



# UIE - AMPERE PhD INTENSIVE COURSE HES 2023 3 – 9 MAY 2023



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## PROGRAM

	WEDNESDAY 3rd	THURSDAY 4th		FRIDAY 5th		MONDAY 8th	TUESDAY 9th
8.30 - 09.30		WELCOME course presentation M.Forzan		SOLID STATE MW HEATING		Power electronics for Induction Heating [PEIH_1]	[PEIH_2]
9.30 - 10.30		ELECTROHEAT TECHNOLOGIES FOR SUSTAINABILITY [ETS_FD]		SOLID STATE MW HEATING		[PEIH_1]	[PEIH_2]
10.30 – 10.45		COFFEE BREAK		COFFEE BREAK		COFFEE BREAK	COFFEE BREAK
10.45 - 11.45		[ETS_FD]		[ETS_KVR]		[ETS_EB]	[ETS_PANEL]
11.45 - 12.45		GROUP SELECTION		[ETS_KVR]		[ETS_EB]	[ETS_PANEL]
		LUNCH - BAR 3 SCALINI		LUNCH - BAR 3 SCALINI		LUNCH - BAR 3 SCALINI	LUNCH - BAR 3 SCALINI
14.00 - 15.00		LAB. 1	LAB 2	LAB. 1	LAB 2	TIME FOR PREPARING THE PRESENTATIONS	Presentation GROUP1
15.00 - 16.00		FOOD PROCESSING	H <sub>2</sub> O PROCESSING	FOOD PROCESSING	H <sub>2</sub> O PROCESSING		Presentation GROUP 2
16.00 - 17.00							CONFERENCE WELCOME

## LECTURERS AND TOPICS

### ELECTROHEAT TECHNOLOGIES FOR SUSTAINABILITY [ETS]

Prof. Egbert Baake, Leibniz Hannover University, *“Defossilisation of industrial heating processes using electrothermal technologies”*

Prof. Fabrizio Dughiero, University of Padova, *“Electro technologies for sustainable processes”*

Prof. Koen Van Reusel, Catholic University of Leuven, *“Industrial added value by interaction of electromagnetic energy with materials. Overview of technologies”*.

### SOLID STATE MW HEATING

Dr. Erika Menosso, Electrolux A.G. *“Solid state MW generators”*

### POWER ELECTRONICS FOR INDUCTION HEATING

Prof. Oscar Lucia, University of Zaragoza, *“Introduction to power electronics and domestic induction heating”*

Dr. Héctor Sarnago, University of Zaragoza, *“Advanced power conversion techniques for induction heating”*

Dr. Pablo Guillen, University of Zaragoza, *“Advanced control techniques and multi-load systems for induction heating”*

### LABORATORY GROUP 1

Anna Maria Cavazzini, *“Technical tests to assess performance of a microwave oven with a solid-state generator”*

### LABORATORY GROUP 2

Matteo Lazzarin, *“Drying of refractory bricks using a laboratory-scale RF machine”*

Matteo Lazzarin, *“Domestic water heating: efficiency comparison between an induction hob and an infrared electric stove”*