

# SECURITY PRINTERS REPORTER

2018 SECURITY PRINTERS – 21-23 MARCH BY INTERGRAF

**INSIDE THIS ISSUE**

- The Danger of 1+1=1
- White Hats Fighting
- The Mighty Rupee
- Intergraf Certification
- New Exhibitors
- Dinner Party

**NEWS** New presentation in programme: 'Neurometrics applied to banknote design: A first validation study', Fernando León Martínez, Head of Research, Development & Manufacturing Technology Division, Banknote Production Control Department at the Banco de España and Jaime Guixeres Provinciale, Scientific Coordinator of Consumer Behavior Research at the Polytechnic University of Valencia

**NEWS** New presentation in programme: 'Unique identification number in a credit referencing system', Ocelia M. Scott, Central Bank of Liberia

## A FINGER ON THE PULSE

**Conferences are ideal for learning where our industry is going; where the great social, political and economic movements are pulling it. But for getting a feeling of what the industry is capable of now and which new tools and materials it will have in the immediate future, exhibitions are hard to beat.**

The best place to have a finger on the pulse is here, in the exhibition on the ground floor of the Convention Centre Dublin. There are over 100 exhibitors covering every aspect of the banknote and ID manufacturing industries. With the exhibition now entering its second day, there is still plenty of time to make those all-important business connections. Who will you meet today?

Like at previous exhibitions, institutions that do not want to sell, but to educate, are well represented. This year, there are the Dutch and Irish National Police, Europol and Interpol. What they have to say is

highly pertinent to our business so don't miss them in the exhibition. There are also many other excellent exhibitors to discover over the course of the next two days.

"Exhibiting at Security Printers is very important for us", said one of our regular exhibitors - a substrate supplier and supplier of security features. "There are people here from all fields of the industry, not only printers or paper makers. There are a lot of experts in border control, passports issues, ID issues - all things that you do not have at other conferences. [...] We learn a lot from these people and have the chance to enhance our products."



## THE DANGER OF 1+1=1

**What to do, if a traveller presents a genuine passport with a photo that looks like the owner, but could also be someone else? This is an increasingly common scenario.**



Morphing, the technique of changing a photograph to closely resemble two people is the subject of three presentations in Identity Session 6 this afternoon. The necessary technology for this new tool for criminals and people smugglers is relatively freely available. The result of morphing is to present a photo which is a sufficiently close match between the legitimate owner of the passport and the second person, in order to become acceptable photo-ID for either. The fact that the passport itself is genuine adds to the likelihood that the morph will be accepted.

**So how does morphing work?**

Tests have shown that passports with morphed ID photos have been accepted by human border guards as well as by automatic processes in ABC gates. It is a sobering thought that humans are generally very bad at matching a real face in front of them with a photograph, especially as there can be a difference of up to 10 years between the time a passport photo was taken and the moment a border guard inspects it although some people - and some systems - are very good at it. Time to take a closer look. Our three speakers will look at the problems from different angles.

**In the Western films of old the bad guys with guns wearing black hats were beaten by the good guys with guns wearing white hats. Modern cyber warriors don't wear hats, but they still fight and often win.**

## WHITE HATS FIGHTING

For people responsible for the security of a company, a security system or even a whole country, hackers are the enemy. Hackers discover weak points in computer systems in order to exploit them for their own ends. But that is not the whole picture. There are people that explore vulnerabilities in systems just for fun and then alert those they have had their fun with, to enable them to correct weaknesses and make systems stronger. One such group of hackers is the Chaos Computer Club (CCC), which won praise even from business journal Bloomberg, who said Chaos Computer Club is "a multigenerational army of activists that has made the country's democracy a lot tougher to undermine." The 'white hat' hacker group "by exposing weaknesses in German banking, government, and other computer systems, has helped make them more resistant to attack and contributed to a society that's exceptionally careful about believing what it sees online."

The Chaos Computer Club e. V. (CCC) is Europe's largest association of hackers. For more than thirty years, CCC has been providing information about technical and societal

issues, such as surveillance, privacy, freedom of information, hacktivism, data security and many other interesting things around technology and hacking issues. As the most influential hacker collective in Europe, the club organises campaigns, events, lobbying and publications. There are many hackerspaces in and around Germany, which belong to or share a common bond to the CCC.

*"The only way to save a democracy is to explain the way things work. Understanding things is a good immunization"*

Linus Neumann, Senior IT Security Consultant and CCC member

Today, one of CCC's prominent members, Senior IT Security Consultant Linus Neumann, takes a look at digital currencies, what we, as a society, would lose or gain, when, as he thinks, banknotes will come to an end. Linus Neumann will again voice his opinion in the final panel discussion on the future of cash on Friday.

### EXHIBITION APERITIF

Yesterday's exhibition opening ended with a cocktail reception in the exhibition hall. Over 100 booths presented their latest products and cutting-edge solutions in a relaxed atmosphere.

# THE MIGHTY RUPEE



If one is looking for really big banknote happenings in the recent - or not so recent - past, the roll-out of the Euro in 2002, which saw 14.89 billion banknotes in 7 denominations printed in different public and private banknote printing works in 11 different countries, is surely the biggest one. Right on the heels of the Euro issue was the almost instantaneous demonetisation of 86 per cent of the Indian currency and the following re-monetisation. Dr Deepali Pant Joshi, Former Executive Director of the Reserve Bank of

India will talk about the challenges the Reserve Bank of India faced in executing the secret plan of the Prime Minister, Narendra Modi, but it is interesting to have a look at just one component of the banknotes that had to be produced: paper.

**A very large demand**  
India is the second largest producer and consumer of banknotes, after China. And although the country is self-sufficient in the printing of banknotes, it has four banknote printing works, it still has to import

India has just gone through a momentous currency change that still has ripple effects 16 months after it happened. Dr. Deepali Pant Joshi will give additional details in her speech, but for some context, here is a look at the banknote paper situation in India, which was central to the replacement of demonetised rupees.

many raw materials for banknotes. In his first year in office, Mr. Modi announced an ambitious plan to make India self sufficient in many things, including banknote paper.

As part of the “Make in India” plan, he urged the RBI to start producing more of the required paper and ink, with the eventual goal of keeping the entire production process within the country. In banknote printing that has already been achieved. Currency notes in India are printed by Security Printing and Minting Corp. of India Ltd (SPMCIL) under the finance ministry and by Bharatiya Reserve Bank Note Mudran Pvt. Ltd (BRBNMPL), an RBI unit. SPMCIL has two currency presses at Dewas, Madhya Pradesh and Nashik, Maharashtra, while BRBNMPL manages two presses - one at Mysuru and the other at Salboni in West Bengal.

As far as paper is concerned, self-sufficiency also seems to be happening; although, immediately after the demonetisation there was obviously a need that

domestic production could not meet. Consequently, in December 2016, eight foreign paper companies were in Bengaluru to finalise bids for contracts of 27,500 metric tonnes (MT) of paper for lower denomination currency notes to be supplied to India from April-December 2017. The RBI did not publish the names of the selected bidders.

**On the way to self-sufficiency**  
India has two security paper mills: Security Paper Mill in Hoshangabad, Madhya Pradesh and Bank Note Paper Mill India Pvt. Ltd in Mysuru, Karnataka. In 2017, two complete paper production lines were installed in Mysuru (Mysore) which have a combined annual capacity of 12,000 MT of banknote paper. In 2015, a new banknote paper production line was inaugurated in Hoshangabad with a capacity of 6,000 MT p.a. - to be used mainly for high denomination notes. India can now produce in its own country a substantial part of its requirement for around 28,000 MT of banknote paper per year, but there is certainly room for growth.

## HIGHLIGHTS FROM EXHIBITORS

**About exhibiting**  
“We are extremely pleased with the quality of our booth materials, everything ordered was perfectly here and ready to be working on time. Very high marks! [...] What has also been a very nice surprise is that both the exhibitors and conference attendees are proving to be good opportunities”

**About Dublin**  
“It has been very good; the logistics were very easy. The guys at Intergraf have all been very helpful”

**About networking**  
“We have had some meetings with customers already and also met a couple of potentially new customers so the event has started very well!”

**About the conference**  
“The content of the presentations so far has been very good – very educational”

**About the speakers**  
“The keynote speaker was phenomenal. I really liked her presentation. Hers was one of the better keynotes that I’ve ever heard”

A risk-based security management system such as these will enhance your organisation’s resilience to potential threats and ultimately strengthen your business.

## ISO 14298 & CWA 15374: FEEL TRUST



ISO 14298 specifies requirements for the management of security printing processes. CWA 15374 is a security management system for suppliers to the security printing industry. This certification specifies requirements for suppliers of products that include security features, as well as for suppliers of services that ensure the physical security of printed matter manufactured by a security printing company: e.g. producers of inks, foils or security paper. Over 100 production sites from 45 countries have been certified by Intergraf.

In his presentation yesterday morning

about preventing counterfeiters from gaining access to security printing equipment, Paul Tiefenbacher, Security Expert at the European Central Bank, described Intergraf’s certifications as having a “very helpful risk-based approach” which (among other things) “clearly address the risk of the second hand market for printing machinery”. He added that they help to “define the obligation of the potential seller and how to assess whether their potential buyer is a reputable one”. Contact Intergraf to learn more about how you can protect your business with the help of our certifications.

“We profited significantly from going through this exercise of certification and will keep on using Intergraf as a lighthouse, guiding us through the demanding evolution of security in our competitive industry.”

Rainer Rettig, Managing Director of HID Global Rastede GmbH

### DINNER PARTY

A truly special occasion in a truly special venue - the legendary St. James’s Gate Brewery, home of Guinness since 1759. Discover everything there is to know about Ireland’s most famous beer across the seven floors of the Guinness Storehouse’s steel-framed, Chicago-style building - fittingly wrapped around a vast atrium in the shape of a pint glass. After enjoying the best in Irish cuisine, we take to the dance floor. Where better to end the day in great company?

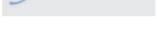


### A BRIEF HISTORY OF GUINNESS

Guinness Stout is sold in over 150 countries worldwide - with 10 million glasses enjoyed daily. A family-run business until 1986, Guinness has been in existence since 1759 and a well-known international brand since the turn of the 20th Century. The company has contributed much to the welfare of the people of Dublin: as a trailblazing employer paying employment benefits before they were provided by the state, and as a generous charitable giver.

We are very lucky to be joined this year by 17 brand new exhibitors! Have you met them yet? Visit their booths to discover more about what they have to offer.

## NEW EXHIBITORS

-  Angstrom Technologies, Inc. (92)
-  Bilcare Research Srl (23)
-  Boulder Imaging (10)
-  Changzhou Moltec Materials Corp. (105)
-  Dai Nippon Printing Co. Ltd. (69)
-  Domino Printing Sciences (112)
-  Drohmann GmbH easycut (79)
-  GTS GmbH (7)
-  Infineon Technologies (63)
-  IQDEMY (107)
-  ITG GmbH Graphic Products (22)
-  Kocher & Beck GmbH & Co. (71)
-  secunet Security Networks AG (102)
-  SPM Security Paper Mill a.s. (78)
-  SPM Steuer
-  Techbeam (103)
-  Unilux (29)
-  Vacuumatic (39)