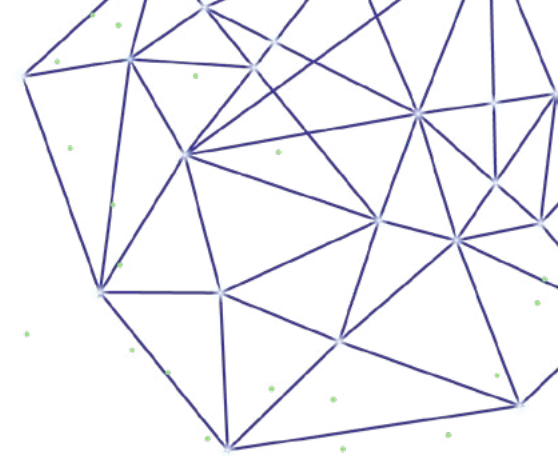




18-21 OCT. 2022
NANCY, FRANCE

DEEPSURF2022

ENERGY AND ECOLOGICAL TRANSITION CONFERENCE



MONDAY
17/10

TUESDAY
18/10

WEDNESDAY
19/10

THURSDAY
20/10

FRIDAY
21/10

OPENING CEREMONY

PLENARY SESSION

Carbon neutrality, when and how?

Coffee break

PLENARY SESSION

Carbon neutrality, when and how?

Lunch break

TECHNICAL SESSION #1

Energy transition: ambitions and limits

Coffee break

TECHNICAL SESSION #2

Carbon cycle and CCS, from deep to surface

FIELD TRIPS

TECHNICAL SESSION #3

From evidence-based science to social acceptability: example of coalbed methane

Coffee break

TECHNICAL SESSION #4

Tools, concepts and insights for decision-makers on land-use management

Lunch break

TECHNICAL SESSION #4

Tools, concepts and insights for decision-makers on land-use management

Coffee break

TECHNICAL SESSION #4

Tools, concepts and insights for decision-makers on land-use management

TECHNICAL SESSION #5

New methodological - technical approaches and their applications

Coffee break

TECHNICAL SESSION #5

New methodological - technical approaches and their applications

Lunch break

PLENARY SESSION

Energy, climate and conflicts

Coffee break

PLENARY SESSION

Energy, climate and conflicts

CLOSING CEREMONY

ICE BREAKER

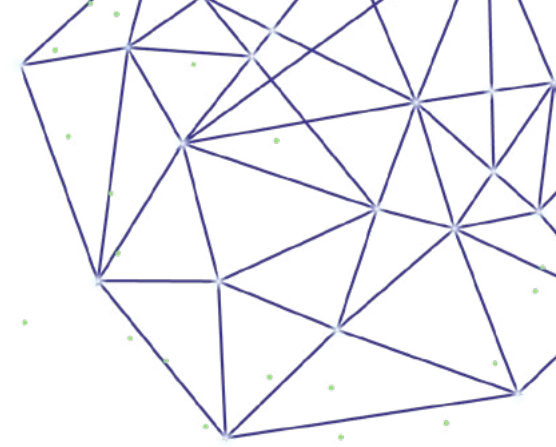
GALA DINNER



18-21 OCT. 2022
NANCY, FRANCE

DEEPSURF2022

ENERGY AND ECOLOGICAL TRANSITION CONFERENCE



MON.
OCT
17

🕒 17h - 19h

ICEBREAKER AT CONGRESS CENTER

TUE.
OCT
18

🕒 9h - 9h30

OPENING CEREMONY

🕒 9h30 - 11h30

PLENARY SESSION

Carbon neutrality, when and how?

Keynote: Michel Deshaies & Raymond Michels

🕒 9h30 - 10h

Laurent Saint-André

Identify strategies that optimize the carbon sink in forests: «the impossible equation?»

🕒 10h - 10h30

Jack Legrand

What roles for research to accelerate the development of carbon sinks in France?

🕒

10h30 - 11h00

Coffee break

🕒 11h - 11h30

Corinne Gendron

The social acceptability of transitions: beyond the concept of resistance to change

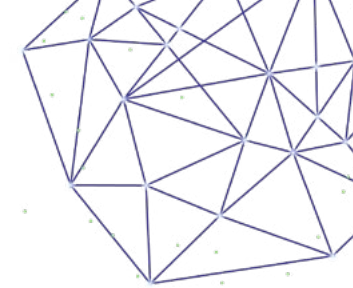
🕒 11h30 - 12h30

PANEL DISCUSSION

Carbon neutrality, when and how?

🕒 12h30 - 13h40

Lunch break



🕒 13h40 - 15h20

TECHNICAL SESSION #1

Energy transition: ambitions and limits

Keynote: Jacques Pironon

🕒 13h40 - 14h	Michel Deshaies	What limits to the development of wind energy? Lessons from France and Germany
🕒 14h - 14h20	Corinne Gendron	Social acceptability of energy transition paths
🕒 14h20 - 14h40	Laurie Tchong-Tchong	Energy transition in a petroleum rich area: the case study of the Pechelbronn sub-basin
🕒 14h40 - 15h	Jean-Daniel Bontemps	Drivers and limitations in wood biomass contribution to the energy mix of European countries
🕒 15h - 15h20	Xiuyan Liu	Cambrian shale gas preservation condition in the SE Sichuan Basin, a key parameter for gas strategy in China
🕒 15h20 - 15h40	Coffee break	



TUE.
OCT
18

🕒 15h40 - 17h

TECHNICAL SESSION #2

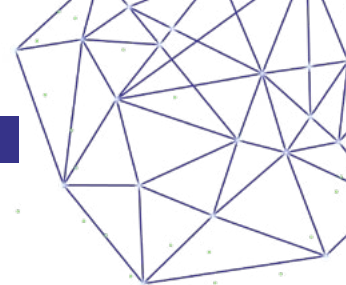
Carbon cycle and CCS, from deep to surface

Keynote: Serge Garcia

🕒 15h40 - 16h	Jacques Pironon	NECCS (Natural Emission of Carbon dioxide with Capture and Sequestration). The case study of Fonts-Bouillants (France)
🕒 16h - 16h20	Marie-Noëlle Pons	Evolution of aquatic Dissolved Organic Matter in forest aquatic systems
🕒 16h20 - 16h40	Thibaut Fleury	CCS in France: a review
🕒 16h40 - 17h	Clémentine Chirol	Mapping carbon stocks and storage capacity for different soil types and land uses over full soil profiles

🕒 19h - 00h

GALA DINNER AT NANCY CITY HALL



FIELD TRIP #2

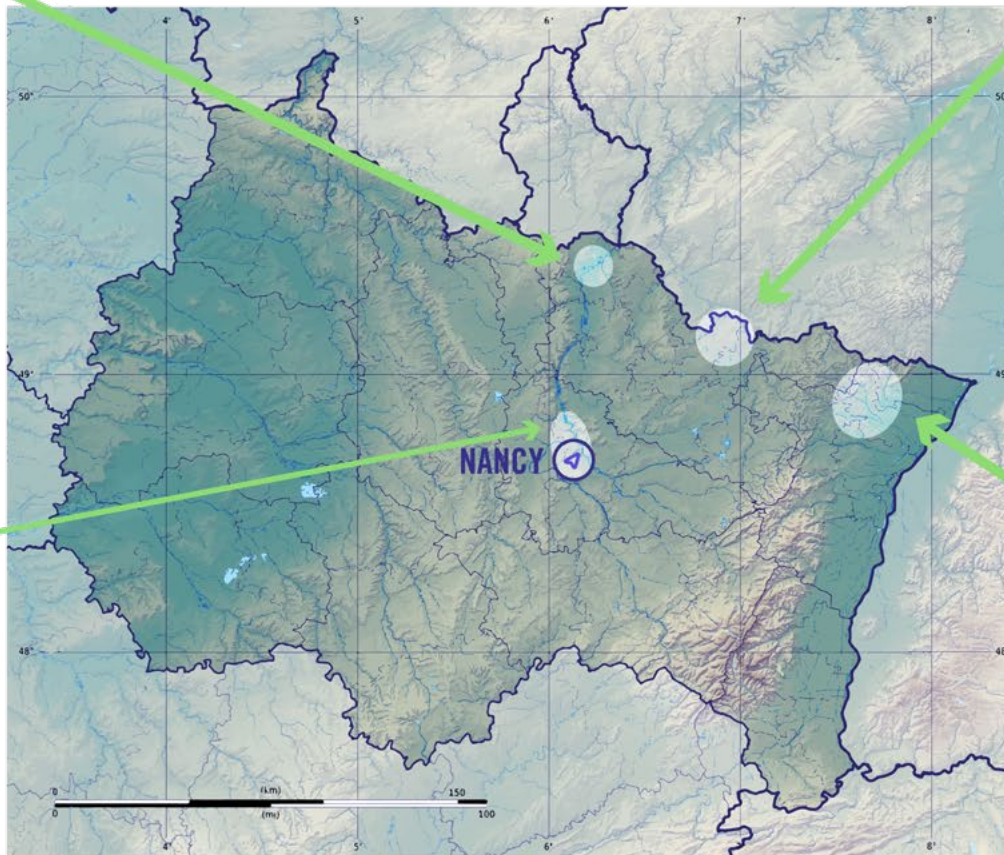


From Koenigsmacker anhydrite quarry to Cattenom nuclear power plant

FIELD TRIP #1



Blénod thermal power station and agro-ecological and energy transitions with the Bouzule farm



FIELD TRIP #4

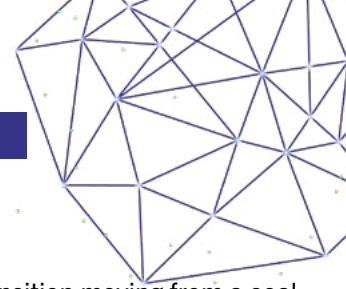


Past coal exploitation and present energy challenges in northern Lorraine

FIELD TRIP #3



Past oil exploitation and present geothermal energy in northern Alsace



#Field trip 1: Blénod thermal power station, agro-ecological and energy transitions with the Bouzule farm



Blénod thermal plant is deeply ancred in the Lorraine industrial legacy and a good example of energetic transition moving from a coal based thermal energy production to a combined cycle gas turbine plant.

In the afternoon, take a walk in the fresh air to visit Bouzule farm mixed polyculture-livestock experimental farm. At the interface between agro-ecological and energy transitions, Bouzule farm proposes one trajectory towards a sustainable agricultural activity, environmentally conscientious, socially responsible and in line with cutting-edge technological research. Its 300 ha cultured land and 200 milking cows and goats provide a wide open laboratory for research and innovation on culture and livestock as well as a relevant educational tool. Come visit this tomorrow's sustainable farm with its industrial methanization platform and methanation laboratory.

#Field trip 2: From Koenigsmacker anhydrite quarry to Cattenom nuclear power plant



Put on your safety helmet for a morning below the surface! We will go visiting the still exploited underground anhydrite quarry in Koenigsmacker. Since the 1970s, this true natural mine of white-gray "gold" has provided 400.000 tons of calcium sulfate each year used for cement and/or fertilizer.

After an underground barbecue, you will be visiting the third largest nuclear power station in France – Cattenom. With a gross production capacity of 5.200 MWe, its four reactors cover 70% of the electrical need of the Great East region. Come and discover the engine rooms and exteriors before slipping into your safety gears to enter the controlled zone.

#Field trip 3: Past oil exploitation and present geothermal energy in northern Alsace



Get to know the history of the first European oilfield, located in northern Alsace. Visit the French Oil Museum along with oil resurgences directly in the forest.

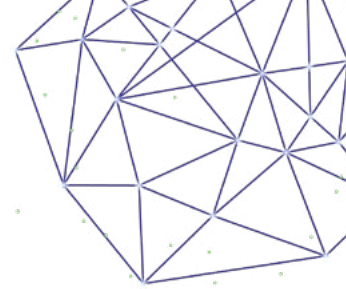
Enjoy a typical Alsatian lunch before visiting a geothermal plant in the Rhine Graben owned by the ÉS-Géothermie company. The geothermal loop currently includes a production well and two reinjection wells 5 km underground, for gross electricity production of approximately 1.7 MWe.

#Field trip 4: Past coal exploitation and present energy challenges in northern Lorraine



Discovery of the former coalfield in northern Lorraine, shaped by a century and a half of coal mining. The morning will be devoted to visiting the Explor Wendel museum in Petite Rosselle. The Explor Wendel Park makes up one of the largest and most complete complexes of coal mining buildings in Europe.

In the afternoon, a visit to the Emile Huchet coal-fired power plant in Carling will illustrate the evolution of the energy system within the framework of the energy transition.



THU.
OCT
20

🕒 9h10 - 10h50

TECHNICAL SESSION #3

From evidence-based science to social acceptability: example of coalbed methane

Keynote : Samuel Furfari

🕒 9h10 - 9h30	Salim Allouti	Geological evaluation of natural gas resources as a variable in the energy transition strategy: example of the Lorraine Carboniferous basin
🕒 9h30 - 9h50	Ahmad Mostafa	Pore-scale hydro-mechanical modeling of gas transport in coal matrix
🕒 9h50 - 10h10	Alan Hasselberger	The impact of emotions on public attitudes and social acceptability of coal gas exploitation after the outbreak of the conflict
🕒 10h10 - 10h30	Franck Amoih	Experimental characterization of adsorption properties of different coal seams for CO ₂ -ECBM
🕒 10h30 - 10h50	Giorgia Bressan	The global production network of unconventional gas: exploring the distances amongst producing and consuming countries
🕒 10h50 - 11h10	Coffee break	

TECHNICAL SESSION #4

Tools, concepts and insights for decision-makers on land-use management



Keynote : Christophe Schwartz

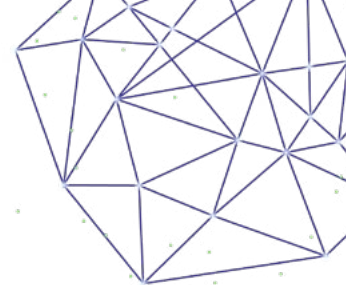
🕒 11h10 - 11h30	Amélie Cavelan	How climate change could affect our contaminated soils and groundwater tables: example of light petroleum contaminants (LNAPLs)
🕒 11h30 - 11h50	Loïc Yung	Fungal endophytes can improve the performances of <i>N. caeruleus</i> and <i>U. dioica</i> in a context of phytomanagement of marginal lands
🕒 11h50 - 12h10	Nathan Gillot	Spatio-temporal modelling of the spread of <i>Armillaria Ostoyae</i> : a fungus in coniferous forests
🕒 12h10 - 12h30	Marie Lapique	Recognizing nature's legal personhood: symbolic gesture or revolutionary legal theory?
🕒 12h30 - 14h	Lunch break	

Keynote : Radu Stoica

🕒 14h - 14h20	Valentin Mathieu	Structure and recent dynamics of the industrial roundwood trade from a network analysis perspective.
🕒 14h20 - 14h40	Toho Hien	Integrating soil natural capital into production functions of ecosystem services in agriculture
🕒 14h40 - 15h	Antoine Feraux	Soil ecosystem services and prospective as drivers for regional land planning: an interdisciplinary approach
🕒 15h - 15h20	Charis Anais Kanellos	A review on the accounting of land use changes in environmental impact assessments of wood products.
🕒 15h20 - 15h40	Coffee break	

TECHNICAL SESSION #5

New methodological - technical approaches and their applications

**Keynote: Philippe de Donato**

🕒 8h30 - 8h50	Romain Hemelsdaël	3D modeling of sedimentary basins in the context of energy transition and exploration of resource: example of the Permo-Carboniferous Lorraine Basin
🕒 8h50 - 9h10	Christophe Reype	Bayesian parameters estimation of an interaction point process for detection of multiple sources in groundwaters from hydrochemical data
🕒 9h10 - 9h30	Ankit Sagar	Forest resources estimation and mapping of dieback affected forest in Vosges mountainous region
🕒 9h30 - 9h50	Nikola Besic	Towards the enhanced observation of forest: an example of the conjoint use of different remote sensing sensors and the NFI
🕒 9h50 - 10h10	David W. Shanafelt	What do the parts say about the whole? Measuring uncertainty in ecosystem service correlations as a function of sample size
🕒 10h10 - 10h30	Coffee break	

Keynote: Simon Gauthier

🕒 10h30 - 10h50	Mohit Kumar	Efficient and long term usable V_2O_5 -AlGaN/GaN based Helium sensor for deep surface applications
🕒 10h50 - 11h10	Md. Iktiham Bin Taher	AlGaN/GaN-based HEMT Gas Sensors for Online Measurement of Underground Gases
🕒 11h10 - 11h30	Philippe de Donato	Natural Hydrogen in Lorraine coal basin: from new analytical developments to new exploration results
🕒 11h30 - 11h50	Carolina Dantas Cardoso	Understanding the source of helium in a potential reservoir in the Nièvre (France)

🕒 11h50 - 13h

Lunch break

🕒 13h - 15h15

PLENARY SESSION

Energy, climate and conflicts

Keynotes: Jacques Pironon & Yann Gunzburger

🕒 13h - 13h30

Glen Burridge

Extraordinary times: How European geoscience can respond

🕒 13h30 - 14h

Fabrice Lemoine

Electricity and heat : threats and opportunities in France for the energy transition

🕒 14h - 14h15

Coffee break

🕒 14h15 - 14h45

Samuele Furfari

No surf without Deep

🕒 14h45 - 15h15

Vitaliy Pryvalov

Could recent discoveries of gas resources serve as one of the key triggers for military conflicts: lessons of Russia's invasion of Ukraine?

🕒 15h15 - 16h15

PANEL DISCUSSION

Energy, climate and conflicts

🕒 16h15 - 16h45

CLOSING CEREMONY & YOUNG RESEARCHER AWARDS

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