTDR and hands on practice on fiber and fiber based system simulation software. The participants will get a unique opportunity to interact with eminent academicians, scientists, engineers and entrepreneurs from different national laboratories, research centre and industries. The 6-days training program has been meticulously planned to provide balance coverage of all the major aspects of optical fiber technology through a series of theory classes interleaved with hands on experience on advance simulation tools, test and measurement equipments.

**Training Components:**

**SCHEDULE**

<b>DAY</b>	<b>Topics (Theory) (09:30am-12:30 pm)</b>	<b>Laboratory (02:00-05:00)</b>
1	Introduction to Fiber Optic Fundamentals	Introduction to Fiber optics test and measurement setups.
2	Fiber Characterization	Fiber Splicing
3	OTDR Review and working	OTDR Working and use
4	Dispersion	Dispersion measurement
5	Fiber Loss Fundamentals	Simulation studies
6.	Sensor application using optical fiber	Minor project.

**Training Outcome:**

This training shall provide with a professional level of education in optics and photonics with training applicable to employment in communications, optical and scientific instruments and optical techniques in biology and medical applications. The training is suitable both for those training for senior positions in optical industries or as preparation for a PhD scholars as one of the thrust area of research. The trainees shall be provided with all hands on training to handle the optical fiber, its slicing techniques and its measuring devices. Also they shall be exposed to various optical circuits.

**Training Calendar:**

**1st Training Session : 27<sup>th</sup> Oct 14 to 1<sup>st</sup> Nov 14**

**2nd Training Session : 24<sup>th</sup> Dec 14 to 29<sup>th</sup> Dec 14**

**3rd Training Session : 19<sup>th</sup> Jan 15 to 24<sup>th</sup> Jan 15**

**4th Training Session : 09<sup>th</sup> Mar 15 to 14<sup>th</sup> Mar 15**

**Eligibility Criteria:**

All women scientists / women interested to pursue their carrier in research having Master's Degree in relevant subjects or equivalent Degree

**Fee:**

No fee shall be charged for the training.

AC-III train fare transport and accommodation will be provided on sharing basis.

**How to Apply**

Interest women scientists may download the application form from the website [www.sophitorium.in](http://www.sophitorium.in) or can get a print out of the below mentioned form and send the completed application form duly signed by the Head of the institute. It should reach to **Prof. Pranati Mishra**, Programme Coordinator, SITAL, Sophitorium Campus, College Road, Jatni, Khurda, Odisha - 752050 before 15 days of commencement of the programme.

**TRAINING PROGRAMME  
ON  
“PHOTONICS FOR WOMEN SCIENTISTS”**

1. Title    2. First Name    3. Middle Name    4. Last Name

Dr.			
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*Affix your recent  
passport size  
photograph here*

5. Date of Birth    6. Age    7. Gender    8. Marital Status

			Married <input type="checkbox"/>
			Unmarried <input type="checkbox"/>

9. Nationality    10. Designation    11. Accommodation required

		Y <input type="checkbox"/>	N <input type="checkbox"/>
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12. Address of the Institute/Department

13. Correspondence Address (If Different)

**EDUCATION DETAILS**

	<i>Qualification</i>	<i>Name of Institute/University</i>	<i>Majors/Specialization</i>	<i>Total Marks Obtained(%)</i>	<i>Year of Passing</i>
14. Ph.D					
15. Masters					
16. Bachelors					
17. Higher Sec.					



GENERAL INFORMATION

24. How do you propose to utilize the knowledge and experience gained from this course  
(Maximum 500 words)

Signature

Date:

City: