

International Graduate Course on Forest Ecophysiology: from cells to ecosystems

Parque Katalapi, R. de Los Lagos, Chile
January 8-16, 2015
<http://www.parquekatalapi.cl>



Organizers

Luis J. Corcuera (Universidad de Concepción, Chile)
Frida Piper (CIEP, Chile)
Aurora Gaxiola (IEB, Chile)
Hans Lambers (University of Western Australia)

Invited Lecturers

Juan Armesto (P. Universidad Católica de Chile)
Marilyn Ball (Australian National University, Australia)
Rafael Coopman (Universidad Austral de Chile)
Alvaro Gutiérrez (Universidad Austral de Chile)
Günter Hoch (University of Basel, Switzerland)
Rafael Oliveira (UNICAMP, Brazil)
Bruce Osborne (University College Dublin, Ireland)
Pablo Guerrero (Universidad de Concepción, Chile)
Michael Shane (University of Western Australia)
Matthew Turnbull (University of Canterbury, NZ)

Registration fee: Students (US\$300; 180000 Ch pesos). Professionals: US\$600; 350000 Ch pesos). This fee includes food, lodging, and course materials.

Information: contact Prof. Luis J. Corcuera at luis.corcuera@parquekatalapi.cl or visit the web page <http://www.parquekatalapi.cl>; Telephone 56-41-2203586; mobile 56992490228.

Application deadline: October 30, 2014

Course Description: This intensive theoretical-field graduate course spans over 10 days. It includes lectures, seminars, and practical classes in the field. The course will use the facilities of Parque Katalapi, located in Carretera Austral, Region de Los Lagos, Chile. This course is designed as an intensive immersion experience. It requires stamina, endurance, social skills, and patience. The course will be centered on theoretical and practical aspects of forest ecophysiology.



Topics of the course

- Introduction to forests: from cells to ecosystems
- Forest structure and resources use
- Ecophysiological methods and techniques in forest research
- Molecular, physiological, and morphological traits underlying forest communities adaptations
- Genetic variation and biogeography of forests
- Photosynthesis and growth under high CO₂
- Rubisco, regulation and physiology
- Photoinhibition and photoprotection. Pigment physiology

- Stomatal physiology and importance of mesophyll conductance
- Isotope analysis in the forest ecophysiology
- Forest carbon balance
- Physiology of carbon transport and balance
- Biotic and abiotic stress in the forest
- Living in low light
- Global warming effects on forests
- Cold acclimation and adaptations
- Volatile emissions by trees
- Root Ecophysiology and strategies for water and nutrient acquisition
- Biogeochemical cycles
- Nutrients acquisition strategies

Sponsors

- Facultad de Ciencias Naturales y Oceanográficas y Escuela de Graduados, Universidad de Concepción, Concepción.
- Centro de Investigación en Ecosistemas de la Patagonia
- Instituto de Conservación, Biodiversidad y Territorio, Universidad Austral de Chile
- Instituto de Ecología y Biodiversidad
- FONDECYT 11121175

