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## ***Editorial***

This 52<sup>nd</sup> volume of The Indian Police Journal for January-March, 2005 includes a variety of articles on subjects like Community Policing, Technology, Forensic Science and Crime Investigation contributed by Senior luminaries in the field of Police, Forensic Scientist, Academicians and Researchers. The issue also contains a number of articles on issues like Police Corruption, Delivery of Police Service, and Community Policing etc., since it concerns both the police and public.

Besides the articles, Book Review of “Manners and Etiquettes” written by Dr. G.P. Bhatnagar and “Nagpur Police Through Ages- A Micro Study in Macro Setting” by Sh. P.L. Joshi, reviewed by Sh. R.C. Arora, Director, BPR&D and Dr. S.B. Bagchi, Principal, CDTs, Kolkata respectively; From the desk of Director (R&D); Technology Update; List of recipients of President’s Police Medals for distinguished Service; and, a list of articles published during 2004 have also been included.

We deeply regret our inability to bring out this issue in time due to some unavoidable/technical problems. Other issues of the journal are also being published soon to clear the backlog.

The present issue has come up with a new cover design with the hope that it will give a better look to the readers of the Journal.

We will be grateful for your comments and valuable suggestions for our future guidance and to enable us to enrich the Journal further.

***EDITOR***



## Abstracts & Key Words

### **Community Policing in Kolkata**

Ms. Tumpa Mukherjee

#### **Key Words :**

Jano Sanjog Sabha, Servant Verification Scheme, Tenant Verification Scheme, Community 'Traffic' Management System.

In Kolkata police & civil society are often at loggerheads with each other. The gory memories of West Bengal State Police crushing the Radical Left Extreme Naxalbari Movement in the late 60's and early 70's haunt the veteran mind. To bridge the yawning gap that prevails among the police and community members, kolkata police is gradually gravitating towards community oriented policing. Kolkata police has advocated and implemented few community policing programs. The thrust is towards promoting client oriented police service where the clients are the community members of the city. The paper further addresses some of the lacunae of the community policing program in Kolkata as well as suggest some workable solutions to make it more effective.

### **Application of Technology in the Prevention of Counterfeiting and Sale of Spurious Products**

Shatrujeet Kapur

#### **Key Words :**

Security printing, Watermark, Fluorescent fibres, Invisible fluorescent ink, Bi-fluorescent ink, Meta merit ink, Thermochromic ink, Optical Variable Ink (OVI), Micro lettering, Radio Frequency Identification (RFID), Dot Matrix Hologram, Electronic Beam (EB) Hologram, Fluorescent galaxy

Wherever there are documents, there is possibility of counterfeiting. The only way to completely prevent this menace is to do away with the documents involved. Although there has been some progress towards paperless working, yet such transactions are only an exception. As a rule, economic transactions involve documents, giving rise to chances of forgery. Another major problem facing the economy is circulation of spurious products. Its global volume exceeds 200 billion dollar per annum causing huge loss to the governments.

How secure a documents is? To answer this question, we will have to look at how secure its ingredients i.e. paper, ink, design, technology, perforation and numbering are. To prevent counterfeiting, we need to carry out a comprehensive review of security features in security documents like

currency notes, government stamps and stamp paper, banking instruments, advance licences etc. Unique composition of paper, ink, design, technology, perforation and add-on features like holograms can go a long way in the prevention of forgeries. It may be a good idea to develop special paper exclusively for security printing. Similarly, certain security inks should be earmarked only for security printing.

Similarly, in order to prevent the sale of spurious products, we need to conceptualize and design a national mark of authentication, on the lines of 'EGMARK', to be used on the labels/packing of genuine products. Concerned industry associations - pharmaceuticals, cosmetics, tobacco products, etc. - may be involved in this initiative with the Government acting as a facilitator.

### **Syllabic Nuclei of Similar Vowel Quality as a Clue for Forensic Speaker Identification -A Study on the Isolated Spoken Words**

C.P. Singh, Manisha K.

#### **Key Words :**

Key Words:- Clue words, onset, Syllabic Nuclei.

In forensic speaker identification practices, the

clue words for spectrographic comparison, which are of same context or dialect, are selected. When the context of the specimen speech materials are different from that of the questioned sample, sufficient clue words are difficult to select out of the speech material provided for spectrographic method of voice comparison which usually leads to no-opinion rather than probable or positive identification even though auditory examination reveals positive matching. Studies have been conducted on the isolated spoken words having similar vowel quality as syllabic nuclei preceded by consonant having same place of articulation for forensic importance as clue words for comparison. Some of the measurable speaker dependent parameters are studied with the selected vowels as /a/, /e/, /i/, /o/ & /u/ uttered by fifteen speakers and found useful for forensic speaker identification, though they are preceded by different consonants having same place of articulation. Thus in a situation where sufficient clue words could not be selected from the speech materials provided, the words/ syllables having vowels of same quality preceded by different consonants having same place of articulation as onset are found to be the only alternative technique of clue word selection for comparison by spectrographic method.

### **Homicide Investigation and Punishment in Ancient India. (From Early Times to 647 A.D)**

Umesh Kumar Singh, I.P.S.,

#### **Key Words :**

Homicide, Primitive Society, Reasons, and Motive of Homicide, Genocide Indus Valley civilization, Vedic Age, The Ramayan and the Mahabharat Age, Dharmashastra, Codification of Indian Law, Kautilyan Arthashastra, Prostitutes, Harlots, Human Sacrifice, Brahmanicide, Sati system, Infanticide, Feticide, Investigation, Postmortem, Punishment, Capital Punishment, Seditious Minister, Unjust, Feudal, Toiling.

This article is of immense academic interest and it is an attempt to present a picture of homicidal incidents in the remote past of Indian society. Society, in the past also, was not free from incidents of crime and the then State machinery had devised a very successful methodology to prevent, detect and control such re-occurrence of criminal incidents. Though police administration or criminal dispensation justice system of modern type did not exist so full fledgedly, yet the then government have devised very effective methods to catch the criminals, put them under trial and to ensure the deterrent punishment to the

real culprits. Due care was taken to ensure that innocent must be allowed protection and be left out without any punishment but utmost care was taken to a sure short I punishment to the guilty. Treatment of State government and other public servant to the people of the state was not equal and uniformed and for the same offence culprits of different castes were differently treated and unequally punished. Brahmins enjoyed the great privilege and were having less punishment, and next to them Kshatriyas were treated with higher esteem and the rest two castes- Vaishyas and the Sudras were punished with all cruelty and tortures. Privileged few enjoyed all the privileges and the common people and masses were ' maitre acted and punished with all severity. Females and Sudras were treated worst than the animals.

### **Are West Bengal Police Officers Stressed?**

Dr. Sibnath Deb, Tanusree Chakraborty, Pooja Chatterjee and Dr. Neerajakshi Srivastava.

#### **Key Words :**

Police Officer, Stress, Symptoms of Stress, Consequences of Stress, Role Over-Load, Role Ambiguity, Role Conflict, Group And Political Pressures, Responsibility For Persons, Under Participation,

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Powerlessness, Poor Peer Relations, Intrinsic Impoverishment, Low Status, Strenuous Working Conditions, And Unprofitability.

Police Officers play a significant role for maintaining law and order in the society. Sometimes they work under pressure and are stressed. The broad objective of the present study was to understand the level of psychological stress among West Bengal Police Officers. A group of 50 Senior Police Officers with at least 5 years working experience was covered and data were collected by using 'Occupational Stress Index' developed by Dr. A.K. Srivastava and Dr. A.P. Singh (1998) through self-administration method. Findings revealed that 14.0% of the Police Officers were suffering from high psychological stress. Further analysis of data revealed that the main areas of stress included un-profitability (22.0%), role overload (18.0%), role conflict (18.0%), powerlessness (18.0%), role ambiguity (16.0%), unreasonable group and political pressure (16.0%), intrinsic impoverishment (16.0%) and under participation (16.0%). Findings suggest that special attention is required for taking need-based measures for each of the above areas of stress for unburdening the level of stress among Police Officers.

### **Taming The Beast: Can Corruption Be Controlled?**

Jayanto N. Choudhury, IPS

#### **Key Words :**

Corruption in India - 2% of GDP - CVC - CBI - CVOs - ACBs - Laws - hotspots - public - police corruption

Corruption reduces India's growth by 3-5% annually. The highest institutions have condemned corruption, yet graft seems to be uncontrollable. This article reviews the architecture and laws to address corruption. It then calls for a coherent strategy, restructured organization and review of instruments. Constructing a Richter's scale of sleaze and focusing on 'hotspots' would make more effective use of limited resources. Consolidating and strengthening the CVO would yield better dividends. Enlisting the public and strengthening anti-corruption capabilities in the states are the keys to better results. Police corruption must be reduced to improve the governments image. Leadership, Training and Oversight are suggested means to achieve this. The feasible goal is to change the perception that corruption is low-risk and that anyone who isn't corrupt lacks either 'the opportunity or the guts'.

### **National Ballistics Imaging Database Management and its Applications in Indian Perspective**

S.S. Baisoya

#### **Key Words :**

Integrated Ballistics Identification System, Firearms Examination, Ballistics Imaging Database, Correlation of Images, Image Analysis Techniques.

Firearms related crimes are increasing due to the use of firearms in the activities of terrorists, naxalites, interstate criminals, serial killers, and repeat offenders in the country. Criminals generally commit several crimes in different jurisdictions after unknown spans of time usually with the same firearm. These crimes are investigated by investigating agencies of the respective areas in an isolated manner due to lack of any clue between them. Many of these crimes remained unsolved and unlinked for an indefinite period. In addition, the increase in casework leads to overburdening the Forensic Science Laboratories in the country. This poses problems in effective examination and comparison of huge amount of exhibits with the traditional manual technique using comparison microscope. Further, as casework increases in the laboratories, there are less likely chances that two separate crimes committed by same firearm would be connected. CFSL Chandigarh, therefore, have taken an initiative and established facility of automatic examination and comparison of

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images of markings on fired bullets/cartridge cases using Integrated Ballistics Identification System. This is an automated system capable of image acquisition, signature extraction and correlation of images. Using this system, the laboratory is creating national ballistics imaging database of the images of markings on firearm evidences. As new images are entered, the system searches the existing database and comparisons are made for possible matches. Thus, the database will help in linking the previously unlinkable crimes committed with the same firearm in different jurisdictions. The present paper explains the various features of the national ballistics imaging database and its forensic applications in the Indian perspective.

**Perceptions of Police Personnel about their Customer Orientation towards Women**

B. Sandhya IPS\*

**Key Words :**

Customer Orientation, Service Delivery, Perception, Grass Root Level, Cutting Edge Level, Middle Level, Women Customers, Crime Against Women (CAW)

Customer Orientation towards the down trodden and needy sections of the society is the basic requirement if the police service need gain an image of a Service-Oriented Organisation. Women in India can be considered as a needy section of the society. In the present study, perception of police personnel about their own Customer Orientation towards women was measured, as

‘mental models’ created by individuals about organization affect the way in which they react to situations and orient themselves. The result shows that Grass Root Level personnel (Constabulary) paint the Department in brighter colours on Customer Orientation towards women, than the Middle Level and Cutting Edge Level personnel. Better interpersonal relations help to develop better perceptions. Police personnel themselves do not feel fully confident that they themselves would get a fair deal from a Police Station in a CAW case. Even then they do not perceive the urgency for further change in Customer Orientation and developing gender sensitivity. The study points towards need for the top management to give top priority to Customer Orientation towards women.