



STAGE-STE PROJECT

Presentation of University of Seville (Partner 44)

***Scientific and Technological Alliance
for Guaranteeing the European
Excellence in Concentrating Solar
Thermal Energy***

***FP7 Grant Agreement Nr. 609837
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STAGE-STE Consortium



PARTICIPANT NO.	ORGANISATION NAME	COUNTRY
1	CIEMAT	SPAIN
2	DLR	GERMANY
3	PSI	SWITZERLAND
4	CNRS	FRANCE
5	FISE	GERMANY
6	ENEA	ITALY
7	ETHZ	SWITZERLAND
8	CEA	FRANCE
9	CYI	CYPRUS
10	LNEG	PORTUGAL
11	CTAER	SPAIN
12	CNRS	ITALY
13	CENER	SPAIN
14	TECN	SPAIN
15	UEVORA	PORTUGAL
16	IMDEA	SPAIN
17	CRAN	UK
18	TKN	SPAIN
19	UNIPA	ITALY
20	CRS4	ITALY
21	INESC-ID	PORTUGAL
22	IST-ID	PORTUGAL

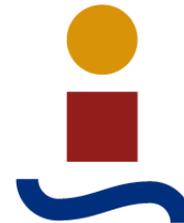
PARTICIPANT NO.	ORGANISATION NAME	COUNTRY
23	SENER	SPAIN
24	AREVA	FRANCE
25	HITIT	TURKEY
26	ACCIONA	SPAIN
27	SCHOTT	GERMANY
28	ASE	ITALY
29	ESTELA	BELGIUM
30	ASNT	SPAIN
31	KSU	SAUDI ARABIA
32	UNAM	MEXICO
33	SUN	SOUTH AFRICA
34	CSERS	LIBYA
35	CSIRO	AUSTRALIA
36	FUSP	BRAZIL
37	IIECAS	CHINA
38	UDC	CHILE
39	UCAM	MOROCCO
40	FBK	ITALY
41	CNIM	FRANCE
42	COBRA	SPAIN
43	SUNCNIM	FRANCE
44	US	SPAIN

- ❖ The University of Seville (US) is an institution that provides the public service of superior education by means of studies, teaching, and research, as well as the generation, development and diffusion of knowledge to serve citizens and society.
- ❖ The US has more than 500 years of experience in knowledge management, with studies adapted to the **European Higher Education Area (EHEA)**.
- ❖ The US is the main public university in Andalusia, with the highest number of students. It is a great team of **more than 70000 members**.
- ❖ The US is committed to quality and excellence, with the European Certificate of Quality for the EFQM model of Excellence, and distinction as a **Campus of International Excellence**.
- ❖ The US is composed by:
 - 27 University Centres / **5 Engineering Schools**.
 - 133 University Departments / **12 Engineering Departments**.

Higher Technical School of Engineering



- ❖ The Research Groups participating in the STAGE-STE project develop their activities at the Escuela Técnica Superior de Ingeniería (ETSI).
- ❖ From its establishment in 1963, the ETSI has matured and the number of graduates rises to over 8000. At the moment, the ETSI has almost 6000 students, 480 professors and an annual number of graduates of over 400 engineers.
- ❖ The ETSI offers:
 - 8 Engineering Degrees.
 - 4 Master's Degrees.
 - 7 Doctoral Programs.



Escuela Técnica Superior de
INGENIERÍA DE SEVILLA



ETSI's main activities



The main objective of the ETSI as member of the US is to provide a public education service, and to develop research and provide service to the society in general and to the industrial sector in particular:

- ❖ **R&D Projects.**
- ❖ Technical Reports.
- ❖ Technical Advice.
- ❖ Test and Measurements.
- ❖ Audit Services.
- ❖ Organisation of specialised courses.

Mainly in the following sectors:

- ❖ **Energy.**
- ❖ Environment.
- ❖ Aeronautical.
- ❖ ICTs.
- ❖ Industrial Engineering.
- ❖ Manufacturing Technologies.
- ❖ Materials & Nanotechnology.
- ❖ Transport & Infrastructures.

Solar Energy Test Facilities at ETSI

- ❖ Station of Radiometric and Meteorological Measurements.
- ❖ Solar Fresnel Collector.
- ❖ Sky cameras and sensors network for short-term prediction of solar radiation.
- ❖ 10 kW Parabolic Dish with Stirling Engine.
- ❖ Test Bench for Parabolic Trough Receivers.
- ❖ Testing Facilities of Photovoltaic Solar Energy.
- ❖ Test Bench of Low Temperature Home Solar Equipment.
- ❖ Double Effect Absorption Chiller.
- ❖ 4000kg Hydroquinone PCM Storage Vessel.



Other ETSI's Test Facilities



Insert Fatigue Test at Constant Temperature
(Maximum Load 1 MNI)



Static Test at Low-High
Temperature

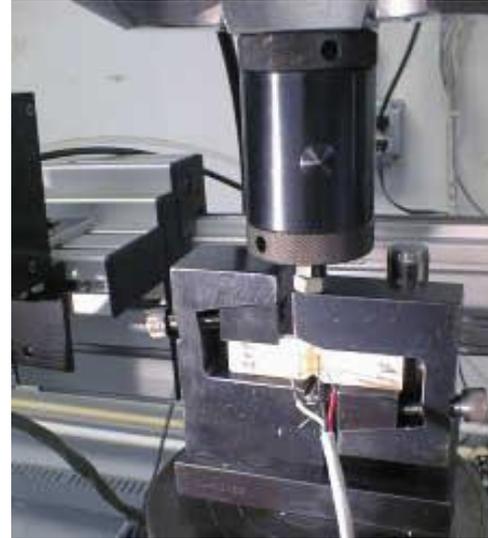
Other ETSI's Test Facilities

Climatic Chamber

Range
-70 /+110°C



Test in Static Machine



Vibration Test System V875-HBT 640

Sine force peak 35.6 kN
Slip table 1220x1220mm

Role in the STAGE-STE Project



US will participate in the following work packages (WP):

- ❖ **WP1:** Consortium Governance and Management Issues.
(1.5 man-months)
- ❖ **WP2:** Integrating Activities to Lay the Foundations for Long-lasting Research Cooperation.
(3.0 man-months)
- ❖ **WP3:** Enhancement of STE Research Facilities Cooperation.
(9.0 man-months)
- ❖ **WP4:** Capacity Building and Training Activities.
(4.0 man-months)
- ❖ **WP5:** Relationship with Industry & Transfer of Knowledge Activities.
(8.0 man-months)
- ❖ **WP12:** Point Focusing STE Technologies.
(20.0 man-months)



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