



# 16NRM06 EMIRIM Improvement of emissivity measurements on reflective insulation materials

## Workshop/training session for stakeholders and end-users from industry

26th November 2018

Welcome  
Introduction  
Agenda

- ▶ **Welcome at LNE**
- ▶ **Presentation of attendees**
- ▶ **Agenda**



## Agenda

<u>Num</u>	<u>Time:</u>	<u>Item:</u>	<u>Partner:</u>
1	14:00	Welcome at LNE. Agenda of the workshop. Presentation of attendees.	LNE, all
2	14:10	Introduction to the EMIRIM Project : Structure; Partners; Presentation of WP1; Presentation of WP2 Objectives	LNE
3	14:20	WP2: Presentation of end-users techniques studied in the project. Technical details about instruments involved in the project.	ZAE
4	14:30	Training : - What total hemispherical emissivity must be measured for the application? - What is actually measured by end-users techniques? - Selection of a temperature for calculation of total emissivity from spectral emissivity results.	LNE
5	14:45	Training : Review of standards : - EN 16012, EN15976, standards related to emissivity of glasses, - highlight on recommendations for extrapolations of total hemispherical emissivity from near-normal spectral or total emissivity results.	ZAE
6	15:00	WP1: Reference samples and reference techniques Task 1.1: Provision of appropriate reference samples A1.1.1 to A1.1.3 : Preliminary reference samples Selection of the types of samples (reasons for the selection, samples produced, emissivity (results)).	PTB



## Agenda

7	15:10	A1.1.5 to A1.1.7 : foils selected for the project, analysis of angular distribution of reflection.	LNE
8	15:20	A1.1.8 : modelling of angular distribution of reflexion for textured surfaces.	Aalto
	15:35	Coffee break	
9	15:50	A1.1.9 : production of samples with specific surface texture	PTB, IPK
10	16:00	Task 1.2: Improvement of reference techniques Short presentations of reference techniques (principle of measurement, performance).	PTB, LNE, DTU
11	16:25	Task 2.1: Investigation of industrially used measurement techniques First results of characterizations of integrating spheres and of TIR100-2. Results of first comparisons.	LNE
12	16:40	Training : Industrially used measurement techniques - Influence of multi-reflections when using integrating spheres or TIR100-2. Procedures for correction. - Main sources of uncertainty (integrating spheres and TIR100-2).	ZAE, LNE
13	16:55	Questions on presentations	all
14	17:10	Questions to Stakeholders and end-users: - Does the project cover the needs? - Point of view of the stakeholders and end-users on the technical work planed in the project. - Any improvement of activities in the project? - Other needs related to emissivity measurements. - Participation of Stakeholders.	all
	17:25	Conclusions	all
	17:30	End of the meeting	

