

# RECONNAISSANCE THE HOLOGRAPHY CONFERENCE™

15–16 NOVEMBER 2018

Minsk, Belarus

The only event which examines all aspects of commercial holography and holographic technologies, in particular their application in authentication and security, packaging and printing.

*Co-organisers*



*Support from*



[www.theholographyconference.com](http://www.theholographyconference.com)

*“Very good organisation, feel good atmosphere, a lot of really good and helpful contacts, perfect for getting into the holography family”*

Temicon

# Welcome



For 30 years the holography conference has been bringing together the leading lights within the holography industry. This year marks the 25th anniversary of the International Hologram Manufacturers Association (IHMA), which in the last few years hit the 100 members milestone.

The holography industry continues to go from strength to strength with new innovations and new fields of application coming to market, while in the last few years the industry has launched a number of ground breaking products across a whole range of areas – many of them unveiled or demonstrated for the first time at The Holography Conference.

The holography industry has never stood still for long – it is driven by innovation and opportunity. This has ensured that holograms remain the security technology of choice for banknotes and branded products as well as being widely used in packaging and other security documents. But the future is open to new markets, new techniques and competitive challenges – so the 2018 conference will once again explore what is happening right now and what we can expect in the near future.

We look forward to welcoming you to Minsk, to experience the energy and life of this truly captivating Eastern European city – and share with us two fascinating days packed with market insights, new knowledge, professional contacts and inspiring new ideas.

**Dr Mark Deakes, Conference Director**

## Topics

- Security and authentication holograms
- Latest hologram and holographic developments
- Innovations in origination, materials and production
- OVDs for identity and currency
- Next generation holographic features
- Holograms for brand, revenue protection and packaging

For more details or to secure your place, visit [www.theholographyconference.com](http://www.theholographyconference.com)

# Who Should Attend

## Hologram Producers & Manufacturers

- Senior executives
- R&D, origination and production staff
- Marketing and promotional staff

## Users, Specifiers & Converters of Holographic Products

- Central banks and government departments responsible for the issue of security documents (*free entry*)
- Security printers
- Packaging manufacturers and converters
- Label makers
- Artists and designers

## Specialist Service Providers & Equipment Suppliers

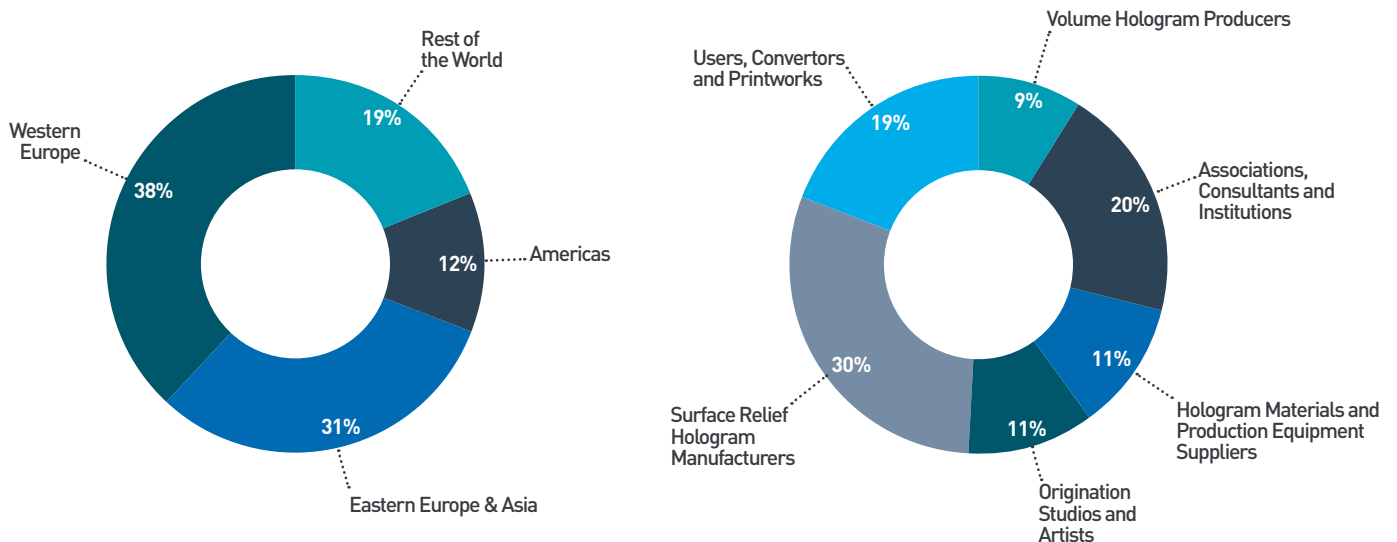
- Providers of technology for hologram production, finishing and application
- Providers of lasers, optics and electroforming or blazing equipment
- Equipment suppliers for surface relief hologram embossing and finishing
- Suppliers of quality control and inspection equipment

## Other

- Market and investment analysts
- Researchers and academics
- Student holographers

# Who Attended the Last Holography Conference

Over 110 delegates from 76 organisations and 27 countries attended The Holography Conference 2017 in Barcelona.



# 10 Reasons to Attend

- 1 Find out how government organisations are specifying holograms for the authentication of secure documents
- 2 Hear how holograms are being used in novel and emerging ways
- 3 Learn from 25 experts on the international opportunities and threats for your business
- 4 Meet potential technology partners and providers
- 5 Establish new technology transfer deals and development agreements
- 6 Share experience with 110 holography professionals from around the world
- 7 Better understand the future opportunities for holograms
- 8 Hear from end users on their needs and requirements for holographic technology
- 9 See the best examples of hologram design, innovation and production
- 10 See and congratulate the 2018 Holography Award winners







## The Application & Development of Holography

**Stages of Development of Security Holography in the Republic of Belarus – Hologram, Unigram, Codogram, Crystallogram, Combigram – 1998-2018**

Leonid Tanin, Holography Industry (Belarus)

**Diffraction Surface Relief Structure for the See-Through Screen Mass Replication**

Stanislovas Zacharovas, GEOLA (Lithuania)

**Touching the Hologram - Augmenting the Reality of Education for the 21st Century**

Richard Lewington, Univ of Cambridge/Plain Concepts (Lithuania)

**Developments in UV Embossing Technology**

Alessio Pastorelli, Diavy (Italy)

**Latest Technology in Hologram Converting to Open New Markets & Applications**

Paul Taylor, Rotary Logic (UK)

## Standards and Brand Protection

**New Developments in Brand Authentication**

Sergey Odinkov, Bauman Moscow State Technical University (Russia)

**Holography and the New ISO Tax Stamp Standard**

Ian Lancaster, Reconnaissance International (UK)

**Joint Steps for Successful Implementation of Management of Security Printing and Hologram Manufacturing Processes**

Doris Schulz-Pätzold, Intergraf (Belgium)

## Display Holography: Past, Present & Future

**The Denisjuk Holographic Method and Its Use in the Spiritual Revival of the Nation**

Vechyaslav Tanin, Holography Industry, Light Magic (Belarus)

**A Holographic Zoetrope with Ultra-Realistic Digital Holograms**

Philippe Gentet, Holography Forum (South Korea)

**The Use of Direct-Write Digital Holographic Printing for the Visualization of Perished Artworks and Historic Sites**

Alkis Lembessis, Hellenic Institute of Holography (Greece)

**My 50 Years in Holography**

Hans Bjeklhagen, HoloConsulting (UK/Sweden)

# New Developments and Innovations in OVDs

## New Developments in Optical Security Features: a History From Concept, Development and Product Launch

Paul Dunn, OpSec Security (UK)

## Recent Advancements in the Production of the Diffractive Lenticular Stereogram Image

Mike Hardwick & Randy James, CCL Secure & Pacific Holographics (Australia)

## Forgery Protection Beyond Diffraction Gratings

Raphael Dehmel, Louisenthal (Germany)

## Windowed Polarisation Security Features and its Interactive Verification Using a Smartphone

Andrey Smirnov, Krypten (Russia)

## Creation and Industrial Development of a New Generation of Holographic Means of Protection Based on Polymerised Liquid Crystals

Petr Moiseenko, Holography Industry (Belarus)

## Striking Applications of High-End Mastering Techniques

Robert Dvořák, IQ Structures (Czech Republic)

## 'ColorSpace' and 'ColorDance': New Optical Security Features by Micro Structures

Zhang Baoli, Zhongchao Special Security Technology (China)

# Authentication of OVDs & Improvements

## Method and Apparatus For Authenticating Security Holograms

Sanjan Ambadiyil, Centre for Development of Imaging (India)

## Optical Variable Devices, Strengths, Vulnerabilities, and Suggestions to Improve

Alex Van Duuren, AVD Solutions (Netherlands)

## Authenticity Control of Secure Holograms

Raman Tsialiatnikau & Ivan Shumsky, Regula (Belarus)

## Diffractive Features on Banknotes Report

Micaal Sidorov, Reconnaissance International (UK)

For the latest changes and  
additions to the programme, visit  
[www.theholographyconference.com](http://www.theholographyconference.com)

23

international  
speakers







## Social Events

Two highlights of the conference are the social events that provide delegates with an ideal opportunity to meet other delegates and make new contacts in a more informal setting.

On the first night we are delighted to announce the prestigious conference dinner sponsored by our Platinum Sponsor Holography Industry JSC. This memorable night also includes the presentation of the winners of this year's IHMA Excellence in Holography Awards.

This is followed by a drinks reception in the exhibition area, bringing the event to a close on Friday 16 November, offering delegates a final chance to share their thoughts on the conference.



## Venue

Located in the very heart of Minsk, DoubleTree by Hilton Hotel Minsk is conveniently set near the Old Town, within walking distance of all major attractions. This modern hotel is 800m away from a metro station, 3.5km away from the central train station and 45km away from Minsk International Airport. With modern conference facilities, restaurants and a sky bar, the DoubleTree will be the perfect location for The Holography Conference.

In Belarus, delegates can also visit the enormous Independence Square – home to the House of Government, the Belarusian State University and the neo-Gothic Church of Saints Simon and Helen (The Red Church).

Attend a concert, exhibition or sporting event at the impressive Minsk Arena, one of the largest complexes in Europe. Watch FC Minsk play at Dinamo Stadium or enjoy a thrilling ice hockey game at the multi-purpose Chizhovka Arena.

Learn about Belarus' struggles and feats of heroism during WWII at the Museum of the Great Patriotic War. Admire the exhibits at the Belarusian State Art Museum or delve into the turbulent history of Belarus at the Belarus National Museum of History & Culture, which features a replica of the printing press used by national hero Francyska Skaryny.

## IHMA AGM

The IHMA is made up of 100 of the world's leading hologram suppliers and manufacturers. Members are invited to the Annual General Meeting, to be hosted at The Holography Conference in Minsk in November. The IHMA AGM will take place on the 15 November.

### IHMA Awards

The winners of the IHMA's 'Excellence in Holography Awards 2018' will be revealed at a special presentation during the conference dinner on 15 November sponsored by Holography Industry JSC.

The five awards recognise the highest standards in design, innovation and production of holograms. For more details, visit [www.ihma.org](http://www.ihma.org).



## REGISTER NOW

Book online at  
[www.theholographyconference.com](http://www.theholographyconference.com)

# Our Sponsors

A dedicated exhibition will bring specialist suppliers and delegates together to discuss the latest materials, equipment and techniques to help make better holograms more efficiently.

Learn about our sponsors and exhibitors and how you can also exhibit at [www.theholographyconference.com](http://www.theholographyconference.com)

## Platinum



Holography Industry JSC specialises in the production of holographic security products. For more than 20 years, we have been developing and producing holographic products from end-to-end using original technologies.

[www.holography.by/en](http://www.holography.by/en)



Light Magic Ltd is one of the leading European companies in the field of holography. It has been working in the market for more than 30 years. The main activity is the production of high-quality display holograms. It has an outstanding experience in holding international holographic exhibitions.

[www.lightmagic.by](http://www.lightmagic.by)

## Gold



Joint stock company 'Krypten Research and Production' is a specialist in the production of security elements (diffractive optical variable devices) for security printing, labelling goods, accompanying papers, authenticity validation of manufactured products and documents with visual and technical control of its authenticity.

[www.krypten.ru](http://www.krypten.ru)

## Support



The National Academy of Sciences of Belarus (the NAS of Belarus, or NASB) is the highest state scientific organisation of the Republic of Belarus. The National Academy of Sciences reports to the President of the Republic of Belarus and the Council of Ministers of the Republic of Belarus.

[www.nasb.gov.by/eng](http://www.nasb.gov.by/eng)

## Exhibitors



We use state-of-the-art technology and interdisciplinary expertise to form micro- and nano-structures of materials and their surfaces to enhance products with new functions and properties.

[www.iqstructures.com](http://www.iqstructures.com)

## Associations



IHMA members are the leading producers and converters of holograms for banknote security, anti-counterfeiting, brand protection, packaging, graphics and other commercial applications around the world.

[www.ihma.org](http://www.ihma.org)

## Media





# RECONNAISSANCE THE HOLOGRAPHY CONFERENCE™

*"There were a lot of interesting presentations, especially about holography history and banknote security features"*

Deutsche Bundesbank

## Useful Information

### Registration

To be part of *The Holography Conference™* 2018, go to [theholographyconference.com](http://theholographyconference.com) to book online.

### Fees

- **Standard:** €1,770
- **Government Delegates (Issuing Authorities):**  
**First two delegates:** Attend for free  
**Additional delegates:** Regional rate applies  
*Applies to government issuing authorities such as passport agencies, immigration authorities and central banks.*
- **Student or Independent Holographers:** €650
- **IHMA Members / Holography News Subscribers:** €1,590

*Holography News™* is the monthly newsletter for suppliers, producers, converters and users of holograms. Subscribers qualify for a 10% discount when registering for The Holography Conference 2018. To become a subscriber, visit [www.holography-news.com](http://www.holography-news.com)

Fees do not include travel, visas, accommodation or accompanying spouse or social partner fees for the cocktails/dinner.

### Travel, Accommodation and Visas

Delegates are responsible for arranging their own travel, accommodation and visas. Details of special booking rates and how to make your hotel reservation can be found at [www.theholographyconference.com](http://www.theholographyconference.com)

You may need a visa to travel to Belarus. Please check your requirements as soon as possible. Please email **Helen Travers** at [helen@reconnaissance-intl.com](mailto:helen@reconnaissance-intl.com) or visit our website for more information.

### Here to Help

If you have any questions about the conference, contact the conference team:

**Sara Rogers**, Conference Manager  
**Helen Travers**, Conference Executive

Tel: +44 (0)1932 785 680

Fax: +44 (0)1932 780 790

Email: [events@reconnaissance-intl.com](mailto:events@reconnaissance-intl.com)

### Other Information

- **Your Conference Organiser:** The event is organised by Reconnaissance International, the leading source of business intelligence for authentication, security printing and holography. Visit [www.reconnaissance.net](http://www.reconnaissance.net)
- **Release:** The organisers accept no liability for personal injury or any loss of or damage to delegates' personal effects. We reserve the right to cancel, modify or postpone the event without prior notice and to refuse admission to any person (with payments refunded).
- **Terms and Conditions:**  
Visit [www.reconnaissance.net/terms](http://www.reconnaissance.net/terms) for full terms.

### Conference Languages

The conference will be conducted in English and Russian.

#### RECONNAISSANCE INTERNATIONAL

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