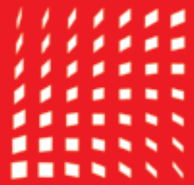




International Circle  
of Educational Institutes  
of Graphic-Media  
Technology & Management

[www.internationalcircle.net](http://www.internationalcircle.net)



**drupa**

May 28-  
June 7, 2024  
Düsseldorf/  
Germany  
[www.drupa.com](http://www.drupa.com)

# international circle at **drupa** 2024

Where  
**Industry**  
meets  
**Education**  
and  
**Research**

**Hall 7.0 - dna Booth G01**

**drupa next age**  
Platform for Networking  
and New Business



# About IC

## International Circle of Educational Institutes of Graphic-Media Technology and Management

**IC** is the international association of institutes and organizations legally operating in higher education and research with a specific interest in the design, production, technology and management of media. The IC was founded in Lausanne, Switzerland, in 1957 by a few mid-European universities for printing technology. IC is cooperating with other institutes and organizations of all types from the wider field of graphic communication and media technology, printing, publishing and

packaging around the world, to promote this goal.

IC provides a platform for the exchange of knowledge and cultural issues, a mutual presentation and comparison of institutions, as well as contact with printing and publishing businesses, suppliers and organizations, opportunities for cooperative relationships between directors, educators and students of the various member institutions.

**IC is administered by the Presidium (Management Committee), which consists of the Chairperson:**

✓ **Prof. Dr. Anastasios E. Politis**

HELGRAMED - Hellenic Union of Graphic Arts and Media Technology Engineers, Greece

**and the Presidium members:**

✓ **Prof. Dr.-Ing. Gunter Hübner**

Associate Chairperson,  
Stuttgart Media University, Germany

✓ **Prof. Dr. Martin Habekost**

Editor of the IC Journal,  
Toronto Metropolitan University, Canada

✓ **Prof. Dr. Daiva Sajek**

designated next Associate Chairperson,  
Kaunas University of Applied Sciences,  
Lithuania.

*The 46th IC  
Annual Conference  
in Corinthia and  
Athens, Greece  
(May 25-29, 2014).*





## The IC Scientific Journal

**The IC Journal “International Circular of Graphic Education and Research”** is peer-reviewed. The editor in chief, is **Prof. Dr. Martin Habekost**.

The Journal offers to our educational and scientific community the opportunity to publish findings of research in a wide range of fields within the Graphic Arts Technology, Graphic Communication, Print-Media and Packaging at a high academic level.

Contributions should cover a scientific (science, engineering, management or economics) or educational topic related with the above mentioned fields of in a wider sense. Papers regarding the structure and development of the graphic arts industry in general or in certain countries will also be considered. Original and review articles are equally welcome. The *International Circular* especially invites young researchers to present their results to the public. These may have been developed, e.g., in the course of the final theses of their studies.



For more information on IC Journal and to submit a paper, please contact:

**The IC Journal Website** 



[www.internationalcircle.net/  
journal/journal\\_publ\\_guide/  
alcircle.net/](http://www.internationalcircle.net/journal/journal_publ_guide/alcircle.net/)

# Welcome

*Dear colleagues and friends  
of the Graphic Communication,  
Print, Media and Packaging fields,*

On behalf of the Advisory Board of the **IC - the International Circle of Educational Institutes of Graphic-Media Technology and Management**, we are warmly welcoming all of you at our booth at **drupa 2024**, following the successful participation of our education and research community at **drupa 2016** and **virtual drupa** in 2021. Together with colleagues from co-exhibitors around the globe, IC presents research and education developments. Visitors can have fruitful discussion and develop their knowledge for curricula and study programs at graduate and post-graduate study programs, as well as to be aware of research initiatives from our colleagues.

The booth location at **dna - drupa next age** provides the unique opportunity to present research and education and to communicate with newcomers and young talents from the print and packaging sector in a targeted manner, being the ideal forum to win over investors with new business models, product solutions and technologies. The IC members and colleagues from partner institutes are actively involved on the dna transparent stand concept with flexible modules, presentations, panel discussions and interviews on the dna



*Participants at the 53rd IC Annual Conference,  
Greenville, South Carolina, USA*

stage, being proactive and involved at all dna activities.

The participation at the dna stage involves, in various ways, panelists, speakers with presentations, discussions, and meetings with the industry. This is quite suitable with the **IC motto** at **drupa 2024**: **“Where industry meets education and research”**. IC members can contribute to the dialog for the future of our education, as well as to present innovative research topics and projects, from our members – the educational and research organizations. And being in close cooperation with **dna** people, we can expand our visibility to a new – wider audience.

*We wish to all a successful  
**drupa 2024**!*

Prof. Dr. Anastasios E. Politis,  
*Chairman of the IC*

Prof. Dr.-Ing. Gunter Hübner,  
*Vice Chairman of the IC*

**For more information on IC,  
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The IC Website 







[www.internationalcircle.net](http://www.internationalcircle.net)

# Co-exhibitors



**IARIGAI - The International Association of Research Organizations for the Information, Media and Graphic Arts Industries**  
*seat: Darmstadt, Germany*

**iarigai** is the acronym of the International Association of Research Organizations for the Information, Media and Graphic Arts Industries. iarigai is a non profit association of research organizations –research institutes, companies, and universities– with a focus on technical research and development in the fields of information, media and graphic arts.

The purpose of iarigai is to promote science and research, for the most part by organising scientific events, research projects and scientific publications. It serves as a forum for the exchange of scientific and technical information in the research areas that the Members consider as important as well as enhancing the international cooperation among members and other organizations. This exchange shall support scientific and industrial progress, specialization, and international cooperation. The Association shall also serve as a forum for discussions on operational issues in research organizations.

Accomplishing its mission and the research objectives, iarigai organizes regularly International Research Conferences, with the purpose of the development and advancement in the information, media and graphic arts science and technology. In addition, iarigai provides the appropriate publishing channels based on international scientific standards via JPMTR, the Journal of Print and Media Technology Research.

Conferences shall be organized by iarigai alone or jointly with one or several Members. This year, the Conference will take place in Zurich, Switzerland, 8 - 11th September, co-organized with the International Circle association.



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

## HELGRAMED

**HELGRAMED - Hellenic Union of Graphic Arts and Media Technology Engineers**  
*Athens, Greece*

**The Hellenic Union (Association) of Graphic Arts and Media Technology Engineers (HELGRAMED)** is the legal professional, educational and scientific organization of the Engineers that hold a Tertiary Education degree (EQF level 6 and above) from a Higher Education Institute (HEI) in the fields of Graphic Arts/ Graphic Communication, Printing, Publishing, Packaging and Media Technology and Engineering. HELGRAMED has been officially established in 2013, being the successor of the Hellenic Union of the "Graphic and Decorative Arts Graduates", originally founded in 1980.

HELGRAMED members possess a long-established experience at a wide range of scientific development with activities and research projects both at national and inter-

national levels in R&D, innovations in printing, publishing and packaging and for the continuous development of education and training. Individual members and groups of researchers participate at numerous projects, organization of conferences and seminars, training programs and other learning activities. In addition, HELGRAMED contributes in studies for the development of Job profiles and occupational standards, development of competencies and the evaluation and certification of competences in the fields of graphic communication, print, media technology and packaging fields.



[www.helgramed.gr/en](http://www.helgramed.gr/en)





## **Appalachian State University** *Boone, South Carolina, USA*

**Appalachian State University's Thomas W. Reese Graphic Communications Management Program** prepares students for entry-level supervisory and staff positions in the graphic communications industry. The Graphic Communications Management (BS) – Print / Packaging Production degree covers a wide variety of processes and methods of production – including offset lithography, flexography, digital printing systems, variable data printing, and wide format printing in addition to the design and production of packages that

protect and promote products in channels of distribution.

In addition, the Cross Media Production concentration can be selected within the program. Furthermore, students are eligible to apply for scholarships over \$20,000, and you'll have the opportunity to participate in Career Connections, the program's job fair for majors.



<https://www.appstate.edu/>



## **Berliner Hochschule für Technik (BHT)** *Berlin, Germany*

**The Berlin University of Applied Sciences (BHT)**, formerly Beuth University of Applied Sciences, is a state university in Berlin. With around 70 courses in eight departments, it is one of the largest engineering universities in Germany. Around 290 professors teach at the BHT.

The BHT focuses on technology-based study programs. There are also interdisciplinary research activities. Innovation, applicability and practical relevance are among the university's goals. The bachelor's degree program in Printing and Media Technology (B.Eng.) offers content in printing technology, digital media as well as business administration and graphic design. There are modern laboratories for pre-press and publishing as well as printing technology and print processing and finishing. Thanks to numerous options, students can individually determine more than half of all

coursework and thus set their own priorities, including topics in quality assurance, photography, media calculation, business plan or print processing and finishing.

The master's program in Printing and Media Technology (M.Eng.) offers a special focus on in-depth research on printing technology topics and the so-called soft skills such as independent working and the ability to work in a team. This will enable the students to fill leadership positions on the national and international market and opens opportunities for work in advertising agencies and marketing departments of international companies, international printing companies, in all areas of the printing and media industry, as well as in interface positions in corporate communications.



<https://dmt-berlin.de/>

# Co-exhibitors



**GRAPHMEDLAB – Hellenic Graphic-Media Research Lab, University of West Attika**  
*Athens, Greece*

The Hellenic Graphic-Media Research Lab – **GRAPHMEDLAB** is the unique research legal entity, operating in the wider field of science and technology in graphic arts/communication, printing and packaging in Greece. The laboratory develops collaborations with all scientific, professional and technological organizations, and institutes, other Universities and research establishments as well as the Industry in Greece and abroad.

Main research fields are –among others– Print-Media Technology, Printing business models and management, publishing, content management, premedia, color management, standardization and certification, prepress and cross-media, material science, finishing technologies and holistic packaging design and production concepts.



<https://graphmedlab.uniwa.gr/en/>



**Hochschule für Angewandte Wissenschaften**  
*München, Germany*

A wide range of study programmes, a focus on applied research and practical orientation as well as excellence as a start-up university - **HM** promises its students outstanding opportunities in science and business.

Each year, more than 2,500 international students and researchers join our academic community in one of Germany's most beautiful, historic, and high-tech cities. We offer the best possible support to help you feel at home in Germany, in Munich, and at our university.

In your versatile, practical Digital Media and Print degree programme, you will learn about different concepts for the design, production

and marketing of digital and print media. You will try out printing processes, programme mobile applications and learn how to edit images and graphics. You will learn about business management contexts, deal with engineering subjects and find out what characterises modern advertising measures today. Your studies are characterised by small groups with personal contact to the professors as well as an excellent network of well-known companies in the industry and international partner universities.



<https://hm.edu/>



**Print Media and Packaging Technologies,  
Faculty Print and Media,  
HdM - Hochschule der Medien  
Stuttgart, Germany**

In Germany, Print Media and Packaging Technologies is the first and only international undergraduate program in engineering dedicated to media, which is exclusively taught in English and designed for students from across the world. It is a unique subject which combines creativity, science, technology, intercultural studies, corporate management and languages. Graduates enjoy high quality jobs and the placement rate is 100%. The program is firmly designed to promote proficiency in media engineering and to form educated leaders and practitioners on media including senior technical, management and marketing positions.

The faculty runs a unique, state-of-the-art learning center equipped with advanced media technology i.e. the latest printing machines used in the industry. It is the largest and best equipped center in Europe and features a number of laboratories and studios, including a new pre-media facility using the latest digital

technologies and specific workflows, digital and commercial printing presses, creative printing set-ups, 3D printing, a packaging print factory and the latest post press equipment used for binding and finishing.

Print Media and Packaging Technologies is part of **Stuttgart Media University**, "**Hochschule der Medien**", which is a University of Applied Sciences offering bachelor degrees and a wide range of specific master degrees. Hochschule der Medien is a public university and aims at securing and strengthening the position of Baden-Wuerttemberg's media industry over the long term – by encouraging and helping students to settle here and promoting cooperative ventures between the media industry and world-leading businesses. We also help companies and organizations to recruit the graduates they need.



<https://pmt.hdm-stuttgart.de/>

# HTWK

Leipzig University  
of Applied Sciences

**HTWK - Hochschule für Technik,  
Wirtschaft und Kultur  
Leipzig, Germany**

**Leipzig University of Applied Sciences (HTWK Leipzig)** was established in 1992, continuing Leipzig's tradition of scholarship. With approximately 6,000 students, HTWK Leipzig is one of Germany's largest universities of applied sciences, offering practice-oriented education leading to accredited bachelor's and master's degrees.

The B.Eng. in 'Digital Print Technologies' explores additive manufacturing, covering pre-press, press, and post-press for industrial 2D and 3D printing. Hands-on courses enable students to characterize materials, understand printing processes, and create diverse products such as packaging and printed electronics. The curriculum integrates engineering fundamentals, process expertise, problem-solving skills, and business management principles.

In the M.Eng. program 'Printing and Packaging Technology', students develop advanced skills for independent scientific work in research, development, and application engineering. The curriculum emphasizes current technical advancements, including mathematical and scientific concepts (e.g., modeling, laser technology, surface science) and specialized topics (e.g., innovations in printing and packaging, UV applications). Elective modules allow further customization, and integrated research internships and projects foster interdisciplinary problem-solving approaches.



<https://www.htwk-leipzig.de/>



# Co-exhibitors



**INP - Pagora, UGA - International School of Paper, Print Media and Biomaterials**  
Grenoble, France

**Grenoble INP – Pagora, UGA**, is a French state-funded graduate school of engineering specialising in the fields of fibre, biobased materials, paper and print media. It offers masters-level and apprenticeship-based engineering training with the support of major industry and research players in France and abroad.

As one of the eight graduate schools of engineering and management schools of Grenoble INP Institute of Engineering and Management, Grenoble Alpes University, Grenoble INP – Pagora has been involved in the circular bioeconomy and plant-based chemistry since the day it was founded. The school trains future professionals in the fibre, paper, printing, packaging and biobased materials sectors, ensuring that they

will be able to pick up the environmental challenges our society faces.

The school also boasts its own research unit, the Laboratory of Process Engineering for Biorefinery, Bio-based Materials and Functional Printing (LGP2), which is used by French and foreign researchers and doctoral students. They conduct research on nanocellulose, the valorisation of plant biomass and printing processes for surface functionalisation.



[pagora.grenoble-inp.fr](http://pagora.grenoble-inp.fr) [lgp2.grenoble-inp.fr](http://lgp2.grenoble-inp.fr)



**MARMARA**  
UNIVERSITY

**Marmara University,**  
**Department of Printing Technologies**  
Istanbul, Türkiye

The “Department of Printing Technologies” belongs to the **Faculty of Applied Sciences at Marmara University**. It has been established in 1976 and has 16 professors, and 5 administrative staff. The current number of graduate students are approx. 200. The department offers Master and Ph.D. programmes in printing technologies in association with the Institute of Pure and Applied Sciences at Marmara University. Main objectives are: to train graduates who have the skills of applying the maths, science and technology knowledge to the problems being experienced in printing production, establish an efficient verbal and written communication, being aware of their professional and ethical responsibilities, have fully apprehended the social and cultural effects, have the knowledge and skills of preparing the projects about printing technologies ac-

cording to the relevant national and international standards and legal rules.

The department also aims to conduct research and development studies and industrial theses supported by BAPKO, TUBITAK, KOSGEB Associations, in order to solve the sectoral problems and contribute to the national economy. The vision is to become a department that constantly develops in terms of academics, trains qualified graduates with high skills of practice for the printing industry, integrates into other universities in the world by exchanging instructors and students, adopts the cooperation of university and industry and develops new technologies.



<http://bt.ubf.marmara.edu.tr/en/>

## Toronto Metropolitan University

Toronto Metropolitan University  
Toronto Ontario, Canada

Toronto Metropolitan University (TMU), located in the heart of Toronto, Canada, offers a thriving four-year program in Graphic Communications Management (GCM), leading to a Bachelor of Technology (B.Tech.) degree. Students explore all aspects of print and packaging, including design and layout, printing and finishing technologies, materials and sustainability, and packaging concepts. Modern labs provide extensive access to industry software and equipment for offset, flexography and digital printing, as well as for proofing, material testing and package prototyping. A management focus exists throughout the program.

Students in GCM enjoy extensive extra-curricular opportunities as part of the school's TAGA,

Phoenix Challenge, Packaging, Flexography, and various competition teams. Students organize an annual industry speaker event known as Colloquium, and all learners benefit from outstanding industry support and connections. The GCM program includes a paid industry internship anywhere in the world between third and fourth years. Graduates enjoy access to employment in printing, packaging, marketing, communication and design, or may choose to continue studies at the Master's level internationally.



<https://www.torontomu.ca/gsm>

## 55th Conference of the IC

### "Future Orientations for Print-Media Education"

Zurich, Switzerland, 8-11 September 2024



### Call for papers is open!

- ✚ Deadline for abstract submission (300-500 words): **31 May 2024**  
To be sent at [politismedia@gmail.com](mailto:politismedia@gmail.com)



For more information, visit the conference website:

<https://www.inspire.ch/en/events/upcoming-events/50-years-jubilee-conference-iarigai/>

# Exhibitors and co-exhibitors at the IC booth at drupa - dna

Organization – Institute	Contact person - responsible for the participation	E-mail of contact person - responsible for the participation	Website
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<b>HELGRAMED - Hellenic Union of Graphic Arts and Media Technology Engineers</b> <i>Athens, Greece</i>	Anastasios Politis	<a href="mailto:politismedia@gmail.com">politismedia@gmail.com</a>	<a href="http://www.helgramed.gr/en/index.php">www.helgramed.gr/en/index.php</a>
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International Circle  
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of Graphic-Media  
Technology & Management

# international circle

at **drupa**  
2024

Where  
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meets  
**Education**  
and  
**Research**

Hall 7.0 - dna Booth G01

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## IMPRESSUM

IC at **drupa 2024**

Where Industry meets Education and Research

*Concept and Texts*

Anastasios E. Politis, Gunter Hübner

*Graphic Design and Layout*

Dr. Evgenia Pagani ✉ [jen.pag@hotmail.com](mailto:jen.pag@hotmail.com)

*Prepress, Printing and Finishing*

DIAGRAMMA S.A. – Christos Koutrouditsos, Greece

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