## Central Forensic Science Laboratory (CFSL), Kamrup, Assam

# **Annual Report 2024-25**

# 1. Total Cases handled during the period:

Division	B/F	Received		Reported		Pending	
		Cases	Exhibits/	Cases	Exhibits/	Cases	Exhibits/
			<b>Parcels</b>		<b>Parcels</b>		Parcels
Biology	0	5	13	4	12	1	1
DNA	14	243	1822	180	1069	77	770
Chemistry	1	10	37	11	40	0	0
<b>Explosives</b>	1	31	121	31	162	1	2
Narcotics	5	124	445	102	453	27	125
Toxicology	10	94	281	87	263	17	59
Physics	2	7	10	6	23	3	7
<b>Ballistics</b>	0	11	283	11	354	0	0
Digital	96	275	1298	181	1032	190	797
<b>Documents</b>	100	75	9301	163	13305	12	2559
Total	229	775	13611	776	16713	328	4320

- 2. Total No. of crime scenes attended and court evidence deposed:
  - Crime Scene visits: 8 in Assam & Manipur
  - Voice Sample collection: 06 in Assam & Nagaland
  - Court Evidence deposition: 141 (including 88 through Video-Conferencing) in Assam, Arunachal Pradesh, Meghalaya, Nagaland, Sikkim, Haryana, Himachal Pradesh, Bihar, Jharkhand, UP, Odisha, West Bengal, Maharashtra, Delhi, Port Blair, Daman & Chandigarh.
- 3. No. of Research Papers/Reviews/Articles published: 06
  - Prasad SM, Sigh SP. Chronic Effects of Organophosphates on Human Health and Ecosystem: A Systematic Overview. International Journal of Creative Research Thoughts (IJCRT). 2025; 13(3): e359-e369.
  - Hussain AA, Saini N, Gupta S. The use of the Silent Answer Test along with the Concealed Information Test in the Suspect Detection System. Journal of the Indian Academy of Applied Psychology. 2025; 51(1): 278-288.
  - Chyrmang G, Barua B, Bora K, Suresh R. Exploring lightweight convolution neural networks for segmenting striation marks from firearm bullet images. Forensic Imaging. 2024; 39: 200611. <a href="https://doi.org/10.1016/j.fri.2024.200611">https://doi.org/10.1016/j.fri.2024.200611</a>.
  - Nato L (2024). Examination of Broken or Non-responsive Touch Screen Display Mobile Phones. In: Woungang I, Dhurandher SK, Singh YJ (eds), Proceedings of the NIELIT's International Conference on Communication, Electronics and Digital Technology. NICEDT 2024. Lecture Notes in Networks and Systems, vol 1022 (pp514-525). Springer, Singapore. https://doi.org/10.1007/978-981-97-3601-0\_37

- Handique S, Saha S, Suresh R, Mahanta L. Development of an AI-Enabled Video Capturing Device for Bullet Trajectory Analysis and Ballistic Research. Journal of Engineering and Technology for Industrial Applications. July 2024; 10(47): 104-108. https://doi.org/10.5935/jetia.v10i47.1105
- Baskar M, Sathyan N, Dwivedi A. X-Ray powder diffraction structure prediction of unknown stone using FullProf and GSAS - Rietveld Refinement. GSC Advanced Research and Reviews. June 2024; 19(03): 227–239. Doi: https://doi.org/10.30574/gscarr.2024.19.3.0179

## 4. No. of training programmes organised: 08

- Training programme on 'Explosives & their Forensic Aspects' was conducted for 10 officials of the 261 Counter Explosive Device Unit (CEDU), 99 APO on 17/05/2024.
- Training programme on 'The Bharatiya Nagarik Suraksha Sanhita, 2023' was organised for CFSL Scientists and Forensic Professionals on 01/072024. Dr. Sarfaraz Ahmed Khan, Associate Professor of West Bengal National Juridical Sciences (WB NUJS), Kolkata delivered an online lecture followed by the question-answer session.
- Training programme on 'Role of Forensic Science in Justice Delivery System' was conducted for two Judicial Officers of Assam on 20/07/2024.
- Training programme on 'Role of Forensic Toxicology, Ballistics, & DNA in Case Exhibit Examination' was conducted for Prof. Dr. Amar Jyoti Patowary, HoD, Forensic Medicine, North Eastern Indira Gandhi Regional Institute of Health & Medical Sciences (NEIGRIHMS), Shillong and three Post-Graduate trainees in Toxicology, Ballistics & DNA divisions on 19-20/09/2024.
- 5-days Training programme on 'Explosives & Post-Blast Investigation' was conducted for 11 officials of the 261 Counter Explosive Device Unit (CEDU), 99 APO from 23-27/09/2024.
- One-day Capacity Building Training Programme on 'Mobile and Computer Forensic Analysis of extracted data and Crime Scene Investigation' at NIA, Branch Office Guwahati on 28/09/2024.
- Training programme on 'Preventive Vigilance and Punitive Vigilance with special emphasis on Procurement' was organised for CFSL Scientists and Forensic Professionals on 30/10/2024. Sh. Rintu Das, Scientist 'D' & Vigilance Officer, National Institute of Electronics & Information Technology (NIELIT), Guwahati delivered an online lecture followed by the question-answer session.
- Training programme on 'Role of Forensic Science in Justice Delivery System' was conducted for 36 Judicial Officers of Assam, Arunachal Pradesh & Mizoram on 02/12/2024.

#### 5. No. of training programmes attended: 14

• Sh. Shishir P. Singh, Scientist B (Toxicology) participated in Capsule Course on 'Bharatiya Nagrik Suraksha Sanhita (BNSS), Bharatiya Sakshya Adhiniyam (BSA), Bharatiya Nyaya Sanhita (BNS): Investigation and Forensic Probe' organised by the National Forensic Sciences University (NFSU), Gandhinagar, Gujarat on 23-24/04/2024.

- Sh. Akash Ravindra Saoji, Scientist B (Electronics) participated in the training programme on 'Forensic Speaker Identification & Audio Video Analysis' in CFSL Chandigarh from 06-10/05/2024.
- Ms. Meenu, Scientist B (Explosives) participated in the training programme on 'Forensic Case Examination & Reporting of Chemistry & Narcotics Cases under NDPS Act' in CFSL Chandigarh from 06-10/05/2024.
- Sh. L. Nato Singh, Assistant Director (Documents) participated in the two-day workshop on 'Audio Authentication and Image/Video Authentication Facility' at CFSL Kolkata on 22-23/05/2023.
- Mrs. Kavita, Junior Scientific Officer (Explosives) participated in two-weeks training on 'Examination and Reporting of Cases related to Explosives & Narcotics' organised by the CFSL Kolkata from 27/05/2024 to 07/06/2024.
- Sh. S.K Mallick, Scientist 'B' (Biology), Ms. Meenu, Scientist B (Explosives), Sh. Akash Ravindra Saoji, Scientist B (Electronics) participated in the course on 'New Criminal Laws for Forensic Officers' organised by the Central Detective Training Institute (CDTI), Kolkata on 30-31/05/2024.
- Dr. Anil Kumar Sharma, Director & Scientist 'E', Dr. Swapnil Gupta, Assistant Director & Scientist 'C' (Documents), Ms. Sakshi Sharma, Scientist B (Explosives) & Sh. Ankit Tripahi, ACIO-I (Documents) participated in the online workshop on 'Sensitization on new Criminal Laws -2023' for FSL officers organised by the Central Detective Training Institute (CDTI), Hyderabad on 19/06/2024.
- Sh. Amitosh Kumar, Assistant Director (Physics) participated in the course on 'New Criminal Laws' organised by the CBI Academy, Ghaziabad on 01/07/2024.
- Sh. Amitosh Kumar, Assistant Director (Physics) participated in a capsule course on 'Forensic Science Approach on New Criminal Laws' organised by the National Forensic Sciences University (NFSU), New Delhi on 25-26/07/2024.
- Ms. Sakshi Sharma, Scientist 'B' (Explosives) and Mrs. Kavita, Junior Scientific Officer (Explosives) participated in the Forensic Science Symposium 2024 on 'Forensic Science Solutions for Emerging Challenges in International Drug Control' organised by the UNODC from 08-10/10/2024.
- Sh. Akash Ravindra Saoji, Scientist 'B' (Electronics) participated in the 'Digital Drone Forensics Software' organised by the Drone Tech Lab on 15/10/2024.
- Sh. R. Suresh, Deputy Director (Ballistics), Sh. S.K. Mallick, Scientist 'B' (Biology) and Sh. Sonu Kumar Maurya, Scientist 'B' (Narcotics) participated in webinar on 'Inclusive Education and Capacity Building for Public Service' organised by iGOTkarmayogi National Learning Week 2024 on 24/10/2024.
- Sh. N.L. Paite, Assistant Director & Scientist 'C' (Documents) participated in the online training programme on 'E-Record Management Right to Information' organized by the Institute of Secretariat Training and Management (ISTM), New Delhi from 11-13/11/2024.
- Dr. Seema Bagchi (Chattaraj), Deputy Director (Explosives), Ms. Sakshi Sharma, Scientist 'B' (Explosives), Sh. Sonu Kumar Maurya, Scientist 'B' (Narcotics), Sh. Rahul Kumar, Scientist 'B' (Toxicology) Sh. Ankit Tripathi, ACIO-I (Documents), Mrs. Kavita, Junior Scientific Officer (Explosives) and Sh. Rahul Kaushik, Junior Scientific Officer (Biology) participated in the 'Laboratory Quality Management

- System and Internal Audit as per ISO/IEC 17025:2017' organized by the CFSL Hyderabad from 26-28/11/2024.
- Sh. N.L. Paite, Assistant Director & Scientist 'C' (Documents), Ms. Afreen Alisha Hussain & Nikhil Saini, Forensic Professionals participated in the online workshop on 'Body Language and Deception Training for Forensic Psychologist' organized by the CFSL Delhi on 19/03/2025.
- 6. Any other specific work carried out during the period:
  - Scientists delivered 19 lectures to the trainees of:
    - o NIA Guwahati Branch
    - o Counter Explosive Device Unit (CEDU), 99 APO
    - o NFSU Guwahati Campus
    - o Directorate of Forensic Science Laboratories Bengaluru
    - o National Science Centre, Guwahati
  - NABL audit for the ISO/IEC 17025: 2017 accreditation was successfully conducted.
- 7. Name of the equipment/software procured:
  - GCMS (6) for other CFSLs
  - Magnet Axiom (5)
  - Magnet Witness (2)
  - Passware kit Forensic (2)
  - EnCase Forensic (5)