

SELECTION OF STAFF BEST PRACTICE AWARD Erasmus Programme 2007-2013



TESTIMONIAL Charles Yousif

The year 2013 marked the tenth anniversary of the Erasmus Agreement between the University of Malta and Valladolid University, Spain. This was originally initiated by Eur Ing Charles Yousif of the Institute for Sustainable Energy, University of Malta and Dr Julia Bilbao Santos of the Applied Physics Department of Valladolid University, following their encounter at one of the European conferences on photovoltaics. Within a year, the agreement was expanded to include the School of Industrial Engineering at Valladolid University, coordinated by Prof. Juan Antonio Lopez Sastre, followed by Prof. Maria Cristina Romero-Avila Garcia and succeeded by Prof. Francisco Javier Rey Martinez.

The scope was and remains to exchange students and also teaching staff in the field of sustainable energy and renewables, as well as collaborates in joint scientific projects leading to publications and to enrich the teaching experiences of teaching staff collaborators.

During my Erasmus visit in July 2013, I had the pleasure of meeting the Rector of the University of Valladolid. This has resulted in a further initiative to sign a memorandum of understanding between the two universities, to enhance and expand collaboration in teaching and research across all faculties, institutes and centres. This has now been finalised for endorsement.

The University of Valladolid has offered me one of the best experiences in Erasmus Teaching Staff Mobility, especially because they have strong ongoing research activities in the field of energy efficiency and renewables. Learning from them has become a valuable experience. In 2008, I enrolled as a Ph.D. student with Valladolid University and I am now in the stage of finalising my thesis in the area of energy performance of buildings.

During the 10th anniversary celebrations in Malta, the Ambassador of Spain in Malta has praised this initiative and wished that academia and industry work closer together in both countries. This will be pursued with the Embassy in Malta in the coming months.

The collaboration between the two universities has yielded over 28 scientific papers that were published in international conferences and peer-reviewed journals. Twenty-eight students have participated in this programme throughout the years, mainly working on their final-year projects but also some of whom were Ph.D. students working on their thesis on ultraviolet solar radiation. This latter project has also seen active collaboration, whereby scientific instruments for measuring solar radiation were pooled together from both universities to come up with valuable studies on the effect of dust on UV radiation in Malta and Spain.

My positive experience with this programme has not been kept to myself but I was thrilled to see my colleagues and other colleagues from Valladolid University, participating actively in different studies and providing valuable collaborative spirit that have made this programme a success story, throughout the years. Moreover, the values relayed to participating students throughout these years have given me not only academic satisfaction but also moral encouragement to continue working in the field of tertiary education. Last but not least, the good will and genuine support that I have experienced from the Erasmus Office at both universities cannot be under-estimated. It is through their full support and assistance that such programmes materialise year after year.

Attachments:

- 1. Press Releases
- Celebrating a Decade of Collaboration Report
- 3. Photographs

Press Release 1

Universities Collaborate on Research Project

Research Collaboration between the Universities of Malta and Valladolid, Spain

The University of Malta and the University of Valladolid, Spain are collaborating on a measurement campaign of ultraviolet solar radiation. A UVA and UVB sensor has been acquired and installed at the Institute for Sustainable Energy in Marsaxlokk, with financial support from the Academic Research Fund of the University of Malta. Meanwhile, two Ph.D. students from Valladolid University, David Mateos and Roberto Roman, have visited Malta in May 2012 and installed an erythermal radiation (UV index) instrument at the Institute. Their work is being supported by the Spanish Government through the Project entitled 'Measurement campaign on Solar Radiation, Ozone, and Aerosol in the Mediterranean Area.

This campaign will provide the first ever actual readings taken in Malta for UVA, UVB and UV index, which would help evaluate the actual exposure to UV radiation in Malta.

Eur. Ing. Charles Yousif of the Institute for Sustainable Energy, University of Malta together with Prof. Julia Bilbao and Prof. Argimiro de Miguel, of the Atmosphere and Energy Laboratory of the University of Valladolid, have been developing this project over the past year. Data that is being collected will be validated against mathematical models, with the aim of reconstructing a long-term database of UV radiation and UV Index history for the Mediterranean region. This is being complemented by other collaborations and databases from other countries, including Italy.

The instruments (both from Valladolid University and Malta University) will provide data of total radiation (both global and diffuse components), UV radiation (in several spectral ranges: UV-B, UV-A, and the erythemal range), ozone column, aerosol load, and precipitable water. Hence, a complete characterization of the atmosphere can be obtained for the monitoring period. In addition, the effect of the Saharan desert dust episodes (detected with a sun photometer) on UV and total radiation will be studied, due to its importance in the radiative forcing field, which is related to global warming.

The Institute for Sustainable Energy had been a leader in monitoring solar radiation in Malta since 1993, after a 20-year data gap. The collaboration with the University of Valladolid had started 10 years ago with student and staff exchange agreements under the EU Erasmus programme. Since then, over 20 students from Valladolid University have come over to carry out research projects at the Institute. A number of joint scientific papers have also been published, fruit of these research collaborations, which covered many aspects of energy, including solar and wind energy, energy use in buildings, heat pumps and atmospheric pollution caused by transport. Meanwhile, Eur. Ing. Yousif is currently enrolled as a Ph.D. Candidate at the University of Valladolid.

The Institute's Director, Prof. Robert Ghirlando, has been supporting these initiatives and intends to pursue further collaborations with this and other Universities, to enhance the Institute's M.Sc. Course and other research areas, with the intention of expanding the Institute's relevance to Malta's needs in the areas of energy, water and transport.



left to right: David Mateos, Eur. Ing. Charles Yousif, and Roberto Román, near the UV monitoring equipment on the roof of the Institute for Sustainable Energy, Marsaxlokk, Malta.

30 May 2012

Press Release 2 CELEBRATING TEN YEARS OF COLLABORATION (2003 – 2013)

The Institute for Sustainable Energy of the University of Malta and the Department of Applied Physics and the School of Industrial Engineering at the University of Valladolid, Spain are celebrating ten years of academic collaboration, with the support of the Erasmus Teaching Staff and Students Exchange Programme.

During these years, over twenty five students from Spain have carried out research projects at the Institute and have successfully found employment in the different engineering fields in Spain and other European countries. The research has also yielded over twenty scientific papers which were published in international conferences and peer-reviewed journals. The collaboration has also provided excellent opportunities for exchange of teaching staff and collaborative research in the fields of sustainable energy, solar radiation monitoring and renewable energies. A Ph.D. study is also being conducted at Valladolid University.

In a brief encounter with the University's Rector to celebrate this event, the Ambassador of Spain his Excellency Mr. Felipe de La Morena, highlighted the importance of sustaining such endeavours and combining them with industrial and commercial partnerships for research and development. Prof. Juanito Camilleri, Rector, has noted that the chances of success are much higher when such collaborations are initiated and supported by the researchers themselves rather than a top to bottom approach. He has also suggested that this collaboration should also be extended to encompass other disciplines within both universities.

Dr. Juan Antonio Lopez Sastre of Valladolid University declared that since his first visit to Malta, he was enticed by Malta's kind people and great history. He highlighted the fact that an Erasmus exchange experience enriches the lives of students, not only intellectually, but also socially.

Eur Ing Charles Yousif who had started this collaboration together with Dr Julia Bilbao and Dr. Sastre has explained that many of the finalized projects have been of immediate and direct benefit to the Maltese society at large, as they focused on applied research and on addressing current energy and environmental concerns. He stressed that such a collaboration could not have succeeded without the full and active support of all members of staff and the Institute's director Prof. Robert Ghirlando and its Chairman Dr. Tonio Sant.

The full report may be downloaded from the website:

http://www.um.edu.mt/ise/ise-uva-ten

Press Release 3

La UVA celebra hoy diez años de colaboración con el Institute of Sustainable Energy de la Universidad de Malta

Cuatro alumnos de la Universidad de Valladolid realizan su proyecto en la Universidad de Malta gracias a esta colaboración

03.07.13 - 14:16 -

El Norte de Castilla | VALLADOLID

La Universidad de Valladolid (UVA) celebra este jueves, 4 de julio, los diez años de colaboración a través del Programa Erasmus entre el Institute of Sustainable Energy de la Universidad de Malta y los departamentos de Química Orgánica y de Ingeniería Térmica y Fluidomecánica la Escuela de Ingenierías Industriales y el Departamento de Física Aplicada de la Facultad de Ciencias de la UVA.

En el acto, que comienza a las diez de la mañana en el salón de grados de la Escuela de Ingenierías Industriales, intervendrán el director de la Escuela de Ingenierías Industriales, Alfonso Redondo; el catedrático ya jubilado de la Universidad de Valladolid Juan Antonio López Sastre; Charles Yousif, coordinador del progama Erasmus por parte de la Universidad de Malta; así como estudiantes que realizan en la actualidad sus trabajos fin de carrera gracias a este programa.

A lo largo de la última década, y gracias a esta relación, cada año cuatro estudiantes de la Universidad de Valladolid han realizado su proyecto fin de carrera en temas relacionados con la eficiencia energética y las energías renovables, han informado a Europa Press fuentes de la UVA.

Además, se mantienen colaboraciones de investigación en materia de energía solar a través de los profesores Julia Bilbao y Argimiro de Miguel Castrillo, del departamento de Física Aplicada de la UVA, y el profesor Javier Rey, coordinador del actual Programa Erasmus y profesor del departamento de Ingeniería Energética y Fluidomecánica, dirige la tesis doctoral de un profesor de la Universidad de Malta.

Los beneficios de esta estrecha colaboración han sido relevantes, ya que han supuesto que cerca de 40 estudiantes han realizado al amparo de esta iniciativa su proyecto fin de carrera, además de perfeccionar su nivel de inglés; se han publicado trabajos en revistas de impacto internacional, y se ha abierto una vía para trabajar en común en el desarrollo de tesis doctorales entre ambas Universidades

Celebrating a Decade of Collaboration (2003-2013)



Institute for Sustainable Energy University of Malta



Department of Applied Physics Faculty of Science University of Valladolid

School of Industrial Engineering University of Valladolid

Supported by the EU Erasmus Programme

PRELUDE

Ten years ago and during one of the international solar photovoltaic conferences, EUR ING Charles Yousif from the Institute for Sustainable Energy of the University of Malta, came across Julia Bilbao Santos from the Department of Applied Physics, University of Valladolid. The topic of conversation was on the papers that were being presented by them there and on their academic backgrounds.

This first encounter was sealed by a Teaching Staff Mobility Agreement under the Socrates-Erasmus Agreement. On his first visit to the University of Valladolid, EUR ING Yousif also met Prof. Juan Antonio Lopez Sastre and the agreement was extended to include the Faculty of Industrial Engineering.

Since then, a number of students have travelled to study at the University of Malta and to carry out projects in the field of sustainable energy. To date, twenty-six students have successfully completed their final year projects at the Institute. Twenty-four scientific publications have also been published, some of which are in peer reviewed journals.

Last year, a programme of studies on ultra-violet radiation was also carried out for six months, whereby Ph.D. students from the Department of Applied Physics of the University of Valladolid have come to monitor ultra-violet radiation at the Institute's centre in Marsaxlokk. The combination of solar radiation data gathered at the Institute and the erythermal data have been utilised to evaluate the effect of the Sahara desert on the ultra-violet radiation levels in the central Mediterranean.

On another note, EUR ING Charles Yousif is currently carrying out his Ph.D. studies at the University of Valladolid, on energy performance of buildings, under the supervision of Dr. Francisco Javier Rev Martinez.

This collaboration has been beneficial to both universities because it was one of the successful experiences that helped to enrich the academic experiences for all participants both in the teaching as well as the research fields. Moreover, the positive experience of participating students and their hard-working have yielded valuable research results that are being utilised for the common good of the country and human kind. This is because the research topics under study were chosen to be factual and of specific importance to the field of sustainable energy. This programme could not have succeeded without the active involvement of all members of staff, from both Universities and the kind support of the EU Erasmus Programme and the EU and Erasmus Offices in both universities.

We are pleased to present here the full list of dissertations, scientific publications, studies and presentations that have been accomplished to date.

PARTICIPATING MEMBERS OF STAFF

University of Malta

Prof. Robert Ghirlando
Dr. Tonio Sant
Prof. Luciano Mule' Stagno
Prof. Manfred Weissenbacher
Ing. Robert N. Farrugia
Dr. Mario Fsadni
EUR ING Charles Yousif (Coordinator)

University of Valladolid

Prof. Julia Bilbao Santos Prof. Juan Antonio Lopez Sastre Prof. Maria Cristina Romero-Avila Garcia Prof. Argimiro de Miguel Castrillo Prof. Francisco Javier Rey Martinez (Coordinator)

DISSERTATIONS

Name of student: Juan Pablo Juarez Martin

Title of Project: Installation of a Vertical Solar Photovoltaic System and Comparison of Data to

Other Systems in Malta Academic Year: 2005/2006

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Maria Fernandez Prieto

Title of Project: PV in Buildings: A First Technical Approach Academic Year: 2005/2006

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Leandro Santana Zurita

Title of Project: Analysis of a Grid-connected Photovoltaic System Operating in a Factory in Malta

Academic Year: 2006/2007

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Juan Manuel Franco Esteban

Title of Project: Comparison between the Performance of a Photovoltaic Tracking System and a

Stationary Vertical System Academic Year: 2006/2007

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Jorge Rebellon

Title of Project: Experimental Determination of Heat Transfer Properties of Building Materials

using a Hot Box set up at the Institute

Academic Year: 2006/2007

Semester: 1

Supervisor: Dr. Mario Fsadni

Name of student: David Salvador Lopez

Title of Project: Performance of a Rooftop Photovoltaic System Installed at a Residence in Malta

Academic Year: 2006/2007

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Carlos Fernandez Naveira

Title of Project: Wind Data Management: A Case Study at Kercem, Gozo

Academic Year: 2006/2007

Semester: 1

Supervisor: Ing. Robert N. Farrugia

Name of student: Marta Villameriel Tejedor

Title of Project: Energy Study at a Residence in Malta

Academic Year: 2007/2008

Semester: 1

Supervisor: EUR ING Charles Yousif Co-Supervisor: Ing. Robert N. Farrugia

Name of student: Carlos Fernandez Vazquez

Title of Project: Performance Analysis of Water-in-Glass Evacuated-tube Solar Heating Systems at

a Housing Project in Malta Academic Year: 2007/2008

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Roberto Martin Sanchez

Title of Project: Analyses of Wind Speeds at Rabat, Malta

Academic Year: 2007/2008

Semester: 1

Supervisor: Ing. Robert N. Farrugia

Name of student: Gorka Ona Quecedo

Title of Project: Comparison of Solar Radiation in Marsaxlokk (Malta) and Valladolid (Spain)

Academic Year: 2008/2009

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Rodrigo Cabornero Gago

Title of Project: Analysis of Low Level Wind Behaviour in Central and South East Malta

Academic Year: 2008/2009

Semester: 1

Supervisor: Ing. Robert N. Farrugia

Name of student: Sara Regalgo Fernandez

Title of Project: Operational Characteristics of a Small Wind Turbine at a Coastal Location in Malta

Academic Year: 2008/2009

Semester: 2

Supervisor: Ing. Robert N. Farrugia

Name of student: Oscar Martin Ramos

Title of Project: Performance of a Pumped Solar Heating System with Vertical Flat-Plate Collector

Academic Year: 2009/2010

Semester: 1

Supervisor: Ing. Robert N. Farrugia Co-superviosr: EUR ING Charles Yousif

Name of student: Sara Morentin Gutierrez

Title of Project: Testing of an Air Source Heat Pump Water Heater in Malta

Academic Year: 2009/2010

Semester: 1

Supervisor: EUR ING Charles Yousif Co-Supervisor: Ing. Robert N. Farrugia

Name of student: Celia Perez Garcia

Title of Project: Energy Performance of a Residential Building in Malta

Academic Year: 2009/2010

Semester: 2

Supervisor: EUR ING Charles Yousif

Name of student: Ignacio Gomez Royuela

Title of Project: Comparison of Energy Performance Rating of Dwellings in Malta Software

(EPRDM) with DesignBuilder-EnergyPlus Simulation Programme

Academic Year: 2010/2011

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Eduardo Ruben Vaguero Palacios

Title of Project: Performance Analysis of Solar Photovoltaic Systems in Malta

Academic Year: 2010/2011

Semester: 1

Supervisor: Prof. Luciano Mule-Stagno Co-Supervisor: EUR ING Charles Yousif

Name of student: Luis Mayor Salgado

Title of Project: The MIA Luqa Meteorological Stations: On Their Applicability for Wind Resource

Assessment

Academic Year: 2010/2011

Semester: 1

Supervisor: Ing. Robert N. Farrugia

Name of student: Rodrigo Hurtado Crespo

Title of Project: Comparison Study between Operational-Phase Energy Profiling and DesignBuilder-EnergyPlus Software Results of a Modern Apartment in Malta

Academic Year: 2010/2011

Semester: 2

Superviosr: EUR ING Charles Yousif

Name of student: Sergio Martin Nieto

Title of Project: Diffusion-tube Measurement of Air Pollution in Malta and Analysis of Long-term

Air Pollution Data Sets

Academic Year: 2011/2012

Semester: 1

Supervisor: Prof. Manfred Weissenbacher

Name of student: Raquel Mucientes Diez

Title of Project: Asset and Operational Energy Performance Rating of a Modern Apartment in

Malta

Academic Year: 2011/2012

Semester: 2

Supervisor: EUR ING Charles Yousif

Name of student: Carlos Javier Ruiz Sanchez

Title of Project: Evaluation of the Renewable Energy Contribution of Air-to-Air Split-Unit Air-

Conditioners in the Maltese Domestic Sector

Academic Year: 2012/2013

Semester: 1

Supervisor: EUR ING Charles Yousif

Name of student: Maria Cristobal Manchado

Title of Project: Energy Performance Rating of a New Office Building in Malta Using

DesignBuilder

Academic Year: 2012/2013

Semester: 2

Supervisor: EUR ING Charles Yousif

Name of student: Irene Teresa Cubero

Title of Project: Performance of a Compact Solar-assisted Thermodynamic Heat Pump for Potable

Water Heating

Academic Year: 2012/2013

Semester: 2

Supervisor: EUR ING Charles Yousif

Name of student: Marcos Gomez Rebe

Title of Project: Optimising Photovoltaic Power Generation and Useable Area by Varying the Solar

Module Tilt

Academic Year: 2012/2013

Semester: 2

Supervisor: Prof. Luciano Mule' Stagno Co-Supervisor: EUR ING Charles Yousif

PUBLISHED PAPERS

Performance of a Solar-assisted Thermodynamic Heat Pump for Water Heating

Charles Yousif, Irene Teresa Cubero and Martin De Bono, Proceedings of the Sustainable Energy 2013: The ISE Annual Conference, 21st March 2013, Qawra, Malta, pp. 80-84, ISBN 978-99957-0-460-5.

The New Brewhouse, Mriehel: Environmental Control through Natural Ventilation and Shading Devices

G. Caruana Smith, A. Miceli Farrugia, M. Cristobal and C. Yousif, Proceedings of the Sustainable Energy 2013: The ISE Annual Conference, 21st March 2013, Qawra, Malta, pp. 7-15, ISBN 978-99957-0-460-5.

Asset and Operational Energy Performance Rating of a Modern Apartment in Malta

Charles Yousif, Raquel Mucientes Diez, and Francisco Javier Rey Martínez, International Conference on Sustainability in Energy and Buildings 2012 (SEB '12), Stockholm, Sweden, 3-5 September, 2012.

Poster: Asset and Operational Energy Performance Rating of a Modern Apartment in Malta

C. Yousif, R. Mucientes Diez & F. J. Rey Martínez

Sustainable Energy 2012: The ISE Annual Conference, 21 Feb. 2012, Qawra – Malta

Poster: Diffusion Tube Measurements of Outdoor Air Pollution in Malta with Special Focus on the Exposure of Children

S. Martín Nieto and M. Weissenbacher

Sustainable Energy 2012: The ISE Annual Conference, 21 Feb. 2012, Qawra – Malta

Comparison of Solar Radiation in Marsaxlokk, Malta and Valladolid, Spain

Gorka Oña Quecedo, Charles Yousif and Julia Bilbao Santos

Peer reviewed publication in Renewable Energy Journal, Article in Press, Elsevier Publishers, Available Online as of 3rd February 2012, DOI information: 10.1016/j.renene.2012.01.031

Energy Performance Rating of Dwellings in Malta

Charles Yousif, Ignacio Gómez Royuela, Francisco Javier Rey Martinez

Proceedings of the 6th Dubrovnik Conference on Sustainable Development of Energy, Water and Environment Systems, 25-29 September 2011, Dubrovnick, Croatia—SDEWES11-0578

Solar Photovoltaic Systems Performance in Malta: Potential versus Real Contribution to the 2020 RE Target

L. Mule Stagno, C. Yousif and E. Vaquero Palacios

Proceedings of the 26th European Photovoltaic Solar Energy Conference, 5-9 September 2011, Hamburg, Germany, pp. 4381-4384, ISBN 3-936338-27-2

Analysis of Low Level Wind Behaviour in Central and South East Malta

Rodrigo Cabornero Gago, Robert N. Farrugia, Lawrence Giordmaina & Charles Galdies Wind Engineering, Volume 34, No. 2, 2010, pp 181–192.

Energy Performance of Residential Buildings in Malta

Charles Yousif, Celia Perez Garcia and Francisco Javier Rey Martínez

Proceedings of the 3rd International Conference on Passive and Low Energy Cooling for the Built Environment (PALENC 2010), 5th European Conference on Energy Performance & Indoor Climate in Buildings (EPIC 2010) and 1st Cool Roofs Conference, Rhodes, Greece, 29 Sep – 1 Oct, 2010

Testing of an Air Source Heat Pump Water Heater in Malta

S. Morentin Gutiérrez, C. Yousif and R.N. Farrugia

Proceedings: World Renewable Energy Congress XI, Abu Dhabi, United Arab Emirates, 25-30 September 2010.

Pumped Solar Heating System with Vertical Flat-plate Collector

Ó. Martín, R.N. Farrugia and C. Yousif

Proceedings: World Renewable Energy Congress XI, Abu Dhabi, United Arab Emirates, 25-30 September 2010.

Comparison of Solar Radiation in Marsaxlokk, Malta and Valladolid, Spain

Gorka Oña Quecedo, Charles Yousif and Julia Bilbao Santos

Proceedings of the World Renewable Energy Congress XI, Abu Dhabi, United Arab Emirates, 25-30 September 2010, Future technology Press, pp 1515-1520

Wind Monitoring on the Island of Gozo

R.N. Farrugia & C. Fernández Naveira

Xjenza 13 (2008), Art. No. 120302, ISSN 1818-7250 (Print), ISSN 1818-7269 (Online), 2008.

Available online at: http://www.xjenza.com

Impact of Domestic Solar Water Heating on an Energy Audit of a Residence in Malta

R. N. Farrugia, C. Yousif & M. Villameriel Tejedor

Proceedings: 1st International Congress on Heating, Cooling and Buildings, EUROSUN2008, 7-10 October 2008, Lisbon, Portugal, Ref. No. 244.

Energy Study in a Maltese Household

R. N. Farrugia, C. Yousif & M. Villameriel Tejedor

Proceedings: World Renewable Energy Congress X, Glasgow, Scotland, 19-25 July 2008, pp. 757-762.

Performance Analysis of Water-in-Glass Evacuated-Tube Solar Heating Systems in Malta,

C. Yousif, C. Fernandez Vazquez*, V. Buhagiar

Proceedings of the 1st International Congress on Heating, Cooling and Buildings, **EUROSUN2008**, 7-10 October 2008, Lisbon, Portugal, Ref. No. 028.

Upright, Optimally-inclined and Tracking Grid-connected PV Systems Performance in Malta

C. Yousif, J.M. Franco Esteban, D. Salvador Lopez and L. Santana Zurita

Proceedings of the 22nd European Photovoltaic Solar Energy Conference & Exhibition, Milan, Italy, 3-7 September, 2007, pp. 3205-3208.

ACCEPTED ABSTRACTS FOR 2013

Total Ozone Column, Aerosol Optical Depth and Precipitable Water Effects on Solar Erythemal Ultraviolet Radiation

J. Bilbao, R. Román, Ch. Yousif, D. Mateos and A. de Miguel Geophysical Research Abstracts, Vol. 15, EGU2013-PREVIEW, 2013, European Geociences Union (EGU) General Assembly 2013

The New Brewhouse, Malta: Environmental Control through Natural Ventilation,

Daylighting and Shading, *Alberto Miceli Farrugia, Greta Caruana Smith, Charles Yousif, Maria Cristobal,* Poster in the Proceedings of the 8th Energy Forum on Advanced Building Skins, 5-6 November, 2013, Bressanone, Italy

Optimising Space Area Utilisation and Photovoltaic Module Output in Confined

Mediterranean City Roofs, Marcos Gomez Rebe,, Luciano Mule' Stagno, Charles Yousif, Proceedings of the 28th European Photovoltaic Solar Energy Conference and Exhibition (EU PVSEC 2013), Paris, France, 30 Sep. - 4 Oct. 2013

Renewable Energy Contribution of Air-Conditioning Heat Pumps for the Domestic Sector in Malta

Yousif, Charles, Ruiz Sánchez, Carlos Javier,

Proceedings of Clima 2013, 11th REHVA World Congress and 8th International Conference on IAQVEC, 16th-19th June 2013, Prague, Czech Republic

Evaluation of Design Features to Achieve Higher Energy Efficiency for a Modern Office Building in Malta

Yousif, Charles, Cristóbal Manchado, María

Proceedings of Clima 2013, 11th REHVA World Congress and 8th International Conference on IAQVEC, 16th-19th June 2013, Prague, Czech Republic

SUBMITTED JOURNAL ARTICLES (UNDER REVIEW)

Verifying Meteorological Station Wind Speed Data for Long-term Resource Studies: The MIA Luqa Wind Databases at Malta

L. Mayor Salgado, R.N. Farrugia, C. Galdies and T. Sant

Ph.D. STUDY

Name of Candidate: Charles Yousif, University of Malta

Title of PhD Thesis: Energy Performance of Maltese Residential Buildings

Period of Study: 2008 – ongoing

Supervisor: Prof. Francisco Javier Rey Martinez, University of Valladolid

PRESENTATIONS IN LOCAL CONFERENCES

Energy Efficiency in Spain

Julia Bilbao and Argimiro de Miguel

ISE Annual Conference 2005: Renewable Energies in Malta and Beyond, 19th September 2005

Grid Connected PV Systems in Spain

J. Bilbao and Argimiro de Miguel

ISE Annual Conference 2005: Renewable Energies in Malta and Beyond, 19th September 2005

Energy Efficiency Measures in Spain

Juan Antonio Lopez Sastre, Julio San Jose

ISE Annual Conference 2008: Energy Efficiency and Renewables: Policies, Applications and Research

Spanish Legislation and Incentives for Sustainable Buildings

Julia Bilbao and Argimiro de Miguel

ISE Annual Conference 2008: Energy Efficiency and Renewables: Policies, Applications and Research

The "Best Result" European Project on Renewable Energy

Ana Perez Burgos, Julia Bilbao Santos and Argimiro de Miguel Castrillo

ISE Annual Conference 2008: Energy Efficiency and Renewables: Policies, Applications and Research

Energy Study at a Residence in Malta

Marta Villameriel Tejedor, Robert N. Farrugia and Charles Yousif

ISE Annual Conference 2008: Energy Efficiency and Renewables: Policies, Applications and Research

Analyses of Wind Speeds at Rabat, Malta

Roberto Martin Sanchez, Robert N. Farrugia

ISE Annual Conference 2008: Energy Efficiency and Renewables: Policies, Applications and Research

Performance Analysis of Water-in-Glass Evacuated-Tube Solar Heating Systems in Malta

Carlos Fernandez Vazquez, Charles Yousif, Vincent Buhagiar

ISE Annual Conference 2008: Energy Efficiency and Renewables: Policies, Applications and Research

TEACHING VISITS TO VALLADOLID

EUR ING Charles Yousif

Every year EUR ING Yousif visited Valladolid University and delivered a number of lectures on the topic sof sustainable energy, solar radiation, solar thermal engineering, solar photovoltaic systems and energy performance of buildings.

Ing. Robert N. Farrugia

In 2011 Ing. Farrugia also visited Valladolid University and delivered lectures on wind energy and thermal energy.

During these visits, administrative work is also undertaken to meet the forthcoming students and introduce them to the projects that they are to work on, while in Malta. In doing so, the students would be able to prepare themselves beforehand, especially with regards to background studies on the specific topic, thus ensuring high quality outcomes.

PHOTOS



Facing (Left to Right): Ing. Robert Farrugia, Prof. Luciano Mule' Stgno, Prof. Robert Ghirlando (ISE Director), Prof. Juanito Camilleri (Rector), Prof. Tonio Sant (ISE Chairman), Eur Ing Charles Yousif (Coordiantor), Stefania Fabri (Director, Erasmus Office)



Left to Right: Charles Yousif with Prof. Juanito Camilleri (Rector) and Prof. Juan Antonio Lopez Sastre (ex-Erasmus Coordinator 2004-2010)



Left to Right: Prof. Luciano Mule Stagno, Prof. Robert Ghirlando greeting Prof. Julia Bilbao Santos (first collaborator in Erasmus agreement) Prof. Juanito Camilleri and Eur Ing Charles Yousif



Charles Yousif delivering his speech on the occasion of the 10th anniversary of Erasmus Agreement.



Left to Right: Student representatives Marcos Gomez Rebe and Irene Teresa Cubero, together with Prof. Maria Cristina Romero-Avila Garcia (ex-Erasmus coordinator 2010-2013), Prof. Juan Antonio Lopez Sastre (ex-coordinator 2004-2010), Prof. Julia Bilbao Santos (first collaborator and coordinator), Prof. Argimiro de Miguel