

**Central Forensic Science Laboratory, Kamrup, Assam
Annual Report 2021-22**

1. Total Cases handled during the period:

Case Data for the FY 2021-2022							
Division	B/F	Received		Reported		Pending	
		Cases	Exhibits/ Parcels	Cases	Exhibits/ Parcels	Cases	Exhibits/ Parcels
Ballistics	05	46	1104	45	1158	06	45
Biology	0	36	126	36	126	0	00
DNA	42	168	1248	88	647	122	893
Narcotics	04	378	642	116	279	226	899
Documents	04	152	6448	156	22503	0	00
Explosives	01	218	1125	94	442	125	696
Computer	55	230	1061	248	1819	37	173
Physics	00	11	576	9	30	02	546
Toxicology	02	35	99	34	105	03	05
Total	113	1274	12429	826	27109	561	3257

2. Total No. of crime scenes attended and court evidence deposited:

- Voice sample Collection: 03 in Nagaland.
- Court evidence deposited: 15 in Arunachal Pradesh, Assam, Delhi, Manipur Meghalaya, Sikkim, West Bengal, A&N Islands & Chandigarh.

3. No. of papers published in Journals:

- Gupta S. Forensic relevance of Concurrently Written Signatures in Document Report Writing. International Research Journal of Engineering and Technology 2022, 9(3): 2005-2009.
- Dutta SK, Saikia S, Barman A, Roy R, Bora K, Mahanta LB, Suresh R. Study on enhanced deep learning approaches for value-added identification and segmentation of striation marks in bullets for precise firearm classification. Applied Soft Computing 2021, 112: 107789. <https://doi.org/10.1016/j.asoc.2021.107789>.

4. No. of training imparted:

- Training programme on 'Forensic Examination of Cyber Crimes' was conducted for two Scientific Officers of Directorate of Forensic Science (DFS), Kahilipara, Assam from September 13- October 12, 2021.
- Organised webinar on 'Forensic Biology & DNA Profiling' for 41 participants from March 7-11, 2022.

5. Lectures delivered:

- Sh. R. Suresh, Deputy Director & Scientist 'D' (Ballistics) delivered a lecture on "Forensic Ballistics, small arms & ammunition" to the trainees of online workshop organized by Karunya Institute of Technology & Sciences, Coimbatore, Tamil Nadu 02/07/2021.
- Shri Arun Kumar Pal, Scientist B (Ballistics) delivered a lecture on "Examination of Removable Media HDDs" to the trainees of training on 'Forensic Examination of Cyber Crimes' by CFSL, Kamrup 27/09/2021.
- Shri Arun Kumar Pal, Scientist B (Ballistics) delivered a lecture on "Examination of Non-Removable Media" to the trainees of training on 'Forensic Examination of Cyber Crimes' by CFSL, Kamrup 28/09/2021.
- Shri Arun Kumar Pal, Scientist B (Ballistics) delivered a lecture on "Reporting on Mobile Phones" to the trainees of training on 'Forensic Examination of Cyber Crimes' by CFSL, Kamrup 04/10/2021.
- Sh. L. Nato Singh, Assistant Director & Scientist 'C' (Documents) delivered a lecture on "Crime Scene Management of Cyber Crimes" to the trainees of Forensic Science Laboratory, Pangei, Manipur on 10/11/2021.
- Dr. Anil Kumar Sharma, Director & Scientist 'E' delivered two lectures on 'Issues related to Degraded DNA, PCR Inhibition, Mixture Interpretation, etc' and 'Biology and DNA Report Writing' on March 10 & 11, 2022 in the webinar on 'Forensic Biology & DNA Profiling'.

6. No. of training attended by the officers:

No. of training attended:

- Shri SS Badwal, Asstt. Director (Physics) participated in the online course on 'Laboratory Quality Management System & Internal Audit as per ISO/IEC 17025:2017 & NABL Requirements' from September 21-24, 2021 of Centre for Electronics Test Engineering (CETE), Kolkata.
- Dr. Swapnil Gupta, Scientist 'B' (Document) participated in the online course on 'Examination of Security Document and Electronic Printout' from September 20-24, 2021 at LNIN National Institute of Criminology & Forensic Science, Delhi.
- Sh. R. Suresh, Deputy Director & Scientist 'D' (Ballistics) participated in the onsite 'NABL Assessors' Training Course on ISO/IEC 17025: 2017 (Level 2)' from August 18-20, 2021 at Gurugram.
- Sh. Sujit Kumar Mallick, Scientist 'B' (Biology) participated in the Hands-on Training Course on 'Advancements in Forensic DNA Workflow' from December 15-17, 2021 at Centre for DNA Fingerprinting & Diagnostics (CDFD), Hyderabad.
- Ms. Sakshi Sharma, Scientist B (Explosive) participated in the training programme on 'Examination & Reporting of Cases related to Chemistry, Explosive & Narcotics' from 14/02/2022 to 25/03/2022 at CFSL, Kolkata.
- Sh. Sujit Kumar Mallick, Sh. Argha Bandyopadhyay, Sh. Shishir Pratap Singh, Dr. Swapnil Gupta & Ms. Meenu, Scientists B participated in the virtual training programme on 'Laboratory Quality Management System & Internal Audit as per ISO/IEC 17025: 2017' from March 26-27, 2022.

- Ms. Afreen Alisha Hussain, Forensic Professional (Psychology) participated in the Workshop on 'Eye Detection System (EDS)' from December 14-15, 2021 at Central Forensic Science Laboratory (CFSL), Kolkata.

No. of Webinars attended:

- Shri R Suresh, Dy. Director (Ballistics) participated in the webinar on 'Demonstration of ED-XRF Spectrometer for Forensic Applications' on 09/06/2021 arranged by CFSL, Bhopal.
- Shri SS Badwal, Asstt. Director (Physics) participated in the webinar on 'X Ray Fluorescence Spectrometry for Application' on 09/06/2021.
- Shri Arun Kumar Pal, Scientist B (Ballistics) participated in the webinar on 'Demonstration of ED-XRF Spectrometry instrument for Forensic Application' on 09/06/2021 arranged by CFSL, Bhopal.
- Shri R Suresh, Dy. Director (Ballistics) participated in the webinar on 'Analytik Jena- PQ 9100 ICP-OES (Basics, Sample Preparation, Working Principle & Instrumentation)' on 16/06/2021.
- Shri SS Badwal, Asstt. Director (Physics) participated in the webinar on 'Analytik Jena- PQ 9100 ICP-OES (Basics, Sample Preparation, Working Principle & Instrumentation)' on 16/06/2021.
- Sh. Shishir Pratap Singh, Scientist B (Toxicology) participated in the webinar on 'Forensic application with FT-IR Microscopy' on 24/06/2021 organised by Bruker India Scientific Pvt. Ltd.
- Shri R Suresh, Dy. Director (Ballistics) participated in the webinar on 'Video Authentication' on 23/07/2021 organized by DFSS, New Delhi.
- Shri Arun Kumar Pal, Scientist B (Ballistics) participated in the webinar on 'Video Authentication' on 23/07/2021 organized by DFSS, New Delhi.
- Shri R Suresh, Dy. Director (Ballistics) participated in the webinar on 'Blockchain Technology' on 28/07/2021 organized by BPR&D, New Delhi.
- Shri SS Badwal, Asstt. Director (Physics) participated in the webinar on 'Blockchain Technology' on 28/07/2021 organized by BPR&D, New Delhi.
- Shri Arun Kumar Pal, Scientist B (Ballistics) participated in the webinar on 'Blockchain Technology' on 28/07/2021 organized by BPR&D, New Delhi.
- Sh. Sujit Kumar Mallick, Scientist 'B' (Biology) participated in the webinar on 'What's Changed- Reflection on 30 Years of Forensic DNA profiling in India' on 30/07/2021 organised by CFSL, Hyderabad.
- Shri R Suresh, Dy. Director (Ballistics) participated in the webinar on 'Crypto Forensics Investigations' on 04/08/2021.
- Shri Arun Kumar Pal, Scientist B (Ballistics) participated in the webinar on 'Crypto Forensics Investigations' on 04/08/2021.
- Dr. Anil Kumar Sharma, Director participated in the demonstration programme of 'eOffice Lite (eFile version)' on 23/08/2022.
- Dr. Anil Kumar Sharma, Director participated in the webinar on 'DNA Databasing- Lessons Learnt from the Field' on 26/10/2021 conducted by NFSU & Thermo Fisher Scientific.

- Sh. Sujit Kumar Mallick, Scientist 'B' (Biology) participated in the webinar on 'DNA Databasing- Lessons Learnt from the Field' on 26/10/2021 conducted by NFSU & Thermo Fisher Scientific.
- Sh. Shishir Pratap Singh, Scientist B (Toxicology) participated in the online conference on 'CCTNS and ICJS Good Practices' on 16/12/2021 conducted by NCRB, New Delhi.
- Dr. Anil Kumar Sharma, Director participated in the webinar on 'DNA Profile Search Tool' on 02/02/2022 organised by DFSS, New Delhi.
- Dr. Anil Kumar Sharma, Director participated in the webinar on 'Investigation of Crime against Women & Children: Forensic Examination of Sexual Assault & POCSO Cases' on 08/02/2022 organised by CFSL, Chandigarh.
- Sh. Sujit Kumar Mallick, Scientist 'B' (Biology) participated in the webinar on 'Investigation of Crime against Women & Children: Forensic Examination of Sexual Assault & POCSO Cases' on 08/02/2022 organised by CFSL, Chandigarh.
- Dr. Swapnil Gupta, Scientist 'B' (Document) participated in the webinar on 'Forensic Examination of Security Documents' on 26/02/2022 conducted by Chandigarh University.
- Shri R Suresh, Dy. Director (Ballistics) webinar on 'Investigation of Cyber Crime in Darknet' on 28/02/2022 organized by the BPR&D, New Delhi.
- Shri Arun Kumar Pal, Scientist B (Ballistics) participated in the webinar on 'Investigation of Cyber Crime in Darknet' on 28/02/2022 conducted by BPR&D, New Delhi.

7. Any other specific work carried out during the period:

- Consultancy provided to Forensic Science Laboratory (FSL), Meghalaya about procurement of equipment and software to develop Cyber Forensic unit and different equipment of Biology, Documents, Physics & Chemistry Divisions.
- 46 trainees (43, SI, 3 ASI) of 49th Basic Course of NEPA, Meghalaya visited CFSL, Kamrup on September 30, 2021. They visited different divisions and interacted with the scientists.
- Four presentations of the Forensic Professionals of CFSL, Kamrup were selected among the best presentations by Expert Panels during online workshop on 'Instrumentation and Techniques used in Forensic Sciences' organised by CFSL, Pune.
- Celebrated Raising Day of DFSS on 31st December. 25 students of Dakshin Kamrup College along with their teacher visited different divisions of CFSL, Kamrup and interacted with the scientists.
- Celebrated Hindi Pakhwada (September 14-28) with 4 activities.
- The Assistant Commissioner of State Tax, State GST Commission, Dispur and his team visited Digital Forensic division to have an overview of efficient extraction of data/digital records from different electronics devices and tools used.

8. Name of the equipment/software procured:

- UFED 4 PC Ultimate,
- MD-VIDEO Examiner,
- Stellar Phoenix Data Recovery Toolkit Software

- Thermomixer C,
- Microscopes,
- Centrifuges,
- PCR Plate Centrifuge
- PCR Workstation,
- Analytical Balance.

9. Any new facility generated by the laboratory.

- Facilities developed in the Narcotics division to facilitate examination & reporting of 116 cases.