

FONT DE LLUM DE SINCROTRÓ FUENTE DE LUZ DE SINCROTRÓN SYNCHROTRON LIGHT SOURCE

ALBA Synchrotron

Light Facility

MAIN CHARACTERISTICS

Three electron accelerators are operating at ALBA facility: a 130 MeV linear accelerator, a 130 MeV - 3.0 GeV booster synchrotron and a 3.0 GeV (250 meter circumference) Storage Ring. Nominal current 250 mA (now: 135 mA)
Nowadays there are 7 beam lines in operation (maximum capacity of 32): 4 hard X-ray and 3 soft X-ray. The possible experiments type are:

BL29 - BOREAS



TUNNEL

3 GeV Storage Ring





BL#	Name	Experiment type
BL04	MSPD	Powder diffraction
BL09,	MISTRAL	X-ray microscopy
BL11	NCD	Biological samples
		diffraction
BL13	XALOC	Protein crystallography
BL22	CLAESS	Catalysis gases process
BL24	CIRCE	Surface analysis
BL29.	BOREAS	Magnetic particles studies

• There are also support labs for the accelerators and the beam lines, like: RF cavities, vacuum, power supplies, biology, chemistry, metrology, material science and magnetic measurements.

MILESTONES

2002: ALBA Project is approved by the authorities

2006: The construction begins
2008: LINAC commissioning & first e-beam
2010: ALBA opening ceremony
2011: First e-beam in the Storage Ring
2012: First scientific experiment by ALBA users

H & S ORGANITATION

The ALBA Health & Safety Group is under the ALBA's Direction. It deals with all matters of conventional safety, radiation protection. The H&S Group's manpower includes 2 physics and 2 engineers and 1 technician.







THE STAFF

The present ALBA team consists of about 160 employees distributed in: administration staff, engineers, accelerator physics, beam line scientists, computing & control engineers, support staff and technicians.

MAIN RISKS

The main risks at ALBA are the standard ones for a synchrotron light facility, which are concerning our staff, our users or coming from the external contractors companies (supporting the installation or doing the maintenance activities):

Ionizing & non-ionizing radiation, electrical, chemical, biological, mechanical, cryogenics and pressurized gases among others.



International Technical Safety Forum ESRF, Grenoble, France, 21 – 24 May 2013

