

# Professional hazard safety at



Access to equipments is subject to approved by the researchers or the responsible engineers

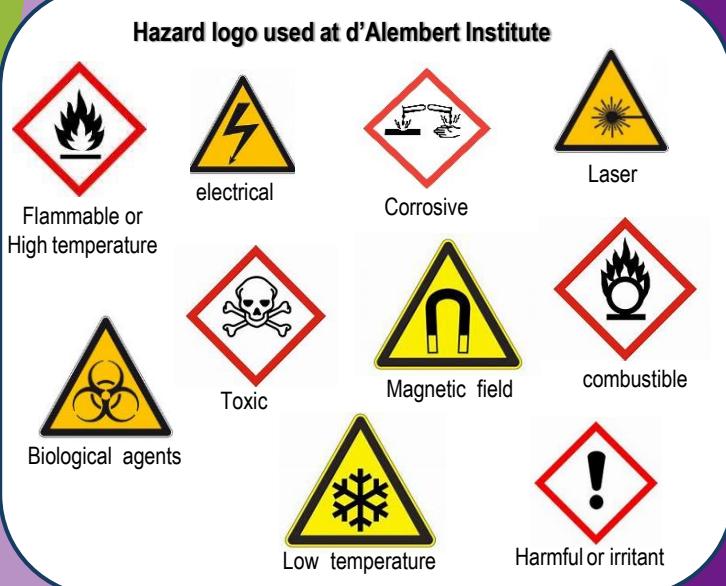


## IDA Technical Platforms

- Clean Room - Rasta Ghasemi - 55 73
- Microfluidic - Jean Pierre Lefevre - 56 13
- Characterization and test (materials and components)
  - AFM, ATG/DSC, FT-IR, Evaporator PVD – Arnaud Brosseau – 55 97
  - MEB and EDX – Rasta Ghasemi – 55 73

## Technical facilities

- Cell Culture - Frédéric Subra – 52 16
- Confocal imagery - Patrick Tauc – 52 22
- RMN 400 MHz - Stéphane Maisonneuve – 56 10
- Decay of fluorescence and nanophotonics - Jean-Frédéric Aubidert - 55 93
- Photonics sensors - Thanh Nguyen – 55 64
- Photonics cristals - Diep Lai – 55 71
- Molecular nonlinearities – Isabelle Ledoux – 55 67
- Micro-cavity lasers – Mélanie Lebental – 55 69
- Optoelectronics and RF – Bernard Journet – 55 63
- Biosensors – Claude Nogues – 52 10



## Screen work :

### Hazards

- aches and pain
- blurred vision
- stress



### Preventive measures :

- correct working position
- take a break every 2 hours

## Chemical hazard

### Hazards :

- inhalation
- absorption
- skin injuries



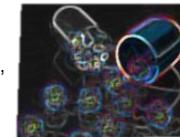
### Preventive measures :

- identification of products
- follow label and storage rules
- use collective (EPC) and individual (EPI) protection equipment
- waste treatment

## Nanoparticles

### Hazards :

- inhalation
- absorption (skin, digestive)



### Preventive measures :

- use collective (EPC) and individual (EPI) protection equipment
- waste treatment

## Laser radiation

### Hazards :

- eye burns/injuries
- skin burns



### Prevention :

- limited access (warning sign, lamp)
- use shield
- use goggles adapted to the wavelength
- do not expose eyes to laser beam during alignment or set-up

## Cryogenic fluids

### Hazards :

- burns
- asphyxi/ anoxia
- explosion



### Prevention :

- closed dewar with insulated handles
- use cryogenic gloves
- ventilated room, presence of oxymeter during work

## Mechanical hazards

### Hazards :

- collapse
- shear
- cut
- fall



### Preventive measures :

- proper training
- wear individual (EPI) protection equipment (safety shoes, goggle, gloves)

## Electrical hazard

### Hazards :

- electrocution (burns, muscle contraction)
- stroke



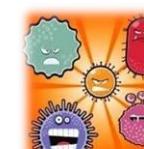
### Prevention :

- do not pull electrical wires
- do not modify electrical plugs
- do not overload sockets
- do not touch sockets with wet hands

## Biological agents

### Hazards :

- infection
- poisoning
- allergic reaction
- cancer (pathogenic agents)



### Preventive measures :

- access to L2 and L3 limited to authorised personnel
- use of collective protection (PSM)
- wear individual (EPI) protection equipment (gloves, hats and masks)
- waste treatment

## Magnetic fields

### Hazards :

- metallic object movement
- interference with pacemaker



### Preventive measures :

- limited access (warning sign, lamp)
- avoid mobile metallic objects (tools, screws)

## Handling & transport

### Hazards :

- lumbar and back pain
- falling loads
- shocks



### Preventive measures :

- wear individual (EPI) protection equipment (safety shoes, goggle, gloves)
- limit load weight, use carriers

# GENERAL SAFETY RULES

## In case of fire accident :

- ALWAYS warn a member of the team
- ALWAYS signal the accident in the hygiene and safety register and CONTACT the prevention assistant.



- Do not use elevators
- Do not go backwards
- In case of smoke, remain close the floor
- Once outside, walk to the assembly point



- Wait for authorisation before reentering the building

## DEFIBRILLATOR :

- Main entrance ENS
- Infirmary ENS : Building East 0081a



# USEFUL NUMBERS

Reception : 50 00

Department hygiene, safety, environment :

- Contact :
  - Patricia BERTHO, Prevention Advisor – 50 07
  - Roland ABIDOS, Fire Safety – ERP – 06 30 52 22 39

infirmary : 49 89

Physician : 49 82

Safety Center : 57 99

Medical Assistance : 15

Fire brigade : 18

Mobile phone : 112 - 114

## USEFUL WEBSITES

- Research and safety website :
  - L'Institut National de la Recherche en Sécurité (INRS) <https://www.inrs.fr/>
  - L'Institut de Radioprotection et de Sécurité Nucléaire (IRSN) <https://www.irsn.fr/FR/Pages/Home.aspx>
- Prevention guide advice for newcomers <http://www.dgdr.cnrs.fr/sst/cnps/guides/nxentrants.htm>

# HYGIENE & SAFETY BOOKLET



LABORATORY	BUILDING	PREVENTION ASSISTANT	PHONE	H & S REGISTER
LBPA	North	G. Mbemba	52 02	4S3
LuMin	North	B. Potier	56 43	En cours
PPSM	North	L. Galmiche	55 98	4U72a
SATIE	North	G. Robin	55 44	En cours
Plateformes IDA	North	R.Ghasemi	55 73	3X31

Specific Hazard	Contact	Phone
Clean Room	R. Ghasemi	55 73
Lasers	JF. Audibert	55 93
Biologic Risks	F. Subra	52 16
Informatic Risks	G. Robin	55 44