



EUROPEAN UNION



**"BSUN Joint Master Degree Study Program on the Management of Renewable Energy Sources - ARGOS"**

**Contract no: 1.3.1.66334.127 MIS-ETC 277, no.44553/08.06.2011**

**Project financed by the European Union**

**Beneficiary: "Ovidius" University of Constanta**

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**Joint Operational Programme "BLACK SEA BASIN 2007-2013"**

СИМФЕРОПОЛЬ

## INTERNATIONAL AUTUMN SCHOOL

**Advanced course on thermodynamics:  
Multiscale thermo fluid engineering of  
renewable energy systems**

**18-23 November 2013  
Simferopol, Ukraine**



## ORGANISATION AND SCOPE

The International Autumn School on "Advanced course on thermodynamics: Multiscale thermo fluid engineering of renewable energy systems", is organized by the ARGOS Project Consortium, which includes the following partners: "Ovidius" University of Constanta, Taurida National University, Istanbul Technical University, Technical University of Moldova, Technical University of Varna, Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) and Black Sea Universities Network.

The main objective of the ARGOS project: "BSUN Joint MASTER Degree Study Program on the Management of Renewable Energy Sources (RES)" is to achieve a stronger regional partnership and cooperation between the universities from the Black Sea Basin by the implementation of a joint Master Degree Program on the Management of RES and the sustainable development of the region.

The International Autumn School on "Advanced course on thermodynamics: Multiscale thermo fluid engineering of renewable energy systems", aims the development of cross-border exchange activities, facilitating direct contacts between students and professors, involving them in teaching, learning and joint studies, together with companies acting in the field of Management of RES.

The ARGOS Project is financed under the Joint Operational Programme BLACK SEA BASIN 2007-2013, Contract 1.3.1.66334.127, MIS-ETC 277 no. 44553/8.06.2011.

## **OBJECTIVES**

The objectives of the International Autumn School are the following:

- ❖ To provide knowledge beyond the state of the art on the advanced concepts in the field of Multiscale thermo fluid engineering of RES;
- ❖ To facilitate the information exchange regarding the potential of RES, regulations, environmental issues and best practices through joint courses and seminars;
- ❖ To promote research and innovation in the field of RES by joint teams of students;
- ❖ To facilitate the sharing of the e-learning resources and IT&C facilities dedicated to the educational process;
- ❖ To improve the quality in education by the exchange of best practices and external peer reviewing processes;

## **TARGETED AUDIENCE**

The International Autumn School is designed for:

- ❖ Students involved in Master Degree Programs
- ❖ Young professionals and junior researchers, including PhD students from academia and industry

## TOPICS

- ❖ Advanced technologies, processes and materials applied to systems with RES;
- ❖ Multiscale, multiphysics modeling and simulations on systems with RES;
- ❖ Multiscale thermo fluid engineering of RES;
- ❖ Risk assessment, vulnerabilities and the environmental impact of RES;
- ❖ Ecosystem services, eco-innovation and environmental restoration based on systems with RES;
- ❖ Cost analysis, advanced methods of economic analysis, exergo-economics and other similar approaches for systems with RES;
- ❖ Project management, quality assurance and other concepts for the management of projects dedicated to RES.

## **SCIENTIFIC AND ORGANISING COMMITTEE**

Prof. Larisa Bugaian - Technical University of Moldova, Republic of Moldova

Prof. Eden Mamut - "Ovidius" University of Constanta, Romania

Prof. Alim Mazinov - Taurida National University, Ukraine

Dr. Anna Moreno - Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA), Italy

Prof. Vencislav Valchev - Technical University of Varna, Bulgaria

Prof. Nilgun Yavuz - Istanbul Technical University, Turkey

## **REGISTRATION**

Applicants should register with Taurida V.I Verdnasky University

Prof. Alim Mazinov- [fotoenergy@gmail.com](mailto:fotoenergy@gmail.com)

Ana-Maria Paizan - [apaizan@univ-ovidius.ro](mailto:apaizan@univ-ovidius.ro)

## **VENUE, LOGISTICS AND ACCOMMODATION**

Venue: Taurida V.I. Verdnasky University, 4, Academician Vernadsky Ave., 95007

Simferopol, Crimean Autonomous Republic, Ukraine

Information on logistics and accommodation will be supplied by Taurida V.I. Verdnasky University

Prof. Alim Mazinov- Taurida V.I. Verdnasky University, Simferopol Ukraine

Tel/Fax: +380954982969

E-mail: [fotoenergy@gmail.com](mailto:fotoenergy@gmail.com)

## Program

Hour	Type	Monday, November 18 <sup>th</sup> , 2013	Tuesday, November 19 <sup>th</sup> , 2013	Wednesday, November 20 <sup>th</sup> , 2013	Thursday, November 21 <sup>st</sup> , 2013	Friday, November 22 <sup>nd</sup> , 2013	Saturday, November 23 <sup>rd</sup> , 2013			
9.00-10.50	Lecture	<i>Welcome speeches, Taurida National University, Ukraine</i>	<b>Modern GIS technologies in the renewable energy sector</b> <i>Vadim Yashenkov, Taurida National University, Ukraine</i>	<b>Technical visit at the Solar Power Plant</b>	<b>Multiscale thermofluid engineering of renewable energy systems</b> <i>Prof. Dr. Eng. Eden Mamut -OUC, Romania</i>	<b>Technical visit at the Wind Energy Park</b>	<b>Matchmaking of cross-border students and planning of mobility activities</b>			
		<b>Development of environmental society by the example of the Crimea</b> <i>Lyudmila Bagrova, Taurida National University, Ukraine</i>			<b>Solar energy - The development and prospects</b> <i>Alim Mazinov, Taurida National University,</i>			<b>Life styles and carbon foot prints,</b> <i>Prof. Dr. Michelle Dobre, University of Caen, France</i>		
10.50-11.00	Break									
11.00- 13:00	Lecture	<b>Energy and Environment: policy and legislation</b> <i>Oleksandr Rudyk, Taurida National University, Ukraine</i>	<b>The basic principles of conversion of solar radiation</b> <i>Alexei Shevchenko, Taurida National University</i>		<b>Technical visit at the Solar Power Plant</b>			<b>Posibilities of Biomass Valuation through Anaerobic Fermentation Processes</b> <i>Ana-Maria Paizan-Ovidius University of Constanta, Romania</i>	<b>Technical visit at the Wind Energy Park</b>	<b>Evaluation of the Autumn School Activities</b>
		<b>Management of environmental risks in the areas of sustainable development</b> <i>Victor Smirnov, Taurida National University, Ukraine</i>	<b>Modern production technology solar converters</b> <i>Vladislav Volodin, Taurida National University</i>					<b>ARGOS MOOC Presentation</b> <i>Claudiu Fercu- Ovidius University of Constanta, Romania</i>		<b>Closing of the Autumn School</b>
13.00-15.00	Lunch									
15.00-15.50	Lecture	<b>Wind and micro-hidro power plants in Azerbaijan</b> <i>Prof. Dr. Shahverdiyev ASTAN - Azerbaijan Technical Univ., Azerbaijan</i>	ARGOS Master Students presentations					<b>1D Model for Fuel Cells</b> <i>Claudiu Fercu- Ovidius University of Constanta, Romania</i>		Free program
15.50-16.00	Break									Departure of the participants
16.00-17.00	Lecture	Visit to the Science Crimea Center Visit to Botanical Garden Taurida National University	ARGOS Master Students presentations		ARGOS Project Partners Mid Term Meeting					
17.00-17.10	Wrap-up									