Institutions and **organisations :** who does what?

Accel Instruments: German industrial firm (radiofrequency components, magnets, vacuum and cryosystems and particle beams) founded in 1993-94 by a management buy-out from the Siemens/Interatom group.

Air liquide: World leader in industrial and medical gases with over 38,000 employees in 72 countries. Its advanced technology division is located at Sassenage (Isère).

Alstom MSA: Alstom Magnets and Superconductors SA, part of the equipment and systems branch of the Alstom group, is a world leader in industrial applications of low temperature superconductivity (wires, cables and magnets).

ANR (Agence nationale de la recherche): French public administrative body responsible for the financing of projects selected on scientific and economic criteria. In 2007 it had a funding capacity of 825 million euros for projects of up to four years. It also finances "white" programmes for original projects of international scope.

CERN: European organisation for nuclear research. World's leading particle physics laboratory. Its headquarters are in Geneva. Its member states are: Germany, Austria, Belgium, Bulgaria, Denmark, Spain, Finland, France, Greece, Hungary, Italy, Norway, Netherlands, Poland, Portugal, Slovak Republic, Czech Republic, United Kingdom, Sweden, Switzerland, India, Israel, Japan, Russian Federation, USA and Turkey. The European Commission and UNESCO are observers.

CNES (Centre national d'études spatiales): French space agency, an industrial and commercial public body responsible for implementing France's space policy.

CNRS (Centre national de la recherche scientifique): French scientific and technological public body. In the domain of magnetism, it works through specific research units (UPRs) including the Louis Néel Laboratory (LLN), the Very Low Temperatures Research Centre (CRTBT), the High Magnetic Field Laboratory (LCMI), the Crystallography Laboratory (LdC) and the Centre for Materials Elaboration and Structural Studies (CEMES), via joint research units (UMR) with partners such as the industrial company **Thalès** and Claude Bernard University (Lyon 1) in the Condensed Matter Physics and Nanostructures Laboratory (LPMCN), or the associate research unit (URA) Spintronics and Component Technology Laboratory (Spintec), attached to the CEA, with the National Polytechnic Institute in Grenoble (INPG) and Joseph Fourier University (UJF).

Crocus technology: Start-up created in 2004 in Grenoble with the support of CEA Valorisation and FIST (subsidiaries of the CEA and **CNRS**). It is industrialising MRAM technology developed by Spintec (CEA/CNRS).

Danish Space Research Center: the DNSC, formed by the merger in 2005 of the Danish Space Research Institute (*Dansk Rumforskningsinstitut*, astrophysics) and the geodesy part of Kort & Matrikelstyrelsen (KMS), the Danish National Survey and Cadastre.

Dassault Aviation: French industrial group that designs and builds fighter aircraft (Mirage and Rafale) and business jets (Falcon). These represent respectively 40% and 60% of their sales, three-quarters of which are for export.

EADS-Astrium: Subsidiary of the European group EADS for space activities.

Elekta Neuromag: The Finnish branch, specialised in MEG, of the international medical technology group Elektra, originally Swedish. It is concerned with cancer therapy and the diagnosis and treatment of brain disorders.

ENS Paris: Higher Normal School formed by the merger in 1985 of the Higher Normal Schools of the Rue d'Ulm and Sèvres. It trains students for research, teaching and, more generally, for posts in central and local government administration, public services and companies. This is the only graduate college that admits both arts and science students, and encourages a multidisciplinary approach with transversal subjects.

ENS Lyon: Founded in 1985, this graduate college inherited the science departments of the Normal Schools of Fontenay and Saint-Cloud. Its teaching is done with Claude Bernard University and other educational bodies in the Rhône-Alpes region.

ESA (European Space Agency): Responsible for the development of space activities, independently of the national programmes of its 17 member states. It manages a budget of about 3 billion euros.

Firmenich: Swiss industrial group with a turnover of 2.5 billion Swiss francs in fragrances and flavour chemicals.

Freescale Semiconductor: Microelectronics company of the American Group Motorola and member, until the end of 2007, of Alliance Crolles 2 with STMicroelectronics and NXP Semiconductors (ex-Philips).

GeoForschungsZentrum (GFZ): German national centre for geoscience (375 researchers), under the authority of the federal ministry for education and research (90%) and the ministry for science, research and culture of the Land of Brandenburg. Part of the Helmholtz association of German research centres.

Guerbet: French pharmaceutical group, specialised in particular in radiological contrast products for X-ray radiography and MRI.

IBM, Almaden Research Center: One of the main research centres of the American group **International Business Machines Corp**., which possesses eight centres worldwide. Set up in 1955 in Almaden Valley (San Jose, in California), it employs 500 persons.

Inserm: National Institute for Health and Medical Research. This public science and technology body is dedicated to biological, medical and health research on populations. Under the authority of the Ministries of Health and of Research, it employs 13,000 people, including 6,000 researchers. One of its 335 research units is **Cognitive Neuroimaging Unit** (Inserm-CEA joint unit), which uses high density digital electroencephalography combined with functional MRI (fMRI) to study the mechanisms of human cognition.

Institut de physique du globe de Paris (IPGP): Higher teaching and research institute dedicated to the observation and study of natural phenomena, research, teaching and dissemination of knowledge in the physical earth sciences. It contributes to the prevention and mitigation of seismic and volcanic risks. Its teams are grouped in a single **CNRS** structure, with as main partners the **Universities of Paris 7**, Paris 6 and La Réunion and **ENS Paris**.

ITER (International Thermonuclear Experimental Reactor): Project designed to demonstrate the feasibility of generating energy by magnetically confined fusion. The partners are the European Union (**Euratom**), Japan, China, India, South Korea, Russia and the USA. It will pave the way for the **DEMO** project, whose aim is to demonstrate the capacity to build an electricity generating reactor.

JAXA (Japan Aerospace Exploration Agency): Organisation formed by the merger of the Institute of Space and Astronautical Science (ISAS), the National Aerospace Laboratory of Japan (NAL) and the National Space Development Agency of Japan (NASDA).

MIT: Massachusetts Institute of Technology (Cambridge) is one of the main US academic research institutions. It handles a research budget of nearly 600 million dollars. About 3,500 researchers work there on projects financed by the government, foundations and industry.

NASA (National Aeronautics and Space Administration): US space agency. It runs most of the US government's civil space activities together with joint projects with foreign agencies.

NeuroSpin: One of the three medical imaging facilities at the Institute for Biomedical Imaging (I2BM) of the CEA's Life Sciences Division. Located at Saclay (Essonne), this centre for neuro-imaging research, co-funded by the CEA, Île-de-France Regional Council, Essonne Local Council and the **ANR** started up at the beginning of 2007.

Paul Scherrer Institute (PSI): The most important Swiss research institute (1,300 employees). It is concerned with solid state physics, materials science, elementary particle physics, the life sciences and energy.

Rutherford Appleton Laboratory (RAL): This centre is run by the British Science and Technology Facilities Council (STFC) at Chilton/Harwell, Oxfordshire" Harwell (Oxfordshire). Its activities include materials science, particle physics, astrophysics, microelectronics, atmospheric science, spectroscopy and energy. Every year more than 10,000 researchers use its facilities, which include the Diamond synchrotron, the ISIS spallation source and the Central Laser Facility.

SHFJ: The Frederic Joliot Hospital Service, one of the three medical imaging facilities at the Institute for Biomedical Imaging (I2BM) of the CEA's Life Sciences Division, located at Orsay (Essonne). It is essentially devoted to clinical research. Located in the nuclear medicine department of the Orsay-Palaiseau hospital group, the SHFJ is the only research unit in Europe that groups all the different methods of human functional exploration, while at the same time running pure research laboratories and a nuclear medicine unit.

Siemens Medical Solutions: A world leader in medical equipment. One of the six branches of this German industrial group.

Snecma: Parent company of the aerospace propulsion branch of the French advanced technology industrial group **Safran** (62,000 employees).

STMicroelectronics: One of the world leaders in microelectronics, formed by the merger in 1987 of SGS Microelettronica (Italy) and Thomson Semiconducteurs (France); 11% is controlled by **Areva** *via* two holdings.

University of West Brittany (UBO): Its faculties of science and technology include the Laboratory of Electronics and Telecommunications Systems (UMR 6165).

Denis Diderot University (Paris 7): Groups 17 higher education and research faculties (UFRs), including seven in pure and applied science. Its 130 or so teams are mostly associated with major research bodies such as the CEA.

University of Uppsala: Swedish university founded in 1477. Research is conducted in seven faculties, of which one is devoted to science and technology.