

What is Foldscope

Foldscope which is an ultra-affordable paper microscope inspired by origami, is a part of the "Democratization of science" movement which aims to make reasonable and easy tools available for scientific use to the most resource constraint schools, colleges, labs etc. It is a portable, robust and versatile microscope made mostly out of paper (water-proof) that can magnify from 140x to 2000x, and has 1.9 μm resolution without the bulkiness and expense of a conventional research microscope. Foldscope is portable, and has ability to project an image and live micro-organisms on any surface, allowing a larger group of people the ability to look at an image simultaneously. Foldscope was invented by an Indian researcher Dr. Manu Prakash at Prakash Lab, Stanford University, USA was brought to India after the signing of a Statement of Intent between DBT and Prakash Lab (Stanford University), USA in 2015.

DBT intends to extend the benefit of the use of Foldscope to the Aspirational Districts of the country as identified by the Government of India. DBT will hold a hands-on training workshop on use of Foldscope at **Government Mata Karma Girls College, Mahasamund**, Chhattisgarh on February 28, 2023 for the teachers of Aspirational Districts of Chhattisgarh.

About the Workshop

This workshop will ignite young and vibrant minds by mentors on use of low cost handy foldscope that can bring revolution in field of microbiology. The objective is to provide a platform to the teachers of inspirational districts of Chhattisgarh to engage young minds towards science and inculcate scientific temper in the budding youth.

About the College

Govt. Mata Karma Girls' College was established in 2005 and run by the Department of Higher Education, Govt. of Chhattisgarh. It is the only Girls' College in entire Mahasamund district. This College is well known for its signature study and discipline. The college is included under Section 2(f) and 12(B) by U.G.C. and it is affiliated to Pt. Ravishankar Shukla University, Raipur (C.G.) and accredited by NAAC with C Grade 1.83



"Science is not in the lab. It is wherever you are, it is all round us. Right under our noses are thousands of phenomena that no one understands."
-Dr. Manu Prakash

Foldscope Workshop for Teachers and Students of Aspirational Districts of Chhattisgarh

Venue: Govt. Mata Karma Girls College, Mahasamund, Chhattisgarh

Date: February 28, 2023

PROGRAMME SCHEDULE

REGISTRATION : 9.00 A.M. to 10.00 A.M.

INAUGURAL SESSION : 10.00 A.M. to 10.40 A.M.

Welcome Address	:	Dr. Sheel Bhadra Kumar, Principal, Mata Karma Girls College, Mahasamund, CG	10.00 AM to 10.05 AM
Address	:	Prof. Keshav Kant Sahu, HoD, School of Studies in Biotechnology, Pt. Ravishankar Shukla University, Raipur	10.05 AM to 10.10 AM
Address - About the Foldscope Programme (DBT Perspective)	:	Dr. Manish Rana, Scientist-F, Department of Biotechnology, Ministry of Science & Technology, Govt. of India	10.10 AM to 10.15 AM
Special Address	:	Shri. Nileshkumar Mahadev Kshirsagar, IAS, District Collector and District Magistrate, Mahasamund, CG. Ms. Sharda Verma, Commissioner Higher Education CG Department of Higher Education Nava Raipur, CG.	10.15 AM to 10.20 AM
Inaugural Address	:	Prof. Keshari Lal Verma, Vice-Chancellor, Pt. Ravishankar Shukla University, Raipur	10.20 AM to 10.30 AM
Vote of Thanks	:	Dr. Swetlana Nagal, HoD Department of Microbiology, Mata Karma Girls College, Mahasamund.	10.30 AM to 10.35 AM

Presentation by **Dr. Arun Dev Sharma**, Group Leader, Lyallpur College Khalsa, Jalandhar.

10.35 AM -11.00 – Tea/Coffee

TRAINING SESSION – I

Time: 11.10 AM to 1.00 PM

General briefing to teachers and students by the trainers, foldscope assembly, sample preparation and sample mounting

LUNCH

Venue: Campus Garden
PM

1.00 PM -2.00

TRAINING SESSION – II

Time: 2.00 PM to 4.30PM

Sample visualization, refinement, picture/video recording.
Presentation of samples by teachers/students.

CERTIFICATE DISTRIBUTION, DISCUSSIONS & SUGGESTIONS

4.30 PM –Tea/Coffee

RESOURCE PERSONS

Mr. Vinod Kumar, Manager BCIL , New Delhi
Ms. Sherly Charles, BCIL , New Delhi
Dr. Arockiasamy Arulandu, International Centre for Genetic Engineering and Biotechnology, New Delhi
Ms. Akshatha Nayak, Citizen Science Fellow, Earthwatch India
Ms. Sujata Adhana, University of Delhi, New Delhi
Ms. Sonali Kadam
Mr. Mo. Pandiarajan, Eden Science Club, Madurai
Dr. Nagarjun Vijay, Indian Institute of Science Education & Research (IISER), Bhopal
Dr. Arun Dev Sharma, Lyallpur Khalsa College Jalandhar

ORGANISERS

Patron: Dr Sheel Bhadra Kumar Principal Incharge,GMKGC Mahasamund
Convenor: Dr Swetlana Nagal HOD & Assistant Professor Microbiology
Organising Team: Dr Saraswati Verma HOD & Assistant Professor Hindi
Mr. Om Prakash Patel HOD & Assistant Professor Geography
Ms Vandana Yadaw HOD& Assistant Professor Chemistry
Ms Kavita Gaheer HOD & Assistant Professor Botany
Mr. Arvind Sahu HOD& Assistant Professor English
Mr. Khageshwar Novrange Assistant Professor Microbiology
Ms Tesar Sahu Adhoc lecturer Zoology
Mr. Gajpati Patel Assistant Grade II

Contact Details: govmtatakarmagirlscollege@gmail.com
6266460793, 98265733821, 888907174

Web site:
<http://www.gmkgclgmsmd.in>

Foldscope Workshop for Teachers and Students of Aspirational District of Chhattisgarh

INVITATION



Foldscope Workshop for Teachers and Students of Aspirational District of Chhattisgarh

February 28, 2023

Organized By
Department of Biotechnology
Ministry of Science & Technology
Government of India

In Association With

Biotech Consortium India Limited (BCIL),
New Delhi
School of Studies in Biotechnology
Pt. Ravishankar Shukla University, Raipur

Department of Microbiology
Government Mata Karma Girls College
Mahasamund