

# ODDS Conference Hits the Phygital Nerve

The programme for the second Optical and Digital Document Security (ODDS) conference is now available, demonstrating the importance of this event in bringing together people involved in developing digital systems for identity and financial transactions with the more traditional security document community. The conference will be on 17-19 April 2023 in Prague, Czech Republic.

The first ODDS conference, in 2022, showed that there is a need for this event as it is the only one presenting the developments at the interface between the physical and digital worlds of financial transaction and personal identity security. The 2023 conference opens with a session which examines 'phygital' features. Paper and plastic currency and identity cards are still in everyday use, albeit they now often interact with a digital record, so this first session sets out innovative ways of making those links, which are becoming the key nerve in securing the protection of our financial transactions and proofs of identity.

The digital domain is becoming more prominent in our everyday transactions as we have to prove who we are for banking, for online purchases and even to use public transport. So the central sessions in the conference cover Protecting Identity in the Digital Age, with presentations from established and highly experienced security printers as well as research institutes and young companies. With identity theft on the increase, the information in these sessions gains added significance for everyone involved in identity security.

The physical security providers remain competitive and innovative,

as the final two sessions on New Optical Techniques for Security will show. Prevention of fraud and easy recognition of genuine items remains a key motivator behind some fascinating new approaches that will be described in these sessions. Many now established optical security features were first announced at the Optical Document Security conference – one of the ODDS precursor conferences, the other being Digital Document Security – and this continues at ODDS 2023, with exciting innovations from well-known companies such as OVD Kinegram and SICPA alongside those from recent start-ups including 4Plate.

ODDS 2023 opens with a seminar on smartphones, given by Dr Alan Hodgson, a knowledgeable and respected authority and regular contributor to Holography News®. He will look at how and why smartphones are becoming a dominant tool in identity and financial transaction management, while setting out their shortcomings as security devices. He will also ask what this means for those who don't have a smartphone or where network coverage is weak. This will be an eye-opening and thought-provoking seminar for everyone developing smartphone ID or financial systems or features for smartphone validation.

And don't miss the conference dinner and table-top exhibition on Tuesday evening, where you can see and handle some of the technologies you'll hear about in the presentations.

Registration for ODDS 2023 is now open, as is table-top exhibition reservations. For full programme details and registration visit [opticaldigitalsecurity.com](http://opticaldigitalsecurity.com).

## Machine-Readable Holograms from IQ Structures

**IQ Structures, a research and production organisation focused on nanotechnology engineering, part of the IQS Group, has introduced holograms that can be authenticated automatically. All it takes is a normal light and a mobile phone app.**

When checking security features, an inspector may not be completely familiar with the authenticity and yet, for various reasons, is not able to verify it against the database entry. This is where IQ Structures believe their machine-readable holograms can help. The operation of the solution is simple: a mobile phone with an app illuminates the hologram, the phone reads the feature and then the app confirms its authenticity.

'Machine-readable holograms combine two very powerful principles. Our holograms contain unique visual effects that virtually cannot be replicated because they are based on special nanostructures. The second principle is automated control, immune to human failure. Each is powerful, together it is unbreakable,' says IQ Structures CEO Petr Franc. 'Our new technology has a range of applications, from personal documents to paper certificates and brand protection.'

The machine-readable holograms are put into ID documents as part of IQ proID's product. This product is based on micro-segmentation technology to ensure seamless integration into the card. Any attempt to manipulate the holographic layer ends up disintegrating the hologram into thousands of miniature parts.

Other advantages of IQ proID are the possibility of full area protection, so no one can change any data on the document, and the possibility of creating integrated security features combining different technologies (security printing, UV and OVI printing, tactile surface embossing and holography). Many customers prefer this technology because of the distinctive visual effects.

Machine readable holograms can also be used in the area of brand protection. In this application, there may be situations where the brand owner has some sort of track and trace system but doesn't want to give full access to all customers. The customer doesn't even know the details of the hologram, so they are only able to make a general check that there is a hologram present on the packaging. With machine-readable hologram technology, the consumer can download an app and check by reading it that it is a genuine security feature.

