

Improvement of METU-Research Laboratory for the Conservation of Historic Monuments

Reporting

Project Information

MONUMENTSLAB

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€ 1 149 612,28

Coordinated by
MIDDLE EAST TECHNICAL
UNIVERSITY
 Turkey

Final Report Summary - MONUMENTSLAB (Improvement of METU-Research Laboratory for the Conservation of Historic Monuments)

Executive Summary:

Care and conservation of cultural heritage should be based on the research done by the conservation scientists in the laboratories specialized in the field of conservation of cultural heritage. That need for such research laboratories has been more evident in recent years, since the activities of cultural heritage conservation with inadequate diagnosis and using incompatible repair materials resulting in the irreplaceable damage to historic structures have increased in number. The collaborative efforts throughout Europe to develop standards in the field of conservation and to establish new methods of diagnosis and treatments needed to be encouraged due to the growing need for research and development in the field. That goal can be achieved by the development of research centers for the regional needs and by the distribution of experiences through networks and collaborative studies in Europe. In spite of its rich cultural

heritage, there was not a well established research laboratory in Turkey devoted to the conservation of historic monuments that contribute to the advances in conservation science in an efficient way. METU Materials Conservation Laboratory (MCL) has been trying to contribute to the achievement of that goal since its establishment.

With this project, MCL has improved its research capacity in two main fields: a) research capacity in non-destructive analyses of historic monuments b) research capacity in microstructural analyses of historic building materials by the supply of equipments and training of conservation scientists. MCL is now able to fulfill its responsibility in a more efficient way by taking part and leading important research projects needed in Europe and in the country for the development of conservation science concerning cultural heritage.

Project Context and Objectives:

The key objective of this project is to reinforce research potential of Materials Conservation Laboratory (MCL) with capacity building, network building and widening its impact and be a part of European Network for The Care and Conservation of Historic Monuments. Specifically, MCL aimed to improve its capacity in two main fields: a) improvement of research capacity in non-destructive analyses of historic monuments and b) improvement of research capacity in microstructural analyses of materials through the equipment purchase and training of conservation scientists.

A review on the equipment purchase and training activities of the project has started in the first and second kick-off meetings with our strategic partners at the beginning of the project. The strategic partners were the members from the leading research institutions in Europe (LRMH-France, CNR-Italy, and LADIR-France). Trainings on the major equipments have started with their purchases and continued in the laboratory and in the field with different pilot training projects.

Dissemination of the training activities included the launch of the monumentslab webpage and its development, two successive kickoff meetings, organization of the First Workshop, Second Workshop and a Dissemination Workshop and preparation of a booklet for the presentation of the laboratory facilities for microstructural analyses and non-destructive analyses in a combined way.

The researchers of the team have found the opportunity to present their training research activities in detail during the workshops involving microstructural analyses and non-destructive analyses reflecting the advances they have made during their training in the project.

Training on the major equipments ordered in the second year was tried to be realized partly before their purchase, six month training of a researcher (K. Göze Akoğlu), on Raman Spectrometer in our strategic partners' laboratory – LADIR and some training with dilatometer set up in LRMH. Another researcher (Elif Sirt) visited LRMH for a month for training on microstructural analyses related to microbiological activity.

Our research team has attended international symposiums. They have presented papers as the products of their training activities both in microstructural analyses and non-destructive analyses.

During the third year, the research team had also one day visit to Bodrum to the laboratories of INA

During the third year, the research team had also one day visit to Bodrum to the laboratories of INA (Institute of Nautical Archaeology, Bodrum) by MCL was organized to be familiar with the activities of INA lab on the conservation of water logged wood of ships, metal, glass and [ceramics](#) to the laboratories of INA – Bodrum. The discussions were made on the conservation studies by microstructural and non-destructive analyses of water-logged archaeological materials. A two days visit to LRMH was also done by the MCL researchers to see the several branches of LRMH and their activities.

The First workshop was organized in 18th-19th May 2010 with the participation of the two of our strategic partners. During the Workshop I we hosted two colleagues from the LADIR and LRMH institutions to share their experiences in microstructural analyses. The members from local authorities and stakeholders, such as KORDER (Association of Conservation Specialists, Ankara) and KOREFD (Association of Conservation Firms) also participated in the workshop, together with them it was possible to discuss the subjects presented during the workshop and to discuss and collaborate on the efforts for the improvement of public awareness and ethics of conservation.

The Second Workshop was done in the beginning of the third year during 14th and 23rd of June 2010 in our laboratory and continued with a field study in Nemrut Mount Monument. During the Workshop II we hosted three colleagues from the CNR-Italy and LRMH-France institutions.

During the workshops the researchers of the team presented their training research activities related to microstructural analyses and non-destructive analyses and field trip have given them the opportunity to discuss their data they have obtained in the lab and in the field with our strategic partners. In addition the field study in Nemrut Mount Monument was very useful to discuss both laboratory analyses and their interpretation in the field both for microstructural and non-destructive analyses.

Dissemination Workshop was organized in 17th -19th May 2011 with the participation of a wider public. Key people from the government institutions, universities and NGO's related to conservation of historic monuments in Turkey were invited as well as some experienced researchers who are well known for their interdisciplinary interest in the field of conservation. Some of those people were able to participate to the dissemination workshop. It was therefore, possible to make fruitful discussions and evaluations on the MonumentsLab Project. That has led to the preparation of Scientific Impact Assessment Report.

The webpage of the project www.monumentslab.org.tr that was launched in December 2008 continued to be developed with the project activities. It is updated by introducing the present training activities of our laboratory and the news on our further training activities, etc.

Project Results:

Completion of the equipment purchase and training on their use:

The equipment listed in the project was completely purchased by the end of third year. According to the arrival of the budget, adjustments for equipment purchase were done. Priority was given to the major equipment that needed special training, i.e. IR Camera for Scientific Applications (FLIR SC640 IR Camera), SEM-EDX unit (SEM Vega II XMU), XRD instrument (D8 Advanced Diffractometer System with Sol-X & Goebel Mirror). The environmental chambers and thin section preparation instruments were the latest purchases.

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Equipment purchased during the first year

IR Camera for Scientific Applications (FLIR SC640 IR Camera),

SEM-EDX unit (SEM Vega II XMU),

XRD instrument (D8 Advanced Diffractometer System with Sol-X & Goebel Mirror).

Equipment purchased during the second year

Two research Microscopes Leica DM4500P, Leica Z16 APO A.

Alpha FTIR equipment

Equipment purchased during the third year

Brueker Senterra Raman Microscope (Arrived at the third year. Its payment was done in the second year)

Climatic Chambers (VOTSCH VCL 4003 34L climatic test cabin -40 +180; ALP Autoclave, HERAUS Low temperature incubator, HERAUS CO2 incubator, HERAUS Safety Cabin)

Grinder-Polisher Unit for thin section preparation Buehler Metaserv250

Low Speed Saw for thin Section Preparation Buehler ISOMET4000

Training Activities

The training activities included not only the operation of that equipment but also data collection and their interpretation for different conservation issues. Those conservation issues were studied through some pilot training projects that were planned in the Kick-off Meetings. The results of those training activities were reflected as presentations in the First, Second and Dissemination Workshops of the project and international conservation symposiums and published papers. The presentations of our researchers in international symposiums (see Dissemination Activities) have given them to opportunity for further training and exchange of knowledge.

In the first year trainings on the major equipment purchased have started with their arrival and continued till the end of the project.). Trainings on the major equipment that arrived at the third year have started before their arrival i.e. a researcher, K. Göze Akoğlu, was trained on Raman Spectrometer in our strategic partners' laboratory – LADIR. The further training on the major equipment have continued in our laboratory. Another training visit was done by one of the researchers Elif Sirt for a month in LRMH on different microstructural analyses.

Training on the major equipments purchased has successfully continued data collection and their interpretation for different conservation issues were done through some pilot training projects. One of the researchers Elif Sirt has been trained for a month in LRMH on different microstructural analyses. In addition, some visits to different institutions in the field of conservation, Conservation laboratories of Institute of Nautical Archaeology in Bodrum –Turkey, and LRMH (Laboratoire de Recherche des Monuments Historiques), Champs Sur Marne – France, and participation to two important symposiums in the field of conservation, namely, HYDROPHOBEVI and SFIC'11 were done as the part of the training and dissemination activities.

Employments of researchers:

At the first year 3 researchers were employed to be trained in the project in addition to our present research staff (2 PhD Candidates from METU and 1 PhD. Candidate from ministry, 3 MSc Student from ministry), starting from September 2008.

During the second year some more researchers employed by ministry have joined us. After they have gained some experience in the field of conservation two of them were employed in the MonumentsLab Project during the third year (Elif Sirt, Duygu Ergenç). In addition an MSc in Archaeometry, Elif Beşer has joined the project in large part of the third year. The complete list of researchers employed by MonumentsLab Project and employed by METU and ministry is given below

The employed researchers in MonumentsLab Project list is as follows:

Evin Caner PhD. Candidate (September 2008 – May 2011)

Şenay Dincer [M.Sc.](#) Student (September 2008 – May 2011)

Duygu Ergenç [M.Sc.](#) Student (June 2010 – May 2011)

Elif Sirt [M.Sc.](#) Student (June 2010– May 2011)

Elif Beşer [M.Sc.](#) in Archaeometry (September 2010– May 2011)

Meltem Cemre Üstünkaya [September 2008 – January 2010](#)

The researchers that are supported by METU and ministry are as follows:

Kiraz Göze Akoğlu PhD. Candidate (September 2008 – May 2011)

Alp Güney PhD. Candidate (September 2008 – May 2011)

Orhan Mete Işıkoğlu [M.Sc.](#) Student* (September 2008 – May 2011)

Ayşenur Kandemir-Yücel PhD. Candidate*(September 2008 – March 2010)

Selen Akevren [M.Sc.](#) Student* (September 2008 – February 2010)

Pınar Çiçek [M.Sc.](#) Student* (September 2008 – September 2009)

Duygu Ergenç [M.Sc.](#) Student* (September 2008 – May 2010)

Elif Sirt [M.Sc.](#) Student*(September 2008 – May 2010)

Organization of the Workshops:

Due to the heavy workload of our strategic partners two kick-off meetings were held instead of one at the first year, first being in 18-21 January 2009 and the second in 9-11 February 2009. The two kick-off meetings have given the opportunity to enlarge the content of the meetings: in addition to the discussions on equipments purchase and employment of researchers, the researchers of the team found the opportunity to present the planned research activities involving microstructural analyses and non-destructive analyses reflecting the advances they aimed to achieve during their training in the project.

The first workshop (Workshop I) of the project was organized in 18th-19th May 2010 with the participation of the two of our strategic partners. During the Workshop I we hosted two colleagues from the IADIR and

of the two of our strategic partners. During the workshop I we hosted two colleagues from the LADIR and LRMH institutions. Dr. Ludovic Bellot-Gurlet is from LADIR-CNRS and the expert on Raman Spectrometry and Ing. de Rech.Paulette Hugon is from LRMH and the expert on FTIR Spectrometry and SEM analyses. In collaboration with them, we planned to train our research staff on those analytical methods. The workshop included the progress in both microstructural and non-destructive analyses achieved in the project and the presentations of our researchers. The members from local authorities and stakeholders, such as KORDER (Association of Conservation Specialists, Ankara) and KOREFD (Association of Conservation Firms) had also joined the workshop and collaborative efforts to improve the public awareness and ethics of conservation were discussed.

The second workshop (Workshop II) of the project was organized in 14th-23rd June 2010 with the participation of the three of our strategic partners. During the Workshop II we hosted Dr. Ermanno Grinzato from CNR and Ing. de Recherche Genevieve Oriol and Dr. Jean-Didier Mertz from LRMH. In collaboration with them, we made plans on the training of our researchers that is the visit of Elif Sirt to LRMH between November-December 2010. In addition we had a field trip to Nemrut Mount Monument together with them in 18-23 June 2010. The field trip was very useful to discuss laboratory analyses and their interpretation in the field both for microstructural and non-destructive analyses. Several topics of Nemrut Mount Monument conservation studies were used as pilot studies for the training of MonumentsLab Project both in microstructural and non-destructive analyses. Since many aspects of the Nemrut Mount Monument were well defined, training on monitoring studies was done at that monument during the field study.

List of participants attended to the MonumentsLab Workshop II, 14-23 June 2010:

Prof. Dr. Emine Caner Saltık (METU, Dept. of Architecture)
Prof. Dr. Asuman Türkmenoğlu (METU, Dept. of Geology Eng.)
Prof. Dr. Tamer Topal (METU, Dept. of Geology Eng.)
Asst. Prof.Dr. Ayşe Tavukçuoğlu (METU, Dept. of Arch.)
Dr. Ermanno Grinzato (CNR, Italy)
Ig. De Recherche Genevieve Oriol (LRMH, France)
Dr. Jean-Didier Mertz (LRMH, France)
Semra Ener (The Head of KORDER)
Saadet Sayın (The Head of KOREFD)
Dr. Ayşenur Kandemir-Yücel
Kiraz Göze Akoğlu (Ph.D Candidate)
Evin Caner (Ph.D Candidate)
Bilge Alp Güney (Ph.D Candidate)
Şenay Dincer (M.Sc Student)
Orhan Mete Işıkoğlu (M.Sc Student)
Duygu Ergenç (M.Sc Student)
Elif Sirt (MSc. Student)

At the end of the third year, Open Dissemination Workshop was organized with the participation of a wider public. Key people from the government institutions, universities and NGO's related to conservation of historic monuments in Turkey were invited as well as some experienced researchers who are well known for their interdisciplinary interest in the field of conservation. It was therefore, possible to make fruitful discussions and evaluations on the Monumental Lab Project. That has also led to the preparation of

discussions and evaluations on the MonumentsLab Project. This has also led to the preparation of Scientific Impact Assessment Report.

List of participants attended to the MonumentsLab Open Dissemination Workshop, 17-19 May 2011:

Prof. Dr. Emine Caner Saltık (METU, Dept. of Architecture, Restoration Program)

Prof. Dr. Asuman Türkmenoğlu (METU, Dept. of Geology Eng.)

Prof. Dr. Tamer Topal (METU, Dept. of Geology Eng.)

Asst. Prof. Dr. Ayşe Tavukçuoğlu (METU, Dept. of Arch., Building Science Program)

Prof. Dr. Cevat Erder (METU, Dept. of Arch., Restoration Program)

Assoc. Prof. Dr. Güven Arif Sargin (Chairman of Dept. of Architecture, METU)

Assoc. Prof. Dr. Neriman Şahin-Güçhan (METU, Dept. of Arch., Restoration Program)

Asst. Prof. Dr. Güliz Bilgin-Altınöz (METU, Dept. of Arch., Restoration Program)

Prof. Dr. Şahinde Demirci, (METU, Dept. of Chemistry, Dept. of Archaeometry)

Prof. Dr. Donato Abruzzese (University of Rome, Italy)

Prof. Dr. Fulvio Zezza (University of Venice, Italy)

Dr. Stefan Simon (Berlin Museum, Germany)

Dr. Ermanno Grinzato (CNR, Italy)

Ig. De Recherche Genevieve Oriol (LRMH, France)

Dr. Jean-Didier Mertz (LRMH, France)

Prof. Dr. Zeynep Ahunbay (Istanbul Technical University, İstanbul, Turkey)

İsmet Ok (Central Laboratory for Conservation and Restoration, İstanbul, Turkey)

Ali Osman Avşar (Central Laboratory for Conservation and Restoration, İstanbul, Turkey)

Prof. Dr. Tamer Gök (Mersin University, Mersin, Turkey)

Prof. Dr. Başak İpekoğlu (İzmir Institute of Higher Technology, İzmir, Turkey)

Dr. Nilüfer Baturayoğlu (Istanbul Technical University, İstanbul, Turkey)

Inst. Dr. Fuat Gökçe (METU, Dept. of Arch., Restoration Program)

Asst. Pro. Dr. İpek Durukan (Mersin University, Mersin, Turkey)

Jale Beşkonaklı (National Palaces, İstanbul, Turkey)

Semra Ener (The Head of KORDER, Turkey)

Cansen Kılıçöte (KORDER, Turkey)

Saadet Sayın (The Head of KOREFD)

Dr. Ayşenur Kandemir-Yücel

Kiraz Göze Akoğlu (Ph.D Candidate, Restoration Program)

Evin Caner (Ph.D Candidate, Restoration Program)

Bilge Alp Güney (Ph.D Candidate, Restoration Program)

Şenay Dincer (M.Sc Student, Restoration Program)

Orhan Mete Işıkoğlu (M.Sc Student, Restoration Program)

Duygu Ergenç (M.Sc Student, Restoration Program)

Elif Sırt (MSc. Student, Biology Department)

Elif Beşer (MSc in Archaeometry, Restoration Program, METU, Turkey)

Nurdan Yücel (PhD. Candidate, METU Archaeometry Department, Turkey)

Işıl Polat (PhD. Candidate, Istanbul University, İstanbul, Turkey)

Our webpage was prepared and launched in December 2008 at www.monumentslab.org.tr it was updated periodically. A booklet was prepared that described the MCL with its functions in microstructural and non-

periodically. A booklet was prepared that described the MCL with its functions in microstructural and non-destructive analyses. Although it was previously planned to make two booklets on microstructural and non-destructive analyses, a combined booklet was prepared after the discussions with our graphic designer since the microstructural and non-destructive analyses were complementary to each other and a combined booklet better represented MCL.

Travels related to training and dissemination activities:

Travels during the three years of project period included

- i) training visits to strategic partners' laboratories,
- ii) travels for participation to the international symposiums as a part of both training and dissemination activities and iii) travels to the potential partners' laboratories.

i) Training visits to strategic partners' laboratories: A training visit was done by a researcher, K. Göze Akoğlu, on Raman Spectrometer in our strategic partners' laboratory – LADIR and on training with dilatometer set in LRMH. Another training visit was done by one of the researchers Elif Sirt for a month in LRMH on different microstructural analyses.

Our researchers and strategic partners traveled to Nemrut Mount Monument in the context of the second Workshop in Ankara (14-23 June 2010) to discuss and interpret the data gathered in the laboratory and at the site. The group who traveled consisted of Emine Caner-Saltık, Asuman Türkmenoğlu, Ayşe Tavukçuoğlu, K. Göze Akoğlu, Evin Caner, Bilge Alp Güney, Şenay Dincer, Duygu Ergenç, Elif Sirt, Orhan Mete Işıkoğlu, Gizem Başkan, Jean-Didier Mertz, Genevieve Oriol, Eramanno Grinzato.

ii) Travels for participation to the international symposiums as a part of both training and dissemination activities: Our research team has attended five international symposiums. They have presented papers as the products of their training activities both in microstructural analyses and non-destructive analyses. Those international symposiums were on the important issues of monument conservation and had importance as training and dissemination activities. International symposiums and the participants from our team are as follows:

- 1) IXth International Conference of the Association for the Study of Marbles and Other Stones in Antiquity, ASMOSIA IXth , 8-13 June 2009, Tarragona, Spain, (Participants: Emine Caner-Saltık, Tamer Topal, K. Göze Akoğlu, Evin Caner, Meltem Cemre Üstünkaya), four papers were presented.
- 2) AITA 2009 - Advanced Infrared Technology and Applications, 8-11 September 2009, Florence, Italy (Participants: Ayşe Tavukçuoğlu, Ayşenur Kandemir, Selen Akevren), two papers were presented.
- 3) Monubasin8 - 8th International Symposium on the Conservation of Monuments in the Mediterranean Basin, 31st May – 2nd June 2010, Patras, Greece (Participants: Emine Caner-Saltık, Bilge Alp Güney, K. Göze Akoğlu, Evin Caner), three papers were presented.
- 4) HYDROPHOBE VI, VIth International Conference on Water Repellent Treatment of Building Materials 12-13 May, 2011, Rome, Italy, (Participants: Emine Caner-Saltık, K. Göze Akoğlu, Evin Caner) – No paper was presented.
- 5) SFIIC'11, Jardins de Pierre, Conservation de la Pierre dans les Parcs, Jardins et Cimetieres, 22-24 June, 2011, Paris, France, (Participants: : Emine Caner-Saltık, Ayşe Tavukçuoğlu, K. Göze Akoğlu, Evin Caner, Bilge Alp Güney, Şenay Dincer, Duygu Ergenç, Elif Sirt, Orhan Mete Işıkoğlu) – Two Papers were presented, they were already published in the symposium proceedings.

presented, they were already published in the symposium proceedings.

iii) Travels to the potential partners' laboratories: A visit to LRMH was done during the SFIC'11 symposium, since it was an opportunity for the MCL researchers to see the several branches of LRMH and their activities.

Visit to INA – Bodrum (Institute of Nautical Archaeology, Bodrum): one day visit to Bodrum to the laboratories of INA by MCL was organized to be familiar with the activities of INA lab on the conservation of water logged wood of ships, metal, glass and ceramics. The discussions were made on the conservation studies by microstructural and non-destructive analyses of water-logged archaeological materials. (Participants: Emine Caner-Saltık, Ayşe Tavukçuoğlu, K. Göze Akoğlu, Evin Caner, Bilge Alp Güney, Şenay Dincer, Duygu Ergenç, Elif Sirt, Elif Beşer).

Potential Impact:

Open Dissemination Workshop was organized with the participation of key people from the government institutions, universities and NGO's related to conservation of historic monuments in Turkey. Some experienced researchers who are well known for their interdisciplinary interest in the field of conservation were also invited. It was therefore, possible to make fruitful discussions and evaluations on the MonumentsLab Project. That has led to the preparation of Scientific Impact Assessment Report. The members of the MCL have prepared communications that were presented at the international symposiums. In addition, two scientific reports were submitted and some new project proposals were prepared concerning the conservation of historic monuments. A proposal was made to MCL to organize the MONUBASIN9-9th International Symposium on the Conservation of Monuments in the Mediterranean Basin, in Ankara-Turkey in October-2012. List of scientific publications during the project are listed in Template A1.

In addition to the scientific publications, several scientific reports were submitted to the Ministry of Tourism and Culture:

- i. "Development of Repair Mortars for the control of rainwater penetration at the Ruined Stone Towers in Perge Archaeological Park Site"; prepared by: E.N. Caner Saltık, A. Tavukçuoğlu, A. Güney, E. Caner, K.G. Akoğlu, D. Ergenç, A.Ş. Dincer; 33 pages; 18 February 2011.
- ii. "KOMMAGENE NEMRUT CONSERVATION AND DEVELOPMENT PROGRAM - Preparing a Management Plan, Materials and Structural Conservation of Nemrut Mountain, Tumulus and Its Monuments"; prepared by: E.N. Caner Saltık, T. Topal, A. Tavukçuoğlu, K.G. Akoğlu, A. Güney, E. Caner, Ş. Dincer, M. Işıkoğlu, E. Sirt, D. Ergenç, B. Deniz; 185 pages; 21 January 2011.

Some new project proposals were made:

- i) JOCHERA: Proposal Full Title: Jordan Conservation of Cultural Heritage in ERA Proposal Acronym: JOCHERA CSA - Supporting Action FP7-INCO-2011-6 Total No. of partners: 5 (UJ, POLITO, METU, TECNALIA, REDINN). The result was successful.
- ii) ENOSIDAS Proposal, Full Title: Innovative Technologies Performance Strategy for Cultural Heritage in Seismic Areas: Modelling, Risk thresholds and Protecting Proposal Acronym: ENOSIDAS Type of funding scheme: small or medium scale focused research program Total No. of partners: 10 (IUAV, NTUA, Upatras, ICPT, ENPC, METU, Uni Rabat, Soles, Ardea, DAAM) Result: Not accepted.
- iii) Proposals of a scientific research projects for 2012-2013 between CNR, Italy and TÜBİTAK-METU

iii) Proposals of a scientific research projects for 2012-2013 between CNR-Italy and TUBITAK, METU-MCL and Istituto Conservazione e Valorizzazione Beni Culturali (ICVBC), Deadline: 15/09/2011.

Scientific Committee Report (Scientific committee report has been compiled during the discussion session of Open Dissemination Workshop): Scientific committee members have expressed that they have observed an integrated approach to conservation issues in the studies presented by the MCL researchers during the Open Dissemination Workshop of MonumentsLab Project. In other words, MCL researchers have successfully united the studies that they have carried out in different scales such as microstructural analyses in material scale; non-destructive analyses in monument scale and issues in site scale. Thus a coherent conservation management program could be achieved in accordance with the current approaches in conservation. All those aspects were well exhibited in the presentations of the MCL researchers. With the MonumentsLab Project, MCL scientists have shown that it was not only having the equipment capacity with the project but also developing the understanding of the phenomena through the measurements done using the advanced instruments. Following the progress of deterioration by using measurable parameters as well as the success of conservation treatments through microstructural analyses and non-destructive analyses seemed to be the important issue in the studies of MonumentsLab

Project presented by MCL researchers. Scientific committee has appreciated those aspects and they thought that developing a databank with those common measurable parameters shared by the conservation scientists in Europe and elsewhere could be possible in the near future. Expression of various aspects of conservation problems with measurable parameters was strongly emphasized in Munich Conservation Laboratory in the past by Dr. Snethlage and his colleagues and was credited among the conservation scientists in Europe. The same approach was observed in the studies presented by the researchers of MCL. That approach was found to be very important in the establishment of a sustainable network of conservation scientists and specialists and the formation of a common databank. Those opinions were strongly shared by the other participants who have expressed their views on the MonumentsLab Project at the end of Open Dissemination Workshop. The scientific committee has suggested that a larger conference should be organized in the future by MCL with that current philosophy of conservation. Members of the scientific committee had the opinion that MCL also could serve as an international educational center for the conservation scientists to be trained since MCL is a part of an international educational institution METU- Architecture Department, Restoration Program. The MonumentsLab Project has successfully contributed to the potential of METU-MCL in those aspects. Scientific Committee Members: Stefan Simon, Fulvio Zezza, Jean-Didier Mertz, Genevieve Oriol, Ermanno Grinzato, Donato Abruzzese, Emine N. Caner-Saltık, Güliz Bilgin-Altınöz, Ayşe Tavukçuoğlu, Tamer Topal, Asuman Türkmenoğlu, Tamer Gök.

Our webpage was prepared and launched in December 2008 at www.monumentslab.org.tr it is updated periodically. The booklet of microstructural and non-destructive functions of the MCL was prepared and distributed to the institutions where the laboratory team visited as well as to the attendees of the Open Dissemination Workshop.

List of Websites:

Our webpage was launched in December 2008 at www.monumentslab.org.tr it was updated periodically. Activities are presented in more detail at our webpage.

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