



WELCOME MANUAL

INSTITUTE OF CERAMICS AND GLASS





Content

1.	WELCOME	3
2.	LOCATION AND HOW TO ARRIVE	3
3.	ORGANIGRAM	6
4.	JOINING TO THE ICV	6
5.	USE OF SCIENTIFIC EQUIPMENT AND INTERNAL COSTS SYSTEM	9
6.	OTHER INFORMATION	10
7.	PREVENTION OF OCCUPATIONAL RISKS (SGPRL)	12
8.	MAPS	19





1. WELCOME

The Institute of Ceramics and Glass (ICV) is one of the 120 centers belonging to the Spanish National Research Council (CSIC). The CSIC is the largest public institution in Spain dedicated to research and one of the most renowned of the European Research Area (ERA). The CSIC is ascribed to the Ministry of Science, Innovation and Universities through the General Secretariat of Scientific Policy Coordination. The CSIC has three main areas of research: Life, Mater and Society. The ICV belongs to the Area of Mater and its function is to carry out research in the field of Science and Technology of Ceramics and Glass Materials.

The CSIC is the owner of the building and the entire infrastructure. The funding to carry out the research in the ICV comes from both public and private funds. There are different public organizations that finance research of the center. Among other, we can mention: Ministry of Science, Innovation and Universities (especially through projects of the National Research Plan and CDTI projects), the European Union, and the programs of different Autonomous Communities. Also, the ICV carries out research and innovation projects with the industrial sector, as well as technological advice. The Institute also offers technical assistance, documentation and library services to other centers and industries in the sector. The ICV regularly organizes courses and seminars. The Institute teaches the subject of Advanced Materials within the Master in Applied Chemistry of the UAM.

The headquarters of the Spanish Society of Ceramics and Glass (SECV) are located also at the ICV building. The SECV is a non-profit association, whose objective is the scientific and technical dissemination of ceramics and glass.

2. LOCATION AND HOW TO ARRIVE

The Institute of Ceramics and Glass is located in the c / Kelsen nº5, within the complex of Centers that the CSIC has on the Campus of the Autonomous University of Madrid in Cantoblanco.

https://goo.gl/maps/g8p8AFkz1Fr







It can be accessed by one of these three means of transport.

Buses: (Plaza de Castilla, Canillejas and Recintos Feriales), Tres Cantos y Alcobendas / S.S. de los Reyes pass or finish in the Universidad Autónoma de Madrid (Autonomous University of Madrid).

The bus stops are located in the University car park.

- Line 714 (Plaza Castilla Cantoblanco Comillas).
- Line 827 Alcobendas-Cantoblanco.
- Line 827A: San Sebastian de los Reyes-Alcobendas-Cantoblanco.
- Line 828: Field of Nations-Airport-Cantoblanco..

Schedules and Stops





RENFE Cercanías:

- Line C-4A Parla-Atocha-San Sebastián de los Reyes.
- Line C-4B Parla-Atocha-Colmenar Viejo.

Check the Cercanías-RENFE website for all the information about schedules and stops:

http://www.renfe.com/viajeros/cercanias/madrid/

By car:

Access from Madrid by the M-607 (Ctra. Colmenar): Exit 15 (Valdelatas-service road-Autonomous University) or exit 17 (M-616-Alcobendas-Autonomous University).

Access from Alcobendas by the M-616, Rotonda Autonomous University.

GPS coordinates:

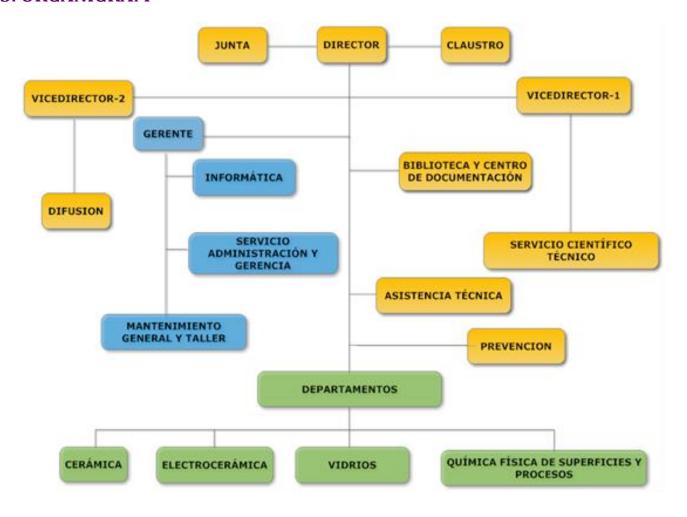
• Latitude: 40 ° 32 '07 "N

• Length: 3 ° 41 '18 "W





3. ORGANIGRAM



The ICV has 4 research departments and 5 common services.

Department	Contact Person	e-mail	Telephone
Ceramics	María Antonia Sainz	masainz@icv.csic.es	922266
Electroceramics	Marco Peiteado	mpeiteado@icv.csic.es	922216
Chemistry-Physics of Surface and Processes	Juan Rubio	<u>irubio@icv.csic.es</u>	922220
Glasses	Mª Jesús Pascual	mpascual@icv.csic.es	922211





Servicies

Departament	Contact Person	e-mail	Telephone
Director	Fausto Rubio Alonso	direccion.icv@csic.es	922104
Management	Rebeca Gómez de las Heras Méndez	Gerencia.icv@csic.es	922108
Administration			
Paymaster	Socorro Pulido Buñuel	spulido@icv.csic.es	922106
Maintenance and Mechanical Workshop		mantenimiento@icv. csic.es	922044
Library and Documentation	Yolanda de la Peña Cañete	<u>biblioteca@icv.csic.e</u> <u>s</u>	922182
Technical Assistance	José Jiménez García	jimenez@icv.csic.es	922052
Image and Design	Carmen Díaz Dorado	c.diaz@icv.csic.es	922046

4. INCORPORATION TO ICV

If you want to carry out research at the ICV, it is necessary to do the following procedures in Administration, floor 1, office 114.

Personal data will be registered in the Institute's database in order to follow the Occupational Risks Prevention regulation. The necessary documents will be signed according to each specific case. You will receive:

- An access card to enter the Institute.
- An email address, if applicable.
- A safety manual.
- A record sheet of PPE and Researcher responsibilities.





WORKING HOURS

The maximum number of hours of effective weekly work will be 37.5, except in the case of personnel in special dedication, in which case, the maximum number of hours of effective work will be 40.

The ICV has a mandatory time control system so, at the time of incorporation / hiring, you must submit a photo that will be incorporated into your magnetic card, if applicable. Short-term stays will receive card for the Prevention of Occupational Risks (SGPRL). There are two clocks located at the entrance of the Ground floor (next to the guard's room) and at the entrance of the Firs floor (next to the Administration). For reasons of Prevention, both entry and exit must be signed, as well as at any time when you leave the Center for any reason. Once your finish your research at the ICV, you must return the card in Administration.

EXPERIMENTS OUTSIDE THE LABOR SCHEDULE

Short-term research stays, who need to do research at the ICV during the weekend or on a holiday, must request authorization from the ICV management with the approval of the Head of Department or Unit. The rest of the staff must sign at the entrance and exit (it is recommended to enter and leave the building through Sor Juana Inés de la Cruz Street - floor 0).

If on any occasion it is necessary to leave a dangerous experiment (emanation of toxic gases, possible abnormal heating, danger of explosion, etc.) during the night, it is mandatory to notify to the security service the nature of the experiment and the laboratory in which It is taking place. It is also necessary to leave a contact telephone to the monitoring service.

HOLIDAYS

All personnel have the right to enjoy a vacation period of 22 working days for each full year of service, which will be requested for periods of at least 5 days. The days for own affairs will be those stipulated in the regulations.

Vacation and day requests for own affairs must be completed in the application available for this purpose on the CSIC Intranet ("Vacation and Permits") with a 15-day advance for holidays and 5 days for own affairs.





PARKING CARDS AND USE OF THE PARKING OUTSIDE THE LABOR HOURS

All vehicles that park in the parking lot of the ICV or in the streets that surround it (Kelsen, Safo, Sor Juana Inés de la Cruz or Newton) must have a parking card that must be requested by the Administration and must be placed in the vehicle in a visible place.

The presence of any vehicle outside working hours should be reported to the monitoring service.

ASSIGNMENT OF ALLOCATION JOBS

There are criteria for the allocation of spaces depending on the professional category and seniority. The departments will be responsible for allocating spaces temporarily while waiting for accessing a long-term position.

INDUSTRIAL OR INTELLECTUAL PROPERTY RIGHTS.

The rights on the results of the research generated at the ICV are property of the CSIC and must be treated as confidential during the five years following the end of the relationship with the Institute. Before beginning the research works in the center, an agreement that regulates the terms and conditions of confidentiality must be signed.

5. USE OF TECHNIQUES AND INTERNAL COST SYSTEM

The ICV has a Scientific-Technical Service that includes a series of laboratories and general techniques of common use. The operating rules can be found on the local website: www.icv.csic.es in the "Techniques" tab. The techniques associated with the Scientific-Technical Service have a cost per use. The cost of each technique is managed through a system of internal costs or by invoice, in the case of tests requested by persons or organizations outside the CSIC. The samples to be tested must be delivered together with the application form, correctly completed, to the technician responsible for the laboratory or technique. These application forms available the local ICV website are (http://www.local.icv.csic.es/tecnicas) along with additional information and the costs associated with the use of each technique or laboratory.





6. OTHER INFORMATION

REST AREAS

The ICV does not have a corporate dining room. There are dining rooms and restaurants in various faculties of the UAM campus as well as in the National Center for Biotechnology (CNB-CSIC). The ICV has two Rest Areas located on floor 1 (rooms 119 and 123) in which coffee, food and beverage vending machines are available, as well as refrigerators and microwave ovens for common use.

It is forbidden to store food overnight in refrigerators, cabinets or any other facility in the room. On Fridays, all food remains in the room will be removed.

• SEMINAR ROOMS, EVENTS ROOM AND PATIO

For the development of seminars, courses, meetings and PhD Thesis defense, the center have two rooms (109 and 120), a classroom (288) and an Assembly Hall. For the use of these ICV units, it is necessary booking in Administration or Reception (ext. 922100). The central Patio can be used to support technical scientific events (courses, seminars, meetings) or for celebrations associated with the operation of the center, in which all people of the ICV are invited. The use of the Assembly Hall and the Patio must have the express authorization of the Director of the Center.

• ICV-ICMM-ICP "Salvador de Aza" LIBRARY

The ICV has a library specialized in Ceramics and Glass Materials located on floor 1 (room 186). In this room you will find a series of computers with Internet access and X-Ray evaluation programs.

• INTERNET ACCESS

The center has Internet access via Ethernet network in offices and laboratories. There is also access via WIFI to the Internet through the EDUROAM system or through the opening of temporary guest accounts. The Maintenance Service is the responsible for managing the internal network. The use of computer resources is regulated by the Circular on the policy of use of computer resources and network infrastructure in the CSIC. The use of CSIC resources for downloading copyrighted content without the appropriate licenses is expressly





prohibited. The use of the center's network for special applications must be expressly authorized by the Director.

• e-MAIL AND COMPUTERS.

All center staff has an email account in the format "alias" @ icv.csic.es. The Computer Service is the responsible for managing the registration and cancellation of these accounts. The staff directory and your email address can be found on the center's website (www.icv.csic.es). There is a distribution list for all center staff (l-personal@icv.csic.es) moderated by direction and management. The use of email accounts is regulated by the "Circular on the policy of use of computer resources and network infrastructure in the C.S.I.C".

The Maintenance Service provides technical assistance for the configuration of the Institute's computers and those that are necessary for the development of the work research of the personnel assigned to the center and guests (laptops). The software licensed by the CSIC can be accessed on the CSIC Intranet.

• PHONE

For calls outside the ICV, dial 0 followed by the number you want to call. In the case of internal calls, dial 922 followed by the dispatch number / Laboratory. During the morning, the telephone control is at the Reception (extension 922100). The rest of the time the control service is transferred to the security post located on the ground floor (Extension 922034).

REPROGRAPHY

The ICV has a reprography service located on floor 1 (room 133) in which photocopies can be made personally. A code provided by the Computer Service Manager must be available.

WAREHOUSE AND SHOPPING

The warehouse is located on the ground floor (room 048). It contains basic stationery items and laboratory material. To access the services of the warehouse it is necessary to provide the internal account for making the correspondent charges. In the warehouse, purchases made outside the center are also processed and collected.







7. PREVENTION OF OCCUPATIONAL RISKS (SGPRL)

Prevention of Occupational Risks is a legal requirement (Law 31/1995), creating a healthy, healthful and safe work environment is everyone's responsibility, depending on the ability to make decisions and actions.

The basic principle in Prevention is to eliminate the risk. If it is not possible, the necessary protection measures are evaluated and established: always first collective measures (forced ventilation / extraction; showcase work; gas detectors; environmental dosimetry ... etc) and Ultimately, Personal Protective Equipment (PPE), ADEQUATE, WELL MAINTAINED AND WITH USE CONTROL (—in case of respiratory protection—).

Prevention is essential and must be integrated in all areas and at all levels.

By definition PREVENTION must be PROACTIVE: to anticipate, predict, take immediate measures in the event of any small incident, perform specific medical-labor examinations with the periodicity corresponding to the risks of each position and the characteristics of the person, notify changes, special sensitivities (pregnancy / breastfeeding, allergies, handicaps ... etc to adapt the position if necessary), trips abroad, ... etc ...

It is important to detect, notify and not allow risk situations, although they do not derive directly from our work. Similarly, our work should not harm or damage colleagues or the environment.

It is very convenient for the newcomer to be assigned to someone (the most appropriate person) to teach and help them integrate, while transmitting notions of occupational health and safety.

The vast majority of accidents are avoided by maintaining minimum levels of ORDER AND CLEANING (classify the useful and dispose the useless).





Always work with complete, appropriate and exclusive clothing for the task to be performed. The laboratory should not be accessed with shorts, sandals ... clothing that does not cover exposed body parts, etc.

a. General Risks

Work with PVDs

Attention when working with Data Display Screens: adequate posture, no reflections, minimum external light of 500 lux, 15 min break every 2h and head exercises (YES / NO / I DON'T KNOW-I DON'T)... etc... etc...

Manual handling of heavy loads

Many musculoskeletal disorders are avoided when you have and apply basic knowledge about Manual Cargo Handling. Objects that weigh more than 3 kg and do not exceed 25 kg (15 kg in the case of people of small complexion) are considered loads.

Tips to avoid muscle and joint problems:

- Keep your back straight and flex your knees to facilitate lifting.
- Do not turn the body with heavy loads.
- Keep the load as close to the body as possible.
- Ask for help if you need it and use the cars available at the Institute.

OPCIÓN 1 Acércate al objeto. 1 Acércate en cucililas. 2 Inclina el objeto un poco. 2 Cógelo bien. 3 Cógelo bien. 4 Utiliza la fuerza de tus piernas. 3 Párate. 3 Párate.





Emergencies:

If you need healthcare:

- You must go to the Mutual or Health Center or to the nearest Hospital in very serious or urgent cases.
- A defibrillator is available at the Institutes of Material Sciences of Madrid and Catálisis y Petroleoquímica. They are located about 100 m from the ICV.

If the worker needs to be transferred to a center of the MUTUA, the corresponding form will be filled in with a number assigned to his professional status with which he will go to consultation. This form must be sealed by Director or Manager. In case of urgency and if the form cannot be sealed, you will go to the health center without that seal and after that, send it by fax.

Important Phones

• UAM Emergencies (9-14h) Mobile Unit 606 911 000

• FREMAP emergencies 900 610 061

• You Health Surveillance Madrid CSIC 91 568 19 31/32/33

• Toxicological Information 91 562 04 20

• Emergencies 112

Action in case of emergencies:

The ICV has a Self-Protection Plan in case of emergency with an action protocol.

In the case of an accident or emergency situation, first, the location of the accident must be protected (see triptych of action in case of emergency). It can be alerted by means of the push buttons in the case of serious emergencies (if a rapid evacuation is needed) or by calling the emergency number 922500 in the case of minor emergencies.

In case of evacuation of the Center:

- Listen carefully the public address message. If in the place where we are not heard well, go to a place where you can clearly hear the message.
- If it is a fire, close windows and doors and exit as quickly as possible, keeping calm.
 - If it is a pump warning, open windows and doors and take your belongings





and follow the instructions of the emergency teams.

- Follow the EMERGENCY EXIT indications or the evacuation equipment indications. Previously, the evacuation rules established in the plan must be known.
- If there is smoke, breathe through a damp towel or handkerchief and walk about crouching.
 - Do not use elevators.
 - Do not go back.
 - Do not use your vehicle to exit the building
- After leaving the building go to the Meeting Point located in the south of the Institute (Kelsen street).

More information at www.icv.csic.es/prevencion See triptych



b. Risks in the laboratory

Commonly used equipment:

The use of common equipment implies compliance with the rules of use:

- 1. Only users who have received the appropriate training may use the equipment.
 - 2. For any problem or doubt, consult the team leaders.
- 3. To use the equipment, it is necessary to sign up for the registration or reservation books.
- 4. Do not use the equipment if it is dirty. Notify the previous user to clean the equipment.
 - 5. Leave the equipment clean after use.





Laboratory safety:

See attached safety manual in the laboratory.

In the event of an accident, the action protocol is the PNH

- P: protect yourself and others
- N: Notify the person in charge of the laboratory or emergency services.
- H: help the injured: if they have knowledge of first aid or follow the instructions of health personnel.

In case of splashes / burns:







In case of spills:

In each laboratory there is a spill collection kit that will be used following the Manufacturer's instructions.



In the case of Gas leak:

When the gas leak has occurred in a fixed installation, close the valves, pipes, etc., and the bottles connected to it and notify the Maintenance Manager to start the necessary emergency actions

If the leakage occurs in a bottle and the gas does not ignite, follow the following rules:

- ✓ Always approach the bottle with wind or air currents in favor.
- ✓ Turn off the tap if possible.
- ✓ If the leak is from a non-inert gas, immediately notify the maintenance manager.
- ✓ If it is possible to move the bottle to an open space, use a suitable PPE.
- ✓ Once outside, check the total emptying of the bottle.
- ✓ Notify the supplier.

Waste management:

It is the responsibility of the laboratory that generates the waste, as well as its members:

- Know the type of waste generated. This includes: the nature of the residue, its danger, composition and chemical incompatibilities.
- Perform adequate segregation and disposal of the generated waste.





- Develop safe work protocols, including waste minimization.
- The correct identification and labeling of the waste generated.
- The correct handling and transport of waste, including the use of PPE: gloves, safety glasses, mask and gown.
- Do not fill the containers more than 80% of their capacity.

Every 6 months, a company will be in charge of collecting the waste from the waste disposal and management room. There should be a laboratory manager who is responsible for calculating the waste and taking it to the waste disposal room for collection.





TIPO Definición: PARÁMETROS DE ADMISIÓN	CÓDIGO LER	Tipo de riesgo PICTOGRAMA
Absorbentes contaminados: Material desechable (incluido filtros) contaminado con distintos productos químicos, ausencia de líquido	15 02 02	Nocivo(H05)
Aceite usado : Aceites minerales derivados de operaciones de mantenimiento. Ausencia de PCB´s, halógenos y fenoles<1,5 %. No emulsiones ni disoluciones.	12 01 07	Nocivo (H05) Pelig m.a (H14)
Aguas de Laboratorio: Disol. acuosas orgánicas (colorantes, fijadores, disolv.) o inorgánicas (metales pesados, Cr-VI). Ausencia de PCB´s, halógenos < 1,5 % . SIN LODOS.	18 01 06	Nocivo (H05) Inflam (H03B)
Ácidos Inorgánicos: Ac. Inorg y sol. acuosas de concentración > 10% v/v, pH<7, ausencia de amoniaco y de distintas fases. Acidez total <5%. Ausencia de Cr-VI y Ac. nítrico.	06 01 06	Corrosivo(H08)
Solución Alcalina: pH>7 miscible en agua, ausencia de cianuro, de amoniaco y de distintas fases. DQO<10.000 mg O2/I	06 02 05	Corrosivo (H08)
Disolvente Orgánico Halogenado: Disolventes y líquidos de limpieza orgánicos con > 2% en halógenos. Cloro < 0.7%. SIN LODOS.	07 01 03	Tóxico (H06)
Disolvente Orgánico no Halogenado: Disolventes y líquidos de limpieza orgánicos con < 2% en halógenos. Cloro < 0.7 . SIN LODOS.	07 01 04	Fácil Inflam (H03A)
Envases metálicos vacíos contaminados: Material metálico que contiene restos o está contaminado de sustancias peligrosas.	15 01 10	Nocivo (H05)
Envases de plástico vacíos contaminados: Material plástico que contiene restos o está contaminado de sustancias peligrosas.	15 01 10	Nocivo (H05)
Vidrio contaminado: Material de vidrio contaminado con restos de productos químicos.	15 01 10	Nocivo (H05) Pelig m.a (H14)
Líquido revelador y fijador: Sólo líquidos fotográficos	09 01 04	Nocivo H05)
Mercurio: Sólo mercurio líquido, ausencia de sólidos	20 01 21	Tóxico (H06) Pelig m.a (H14)
Reactivos de Laboratorio: Sólidos o líquidos de elevada peligrosidad y toxicidad, react. puros obsoletos o caducados y compuestos no identificados.	16 05 06	Corrosivo (H08) Inflam (H03B)
Sólidos inorgánicos: Sales sólidas y soluciones que contienen metales pesados con mat. Orgánica<5%, NH3<2.5% y 6 <ph<9< td=""><td>06 03 13</td><td>Nocivo (H05)</td></ph<9<>	06 03 13	Nocivo (H05)
Tubos fluorescentes: y otros residuos sólidos que contengan mercurio. Ausencia de tubos rotos	20 01 21	Tóxico(H06) Pelig m.a (H14)
Lodos aceitosos: Lodos con hidrocarburos: sedimentos>40%. Ausencia de PCB´s, halógenos < 1,5%	13 05 02	Nocivo (H05)
Lodos acuosos con metales en suspensión: Soluciones viscosas con hidróxidos	11 01 08	Nocivo (H05)
metálicos: líquidos<50%. Ausencia de PCB's, halógenos < 1,5%. Lodos de fosfatación		<u> </u>





8 MAPS.

Ground Floor







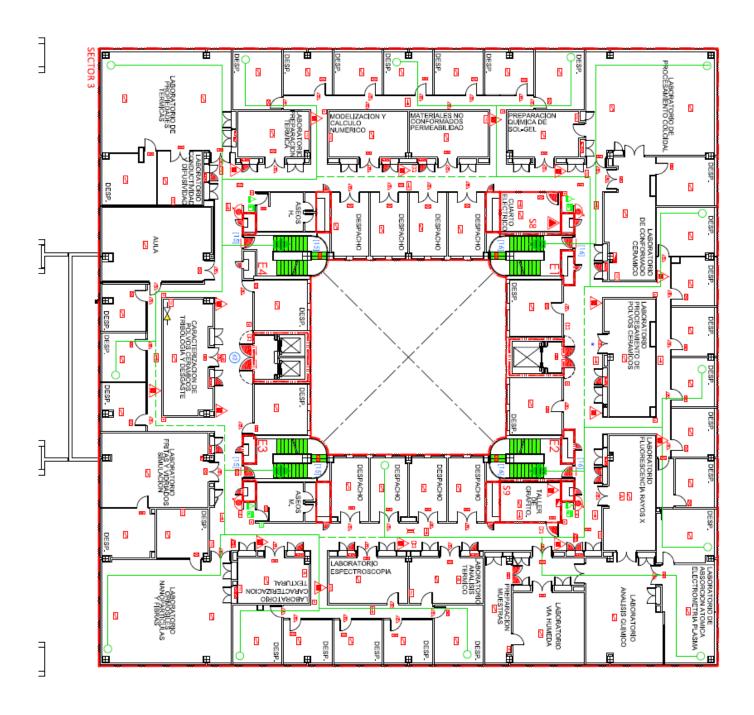
First Floor







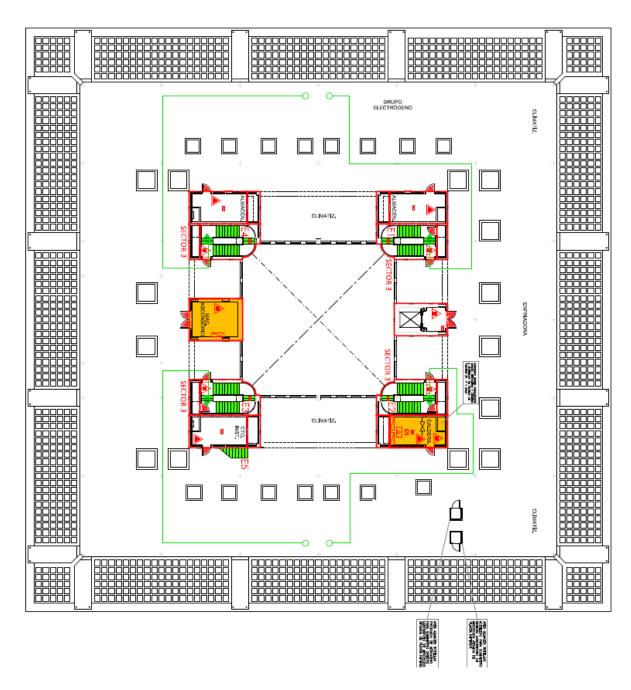
Second Floor







Third Floor



It is totally forbidden to go to the third (roof) floor if you are not authorized.





