

# UNIVERSITAS STUDIORUM SPALATENSIS

## **SPLIT SUMMER SCHOOL STSS2018**

COURSE: EXPERIENCE THE RENEWABLES

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Web page: https://www.oss.unist.hr/summer-school

http://www.unist.hr/international-split-summer-school-2018/courses

### Main topics:

utilisation of renewable sources of energy

solar energy, wind energy and outdoor air as an energy source

• energy conversion and efficiency

 different technologies such as: flat plate solar thermal collector, solar dish (CSP), photovoltaic solar collector (polycrystalline, CdTe/CdS thin film), solar fixed system, solar tracker system, outdoor wind turbine (500 W), indoor wind tunnel with wind turbine (80 W), air-to-air heat pump, air-to-water heat pump.

#### Programme structure:

5-day course

theoretical introduction to the main topics

practical demonstrations, measurements and calculations

laboratory report templates will be provided

# Important dates:

Course dates: 03/09/2018 – 07/09/2018

Deadline for application: 01/07/2018
Payment due by: 10/07/2018
Confirmation of the course: 20/07/2018

Price of the course: 300 € (tax included)

Bed & breakfast: 6 nights - 1.422,00 HRK (approximately 190 EUR) (tax included) – contact person:

Marina Kero, email: marina.kero@scst.hr

## Programme plan:

### Day 1

- Theoretical work – Renewable sources of energy; Conversion of solar energy into heat (2 hours)

- Practical work - Solar thermal systems (4 hours)

#### Day 2

 Theoretical work – Conversion of solar energy into electricity (2 hours)

Practical work – Solar photovoltaic systems (4 hours)

## Day 3

- Theoretical work Conversion of wind energy into electricity (2 hours)
- Practical work Wind turbine operating parameters vs. wind speed (4 hours)

## Day 4

- Theoretical work Working principle of an air source heat pumps (2 hours)
- Practical work The operating parameters of air-to-air and air-to-water heat pumps (4 hours)

#### Day 5

- Overview of Students' reports and discussions (6 hours)

### Programme lecturers:

PhD Zlatko Jankoski, BSc Mech Eng, DIC

Tenured College Professor at the University of Split,

University Department of Professional Studies, Department

of Mechanical Engineering, Split, Croatia

Ivan Vrljičak, prof. spec. eng. mech.

Senior Laboratory Technician at the University of Split, University Department of Professional Studies, Department

of Mechanical Engineering, Split, Croatia