



ITN-DCH: PROJECTING OUR PAST TO THE FUTURE

ITN-DCH Newsletter

November 2015

IN THIS ISSUE

CyArk 2015 Annual Summit, Berlin

by Matthew L. Vincent, ESR 11

What is it like to be in a room with experts from around the world who are excited to preserve heritage for generations to come? Pretty amazing. This last October (20, 21), Dieter Fritsch (Partner, IFP, University of Stuttgart), Chance Coughenour (ESR1, University of Stuttgart), Elisavet Stathopoulou (ESR4), and Matthew L. Vincent (ESR11), all attended the event, with Fritsch and Vincent presenting papers at the conference.

Perhaps a special surprise for two of the attendees, Coughenour and Vincent, was the receipt of the CyArk 2015 Award for Innovation for their work on Project Mosul, a spinoff started by the two researchers and run in their free time. The project represents the application of what fellows are learning in the ITN-DCH to real world situations, particularly those involving the preservation and recovery of lost heritage.

The programme included two presentations from ITN-DCH members. Fritsch presented on the latest developments in photogrammetry, recapping some of the best practices and touching on future directions. Vincent, who presented on Project Mosul (representing work from both Coughenour and Vincent), introduced the project's new name, Rekrei, which introduces an element of universality and a new global focus that goes beyond just the middle east.

The entire theme of the summit was on ways that individuals and projects are preserving heritage around the globe using new technology. Certainly for the ITN-DCH, such a summit resonates with us a group of fellows and professionals who are seeking to apply our expertise and talents to the preservation of heritage.

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THALES- Scientific Support to Decision Making for the Compatible and Sustainable Protection of Cultural Heritage (COMASUCH)

by Emmanouil (Manolis) Alexakis, ESR 15

Under the coordination of Antonia Moropoulou, Professor of the National Technical University of Athens and Vice President of Technical Chamber of Greece, partners from eight Greek Universities concluded the 42-months national project THALES-COMASUCH with the national scientific conference entitled "Scientific support to decision making for the compatible and sustainable conservation materials and interventions for the protection of Cultural Heritage". Conference took place at NTUA in Athens on September 28 and 29 2015. Project Board co-organized the Conference with NTUA: the Marie -Curie ITN-DCH Project, the Interdisciplinary Postgraduate Program "Protection of Monuments", Technical Chamber of Greece, the Hellenic Construction Technology Platform and National Archaeological Museum. The conference was under the auspices of the Greek Ministry of Culture.

About 300 professionals gathered together with a remarkable number of students, policy makers from the Ministry of Culture in Greece and the private sector/industry interested in preservation of Cultural Heritage assets. The THALES-COMASUCH project has been co-financed by the European Union (European Social Fund-ESF) and Greek National Funds through the Operational Program "Education and Lifelong Learning" of the National Strategic Reference Framework (NSRF) - Research Funding Program: THALIS Investing in knowledge society through the European Social Fund.

Within the framework of the project, an innovative semantic-based knowledge database was developed for handling material properties as far as protection of cultural heritage objects is concerned. The developed knowledge database permits insertion of several data covering all different properties of a material, supporting analysis of defects, mortars, material decay phenomena, consolidation materials et al.



The main issue highlighted and successfully addressed by the project is the need for and the clear advantages of scientific support in decision making based approach for the protection of Cultural Heritage that conforms to the requirement of compatibility and sustainability. Finally, the project underlined the benefits of cooperation between the Scientific Community, the Cultural Heritage stakeholders and the Society, which ensures that research accomplishments are based on actual applied User Cases, which are readily applicable and have the optimum effectiveness.

Marie Curie Fellow ESR15 Emmanouil (Manolis) Alexakis played an active and decisive role for the success of the conference as a member of the Organising Committee. The conference had a total number of 60 publications (42 oral and 18 poster presentations) and there were more than 300 attendees who were informed about Marie Sklodowska Curie Actions and ITN-DCH through leaflets shared with the conference program by the fellows. Additionally, participants were presented with USB sticks with information concerning ITN-DCH Project. Furthermore, Manolis had a publication paper entitled "A Knowledge Database for the THALIS AEIS Intelligent Platform" and was the editor of the Conference Proceedings while Ellie Stathopoulou presented her poster: "Crowdsourcing Lost Cultural Heritage".

Figure 2: In the centre of the image Emmanouil (Manolis) Alexakis, ESR 15 sitting on the panel of COMASUCH

Digital Heritage Conference, Granada, Spain

by Rossella Suma, ESR 16



Figure 3: 1. Alhambra, Granada. 2. George Bruseker ER1 discussing with Prof. Andreas Georgopoulos; 3. Prof Alan Chalmers receiving the Tartessos Awards; 4. ITN-DCH fellows enjoying a meal together; 5. Digital Heritage Conference during the final panel. Pictures courtesy of Anais Guillem.

From the 28th of September to the 2nd of October I attended the Digital Heritage Conference in the beautiful city of Granada. The conference is one of the major events in Europe regarding heritage preservation and digitisation techniques. It brings together researchers from Universities and Industry all around the world.

With more than 300 presentations including full papers, posters, panels, and tutorials, the schedule was quite full. The conference was divided in thematic sessions: Digitisation and 3D data acquisition, Computer Graphics and interaction, Analysis and interpretation, Theory, methods, preservation and standards, Projects and applications in cultural heritage. Depending on the personal expertise and preferences there was plenty of talks and presentations and workshops to attend.

One of the most interesting presentations for me has been the work from Alexandru Dului et al on Illumination Compensation for High-resolution Multispectral Image Mosaicing of Heritage Paintings - which won the best paper award.

Great attention has also been given to the presentation of the tutorial by Neil Smith and one of our fellows Mathew Vincent (ESR 11) on Digital Field Recording in the 4th Dimension: ArchField C++ and OpenDig. This tutorial aimed to provide the key software tools to enable any archaeologist to begin integrating digital field recording methodologies into their excavations.

During the week Anais Guillem (ESR 6) and George Bruseker (ER1) presented their work on Building an Argumentation Platform for 3D Reconstruction using CIDOC-CRM and Drupal. They presented an open source based application where they tested the possibilities of building an information environment aimed at the argumentation of executing virtual reconstructions. Luc Van Goul, one of our project's partner from University of Leuven was invited as keynote speaker on Thursday. He presented the mini dome created by his research group and the work of Gina Stavropoulou (ESR 5) on computer aided pattern recognition applied on the digital analysis of mural paintings.

During the week Digital Heritage Expo fair was also running in the same location as the Conference at which companies and institutions from all around the world could show their work. In particular CultLab3D, Fraunhofer, one of our project's partner and our fellow Matevž Domajnko (ESR 7) presented the world-wide first attempt at 3D mass digitisation pipeline. This is a multi-modular scanning pipeline connecting individual scanners by conveyor belts and transporting cultural heritage artefacts on corresponding trays.

On the last day one of the project partners, Prof Alan Chalmers from the University of Warwick was awarded of the prestigious Tartessos Awards. This is an international award from the Spanish Society of Virtual Archaeology (SEAV). The award recognises those members of the scientific community and

institutions for their contribution to the dissemination and progress of Virtual Archaeology worldwide.

I particularly appreciated the possibility of networking that this kind of conference offers. The good Spanish food and wine makes people relax and discuss common goals, ideas and dreams for preservation of our roots and exploration of new technological horizons.

I believe that Livio De Luca's (also partner in ITN-DCH) final talk really hit the mark: the challenge we are facing as technology or history experts is being able to focus on what is really important in the process of digitisation of History and being able to meet half way. On the one end finding the meaning and purpose to the technology applications we seem eager to apply everywhere and, on the other end, being able to foreseen the challenge that the future presents us and take advantage of the possibilities that science and engineering offers to preserve our history and roots.

Secondment at Stuttgart University, Stuttgart, Germany

By Magda Ramos, ESR 2



Figure 4:

1. Prof. Dieter Fritsch presenting at PhoWho
2. From left to right, Diego Bellido Castañeda, ESR3, José Balsa, postdoc at Stuttgart University, Magda Ramos, ESR2, Konrad Wenzel, Founder of nFrames, Chance Michael Coughenour, ESR1 & Elisavet Konstantina Stathopoulou, ESR4
3. Fellows attending a presentation given by Konrad Wenzel, Founder of nFrames

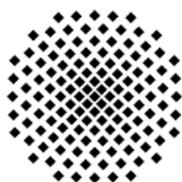
Last September, several fellows have had the opportunity to share a secondment at the Institut für Photogrammetrie (*ifp*, University of Stuttgart): Diego Bellido Castañeda (ESR3), Ellie Stathopoulou (ESR4), Magda Ramos ESR2), together with our host fellow Chance Coughenour (ESR1) and ESR7, Matevž Domajnko, who visited us in two occasions.

We all spent a productive period at *ifp* as we participated in a wide range of activities. Prof. Dieter Fritsch (secondment institute supervisor) organised the secondment period such as the fellows would be able to attend the 55th Photogrammetric Week conference event (<http://www.ifp.uni-stuttgart.de/phowo/index.en.html>), as well as the previous day tutorial. Photogrammetric Week is a biennial conference organized by the *ifp*, where a variety of the main advances in photogrammetry are presented to the community. In fact, some of our ITN-DCH supervisors were presenting lectures at PhoWo: Dieter Fritsch, Fabio Remondino, Luc van Gool, Michael Klein and Nadia Magnenat-Thalmann. We had the chance not only to join the interesting lectures in order to have an overview about the last advances in the fields, but also to have fruitful discussions among the ITN-DCH network

and beyond, with several professionals and researchers of the field.

Furthermore, our period at *ifp* also coincided with InterGeo event (<http://www.intergeo.de/intergeo-en/index.php>). InterGeo is the world's leading conference trade fair for geodesy, geoinformation and land management. Joining this fair did not only give us the opportunity to become familiar with the state of the art technology, but also to analyse the software already available at the market and, most important, to brainstorm about the possibilities of using such technology for our purposes within the ITN-DCH network.

Lastly, nFrames (<http://nframes.com/>) kindly invited us to their office. NFrames is a recently established spin-off composed by personnel coming from Stuttgart University. Over all, NFrames focus its activity on algorithms' and software development in the fields of computer vision and photogrammetry. During our visit we had the opportunity to discuss with them our incoming projects and ideas and to have a look at new software products as well.



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Researcher's Night

By Emmanouil (Manolis) Alexakis, ESR 15 & Gina Stavropoulou, ESR5

Researcher's Night in Athens, by Emmanouil (Manolis) Alexakis

"2015 Researchers' Night" took place in the National Technical University of Athens on Friday 25th of September, 2015 from 18:00 till midnight at the historic Averof Building in Patission Campus in the centre of Athens. The event was organized under the initiative of Horizon 2020 Marie Skłodowska-Curie and more specifically under the project "ReN2014-15 - 2014-2015 Researchers' Night: The Greek events".

The local Organizers of the event are the National Technical University of Athens - and in particular its Employment and Career Structure (DASTA) - the Technical Chamber of Greece and the Hellenic Construction Technology Platform (HCTP), under the auspices of Municipality of Athens - Athens Development and Destination Management Agency, with the support of the Representation of the European Commission in Greece. Throughout the event, the public had the opportunity to be acquainted with researchers and their research work from all nine Schools of the National Technical University of Athens, as well as from selected Research Teams from the other Universities in Athens.

Researchers' Night highlighted the work of researchers and the importance of their role in science and society – especially their impact on students of all educational levels. This initiative aimed to improve the social recognition of researchers as well the public's awareness of research results. The hope was to increase interest and provide vocational guidance to young people looking to join research professions.

The public had the opportunity to interact with researchers, participate in experimental demonstrations, computer simulations, educational activities and competitions.

In the atrium of the Averof Building, several "Thematic Corners" were organised, including the "European Corner", "Education and Quality Corner", "Employment and Innovation Corner" and the "Development and Sustainability Corner". Relevant

researchers from each project presented their activities and disseminated informative material to the public.

The event had major participation from Marie Skłodowska-Curie Fellows over at the "European Corner" where they discussed the mentoring of future generations of Marie Skłodowska-Curie Fellows, as well as demonstrating their research achievements on tables specific to each participating laboratory. Given the celebration of 10 years of "Researchers' Night", an inauguration session titled "Science and Education for a better future" was held with the participation of representatives from all the Universities of Athens, as well as a special discussion panel, titled "Challenges, Innovation-Development - Employability", moderated by the Deputy Minister of Education, Research and Religious Affairs, Prof. Theodossis Pelegrinis with the participation of the School Directors.

As such, the Early Stage Researcher (ESR15), Emmanouil (Manolis) Alexakis from the Initial Training Network for Digital Cultural Heritage (ITN-DCH) Marie Skłodowska-Curie Project had an active role, both as a mentor and as a researcher, for the attending young students. He advised them and illustrated to them the Marie Skłodowska-Curie Projects and explained the eligibility to join such a project, and prerequisites etc. Also, as a member of the Laboratory of Material Science and Engineering, he was demonstrating to students, researchers and stakeholders some of the portable non-destructive testing equipment, including the Ground Penetrating Radar, Fiber Optic Microscope and Infra-Red Thermo-Camera which are used for in-situ diagnostic studies for the Protection, Preservation and Conservation of Cultural Heritage assets. The event had a massive participation and according to the organizers the estimated number of the attendees was from 2000 to 3000 people. All in all it was a great opportunity for the ITN-DCH project to demonstrate their activities and achievements to the wider public.

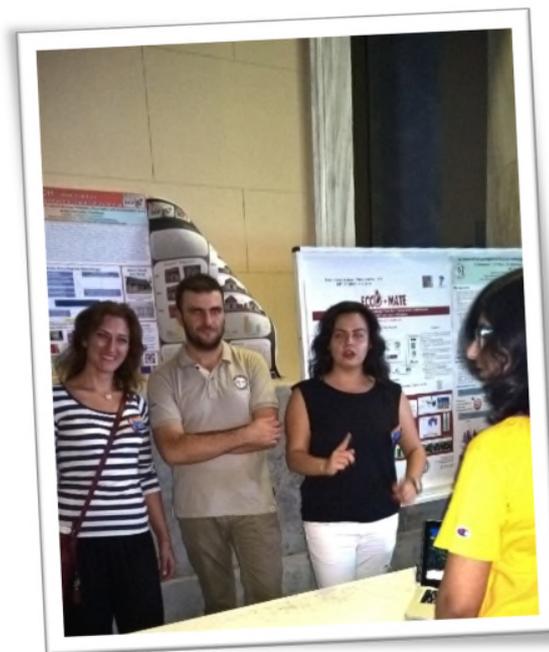


Figure 4: From left to right, Monica Giuliano, ESR12, Manolis Alexakis, ESR15 & Nikoletta Skordaki, ESR14



Researcher's Night in Brussels, by Gina Stavropoulou ESR5

This year ITN-DCH had a strong presence in the European Researcher's Night events organized in various European cities on the 25th of September. Two days earlier, the 10th anniversary of the Researcher's Night was celebrated in Brussels with "Science is wonder-ful", a special event organized by the European Commission.

As a Marie Curie Researcher, I was lucky to be actively involved in this very well-organised event and, together with another fellow of the project, Matthew Vincent ESR 11), we demonstrated currently used technologies for data collection in the field of Cultural Heritage with the Minidome (<http://www.minidome.be/vo1/home.php>), a digitisation device developed by the VISICS group of KU Leuven university. Data of small archaeological objects were collected in situ and people were allowed to interact with the objects' 3D models and view them under different virtual lighting conditions (<https://www.youtube.com/watch?v=Fef1X8rO8KI>).

Additionally, with the purpose of introducing the various research areas of the project, we had a live demonstration of an Augmented Reality application, developed by Marleen de

Kramer (ESR8), for the church of Asinou in Cyprus (project's case study I). These live demonstrations aimed to familiarise people with the state-of-the-art technologies and raise awareness over the importance of the preservation and documentation of cultural heritage.

During the event, people of all ages visited our stand to get informed on the different aspects of ITN-DCH and I believe that both Matthew and I managed to inspire them towards the whole spectrum of sciences that are combined under the wider umbrella of the project. Having no similar experience before, this event formed a good opportunity for me to learn how to communicate my research to non-scientific audience in a succinct and accessible way. Especially when it comes to children, it is important to use simplified, but yet interesting vocabulary, not only to make them understand your work but also to motivate them towards science.

Based on the enthusiasm and the positive feedback that we received from the visitors, I believe our participation was very successful in bringing people closer to the digital documentation and protection of Cultural Heritage.

Figure 5: Matthew Luke Vincent, ESR11 & Gina Stavropoulou, ESR5

Researcher's Night all around Europe



Figure 6: All the ITN-DCH researchers taking part in the Researcher's Night

Ilmendorf Belt Reconstruction, preliminary results

By Marleen de Kramer, ESR₉

One of the ITN-DCH case studies is the Hallstatt Period elite grave founded in 2010 in Ilmendorf (South Bavaria) <http://www.itn-dch.eu/index.php/case-studies/ilmendorf/>.

Though the burial yielded jewellery made of bronze, gold, glass, frit, and amber, perhaps the most spectacular piece is a belt still partially contained within a block excavation.

The block has been investigated using computer tomography - it consists of ca. 11,000 individual bronze tacks that were presumably once held in a leather matrix, an ornate bronze belt plate, and at least 15 large blue and yellow glass rings suspended from the bottom. Traces of organic material remain, implying that the belt was lined with leather, fur, or a woven material.

As part of the complete digitisation pipeline, Marleen de Kramer, ESR₉, will visualise the belt as a virtual 3D object, allowing the models of individual finds produced by other fellows through photogrammetry and structured light scanning to be placed in relation to one another and shown in their context.

Of course, not all parts of the belt have been preserved, so in order to show a model of the entire object, the existing partial finds must be supplemented with speculative additions. In order to make these as accurate as possible, they must be extrapolated from existing parts, taken from comparable finds that are similar in age and geopolitical context, or derived from the known manufacturing processes and aesthetics of the time. This requires an intense dialogue with the experts at the Archaeological State Collection, which has already resulted in new insights into the function and manufacturing process of the original belt.

Accountability must be maintained and a clear decision-making process should be documented so that future researchers can analyse the quality and methodology of the model, in order to take it from a symbolic visualisation to a scientifically rigorous reconstruction. It must also be presented - both to the academic, research community and the public - in such a way that it is made clear which parts are models of authentic objects and which are interpolations/additions. This can be

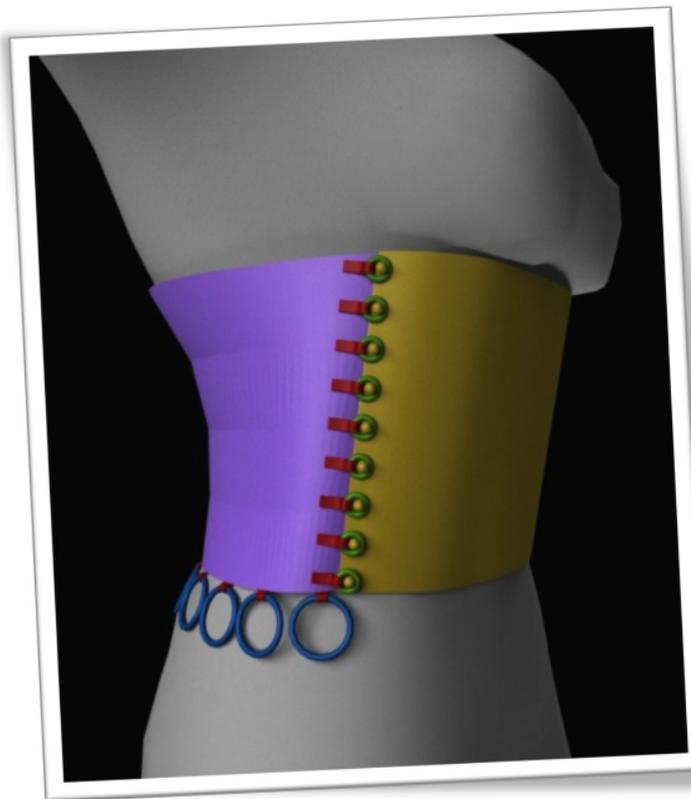


Figure 7: Preliminary Image of Ilmendorf Belt reconstruction by Merleen de Kramer

achieved visually through colour, texture, transparency, through filtering in the display, or through readily accessible metadata, all more easily than it could be done in a physical reconstruction.

While the investigation is still underway, the practical recording of the argumentation and decision-making process in a reconstruction/visualisation has been provisionally recorded in a spreadsheet that contains a brief summary of the decision made (e.g. the dimensions of the belt plate), the type of primary or secondary source that informed the decision (e.g. photographs and measurements of the existing remnants), the names of any experts involved and the name of/link to the source of the information, be it bibliographic data for a published source or an offline copy of a relevant e-mail. This provisional recording system will be used as material for the eventual protocol produced by ITN-DCH and materialized in a database. Two co-fellows, Anaïs Guillem, ESR₆, and George Bruseker, ER₁, are presently using this material in dialogue with ESR₉ as a test case for documenting reconstruction in an

argumentation documentation platform called behindthelines.eu, a drupal database based on CIDOC-CRM.

One Year in ITN-DCH

By Gina Stavropoulou, ESR5 & Elisavet Konstantina Stathopoulou, ESR4

By Gina Stavropoulou, ESR5



In October 2014, I was recruited as one of the early stage researchers of the ITN-DCH project. Since then, I gained a wide range of different experiences from which I consider most important the opportunity to study and work in KU Leuven University. Being part of the VISICS group I gained a lot of training on machine learning methods and computer vision and I also enhanced my programming skills. Additionally, through the project's summer schools and workshops, I acquired a set of new skills and knowledge in a wide range of subjects, from digitisation methodologies to material characterisation, and I built a more global understanding of Digital Cultural Heritage. For me, the highlight of this year was my secondment in CNRS, which I believe sums up the meaning of being a Marie Curie Researcher in an ITN project. During my month there, I received valuable training on the theoretical background and the challenges of linking semantically enriched data to different 2D and 3D dimensional representations of cultural heritage objects. More importantly, I had the opportunity to work with other fellows on the project's case studies. This interaction and cooperation with people from different scientific backgrounds strongly reflects the multidisciplinary of ITN-DCH and was one of the most important experiences of the past year.



By Elisavet Stathopoulou, ESR4

More than one year has passed since the time the first fellows of ITN-DCH were recruited. Month by month, new team members come into the project and right now we count 18 ESRs and 2 ERs fellows in place. The network is expanding within Europe and beyond. Up to today, the fellows have participated in two ITN-DCH summer schools, one ITN-DCH workshop and a variety of other events like international or local conferences, trade fairs, seminars and workshops. Within the framework of these events, the fellows were given the

opportunity to broaden their skills, receive and transfer knowledge, meet well known scientists and professionals from all over the world, but, most importantly, to be part of an interdisciplinary team network. Presentations, discussions, hands-on workshops, educational visits to monuments have trained them in multiple other fields apart from their main expertise. That way, they learn how to collaborate in a professional level also with people having a completely different background, integrate their knowledge in such way to define a well-determined and complete output.

CIPA2015 International Symposium

By Nikoletta Skordaki, ESR 14



Figure 9: Group picture at CIPA Gala including ITN-DCH fellows, ITN - DCH coordinator Marinos Ioannides (CUT), ITN-DCH project advisor Alex Ya-Ning Yen and ITN-DCH associated partner Nikos Grammalides (CERTH)



Figure 10: Participants at the Workshop

The 25th International Symposium was held in Taipei, Taiwan, from 31st of August until 4th of September (<http://www.cipa2015.org/>). The ITN – DCH project had a very active participation with the organization of a workshop and many fellows' oral presentation of their accepted papers. During the ITN – DCH workshop the attendants had the opportunity to be introduced to the project and the research field, in which partners and fellows are associated with (EU-Chic project, Project Mosul etc.). ER George Bruseker and ESRs Chance Coughenour, Diego Bellido Castaneda, Ellie Stathopoulou, Anais Guillem, Nicola Carboni and Nikoletta Skordaki participated at the CIPA Symposium by making an oral presentation of their innovative work and attended to very interesting sessions for the integrated

documentation, preservation and conservation of both movable and immovable Cultural Heritage. The fellows had very fruitful discussions with distinguished researchers and scientists, including the President of ICOMOS, Gustavo Araoz, Alex Ya-Ning Yen and Rob Davies, who are ITN-DCH project's advisors. The outcome of the discussions and their advice to the fellows will help them for their future research steps. Moreover ITN – DCH partners Andreas Georgopoulos and Fabio Remondino, respectively President and Vice President of CIPA, Markus Reindel, Martin Schaich and Marinos Ioannides had an active role in the CIPA Symposium. Apart from their support to the ITN-DCH fellows, they gave keynote lectures and were chairmen to CIPA sessions.

In conclusion, CIPA Symposium was a very exciting experience for the fellows. They had the opportunity to present to a very specialized scientific audience their research's results. In addition, this conference gave them the chance to discuss with many highly qualified researchers, who gave them significant advice and also they get to know the exotic culture of Taiwan.

European Council's Meeting, Limassol, Cyprus

By Margarita Papaefthimiou, ESR 10

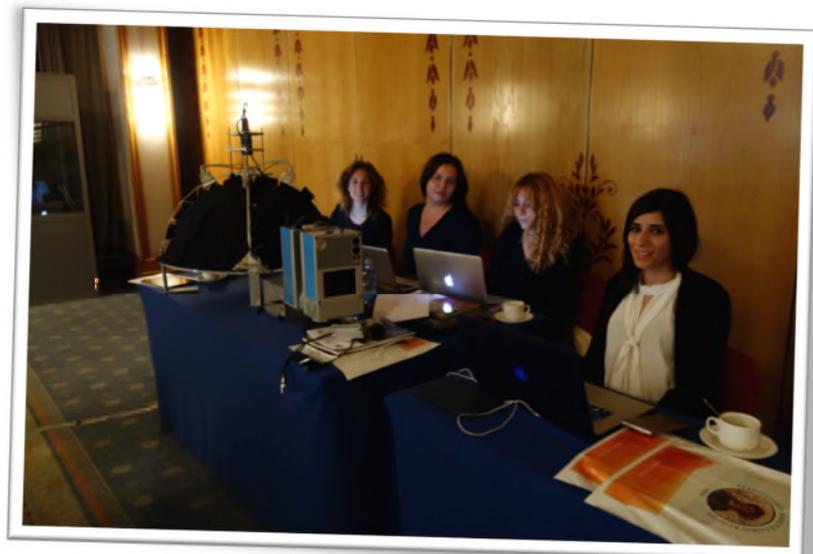


Figure 11: Margarita Papaefthimiou, ESR, Nikoletta Skordaki ESR14, Gina Stavropoulou, ESR5 and Monica Giuliano ESR 12

On October 27, 2015, the Committee of the Council of Europe on Culture, Science, Education and Media (<http://assembly.coe.int/nw/Committees/as-cult/as-cult-main-EN.asp>) together with the SubCommittee on Culture, Diversity and Heritage met with prominent Scientists in the area of Cultural Heritage Documentation.

The two days meeting was held at the Grand Resort Hotel in Limassol, Cyprus. The main aim of this particular meeting was

to discuss future Pan-European developments for boosting growth and to shape sustainable development programs in the area of cultural and natural heritage. The discussions revolved also around the local CY developments in the area of the Cultural Heritage Documentation, Preservation and Protection. The conference was also attended by Dr. Marinos Ioannides, coordinator of the ITN-DCH (Cyprus University of Technology) and Prof. Roko Žarnić (University of Ljubljana). Both supervisors gave an exhaustive presentation about the current and future challenges on

research and development in the area of Cultural Heritage documentation and protection. As researchers in the area of cultural heritage, they presented the new challenges of 3D and 2D digitization as a holistic approach to the electronic recording of the past. Among the delegates were also five ITN-DCH early stage researchers (www.itn-dch.eu), who had the opportunity to follow closely the discussions of the event and be informed on the most important challenges of the policy makers about the future recommendations' on protection and preservation of cultural heritage. The young researchers exhibited indicative equipment for the documentation and digitization of monuments and archaeological objects and an augmented reality application that has been created within the frame of the research program for the church of Panagia Forviotissa (Panagia Asinou). All the parliamentarians showed extreme interest on the on-going research activities of the ITN-DCH project.

New Fellow: Monica Giuliano, ESR 12

Monica Giuliano is our new fellow ESR 12. She is hosted at CUT in Cyprus.

Monica was born in Naples, in the South of Italy. In 2010 she acquired her Master Degree in Cultural Heritage and during her studies she focused on Greek and roman archaeology and the research on building materials of historical, artistic and archaeological monuments in Campania and Pompei. She attended in 2011, a postgraduate Master's program in "Geotechnologies for Archaeology" at the center of Geo-Technologies (CGT) of Siena University and she focused her research activities on photogrammetry and laser scanning survey integrating her results on GIS platforms. She continued her research

career at the Italian Virtual Heritage School at CNR-ITABC, which was a good opportunity to enhance new knowledge about virtual archaeology and open source software. In order to increase her background in the field of 3D survey applied to restoration and conservation, she attended in 2012/13 the postgraduate Master's program in "Instruments and methods for conservation and valorisation of cultural heritage" at Urbino University. During that period, she had the opportunity to gain experience in the field of documentation and surveying of Cultural Heritage.

In 2012, she won the Alexander Goets Instrument Support Program (AGISP) by



ASD (Colorado). As of 2013 she worked by different leading institutions in the area of Cultural Heritage documentation in several places in Europe and Algeria. Apart from work, she loves street photography, travelling, enjoying her family and friends, walking with her dog, cooking, reading books and swimming.

Forthcoming events & meetings

3rd ITN- DCH Workshop, 30th of November - 4th of December, Nicosia, Cyprus

The upcoming 3rd ITN-DCH Workshop will be hosted by CUT in Cyprus and will revolve around "Standardization – Archiving – Harvesting: Existing Cultural Heritage metadata interface and their relation to Semantic, Symbolic and Conceptual representations". This particular event will focus on all challenges about the holistic documentation of the ASINO UNESCO WHL Monument (<http://itn-dch.org/index.php/case-studies/asinou/>).

All the fellows will be participating. More information in the next newsletter.

International society for photogrammetry and remote sensing, 12th-19th July, Prague

ISPRS is a leading organization in remote sensing, photogrammetry and spatial information sciences - very high-resolution satellite imagery, terrain based imaging and participatory sensing, inexpensive platforms, and advanced information and communications technologies.

Every 4 years the Congress welcomes participants from all over the world. This gathering strengthens relations among the researchers, professionals and representatives of governmental and non-governmental organization thus enhancing the co-operation within the field. ISPRS welcomes all papers bringing new results, achievements, methods and theory to help to shift the present level of knowledge.

<http://www.isprs2016-prague.com/>

VISAPP, the 11th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications, 27th- 29th of February 2016, Rome, Italy

The International Conference on Computer Vision Theory and Applications aims at becoming a major point of contact between researchers, engineers and practitioners on the area of computer vision application systems. Five simultaneous tracks will be held, covering all different aspects related to computer vision: Image Formation and Preprocessing; Image and Video Analysis and Understanding; Motion, Tracking and Stereo Vision; and Applications and Services. The conference covers different areas of interest: Image Formation and Preprocessing; Image and Video Analysis; Image and Video Understanding Applications and Services Motion, Tracking and Stereo Vision

<http://www.visapp.visigrapp.org/Home.aspx>

EuroMed2016, October 31st - November 5th, 2016, Cyprus

The 6th EuroMed2016 brings together researchers, policy makers, professionals and practitioners to explore some of the more pressing issues concerning cultural heritage today. In particular, the main goal of the conference is to focus on interdisciplinary and multi-disciplinary research on the holistic documentation of tangible and intangible Cultural Heritage, the use of cutting edge technologies for the protection, restoration, preservation, massive digitalization and presentation of the CH content. The event will also cover topics of research ready for exploitation, demonstrating the acceptability of new sustainable approaches and new technologies by the user community, SME's, owners, managers and conservators of cultural patrimony.

www.euromed2016.eu

ITN-DCH Newsletter

The “Initial Training Network for Digital Cultural Heritage: Projecting our Past to the Future” (ITN-DCH) is a Marie Curie fellowship projects in the area of the e-documentation / e-preservation and CH protection funded by the European Union under the FP7 PEOPLE research framework. The Project started on the 1st of October 2013, its consortium comprises **14 full partners and 9 associate members** covering the entire spectrum of European CH actors, ranging from academia, research institutions, industry, museums, archives and libraries. The project aims to train **20 fellows** in the area of CH digital documentation, preservation and protection in order to create them a strong academic profile and market-oriented skills which will significantly contribute to their career prospects. ITN-DCH targets **all aspects of CH** ranging from tangible (e.g. books, newspapers, images, drawings, manuscripts, uniforms, maps, artefacts, archaeological sites, monuments) to intangible content (e.g., music, performing arts, folklore, theatrical performances) and their inter-relationships.

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<https://www.youtube.com/watch?v=1npcQvGaQJY>

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Special Thanks for their support to: George Bruseker,, Anaïs Gullielm, Alan Chalmers, Fabio Remondino, Marinos Ioannides, Joshua McNamee.

Acknowledgments:

This project has received funding from the European Union’s Seventh Framework Programme for research, technological development and demonstration under grant agreement no 608013.

