

NEXTOWER WORKSHOP - Advanced materials for high temperature concentrated solar power (CSP) towers

9 June 2020

11.30-11.40		MORNING SESSION Intro	
Chairs: Antonio Rinaldi (ENEA), Isella Vicini (Warrant Hub S.p.A.), Elena Melotti (Warrant Hub S.p.A.)			
1) Novel high efficiency solutions for the EU leadership in the next generation of solar energy harvesting: the case of NEXTOWER H2020 Project			
1	11.40-11.50	EU framework programmes supporting innovation	Isella Vicini (Warrant Hub S.p.A.); Elena Melotti (Warrant Hub S.p.A.); Massimo Rinaldi (BEWARRANT S.P.R.L.)
2	11.50-12.00	Recent trends in energy materials research and European perspectives	Lorenzo Malerba (CIEMAT)
3	12.00-12.10	The Future Essential Roles of STE Plants	Luis Crespo (Protermosolar)
4	12.10-12.20	NEXTOWER Project: Advanced materials solutions for next generation high efficiency concentrated solar power (CSP) tower systems	Antonio Rinaldi (ENEA SSPT)
2) Ceramic Materials for Next Generation Solar Receivers			
5	12.20-12.30	New high performance SiC-based solar receivers for CSP	Valentina Casalegno (Politecnico di Torino DISAT); Luca Ferrari (EngiCer); Victor M. Calendario (LiqTech International A/S); Sandro Gianella (EngiCer); Monica Ferraris (Politecnico di Torino DISAT)
6	12.30-12.40	Thermophysical characterization of ceramic materials for next generation solar receivers	Luca Laghi (CertiMaC S.c.a.r.L); Giulia De Aloysio (CertiMaC S.c.a.r.L); Victor M. Calendario (LiqTech International A/S); Haris Kadrishahic (LiqTech International A/S); Luca Ferrari (EngiCer); Sandro Gianella (EngiCer); Antonio Rinaldi (ENEA SSPT)
7	12.40-12.50	New accelerated ageing test bench and X-ray tomography for non-destructive characterisation of SiC ceramic receivers for concentrated solar power	Inmaculada Cañadas Martínez (CIEMAT-Plataforma Solar de Almería); Jesus Fernandez-Reche (CIEMAT-Plataforma Solar de Almería); Claudio Mingazzini (ENEA SSPT-PROMAS-TEMAF); James Marrow (Oxford University); Yang Chen (Oxford University); Matteo Scafé (ENEA SSPT-PROMAS-TEMAF); Victor M. Calendario (LiqTech International A/S)
8	12.50-13.00	Towards the market through STANDARDS	Ana Mariblanca Sánchez (Spanish Association for Standardization UNE)
13.00-13.30		Questions and Answers Session	

15.00-15.10		AFTERNOON SESSION Intro Chairs: Antonio Rinaldi (ENEA), Isella Vicini (Warrant Hub S.p.A.), Elena Melotti (Warrant Hub S.p.A.)	
3) Challenges and Solutions for Higher-Temperature Thermal Storage			
9	15.10-15.20	SOLEAD Lead Facility: from the conceptual design to the operation	Ivan Di Piazza (ENEA); Amelia Tincani (ENEA); Mariano Tarantino (ENEA); Massimo Valdiserri (ENEA); Serena Bassini (ENEA); Ranieri Marinari (DICI DICI University of Pisa); Antonio Rinaldi (ENEA); Luca Turchetti (ENEA)
10	15.20-15.30	High Temperature Corrosion of a Lean Alloyed FeCrAl-steel the Effects of Impurities in Liquid Lead	Peter Dömstedt (KTH, Royal Institute of Technology); Jesper Ejenstam (Kanthal, part of Sandvik Group); Peter Szakálos (KTH, Royal Institute of Technology)
11	15.30-15.40	Engineering challenges in high temperature liquid lead storage for CSP air tower systems	Antonio Rinaldi (ENEA); Giuseppe Barbieri (ENEA); Damiano Vitale di Maio (SRS); Emanuele Rizzo (SRS); Amelia Tincani (ENEA); Ivan Di Piazza (ENEA); Jesus Fernandez (CIEMAT-Plataforma Solar de Almería); Antonio Avila (CIEMAT-Plataforma Solar de Almería); Claudio Testani (CALEF)
12	15.40-15.50	Challenges and handicaps on the design an efficient beam-down system at an existing heliostat field layout	Amaia Mutuberria (CENER); Marcelino Sánchez (CENER); Claudio Testani (CALEF); Jesus Fernandez (CIEMAT-Plataforma Solar de Almería); Antonio Rinaldi (ENEA); Eduardo Zarza (CIEMAT-Plataforma Solar de Almería)
13	15.50-16.00	Manufacturing the SOLEAD main vessel: the choice of the Weld Overlay Cladding process	Eduard Kosykh (Walter Tosto S.p.A.), Tommaso Di Bernardino (Walter Tosto S.p.A.), Davide Quintiliani (Walter Tosto S.p.A.)
4) From Modeling towards Exploitation of NEXTOWER Results			
14	16.00-16.10	Materials modelling under extreme conditions in NEXTOWER project: solar receivers and liquid lead thermal storage	Sergio Estravis (ICAMCyL); Nuno Vinha (ICAMCyL); Carlos Gonzalez Vegue (ICAMCyL); Santiago Cuesta-Lopez (ICAMCyL)
15	16.10-16.20	Enablers and Barriers for a wider deployment of CSP technology in Europe	Fabio Maria Aprà (R2M Solution Spain SL), Raymond Sterling (R2M Solution Spain SL), Sander Smit (R2M Solution Spain SL)
16.20-17.00		Questions and Answers Session	

PARTICIPATE TO THE WORKSHOP FOR FREE: FILL IN THE FOLLOWING FORM

Deadline June 7th, 2020

<https://docs.google.com/forms/d/e/1FAIpQLSe1Kui28uwgZ07OtUuMA2cFPh1BrKDivGyP3R9-anUXcSgLCw/viewform>



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