# 2023













## ATOMIC ABSORPTION SPECTROPHOTOMETRY WITH REFERENCE TO MONITOR SOIL HEALTH AND FERTILITY



### **5-DAY TRAINING PROGRAMME**

Environmental
Information
Awareness Capacity
Building and
Livelihood
Programme(EIACP)

**CSIR-NBRI** Lucknow

#### 5-DAY TRAINING

ON

## "ATOMIC ABSORPTION SPECTROPHOTOMETRY WITH REFERENCE TO MONITOR SOIL HEALTH AND FERTILITY"

A five-day training under the National Project on Soil Health and Fertility Programme 2022-23 organized by CSIR-National Botanical Research Institute from 09 to 13, January 2023 under the umbrella of CSIR Integrated Skill Initiative & CSIR-EIACP (Environmental Information, Awareness, Capacity Building and Livelihood Programme) sponsored by Department of Agriculture, Government of Uttar Pradesh.

75 Technical officers selected by the Department of Agriculture Uttar Pradesh, from 71 districts attended the Training entitled "Atomic Absorption Spectrophotometry with reference to monitor soil health and fertility".

The training program was inaugurated by **Assistant Director Dr. Manmohan Lal** (Research and Soil Monitoring Division) on 9<sup>th</sup> January 2023.









The day started with a lecture regarding soil health and fertility by **Dr. Lal Bahadur (Principal Scientist, CSIR-NBRI)** followed by a lecture on "Threats to soil health and fertility" and a discussion regarding emerging threats to soil health by **Dr. Anju Patel (Scientist, CSIR-NBRI)**. After that Hands-on training and operation maintenance of Atomic absorption instruments along with "Atomic Absorption Spectrophotometry" discussed by **Dr. Shekhar Mallick (Principal Scientist, CSIR-NBRI)**.

**Day-1 Training session** 













**Day-2 Training session & Training Certificate distribution** 



**Day-3 Training session & Training Certificate distribution** 



## **Day-4 Training session**

Participants comprehend the principle and working of AAS along with the preparation of calibration curves and standard solutions for the analysis. Participants understand to do and don'ts of the AAS instrument and were acquainted with certified reference material and quality assurance.





They also get an insight into soil health and nutrient management in the agricultural soil along with the emerging threats regarding microplastic contaminants in soil.





The training strengthens their skills and knowledge regarding AAS and Soil fertility.





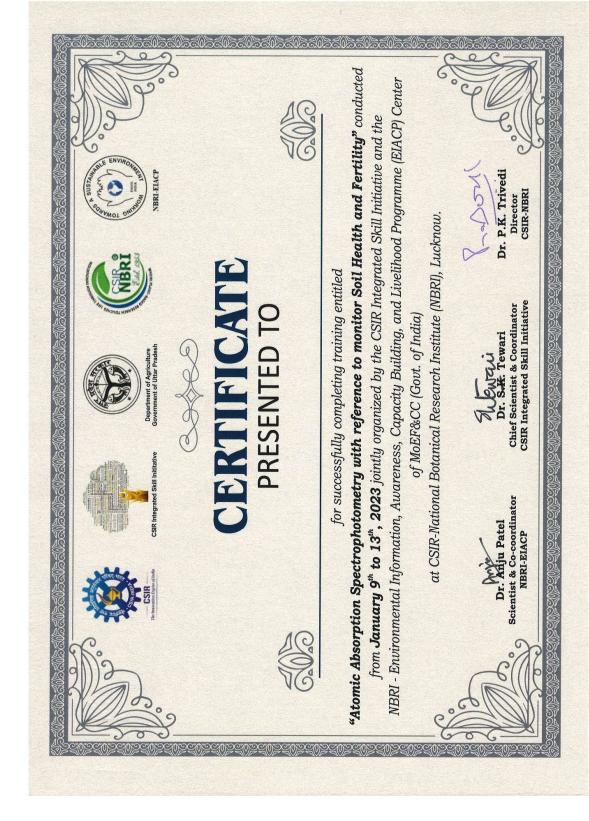


Valedictory session



On the last day, 13 January 2023 certificate was awarded to the participants by Dr. Probodh Trivedi, Director of CSIR- NBRI.





## दिनांक 09 से 13 जनवरी 2023 तक एन0बी0आर0आई0 में आयोजित ए0ए0एस0 प्रशिक्षण के कार्मिकों की सूची का विवरण

S.No.	District's Name	Name	Post	Mob. No.
1	Saharanpur	Mr. Amit Kumar Tyagi	Technical Assistant Group-C	8126080103
2	Muzaffar Nagar	Mr. Bhupender Tomar	Technical Assistant Group-C	7351564100
3	Meerut	Mr. Sumit Kumar	Technical Assistant Group-C	7017172458
4	Baghpat	Mr. Anil Kumar	Technical Assistant Group-C	9012757484
5	Buland Saher	Mr. Trilok Chand	Technical Assistant Group-C	9548247506
6	Ghaziabad	Mr. Harbir Singh	Technical Assistant Group-C	9837676685
7	Hapur	Mr. Anuj Kumar	Technical Assistant Group-C	9456959571
8	Aligarh	Mr. Prempal Singh	Technical Assistant Group-C	9027580562
9	Hathras	Mrs. Sanjay Kumari	Technical Assistant Group-C	
10	Etah	Mr. Harveer Singh	Technical Assistant Group-C	
11	Kasganj	Dr. Dinesh Kumar	Technical Assistant Group-C	9458835353
12	Agra	Mr. Layak Singh	Technical Assistant Group-C	9897181371
13		Mr. Ravikant Mishra	Pr.Assistant Group-B	8273129688
14	Firozabad	Mr. Deshraj Singh	Technical Assistant Group-C	9412801899
15	Mainpuri	Dr. Vandana Singh Chandel	Technical Assistant Group-C	9410634081
16	Badaun	Mr. Seetaram	Technical Assistant Group-C	7017006180
17	i	Mr. Pushpendra	Technical Assistant Group-C	8279867188
18	Shahjahanpur	Mr. Veer Pal	Technical Assistant Group-C	7017802635
19	Pilibhit	Mr. Moti Ram	Technical Assistant Group-C	8077468578
20	Bijnor	Mr. Subodh Kumar	Technical Assistant Group-C	9258841948
21	Moradabad	Mr. Kuldeep	Technical Assistant Group-C	
22	Amroha	Mr. Mahipal Singh	Senior Technical Assistant Group-B	9758481696
23	Rampur	Mr. Ranvir Singh	Senior Technical Assistant Group-B	9412507834
24	Sambhal	Mr. Ramesh Chandra	Senior Technical Assistant Group-B	9759168283
25	Kanpur Nagar	Mrs. Swapnil Dwivedi	Technical Assistant Group-C	7355226325
26	Kanpur Dehat	Mr. Mamtesh Singh	Technical Assistant Group-C	8081869058
27	Auraiya	Mr. Santosh Kumar	Senior Technical Assistant Group-B	7398168860
28	Kannauj	Mr. Sushil Kumar	Senior Technical Assistant Group-B	9956791765
29	Farrukhabad	Mr. Pradeep Kumar	Technical Assistant Group-C	
30	Etawah	Mr. Sumit Kumar	Technical Assistant Group-C	7017593565
31	Fatehpur	Mr. Premdan Singh Pal	Technical Assistant Group-C	8853041877
32	Prayagraj	Mr. Ranjeev Kumar	Technical Assistant Group-C	8858522007
33	Kaushambi	Mr. Vikas Kumar Yadav	Technical Assistant Group-B	
34	Pratapgarh	Mr. Anand Pal	Senior Technical Assistant Group-B	7905849318
35	Jhansi	Ms. Khushboo Dixit	Technical Assistant Group-C	
36	Lalitpur	Mrs. Shruti Mishra	Technical Assistant Group-C	9795003352
37	Jalaun	Mr. Umesh Chandra Chachaindia	Senior Technical Assistant Group-B	

S.No.	District's Name	Name	Post	Mob. No.
38	Hamirpur	Mrs. Shweta Ranjan	Technical Assistant Group-C	7007356353
39	Mahoba	Mr. Jitendra Kumar	Senior Technical Assistant Group-B	9450178833
40	Bada	Mr. Shrikrishna	Technical Assistant Group-C	9919293758
41	Chitrakoot	Mr. Anand Sen	Technical Assistant Group-C	9452999540
42	Varanasi	Mr. Vijay Kumar	Technical Assistant Group-C	6394255211
43	Chandauli	Mr. Dhirendra Kumar	Senior Technical Assistant Group-B	8989869185
44	Ghazipur	Mr. Shivshakti Singh	Technical Assistant Group-C	9506871047
45	launpur	Or. Dharmendra Kumar	Technical Assistant Group-C	8423781612
46	Mirzapur	Niharika Singh	Technical Assistant Group-C	9453890238
47	Sonbhadra	Or, Pankaj Kumar Mishra	Senior Technical Assistant Group-B	9554444228
48	Sant Ravidas Nagar	Mr. Balkeshwar Singh Patel	Technical Assistant Group-C	8471019717
49	Azamgarh	Mr. Jitendra kumar Pandey	Technical Assistant Group-C	9415208402
50	Mau	Mr. Pradeep Kumar	Technical Assistant Group-C	7800084398
51	Ballia	Mr. Lal Bahadur Sharma	Technical Assistant Group-C	9889177154
52	Gorakhpur	Ku Gauthu Naga Panchavati	Technical Assistant Group-C	
53	Maharajganj	Mrs. Durga Singh	Technical Assistant Group-C	9026449743
54	Deoria	Ms. Shwetanshu Priya	Technical Assistant Group-C	9142197566
55	Kushinagar	Mr. Vinay Kumar Srivastava	Senior Technical Assistant, Group-B	9984451218
56	Basti	Mr. Pradeep Kumar Chaudhary	Technical Assistant Group-C	
57	Siddharthnagar	Mr. Om Prakash	Technical Assistant Group-C	9451342276
58	Sant Kabir Nagar	Mr. Adesh Kumar Mishra	Senior Technical Assistant, Group-B	8953135672
59	Lucknow	Ms. Priyanka Thakur	Technical Assistant Group-C	9369355905
60	Unneo	Mr. Pradeep Kumar	Senior Technical Assistant, Group-A	7379762625
61	Rai Bareilly	Mr. Arvind Kumar	Technical Assistant Group-C	7398707563
62	Sitapur	Mr. Mulayam Singh	Senior Technical Assistant, Group-A	8318861653
63	Hardoi	Nisha Pandey	Technical Assistant Group-C	8081148650
64	Lakhimpur Kheri	Mr. Chandra shekhar	Technical Assistant Group-C	9648384968
65	Ayodhya	Mr. Arun Kumar	Technical Assistant Group-C	9473773515
66		Mr. Virendra Kumar	Senior Technical Assistant, Group-B	9580652260
67	Ambedkar Nagar	Mr. Narendra Kumar Yadav	Technical Assistant Group-C	
68	Sultanpur	Mr. Brijendra Kumar	Technical Assistant Group-C	9918979747
69	Amethi	Mr. Anil Kumar Vishwakarma	Technical Assistant Group-C	8081574848
70	Gonda			
71	Balrampur	Mr. Krishna Kumar Maurya	Technical Assistant	9451942104
72	Bahraich	Mr. Dheeraj Kumar Bharti	Senior Technical Assistant, Group-B	9236132428
73	Shravasti	Mr. Vishal Singh	Senior Technical Assistant, Group-B	9598818908
74	Jhansi	Mr. Girjesh Singh Yadav	Technical Assistant	9695703803
75	Jansi	Mr. Ankur Chaurasiya	Technical Assistant	7985585633
76	Gonda	Mr. Gauri Shanker	Technical Assistant	
	Balrampur	Mr. Chote Lal	Technical Assistant	