



The Universitat Politècnica de València certifies that

CARLES LARA LLAÓ

ID 52218769Y, has completed and passed the assessment tests set out in the course **SOLAR POWERED WATER SYSTEMS (ED. 2022/23)**, held on 2022-2023 academic year of 30 distance hours, equivalent to 3 ECTS credit hour, and it witness whereof, it is issued this certificate.

La Universitat Politècnica de València certifica que

CARLES LARA LLAÓ

con DNI número 52218769Y, ha realizado y superado las pruebas de evaluación establecidas en el curso **SOLAR POWERED WATER SYSTEMS (ED. 2022/23)**, realizado en el curso académico 2022-2023 de 30 horas a distancia, correspondientes a 3 créditos ECTS. Y para que conste a los efectos oportunos, se expide el presente certificado.



# Grade Report for Carles Lara Llaó

<b>Course Grade: -</b>			
Gradebook Item	Grade	Due Date	Comments
PVWPS_Final-EXAM (M0 to M10)	  8.96 / 10	-	
PVWPS_M00	  9.45 / 10	-	
PVWPS_M01	  10 / 10	-	
PVWPS_M02	  8.03 / 10	-	
PVWPS_M03	  9.52 / 10	-	
PVWPS_M04-Part1	  6.9 / 10	-	
PVWPS_M04-Part2	  8.8 / 10	-	
PVWPS_M04-Part3	  6.7 / 10	-	
PVWPS_M05	  8.04 / 10	-	
PVWPS_M06	  9.38 / 10	-	
PVWPS_M07	  10 / 10	-	
PVWPS_M08	  1.6 / 10	-	
PVWPS_M09	  8.37 / 10	-	
PVWPS_M10	  10 / 10	-	

# Solar Powered Water Systems



- The course is an in-depth introduction to solar-powered water systems for humanitarian and development projects.
- The course is online (self-paced training) with asynchronous tutorials and tests (continuous evaluation) on the Universidad Politécnica de Valencia (UPV) training platform.
- The teaching-learning process is carried out with videos recorded at the UPV, and includes a book containing all the subjects, topics, and graphics discussed in the videos. Several documents, made-for-purpose solar pumping tools, and Excel spreadsheets are provided for various modules.
- The training material includes practical exercises proposed and solved (in Excel and using commercial software).

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[www.cursofotovoltaica.com/solar-powered-water-systems/](http://www.cursofotovoltaica.com/solar-powered-water-systems/)

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The UPV Lifelong Learning Centre training course 'Solar Powered Water Systems' introduces the use of photovoltaic energy solutions for water supply systems. The course describes the various configurations and components in solar powered water systems (SPWS) and the criteria for selecting, assembling, and utilising these solutions to provide water using solar energy. Economic comparisons between solar and other pumping technologies are also explained.

The modules are based on real field experience collected during onsite visits to more than 80 refugee camps and communities in 12 developing countries. The course is especially suited for humanitarian and development workers who need the necessary expertise to start using SPWS in their projects worldwide.

Registration for this postgraduate course is open and students may begin at any time of the year. Enrolled students who pass the examinations of the various modules will receive a certificate issued by the university.

#### Instructors:

**Alberto Ibanez Llario (IOM), Asenath Kiprono (OXFAM), PhD. Salvador Segui-Chilet (UPV), and PhD. Pablo González Altozano (UPV).**

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The online course development is a collaboration between the **Global Solar and Water Initiative** (a programme developed by the International Organization for Migration) and Oxfam (with funds from **USAID's Bureau of Humanitarian Assistance** and the **Universidad Politécnica de Valencia**).



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