

















OFFICIAL PROGRAM - FESP10

10th Conference on Fire Effects on Soil Properties

November, 18 to 21, 2025 | UFRO, Pucon Campus

ORAL PRESENTATIONS BY THEMATIC SESSION

DAY 1 Tuesday, November 18

Keynote Lecture: Antonio Girona-García "The Role of Post-Fire Soil Erosion in the Carbon Cycle"

Time	Presentation / Event
08:30 - 09:30	Registration
09:30 - 09:40	Opening Ceremony – Welcome words
09:40 – 10:20	Immersive experience "Tiempo Pewen" – MagmaLab
	/ am: nith-Ramírez – Universidad de Los Lagos, Chile lojas – Universidad de O'Higgins, Chile
10:20 – 11:00	Keynote Lecture: Antonio Girona-García – The Role of Post-Fire Soil Erosion in the Carbon Cycle
11:00 – 11:20	Coffee Break
11:20 – 12:00	Francisco Matus and Carolina Merino – Multiscale effects of extreme forest fires on soil recovery, nutrient cycling, and water dynamics in temperate forest ecosystems of south-central Chile
12:00 – 12:20	Luis D. Olivares-Martínez – The role of soil mineral fraction to protect and stabilize organic matter in fire-affected soils of Torres del Paine, Patagonia, Chile
12:20 – 12:40	Rafael Rubilar – Modeling the impact of fires on the growth and productivity of forests and plantations
12:40 – 14:30	Coffee Break
	/ pm: da – Universidad de Barcelona, España Merino – Universidad de La Frontera, Chile
14:30 – 14:50	Daniel Moya – Predicting potential burn severity in Central Spain (Severia)
14:50 – 15:10	Agustín Merino – Potential of thermal analysis techniques for assessing fire impacts on soils and pyrogenic organic matter
15:10 – 15:30	Gregorio Arone – Impact of burning hard yellow corn stubble on soil properties in Barranca, Peru
15:30 – 15:50	Camila Cifuentes Croquevielle – Post-wildfire decline of soil entomofauna in a temperate Andean forest and its impact on litter decomposition
15:50 – 16:10	Edilia Jaque – Between ashes and slopes: The configuration of post-fire geodynamic risk in Tomé and Santa Juana (Biobío region, chile)
16:30 – 18:00	Welcome wine reception



















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DAY 2 Wednesday, November 19

Keynote Lecture: Hugh Safford

"Fundamentals of Fire Ecology and Its Connections with Erosive Processes and Debris Flows"

Time	Presentation / Event
08:30 – 09:20	Registration
	/ am: ibilar – Universidad de Concepción, Chile. Nájera – Universidad de la Frontera, Chile.
09:20 – 10:00	Keynote Lecture: Hugh Safford – Fundamentals of Fire Ecology and Its Connections with Erosive Processes and Debris Flows
10:00 – 10:20	Leonor Calvo – Fire severity in extreme fire events is the key fire regime driver of ecosystem functioning
10:20 – 10:40	Jessica Castillo-Mandujano – Escalating fire severity in south-central Chile: a wake-up call for restoration and governance
10:30 – 11:00	Coffee Break
11:00 – 11:20	Cecilia Smith – Recovery of richness, structure, and soil properties in Andean Chilean temperate rainforests along a fire chronosequence
11:20 – 11:40	Rayo Pinto Prieto – Microbial community composition and nutrient associations two years after a large wildfire
11:40 – 12:00	Daniel Moya – Biological soil quality after post-fire restoration in Eastern Iberian Peninsula: thinning natural hyperdense regeneration after wildfires in <i>Pinus halepensis</i> (Mill.) forests
12:00 – 12:20	Andres Fuentes – Post-fire recovery in Araucaria araucana forests: overview of the China Muerta National Reserve a decade after the 2015 forest fire in the south-central Andes of Chile
12:20 – 14:00	Lunch Break
	/ pm: Matus – Universidad de La Frontera, Chile uentes – Universidad de La Frontera, Chile
14:00 – 14:20	Claudia Rojas Alvarado – Integrated post-fire assessment of soil–vegetation responses at landscape and site scales in Mediterranean and temperate forest ecosystems
14:20 – 14:40	Cindy Garnica Ojeda – Salvage logging and the recovery of species richness and structure of Andean Chilean forests after a fire occurred 10 years ago
14:40 – 15:00	Sebastian Gabriel Alfaro-Zepeda – Forest management by prescribed fire in a Pinus halepensis forest and its effects on the physical and chemical soil properties. Montgri Massif (Girona, Spain)
15:00 – 15:20	Yessica Rivas Tisnao – Assessment of biocrust-forming cyanobacterial consortia for post-wildfire ecosystem service restoration in Chile's central–southern macrozone
15:20 – 15:40	Coffee Break
15:40 – 17:00	Poster Session & Pitch Presentations (3 min per poster, evaluated – Best Pitch Award)
	Note: To participate in the 3-minute Pitch, please sign up at the registration desk on Day 1. Activity aimed at students.
	Each presenter will have 3 minutes to highlight their poster; evaluations will be conducted by members of the Scientific Committee as well as an in-room audience vote. The Best Pitch will receive an award and a winner's certificate issued by Universidad de La Frontera.
	All posters, whether or not they enter the contest, must already be installed at the start of this session, as there will be time for an initial walkthrough by participants. An extended poster viewing to discuss all posters in depth will take place on Day 3.
20:00 – 00:00	Social dinner (off-program activity)

















Journal
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DAY 3 Thursday, November 20

Keynote Lecture: Susana Paula

"Fire ecology and plant functional biology with an applied focus on post-fire assessment and restoration"

Time	Presentation / Event
08:40 - 09:00	Registration
	s / am: Zamorano – Universidad de La Frontera, Chile o Matus – Universidad de La Frontera, Chile
09:00 – 09:40	Keynote Lecture: Susana Paula – Soil fertility and fire proneness across scales
09:40 – 10:00	Alejandra Sterh – Effects of wildfires on the water balance of the basin: a case study of the Quepe River watershed
10:00 – 10:20	Paulo Fachín – Hydrological responses to fire in subtropical rainforest soils in southern Brazil
10:20 – 10:40	Agustín Merino – Impacts of service-learning education approach on university student's training in post-fire soil management
10:40 – 11:00	Sebastian Gabriel Alfaro-Zepeda – Forest management by prescribed fire in a Pinus halepensis forest and its effects its effects on the biological soil properties. Montgri Massif (Girona, Spain)
11:00 – 11:20	Coffee Break
11:20 – 11:40	Gerard Villà Òrrit – Soil effects of forest management with prescribed burns versus forest fires. The case of Vilanova de Meià (Spain)
11:40 – 12:00	Xavier Úbeda – Use of livestock as post-fire forest management and its effects on the physical and chemical soil properties. Cap de Creus (Girona, Spain)
12:00 – 12:20	Sebastian Gabriel Alfaro-Zepeda – Use of livestock as post-fire forest management and its effects on the biological soil properties. Cap de Creus (Girona, Spain)
12:20 – 13:40	Poster Session
	Reminder: All posters should have been installed since the start of Day 1; today there will be extended time to visit and discuss them in depth.
13:40 – 15:00	Lunch Break
	Afternoon – Optional
15:30 – 16:30	Science Café: The Fire and Soil Connection: Science in Dialogue Interviewees: Claudia Rojas and Susana Paula Julia
	An outreach activity that connects the congress content with the broader community. Live interview (in Spanish) with in-person audience and coffee available. Broadcast by UFRO-Medios

















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DAY 4

Friday, November 21

Field Excursion: China Muerta National Reserve

Time	Presentation / Event
07:00	Departure from Pucón
09:00 – 10:00	Breakfast / Coffee break in Melipeuco
10:30 – 11:30	Visit to experimental site: Salvage logging activity after 2015-fire and its consequences in plant regeneration, soil perturbation and bamboo cover, Dr. Cecilia Smith-Ramírez
12:00 – 17:00	Arrival and field activities in China Muerta National Reserve (guided tour along the trail, including Coffee break 2)
20:00	Return to Pucón

Note: Participants are strongly advised to wear warm outdoor clothing and sturdy footwear, as snow may still be present along the "Huellas del Puma" trail in China Muerta National Reserve. This field excursion is included in the conference registration fee.

















FESP10 - POSTER PRESENTATIONS LIST

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Reminder: All posters must remain installed from the beginning of Day 2 until the end of Day 3.

- **P1. Carolina Ojeda Leal** LANDOWNER RESTORATION PROJECTS IN FLORIDA, CHILE: LIMITATIONS AND OPPORTUNITIES FOR WILDFIRE PREVENTION ACTION PROMOTED BY PUBLIC INSTITUTIONS AND INTERNATIONAL ORGANIZATIONS.
- **P2. Gemma Ansola** RECOVERY OF FUNGAL COMMUNITIES IN SCRUBLANDS AND PINE FORESTS AFTER A HIGH SEVERETY WILDFIRE
- **P3. Luis E Sáenz De Miera** PROKARYOTIC DIVERSITY IN PINE FORESTS AFFECTED BY WILDFIRES ALONG THE ATLANTIC-MEDITERRANEAN CLIMATE GRADIENT
- P4. Karla Sánchez INCEPTISOLS AFFECTED BY A WILDFIRE, BIOBÍO REGION, CHILE
- P5. Elena Marcos Porras EFFECTS OF FOREST FIRE RECURRENCE ON THE DECOMPOSITION PROCESS
- P6. Antonio Girona-García WHAT DO WE KNOW ABOUT POST-FIRE SOIL EROSION MITIGATION?
- **P7. Antonio Girona-García** SOIL HEATING DURING WILDFIRES AND PRESCRIBED BURNS: A GLOBAL EVALUATION
- **P8. Diana Carolina Briñez Perales** EFFECTS OF BURNING ON THE COMPOSITION AND FUNCTION OF SOIL MICROBIAL COMMUNITIES IN THE GRASSLAND SAVANNA OF ARAUCA, ARAUCA, COLOMBIA
- **P9. Karla Erazo** IMPACT OF FIRE ON MICROBIAL ABUNDANCE AND ANAEROBIC FUNCTIONS IN FOREST TYPES ACROSS A CHRONOSEQUENCE
- **P10. Karol Guitard** INTEGRATING REMOTE SENSING AND FIELD DATA TO ASSESS POST-FIRE SOIL AND VEGETATION RESPONSES IN SOUTH-CENTRAL CHILE
- **P11. Ekaterina Kingsep** HYDROPHOBICITY IN BURNED AND UNBURNED VOLCANIC SOILS OF TEMPERATE RAINFORESTS AND PINE PLANTATIONS
- **P12. David Beltrán Marcos** EVALUATION OF SHORT-TERM EFFECTS OF FIRE SEVERITY ON SOIL FUNCTIONAL RESILIENCE IN A PINUS PINASTER ECOSYSTEM SUBJECTED TO POST-FIRE SALVAGE LOGGING
- **P13. Ximena Fadic Ruiz** EVALUATION OF WATER-REPELLENCY IN SOILS AFFECTED BY THE VALPARISO MEGA-FIRE OF FEBRUARY 2024
- **P14. Francisco Cereceda-Balic** BURNING SOIL OF DIFFERENT VEGETATION COVER TYPES IN A CONTROLLED COMBUSTION CHAMBER: UNDERSTANDING THEIR CONTRIBUTION TO WILDFIRE EMISSION FACTORS
- **P15. Marcela Carvajal** TOWARDS THE POST-FIRE ECOLOGICAL RESTORATION: RECOVERY OF BURN SOILS BY APPLYING A NATIVE AND FUNCTIONAL MICROBIAL CONSORTIUM