

HANDS ON LC3 PRODUCTION

October 6-11, 2024

The Latin American Technology Resource Center (TRC LATAM) is launching the second “Hands on” seminar on clay calcination, which will take place from October 5-12, 2024 in Santa Clara, Cuba. The seminar will include

- Lectures with latest updates on issues related to clay survey, calcination and grinding, cement production, and durability of LC3 concrete.
- Lab activities on clay and LC3 cement characterization
- Field work at a clay deposit, including sample collection and processing
- Participation on a real clay calcination trial at the LC3 Pilot Plant UCLV
- Visit to the natural exposure site at cayo Santa Maria

Date	Activity	Details
October 6th (Sunday)	Arrival of participants	Accommodation at Santa Clara city
	18:00: Welcome cocktail	In Santa Clara
October 7th (Monday)	8:30: Registration for the seminar	Transport available to UCLV
	9:00: Introduction of the course	
	9:15: Clays and survey of clay deposits	How to find suitable clays?
	10:15: Thermal activation of clays	Clay calcination and reactivity
	11:15: coffee break	
	11:30: Hydration of cements containing calcined clay & limestone	Up-to-date findings. Real case studies
	12:30: Organization of the lab work for the course	Workgroups of 3-4 people to be organized
	13:30: lunch at UCLV	
October 8th (Tuesday)	8:00: departure to a clay site	Remedios
	8:15: safety instructions	How to use the safety gear
	9:30-12:30: collecting real samples at clay deposit	Each workgroup will collect samples

	13:00: Lunch at Remedios historic center	
	14:00: depart to UCLV	
	15:00-17:00 Experimental work at lab	Characterization of collected samples
October 9th (Wednesday)	9:00: The manufacture of LC3 cement	Formulation, grinding, properties
	10:00: Applications of LC3	Concrete and mortar
	11:00: coffee break	
	11:15: Durability of LC3 concrete	Chlorides, carbonation, service life
	12:15: Impacts of LC3 production	LCA analyses. Online tool for LC3
	13:15: lunch at UCLV	
	14:00-16:00 Experimental work at lab	Cement characterization
	October 10th (Thursday)	8:00: departure to LC3 plant UCLV
8:15: safety instructions		How to use the safety gear
9:00-12:00: industrial trial		Calcination and grinding trial
12:00-13:30 Presentation of service providers <ul style="list-style-type: none"> • Calcination technologies • Admixtures for calcined clay applications • Real projects in operation 		Sponsoring companies are invited to present their products
13:30: lunch at UCLV		
15:00: Departure to Cayo Santa Maria		
October 11th (Friday)	9:00-10:00 Lecture Durability of LC3 concrete exposed under natural conditions	
	10:00-12:30: Visit to exposure site Punta Matamoros and sede	Site 1: directly on the shore Site 2: 500 m from seashore
	13:00 Lunch	
	15:00-17:00 Presentation of reports each team	10 minutes PPT per workgroup
October 12th (Saturday)	Return	

Economic information

Registration fees	
Seminar LC3 delegates	\$US 600
Seminar LC3 PhD students	\$US 400
Accommodation package	
(i) Santa Clara and cayo Santa María (Oct. 5-12)	\$US