



5

YEARS
2007-2011

ikerbasque

Basque Foundation for Science



EUSKO JAURLARITZA
GOBIERNO VASCO

HEZKUNTZA, UNIBERTSITATE
ETA IKERKETA SAILA
DEPARTAMENTO DE EDUCACIÓN,
UNIVERSIDADES E INVESTIGACIÓN



"What we know is a drop of water;
what we ignore is the ocean."

Isaac Newton





190

RESEARCHERS

6

**BERC IN
OPERATION**

MORE THAN

1.000

**INDEXED
SCIENTIFIC
PUBLICATIONS**

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THE BASQUE FOUNDATION FOR SCIENCE, IKERBASQUE

Was founded 5 years ago by the Department of Education, Universities and Research of the Basque Government in order to foster scientific research in Euskadi.

During this period, Ikerbasque has attracted 190 researchers from 20 countries, who have joined the universities and research centres. These researchers have published more than 1,000 scientific articles in indexed publications.

Similarly, the Foundation has contributed to the development of the BERC (Basque Excellence Research Centres) research centres, a network that is currently comprised of 6 centres working on materials physics, cognition and language, climate change, biophysics, applied mathematics and physics.

In the past few years the Basque Country has firmly banked on research as the cornerstone for economic growth with two aims: the research will generate new products and services so that Basque companies will be able to improve their competitiveness on a long-term basis, and the research would also obtain immediate returns for Euskadi as funds, on a short-term basis.

In these 5 years of Ikerbasque's progress, the Foundation's researchers have achieved a return of € 40 million. This implies that for each euro that the Basque Government has invested in Ikerbasque, a return of 2 euros has been obtained for Euskadi from the outside. These resources have been used to foster research in Euskadi by

contracting researchers of all levels and investing in equipment and infrastructures. Since its creation, Ikerbasque has banked on sustainability and management excellence. In 2011 this bet was recognised by two renowned awards, the Silver Q for Management Excellence and the HR Seal of Excellence in Research, awarded by the European Commission to reference institutions in the attraction of research talent.

MISSION

Ikerbasque is the Foundation fostered by the Basque Government in order to strengthen the Science System in Euskadi by the incorporation, retention and consolidation of researchers and the creation of basic research centres, in cooperation with the scientific community and with a commitment to excellence.

VALUES

- Innovation
- Efficiency
- Consideration
- Cooperation

VISION

Ikerbasque strives to be in 2013: the main science production institution in the Basque Country, in relative terms to our number of researchers, thanks to our capacity to attract and retain scientific talent, and our contribution to the creation of new basic excellent research centres, recognized by the society, the public administration and our Board by our contribution to foster Science in the Basque Country, by our management and sustainability model, and where all the staff of the Foundation can fully develop his/her potential.



RECOGNITIONS

Ikerbasque has been awarded the “HR Excellence in Research” seal by the European Commission for its strategy in attracting research personnel. It is the first and only Basque institution to have achieved this to date. In the Spanish state only the IMDEA Water Institute in Madrid has been awarded this recognition by Brussels.

The body in charge of granting this award is the General Research and Innovation Directorate of the European Commission, which thus recognises the reference institutions in Europe with regards to the selection, contracting and consolidation of researchers.

IKERBASQUE has attained this award due to its strategy and policy for obtaining scientific personnel, based on rigour in the evaluation process, the following of a strict ethical and conduct code and continuous improvement in the entire process for attracting talent.

Ikerbasque has been awarded the Silver Q as recognition of the level it has attained in Management Excellence. This recognition has been the result of the independent evaluation carried out by a team of outside evaluators, who are independent and have a high degree of professional qualification. The independent evaluation is an overall and systematic analysis of the organisation's management, which offers an objective view and serves as a reference point for self-evaluation, following the EFQM Excellence model.



HR EXCELLENCE IN RESEARCH



Attracting Talent

Three stylized hands, one large and two smaller, are reaching upwards from the bottom right towards the top center of the page. They are rendered in a dark red color against a lighter red background.

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EVALUATION COMMITTEE

The Ikerbasque Evaluation Committee is independent from the Basque Science System and is comprised of 99 researchers from 25 countries, coordinated by the following researchers:

Prof. Luis Oro

Professor of Inorganic Chemistry of Zaragoza University, awarded the National Chemistry Research Prize 2007 and the King James I Research Prize 1999.

Prof. Ginés Morata

Researcher of the CSIC, awarded the Price of Asturias Research Prize 2007 and the King James I Research Prize 1996.

Prof. Domingo Docampo

Professor of Telecommunications and ex-Vice-chancellor of Vigo University.

Prof. Salvador Barberà

Professor of Economics at the Autonomous University of Barcelona and awarded the King James I Research Prize 2008.

Prof. Felix Yndurain

Professor of Condensed Matter Physics at the Autonomous University of Madrid and ex-Secretary General of Scientific Policy of the Ministry of Science and Technology.

Prof. Joan Rodés

Professor of Medicine at the University of Barcelona, ex-Director of the Hospital Clinic of Barcelona and awarded National Prize for Medical Research in 2006.

Prof. Javier López Facal

Professor of research in Scientific Policy and Research Management at the CSIC. Ex-vicepresident of CSIC.

EVALUATION CRITERIA

- 1** Scientific merit and research career.
- 2** Relevance of the research field and publications made.
- 3** Concordance with the capabilities of the Basque Research System.

HOST INSTITUTIONS

The Ikerbasque researchers have joined the following centres in the Basque Country.

bc³

BASQUE CENTRE
FOR CLIMATE CHANGE

**CIC
nanogUNE**
nanoscience cooperative research center

eman ta zabal zazu



Universidad
del País Vasco

Euskal Herriko
Unibertsitatea

(bcam)

basque center for applied mathematics

b+o
eusko fundazioa
Fundación Vasca de Innovación
e Investigación Sanitarias

dipc

Donostia International Physics Center

bcbl

BASQUE CENTER
ON COGNITION, BRAIN
AND LANGUAGE

ESS
bilbao

mm
MONDRAGON
UNIBERTSITATEA

ceit

ik4 research alliance

neiker
tecnalia



UNIDAD DE BIOFÍSICA
BIOFISIKA UNITATEA

CENTRO MIXTO
CONSEJO SUPERIOR DE
INVESTIGACIONES CIENTÍFICAS
UNIVERSIDAD DEL PAÍS VASCO
EUSKAL HERRIKO UNIBERTSITATEA

**CIC
bioGUNE**
Centro de Investigación Cooperativa en Biociencias



Universidad de
Deusto

**CIC
biomaGUNE**
Biomaterialetako Ikerkuntza Kooperatiboko Zentroa
Centro de Investigación Cooperativa en Biomateriales

biodonostia
INSTITUTO DE INVESTIGACION

**CIC
microGUNE**
Microtechnologies Cooperative Research Center



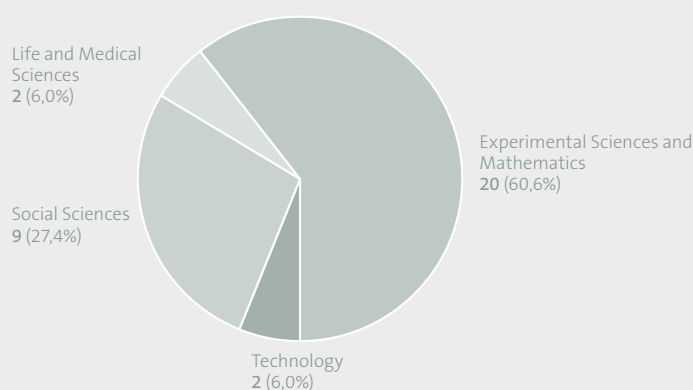
GLOBERNANCE

GOBERNANTZA DEMOKRATIKOAREN INSTITUTUA
INSTITUTO DE GOBERNANZA DEMOCRÁTICA

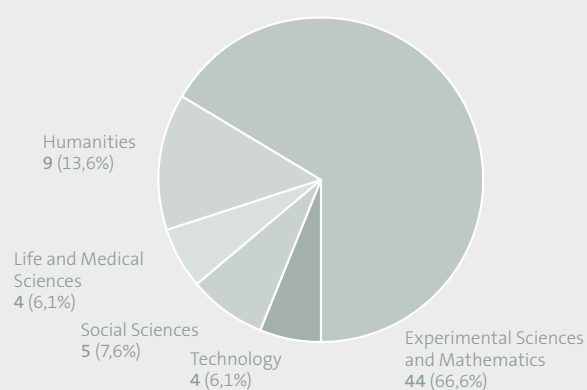
CFM
Centro de Física de Materiales
Materials Physics Center

IKERBASQUE RESEARCHERS PROFILE

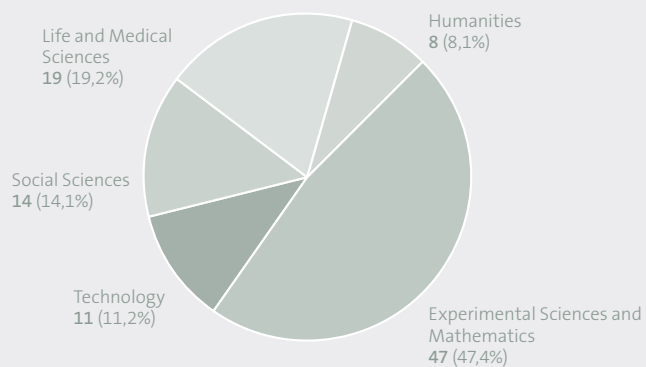
Researchers in research centres by field



Researchers in universities by field

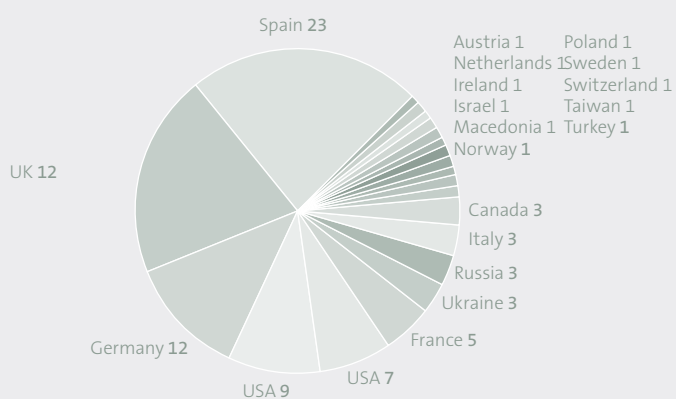


Researchers by knowledge field



Country of origin of the researchers at the time they were hired

Total 99

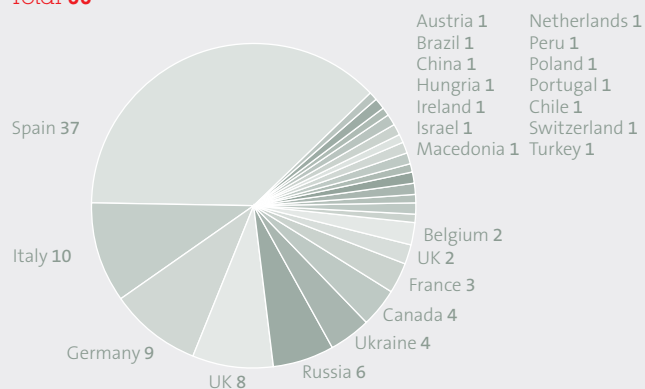


Researchers Sex

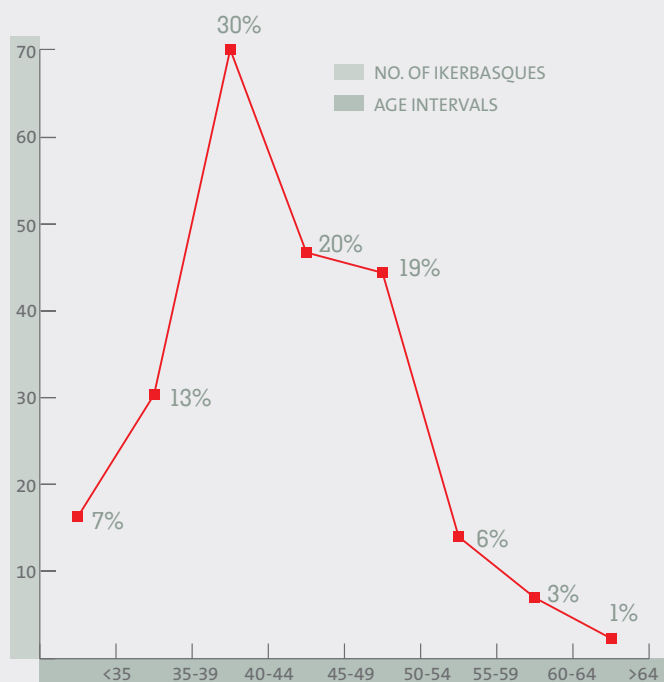


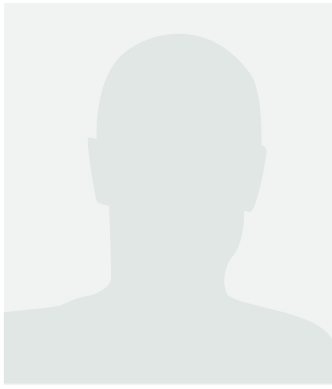
Nationality of the researchers

Total 99



Distribution of the researchers by age





RESEARCHER PROFILE

European.

With a doctor's degree from a prestigious European university.

More than 15 years of research experience in three universities or research centres in Europe or the USA.

Has led research teams.

Has European financing for research projects.

IKERBASQUE RESEARCHERS



Dr. Nicola G. A. Abrescia

Italian.

Doctor in Science in 2001 from the Polytechnic University of Catalonia (Barcelona).

10 years of research experience at centres in Spain, the USA and the United Kingdom.

Research Field: Structural studies of large molecular complexes and virus particles using X-ray crystallography and electron microscopy.

Comes from the Structural Biology Division of the Wellcome Trust Centre of Human Genetics of the University of Oxford.

Has joined the Structural Biology Unit of CICbioGUNE.

Max Planck History of Science Institute (Berlin) and the Smithsonian (Washington, DC).

Research field: History of Physics and Geophysics, Science in non-democratic regimes; the interaction between science, technology and industry.

Comes from the Smithsonian (National History Museum of America), Washington, D.C. (USA).

Has joined the Basque Museum of the History of Medicine and Science, of the UPV/EHU in Leioa.



Dr. Urtzi Ayesta

Basque.

Doctor in Computational Science in 2004 from the University of Nice Sophia-Antipolis.

Research experience at INRIA and France Telecom. Postdoctoral stay at CWI, Amsterdam.

Research field: Programming theory, queuing theory, stochastic processes, gaming theory and their applications to the performance of the evaluation, design and scoping of the telecommunications and distributed systems networks.

Comes from the CNRS, France

Has joined the BCAM - Basque Centre for Applied Mathematics.

Health Care in 2007 from the University of Harvard.

More than 22 years of research experience at universities in Chile, the USA and Spain.

Research field: Family health, immigrant and transnational families, psychosocial impact of social technologies (ICTs), gender violence, family psychotherapy.

Comes from the University of Massachusetts Boston and from the Family Medicine and Community Health at UMASS Medical School Worcester.

Has joined the Faculty of Psychology and Educational Sciences of the University of Deusto.



Dr. Emilio Artacho

From Madrid.

Doctor in Condensed Matter Physics from the Autonomous University of Madrid.

More than 10 years experience at research centres in Europe and the USA.

Research field: Condensed matter physics; theory and simulation of solids, liquids and nanostructures.

Comes from the Cavendish Physics-Laboratory Department of the University of Cambridge

Has joined the Nanogune.



Dr. Aitor Anduaga

Basque.

Doctor in Physics in 2001 from the University of the Basque Country.

Guest Professor at the universities of Oxford, Sydney, Toronto and Montreal, the



Dr. Gonzalo Bacigalupe

Chilean, USA.

Doctor in Education (Psychological Counsellor) in 1995 from the University of Massachusetts Amherst; Masters degree in Public



Dr. Igor Bandos

Ukrainian.

Doctor in Physics and Mathematics in 1986 from the University of Donetsk.

Senior researcher at the Kharkov Institute of Physics and Technology, Ukraine.

Research field: Theoretical physics of high energies, string theory/M theory, supergravity, supersymmetry.

He comes from the position as guest Professor of the Theoretical Physics Department of the University of Valencia.

Has joined the Theoretical Physics and History of Science department of the Faculty of Science and Technology of UPV/EHU in Leioa.



Dr. Alexander Bittner

German.

Doctor rer. nat in Chemistry in 1996 from the University of Berlin, Germany.

Postdoctoral stays in Lure (France) and ETH (Lausanne, Switzerland), Sciences at nanoscale at MPI Solid State Research in Stuttgart.

Research field: electrochemistry, solids/liquids interfaces, plant viruses, electrospinning.

Comes from MPI Research of solid states in Stuttgart.

Has joined the CICnanoGUNE.



Dr. Francisco Blanco

From Madrid.

Doctor in Chemistry in 1992 from the Complutense University of Madrid.

With 15 years of research experience at centres in Germany, the United States and Spain.

Research field: Biosciences, the structure of proteins.

Comes from the National Centre of Oncology Research (CNIO) in Madrid.

Has joined the CIC bioGUNE.

Comes from the Physics and Astronomy department of the University of Tel Aviv, Israel.

Has joined the Theoretical Physics department of the UPV/EHU in Leioa.



Dr. Jean-Bernard Bru

French.

Doctor in Mathematical Physics in 1999 at the Theoretical Physics Centre (C.P.T.), Marseille, France.

12 years of research experience in Germany, Austria, Ireland, France and the USA.

Research field: mathematical studies (analysis, probability, algebra) of the quantum problem of multiple bodies relating to condensed matter physics.

Comes from the University of Vienna, Austria.

Has joined the Mathematics Department of the Faculty of Science and Technology of the UPV/EHU.



Dr. Arkaitz Carracedo

Basque.

Doctor in Biological Sciences in 2006 from the Complutense University (Madrid)

10 years of research experience in the signalling of cancer cells acquired at prestigious research centres in Europe and the United States.

Research field: Contribution of the reprogramming of the metabolism to the biology of cancer cells, and the implication of the signalling pathways in the regulation of the cancer's metabolism, with special emphasis on prostate cancer.

Has joined the Proteomic Unit of the CICbioGUNE.



Dr. Thomas Broadhurst

British.

Doctor in Physics from the University of Durham, United Kingdom.

More than 20 years of research experience in the United Kingdom, the USA, Germany, Israel, Japan and Taiwan.

Research field: Observational cosmology, dark matter, the formation of galaxies. Experience with telescopes and satellites.



Dr. Joaquín Castilla

Basque.

Doctor in Science in 1996 from the Autonomous University of Madrid.

More than 10 years experience at centres in Europe and the USA.

Research field of the Scripps Institute in Florida: molecular mechanisms involved in the transmission of prions between different species.

Comes from the Scripps Institute in Florida.

Has joined the CIC bioGUNE.

NOTEWORTHY PUBLICATION

The Molecular magazine published a paper suggesting that Alzheimer's disease could be infectious

A recent study published in the digital version of the magazine Molecular Psychiatry by the Nature group — points towards it being possible that Alzheimer's disease could be infectious. It involves a research project led by Dr Claudio Soto of the University of Texas and in which Dr Joaquín Castilla, an Ikerbasque researcher of the CIC bioGUNE has participated.

The study carried out on mice by doctors Soto and Castilla has cast a little more light as it shows that some of the cerebral anomalies associated with Alzheimer's disease may be related with infectious processes similar to those that occur in the transmissible spongiform diseases, also called prionic diseases, as are the cases of 'mad cow' disease, Creutzfeldt-Jakob disease, etc. It involves another step, but it is still too early to conclude that Alzheimer's may be an infectious disease.

"Our results suggest that some of the cerebral anomalies associated with Alzheimer's disease may be induced by a mechanism similar to what occurs with the transmissible spongiform diseases", asserts Dr. Castilla.

As Joaquín Castilla explains, the formation of A β deposits or amyloid plaques can be induced in healthy animals by the injection of cerebrum extracts from patients with Alzheimer's. In that project they were able to observe that the accumulation of amyloid plaques increased progressively over time after the inoculation performed in mice, observing the characteristic lesions in cerebral areas that were very far away from the injection point.

Essentially, if the forementioned studies demonstrate that the amyloid peptide replicates itself in a similar manner to that of an infectious prion, which causes the mentioned infectious diseases, the absence of observed pathology in the inoculated animals —mice—, and in this sense, "their more than dubious transmission capacity allows us to doubt on the practical infectiveness, although not the theoretical one, of Alzheimer's disease", concludes Dr Castilla.

The discovery of prions and their inclusion in the group of infectious agents, led to the concept of infection itself having to be reconsidered. "Whereas no one doubts that the replication of the HIV virus in the lymphoid cell of an individual represents a clear example of an infectious process, the replication of a single protein or a simple peptide, as occurs with Alzheimer's disease, does not encompass all the features that we are used to in the definition of infection", is Dr Castilla's opinion.



Dr. Félix Casanova

Catalan.

Doctor in Physics in 2003 from the University of Barcelona.

With 4 years of experience as a postdoctoral researcher at the University of San Diego, California, USA.

Research field: spin currents in complex systems (metals, superconductors, organic semiconductors) by nanomanufacturing and features of “spintronic” devices.

Comes from the University of San Diego, in California (USA).

Has joined the CIC NanoGUNE.

Research fields: ferromagnetic materials with shape memory.

Comes from the position as guest professor at the CNR-IENI in Italy where he was responsible for the magnetism research group.

Has joined the Electricity and Electronics department of the Faculty of Science and Technology of the UPV/EHU in Leioa.



Dr. Andrey Chuvilin

Russian.

Doctor in Physics and Mathematics in 1998 at the SB RAS Inorganic Chemistry Institute, Novosibirsk, Russia.

More than 25 years of research experience in transmission electron microscopy in Russia and Germany.

Research field: Low voltage high resolution TEM of nanocarbon materials, electron diffraction in convergent beams, image simulation and processing.

Comes from the SB RAS Catalysis Institute, Novosibirsk, Russia.

Has joined the CIC NanoGUNE.



Dr. Volodymyr Chernenko

Ukrainian.

Doctor in Physics and Chemistry in 1980 from the State University of Moscow.

28 years of research experience at centres in Ukraine, Germany, Japan, Italy, United States, France, Switzerland, Australia, Austria, Russia and Germany.

Dr. Darrell Conklin

Doctor in Computer Science in 1995 from the University of Queen.

More than 20 years of research experience at centres in Spain, the United Kingdom, the USA, Norway and Canada.

Line of research: bio information technology, musical information technology.

Comes from the Computer department of the University of London.

Has joined the department of Information Technology and Artificial Intelligence of the UPV/EHU in Donostia-San Sebastián.



Dr. Martin Cooke

British.

Doctor in Information Technology in 1991 from the University of Sheffield.

British Computer Society Prize (Cambridge University Press).

26 years of research experience in Great Britain at the National Physics Laboratory and at the University of Sheffield.

Research field: computer hearing, robust automatic speech recognition.

Comes from the position as Information Technology Professor of the University of Sheffield.

Has joined the LASLAB laboratory (Language and Speech Lab) at the Faculty of Arts at the UPV/EHU in Vitoria-Gasteiz.



Dr. Daniel Conversi

Italian.

Doctor in Sociology in 1994 from the London School of Economics.

More than 20 years of research experience at research centres in Europe and the USA.

Research field: Political and social history.

Comes from the University of La Sapienza, Rome (Italy).

Has joined the PROSOPARLAM of the UPV/EHU in Leioa.



Dr. Eros Corazza

Swiss.

Doctorat ès lettres in 1992 from the University of Geneva.

More than 17 years of research experience at universities in Europe, the USA and Canada.

Research field: Philosophy of language and the mind. Linguistics. Cognitive sciences.

Comes from the University of Carleton (Philosophy and Cognitive Science department), Ottawa, Ontario, Canada.

Has joined the ILCLI (Institute for Logic, Cognition, Language and Information) of the UPV/EHU, in Donostia -San Sebastian.

She comes from the Experimental Medicine department and the Clinic of the University of Linköping, Sweden.

Has joined the Physiology department of the Faculty of Medicine, UPV/EHU.



Dr. Roberto D'Agosta

Italian.

Doctor in Physics in 2003 from the University of Rome "Tre".

More than 8 years of research experience in the Theory of the Physics of condensed matter.

Research field: the transport of electrons in nanoscale systems, multiple bodies system theory and the open quantum system. Cold atoms physics.

Comes from the University of California, San Diego (USA) and the Imperial College in London.

Has joined the ETSF and the Materials Physics department of the Faculty of Chemistry of the UPV/EHU, in Donostia-San Sebastián.



Dr. Ezequiel DiPaolo

Italian-Argentinean.

Doctor in Computer Science in 1999 from the University of Sussex, United Kingdom.

More than 10 years of research experience at different centres such as the Computational Neuroscience and Robotics Centre (CCNR) and the Cognitive Systems Research Centre (COGS), University of Sussex.

Research field: Personal and social cognition, philosophy of the mind, evolutionist robotics, computational neuroscience.

Has joined the Logic and Philosophy of Science Department of the UPV/EHU in Donostia-San Sebastián.

More than 18 years of research experience at centres in France, Spain, Sweden, Germany, China and Canada.

Research field: computer vision, image processing, models recognition, learning by machines.

Comes from the National Geographic Institute (IGN), in Saint-Mandé, Paris, France.

Has joined the Computer Science and Artificial Intelligence department of the UPV/EHU, in Donostia-San Sebastián.



Dr. Susana Cristobal

Basque and Swedish.

Doctor in Biochemistry in 1997 from the Faculty of Medicine of the Basque Country.

More than 10 years experience at research centres in Sweden.

Research field: tools to calculate environmental and health matters.



Dr. Fadi Dornaika

Canadian.

Doctor in Computer Science in 1995 from the National Research Institute of Information Technology and Automation (INRIA) in France.



Dr. Javier Echeverria

Basque.

Doctor in Philosophy in 1975 from the Complutense University of Madrid and Doctor in Science and Humanities from the University of Sorbonne (Paris).

Euskadi Research Prize 1997.

With 35 years of research experience at centres in the USA, France, Germany and Belgium.

Research field: The Information and Knowledge Society.

Comes from the position of Director of the Philosophy Institute of the Higher Centre for Scientific Research (CSIC) in Madrid.

Has joined the department of Sociology II of the Faculty of Social Sciences and Communications of the UPV/EHU.



Dr. Juan M. Encinas

From Madrid.

Doctor in Neuroscience from the Complutense University of Madrid.

More than 10 years of research experience in neuroscience at different centres in Spain and the USA.

Research field: Study of the intrinsic properties of neural stem cells and neurogenesis in the adult hippocampus under normal conditions, of aging and of neurological disorders such as epilepsy.

He comes from the Neurological Research Institute (Baylor College of Medicine/ Texas Children's Hospital), Houston, Texas, USA.

Has joined the Neuroscience department of the UPV/EHU in Leioa, Bizkaia.



Dr. Juan Falcón-Pérez

Basque.

Doctor in Biological Sciences in 1999 from the Autonomous University of Madrid.

More than 10 years of research experience at research centres in Spain and the USA.

Research field: Functional and molecular study of microvesicles and thorough metabolic analysis of body fluids.

Has joined the CICbioGUNE.



Dr. Sergio Faria

Brazilian.

Doctor rer. nat in Mechanics from the Technological University of Darmstadt, Germany.

More than 8 years of experience at research centres in Brazil and Germany.

Research field: Environmental physics, glaciology, geomorphology, thermodynamics, soft matter, continuous diversity, biodiversity, emerging and multiscale modelling.

Comes from the Geosciences centre of the University of Göttingen in Germany.

Has joined the BC3 (Basque Centre for Climate Change).

Research field: long-term relationships between the development of the economy, technological change, energy consumption and climate change.

Comes from the Imperial College of London.

Has joined the BC3 - Basque Centre for Climate Change, Bilbao.



Dr. Roger Fouquet

British.

Doctor in Economics in 1997 from the University of Surrey.

With more than 18 years of experience in the financial analysis of energy, environmental and health matters.



Dr. Inma Estevez

Basque.

Doctor in Zoology in 1994 from the University of Cordoba.

With 14 years of research experience at centres in the United States, France and Sweden.

Research field: improvement of poultry production.

She comes from the position of Animal Science Professor at the University of Maryland, United States.

Has joined the Neiker-Tecnalia research centre in Vitoria-Gasteiz.

NOTEWORTHY PROJECT

Neiker-Tecnalia's research team, led by the Ikerbasque researcher, Inmaculada Estévez, participates in a European project for improving the well being of production animals.

One of the specific objectives of the work consists in ascertaining the degree of pain of the animals during the different production and breeding phases.

The Animal Production department of Neiker-Tecnalia, with the cooperation of Ikerbasque, participates in the AWIN -Animal Welfare Indicators- project. This is a research project financed by the European Union, which has the participation of international animal wellbeing experts belonging to 11 institutions. The main objectives of the research project are the design of the wellbeing evaluation protocols for sheep, goats, horses, donkeys and turkeys, with special emphasis on ascertaining the possible pain indicators in these species. Similarly, the work is intended to determine to what degree the maternal stress caused by the different handling practices can affect the viability of the young animals.

One of the specific objectives of the work consists in ascertaining the degree of pain of the animals during the different production and breeding phases. The research project is intended to develop and perfect non-invasive protocols to assess pain, including the effects of processes such as mastitis or lameness. Likewise, experiences shall be performed on the attitude of the animal breeders in the face of pain and work on the management of painful conditions. Ascertaining pain in livestock species is no easy task, as many of these animals have developed a great deal of ability for hiding it throughout their evolutionary history. This fact is

due to these species being the prey of predators in the past, so that if an animal displayed signs of pain or injury, such as lameness, it became easy prey for the predators. This advantage for survival in the wild has disadvantages in livestock breeding, as the animal may be suffering pain long before it becomes apparent and a palliative treatment can be given. It is therefore necessary to have a scientific protocol that detects pain in time.

Severe episodes of pain and stress in farm animals can affect the embryonic development of the foetus and the young animals in later growth stages. Neiker-Tecnalia, together with the Scottish Agricultural College and the University of Norway, will actively participate in this project, in order to ascertain to what degree the stress during gestation and the application of different handling systems can affect the "prenatal programming" of the young animals. This condition can have consequences on the development, the behaviour and the physical condition of the young animals.



Dr. Zoraida Freixa

Catalan.

Doctor in Chemistry in 2000 from the Autonomous University of Barcelona.

More than 10 years of experience at the University of Coimbra, Universiteit van Amsterdam and the Catalan Institute of Chemistry Research.

Research field: homogeneous catalysis, supramolecular chemistry and photochromic materials.

Comes from the University of Barcelona (UB).

Has joined the Chemistry department of the UPV/EHU in Donostia-San Sebastián.

National Health Institute in Bethesda (USA).

Research field: biophysics of cellular membranes and model; membrane dynamics, fusion and fission, mechanics and thermodynamics of small membrane systems.

Comes from the National Health Institute of Bethesda in the USA.

Has joined the Biophysics Unit (CSIC-UPV/EHU), of the University of the Basque Country as group leader, in Leioa.



Dr. Frank Girot

French.

Doctor in Materials Science and Processes in 1987 from the University of Bordeaux.

Qualification for conducting research projects from the University of Bordeaux (1996).

Research field: optimisation and simulation of manufacturing processes; application of nanotechnologies to manufacturing processes.

Comes from position of Processes and Materials Professor at the Arts et Métiers ParisTech (ENSAM campus of Bordeaux, France).

Has joined the Mechanics department at the Higher Technical Engineering School of Bilbao, UPV/EHU.



Dr. Vadim Frolov

Russian.

Doctor in Biophysics in 1998 from the State University of Moscow.

With research experience and group leader at the A.N. Frumkin Electrochemistry Institute of Moscow (Russia); Guest researcher at the



Dr. Durk Gorter

Dutch.

Doctor in Humanities in 1993 from the University of Amsterdam.

With 30 years of research experience at centres in the USA and the Netherlands.

Research field: studies in minority languages; multilingual education.

Coordinator of research networks in Europe.

Comes from the position as Sociolinguistics Professor of the University of Amsterdam, the Netherlands.

Has joined the department of Education Theory and History of the UPV/EHU in Donostia-San Sebastián.



Dr. Slawomir J. Grabowski

Polish.

Doctor in Chemistry in 1986 from the University of Warsaw, Poland.

More than 20 years of research experience at the Eidgenössische Technische Hochschule (ETH) Zürich (Switzerland), University of

Uppsala (Sweden), University of Grenoble (France), Jackson State University (USA), University of Fukuoka (Japan) and the University of Poland.

Research field: Theoretical chemistry, Physics-chemistry, intermolecular interactions.

Comes from the Chemistry department of the University of Lodz in Poland.

Has joined the Faculty of Chemistry of the UPV/EHU and the Donostia International Physics Centre (DIPC).



Dr. Konstantin Guslienko

Ukrainian.

Doctor in Solid Matter Physics in 1989 from the Metal Physics Institute in Kiev, National Science Academy of Ukraine.

24 years of research experience in top level centres in Austria, Germany, South Korea, Japan, Ukraine and the USA.

Research field: Theory of magnetism and magnetic materials: quantum magnetism, nano magnetism and micromagnetism, spin dynamics.

Comes from the position as guest researcher of the spin dynamics and “spin wave” devices Research Centre of the National University of Seoul, South Korea.

Has joined the ETSF and the Materials Physics department of the Faculty of Chemistry of the UPV/EHU, in Donostia-San Sebastián.



Dr. Andreas Heidenreich

German.

Doctor in Chemistry in 1990 from the University of Marburg (Germany).

Research experience at the University of Tel Aviv (Israel) and at the Humboldt University of Berlin (Germany).

Research field: computer simulations of Coulomb explosions in clusters induced by ultra-intense and ultra-short pulses.

Has joined the Chemistry department of the Faculty of Chemistry of the UPV/EHU in Donostia-San Sebastián.

biology, membranes traffic. Protein complexes.

Has joined the CIC bioGUNE as group leader.



Dr. Vladimir Kabardin

Austrian-Byelorussian.

Doctor in Biochemistry in 1991 from the University of Moscow.

With 17 years of research experience at centres in the Byelorussia, Austria and Taiwan.

Research field: post-transcriptional control, processing and decay of RNA, bacterial stress responses.

Comes from the position as guest professor at the Molecular Biology Institute, Academia Sinica, Taipei, Taiwan.

Has joined the Faculty of Science and Technology of the UPV/EHU in Leioa.



Dr. Andrey Kazansky

Russian.

Doctor in Science (Physics and Mathematics) from the State University of Saint Petersburg.

40 years of experience as head researcher at the V.A.Fock Physics Institute in Saint Petersburg. More than 50 stays as guest professor in the USA, France, Germany, Denmark and Spain.

Research field: Computer simulation of the ultra-fast phenomenon in gases and metal interfaces.

Comes from the V.A.Fock Physics Institute of the State University of Saint Petersburg.

Has joined the Donostia International Physics Centre.



Dr. Aitor Hierro

Basque.

Doctor in Molecular Biochemistry and Molecular Biology from the Biophysics Unit (CSIC-UPV/EHU).

Postdoctoral research for the American Food and Drug Administration (FDA) and the US National Health Institute.

Research field: Structural



Dr. Sergey Korotov

Russian.

Doctor in Scientific Computation in 1997 from the University of Jyväskylä in Finland.

16 years of research experience in the Netherlands (University of Utrecht), Finland (Academy of Finland), Sweden (Mittag-Leffler Institute) and Germany (University of Erlangen).

Research field: numerical analysis, finite element method, mesh generation.

Comes from the Academy of Finland and the Technological University of Helsinki.

Has joined the BCAM - Basque Centre for Applied Mathematics.

Research field: The science of the surface, the theory of the deflation/diffraction of electrons and photoemissions, computational methods of solid state theory.

Comes from the position as researcher of the Metal Physics Institute of the Academy of Sciences of Ukraine.

Has joined the Materials Physics department of the Faculty of Chemistry of the UPV/EHU in Donostia-San Sebastián.



Dr. Annick Laruelle

Belgian.

Doctor in Economics Sciences in 1998 from the Catholic University of Leuven, Belgium.

She has been guest professor in several European universities.

Research field: Game theory and social choice.

Comes from the position as Professor at the University of Caen Basse Normandie, France.

Has joined the Fundamentals of Financial Analysis I department of the UPV/EHU in Sarriko, Bilbao.



Dr. Stefan Kurth

German.

Doctor in Physics in 1995 from the University of Wurzburg, Germany.

13 years of experience at research centres in Germany, Sweden, the USA and Belgium.

Research Field: Particle quantum physics, especially functional density theory, the temporal description of the transport of electrons through molecules and nanostructures.

Comes from the position as researcher at the Free University in Berlin, Germany.

Has joined the nanobio-spectroscopy group of the Material Physics department of the Faculty of Chemistry of the UPV/EHU and the Material Physics Centre (mixed centre of the CSIC and UPV/EHU in Donostia).



Dr. Eugene Krasovskii

Ukrainian.

Doctor in Physics and Mathematics in 1987 from the Academy of Science in Ukraine.

More than 20 years of research experience at research centres in Ukraine and Germany.



Dr. Marcelo E. Guerin

Italian-Argentinean.

Doctor in Biochemistry and Molecular Biology in 2002 from the Leloir Institute, School of Sciences of the University of Buenos Aires (Argentina).

Postdoctoral researcher in the Structural Biochemistry Unit in the Pasteur Institute of Paris and senior researcher at the Mycobacteria Research laboratories in the Microbiology department of the State University of Colorado, USA.

Research field: Structural glycobiology.

Comes from the Mycobacteria Research Laboratories, of the Microbiology department of the State University of Colorado, USA.

Has joined the Biophysics Unit (CSIC-UPV/EHU) in Donostia-San Sebastián.

NOTEWORTHY PROJECT

Marcelo Guerin, an Ikerbasque researcher, of the Biophysics Unit (CSIC-UPV/EHU), participates in a project financed by the EU, focused on the discovery of new drugs against tuberculosis.

Mycobacterium tuberculosis, the causative agent of tuberculosis, is the second infectious agent that causes the most deaths worldwide after AIDS (HIV).

Tuberculosis continues to be a serious worldwide health problem and causes the death of approximately 2 million people a year. In turn, it is estimated that a third of the world population is infected and is a carrier of a latent form of the bacterium. The slow and arduous treatment of the disease requires giving the patient two to four drugs for at least six months, and adherence by the patient is usually low. Very recently a significant increase in the number of resistant strains (MDR) and extensively resistant strains (XDR) of the bacterium have been detected, which makes it increasingly necessary to progress towards the discovery of new drugs.

The World Health Organisation (WHO), through the "Stop TB" programme and its support of the "Global Plan to Stop TB", it has set itself an ambitious goal; that of halving the prevalence and mortality of the disease with a view to the year 2015. The European MM4TB - More Medicines for Tuberculosis- project, in which the Biophysics Unit of the University of the Basque Country (CSIC-UPV/EHU) participates, has joined this initiative. More than 20 leading European research groups are participating in this consortium,

among which there are the universities of Cambridge, Uppsala and Pavia, the Pasteur Institute of Paris, the École Polytechnique Fédérale de Lausanne – the entity that leads this project – and two market leading pharmaceutical companies, AstraZeneca and Sanofi-Aventis. The project, which started its activities in February of this year, has a budget of € 60 million and is financed by the 7th Framework Programme for Research of the European Union.

The team that has come together around MM4TB will use a multidisciplinary and comprehensive approach, including strategies for three-party screening and medicinal chemistry, functional genomics and structural biology. This combination of techniques is intended to progress towards specific solutions with regards to the discovery of new candidate drugs, drug validation, the identification of new targets, and the analysis of the varied action mechanisms during the course of the infection caused by the bacterium.



Dr. Charles Lawrie

British.

Doctor in Biological Science in 2000 from the University of Oxford.

More than 10 years of experience in commercial and academic departments in the United Kingdom.

Research field: Use of primary genome techniques to identify the genes/micro-RNA involved in the pathology of cancer and their potential as a biomarker.

Comes from the Clinical Laboratory of Science of the University of Oxford.

Has joined the Biodonostia Institute as Director of Oncology Research.



Dr. Michael Marder

Canadian.

Doctor in Philosophy of the New School for Social Research in New York.

More than 8 years of research experience at universities in the USA, Canada and Portugal.

Research field: phenomenology, ethical and political philosophy,

environmental philosophy.

Comes from the University of Duquesne, USA and from the University of Lisbon, Portugal.

Has joined the Philosophy department of the UPV/EHU in Vitoria-Gasteiz.



Dr. Juan Mareque

Galician.

Doctor in Inorganic Chemistry in 1998 from the University of Missouri, St. Louis, USA.

16 years of research experience in the USA (MIT and UMSL) and the United Kingdom (University of Edinburgh).

Research field: Bioinorganic and supramolecular chemistry, molecular recognition, biomedical and nanomedical imaging.

Comes from the University of Edinburgh.

Has joined the CiC biomaGUNE in Donostia-San Sebastián.



Dr. Anil Markandya

British.

Doctor in the Economics of the Environment in 1975 from the London School of Economics, United Kingdom.

30 years of research experience at centres in the United Kingdom, Russia, Italy, the United States and France.

Research fields: The economics of the environment and of the resources, climate change.

Comes from the position as Economics Professor at the University of Bath, United Kingdom.

Member of the IPCC - International Panel of Experts on Climate Change - awarded the Nobel Peace Prize in 2007.

Has joined the BC3 (Basque Centre for Climate Change) as the Scientific Director.



Dr. Ugo Mayor

Basque.

Doctor in Biology in 2003 from the University of Cambridge.

Experience at the Lund University in Sweden and at the MRC Centre for Protein Engineering, WT CR UK Gurdon Institute and the Genetics department at Cambridge (United Kingdom).

Research field: biochemical and genetic characterisation of the locational pathways in functions and neuronal disorders.

Comes from the Genetics department of the University of Cambridge.

Has joined the CIC BioGUNE.



Dr. David Mecerreyes

Basque.

Doctor in Science in 1998 from the University of Liege, Belgium.

12 years of research experience at industrial and private research centres in the USA and Spain.

Research field: Polymer chemistry, Organic catalysis, environmentally non-harmful Polymers, sustained polymerisation reactions.

Has joined the POLYMAT of the UPV/EHU in Donostia-San Sebastián.



Dr. Michele Modugno

Italian.

Doctor in Theoretical Physics in 1998 from the University of Florence, Italy.

More than 15 years of research experience in Italy, Switzerland and France.

Research field: Bose-Einstein condensation. Quantum "ultracold" gases in optical networks and potential disorders.

Comes from the Physics and Astronomy department of the University of Florence, Italy.

Has joined the Theoretical Physics and the History of Science department of the UPV/EHU in Leioa.



Dr. Rafael Morales

From Asturias.

Doctor in Physics from the University of Oviedo.

Research experience at the University of Oviedo, in the CINN in Spain and at the University of California in San Diego (USA).

Research field: Interchange magnetism of paired multilayers and nanostructure magnetism.

Comes from the University of Oviedo-CINN.

Has joined the Physics-Chemistry department of the Faculty of Science and Technology of the UPV/EHU.



Dr. Jaume Navarro

Catalan.

Doctor in the History of Science in 1988 from the Autonomous University of Barcelona.

Research experience at the University of Cambridge, Imperial College (London) and the Max Planck Institute of Berlin.

Research field: The History of Science, especially the history of physics science.

Comes from the University of Cambridge (United Kingdom).

Has joined the Faculty of Philosophy of the UPV/EHU.



Dr. Ignacio Palacios

Basque.

Doctor in Economics in 1995 from the University of Chicago.

More than 20 years of research experience at Dartmouth College of the University of Stanford, the University of Chicago, Brown University and the London School of Economics.

Research field: Theoretical and applied microeconomy, game theory, behavioural and experimental economy.

Comes from the London School of Economics.

Has joined the Bilbao LABEAN (UPV/EHU).



Dr. David Pardo

Basque.

Doctor in Computational and Applied Mathematics in 2004 from the University of Texas (Austin).

Postdoctoral stay at the Computational Science and Engineering Institute (ICES). Associate researcher in the

Petroleum Engineering department at the University of Texas, USA.

Research field: computational simulations, multiphysics, investment and petroleum.

Comes from the University of Texas in Austin.

Has joined the Applied Mathematics, Statistics and Operational Research department of the UPV/EHU.



Dr. Florence Perrin

French.

Doctor in Biological Sciences- Evolutionary neuroscience in the year 2000 from the University of Basel, Switzerland.

With more than 12 years of experience in the evolution of the central nervous system and pathologies in Switzerland, Canada and France.

Research field: underlying molecular mechanisms in neurodegeneration and neuroprotection processes and in the development and pathologies of the spinal cord, focused on amyotrophic lateral sclerosis, chronic motorneuronal disease and spinal cord damage.

Comes from the INSERM, France.

Has joined as manager of the new Integrative Biology and Neurodegenerative laboratory at the Neuroscience department of the Faculty of Medicine in the UPV/EHU in Leioa.



Dr. Unai Pascual

Basque.

Doctor in Environmental Economy in 2002 from the University of York (United Kingdom).

More than 15 years of experience in the Environment and Development Economics, applied to numerous countries around the world.

Research field: Economy of the environment and development, ecological economy, modelling of natural resources, the economy of biodiversity and ecosystems, global environmental change, links between poverty and the environment, preservation of the agrobiodiversity.

Comes from the University of Cambridge (United Kingdom).

Has joined the BC3 (Basque Centre for Climate Change).



Dr. Daniel Innerarity

Basque.

Doctor in Philosophy.

29 years of research experience at centres in Germany (as Alexander von Humboldt-Fellow), Switzerland, Italy and France.

Research field: Political philosophy (governance in the global knowledge society).

Comes from the University of Zaragoza and the University of Sorbonne (Paris).

Has joined the Constitutional Law department of the Faculty of Law, UPV/EHU. Responsible for the Democratic Governance Institute.

NOTEWORTHY PUBLICATION

Last October a congress was held in Ottawa on the thinking of Daniel Innerarity and specifically on the reception of his work in Canada; most of his books are translated in that country.

The Ottawa congress brought together a team of specialists from different countries who studied "Étique de l'hospitalité", and in which they analysed several philosophical matters that concern the evolution of the modern subject.

The book "Étique de l'hospitalité" of the Ikerbasque researcher, Daniel Innerarity, has received the prize of the Alpine Philosophy Society awarded for the best Philosophy book published in French.

The prize was awarded to him in Grenoble by a grouping of French-speaking philosophy associations.

The Ethics of hospitality analyses a world divided by the conflict between the imperatives of modernisation and growth on one side and on the other, the ethical demands of safeguarding, care and protection. In view of the experience of the world's general fragility, we attend to the birth of a powerful sensitivity in favour of the request that strains to brake the forces of destruction, of negligence and of boundless modernisation. The fragility begins with oneself, with a subject who feels less protected and

more exposed to the perplexity and the rootlessness in its many forms. The total sum of efforts spent in transforming the world, in building it again and starting from scratch, is less than that which mankind allocates to repair tasks.

Thus, the duty of individuals does not consist in their defending themselves against society, but in defending it, and caring for a social fabric outside which their identities cannot be realised. One could define the spirit of these past few years as that of the growing awareness of the fragility of the civilised world. It has become a mundane place, in general and everyday experience, although with a less dramatic tone to that asserted by Paul Valéry after the First World War: civilisations know that they are mortal.



Dr. Mario Piris

Cuban.

Doctor in Physics in 1997 from the University of Habana, Cuba.

20 years of research experience in Cuba, Italy, Germany and Spain.

Research Field: Chemistry physics, quantum chemistry, reduced density matrix mechanics, natural orbit functional theory.

Has joined the Faculty of Chemistry of the UPV/EHU.

objects and the research of nano-complex objects with autoassembly behaviour.

Has joined the Materials Physics Centre (UPV/EHU-CSIC).



Dr. Ulf-Dietrich Reips

German.

Doctor in Psychology in 1997 from the University of Tübingen (Germany).

More than 12 years of research experience at universities in Switzerland, Germany, the USA and the United Kingdom.

Research field: Methodology of Internet science (use of the Internet for research into social and behavioural sciences); cognition of causality.

Comes from the Psychology department of the University of Zurich (Switzerland).

Has joined LabPsico of the Psychology department of the University of Deusto.



Dr. Yuri Racovich

Irish.

Doctor in Physics in 1995 from the National Science Academy of Minsk, Byelorussia.

Research experience at the Technical University of Brest; the University of Minho (Braga), Senior researcher at the CRANN, Trinity College (Dublin, Ireland).

Research field: Nanophotonics, spectroscopy and photonics application of particles and structures at a nano scale, microcavities optics, nano-biophotonics.

Comes from Trinity College of Dublin.

Has joined the Materials Physics Centre in Donostia-San Sebastian.



Dr. Jose Pomposo

Basque.

Doctor in Chemistry in 1994 from the University of the Basque Country (UPV/EHU).

More than 15 years of research experience in Materials Sciences. During 12 years he was responsible for the New Materials department at the Electromechanical Technologies Centre - Cidetec.

Research field: Launch of the "Macromolecular Click-Chemistry Laboratory" for the synthesis of nano-soft uniform



Dr. Susana Rodríguez

Galician.

Doctor in Chemistry in 1999 from the University of Vigo.

Guest researcher at the Environmental Biotechnology Institute of the University of Graz (Austria) and the Biological

Engineering department of the University of Minho (Portugal).

Research field: production of ligninolytic enzymes, development of different techniques for the immobilization of microorganisms and the immobilization of enzymes, bioreactor design, development of bioprocesses, biological treatment of wastewater containing dyes and the purification of enzymes.

Comes from the Rovira i Virgili University (Tarragona, Spain).

Has joined the CEIT - Technical Studies and Research Centre of Guipuzcoa - in Donostia-San Sebastián.

Comes from the University of Manchester.

Has joined the Functional Neuroanatomy Laboratory of the Faculty of Medicine of the UPV/EHU in Leioa.



Dr. Mª Cruz Rodríguez Oroz

Spanish.

Doctor in Medicine and Surgery from the University of La Laguna (Spain).

More than 10 years of research experience at different centres in Spain, the United Kingdom and the USA.

Research field: Parkinson's disease, mainly based on surgical treatment and the associated behavioural and cognitive problems, as well as the pathophysiology of basal ganglia of this disease.

Comes from the University Clinic of Navarra and CIMA.

Has joined BioDonostia and Donostia Hospital.



Dr. José Julio Rodríguez Arellano

From Madrid.

Doctor in Biological Sciences - Neurobiology in 1995 from the Complutense University.

More than 14 years of research experience in Switzerland (Novartis Pharma), France (INSERM), USA (Cornell Medical College and Florida Atlantic University) and the United Kingdom (University of Manchester).

Research field: Neuroanatomy and functional connectivity of neural circuits in the context of plasticity relating to memory under normal and pathological conditions.



Dr. Dirk Rübbelke

German.

Doctor in Economics ("Dr. rer. pol.") in 2001 from the Chemnitz Technological University; qualification ("Dr. rer. pol. habil.") in 2006.

14 years of research experience in Environmental and Public Economics.

Research field: Environmental and public economics; specifically the international aspects of climate change and the benefits of climate change policy.

Comes from the Climate and Environmental Research Centre of Oslo (CICERO).

Has joined the BC3 - Basque Centre for Climate Change.



Dr. Arthur Samuel

American.

Doctors degree in 1979 from the University of California, San Diego.

30 years of research experience, which include a postdoctoral stay at the Bell Laboratories and stays at the Universities of Yale and Stony Brook, USA.

Research field: psycholinguistics, particularly, the cognitive processes involved in the recognition of spoken language.

Comes from the University of Stony Brook.

Has joined the BCBL (Basque Centre on Cognition, Brain and Language).



Dr. Gunar Schnell

German.

Doctor in Physics from the State University of Mexidoy, Las Cruces, NM, USA.

Research experience in Germany, Japan and Belgium.

Research field: Experimental and phenomenological research of quantum chromodynamics and particularly the structure of the nucleon and hadronisation.

Comes from the Deutsches Elektronensynchrotron research centre (DESY) - Zeuthen, Germany.

Has joined the Faculty of Science and Technology of the UPV/EHU in Leioa.

Research fields: nanostructures, spintronics and quantum magnetism.

Comes from the position as Researcher at the University of Toronto, Canada.

Has joined the Chemistry-Physics department of the Faculty of Science and Technology of the UPV/EHU in Leioa.



Dr. Jens Siewert

German.

Doctor in Physics from the University of Karlsruhe, Germany.

With more than 13 years of research at centres in the USA, Italy and Germany.

Research field: quantum dynamics and transport in mesoscopic systems, quantum information theory.

Comes from the University of Regensburg, Germany.

Has joined the Chemistry-Physics department of the Faculty of Science and Technology of the UPV/EHU in Leioa.

Research field: Ultra-fast particle dynamics.

Researcher of the Physics and Materials Science Institute of Tomsk, Russia.

Has joined the Materials Physics department of the Faculty of Chemistry of the UPV/EHU in Donostia-San Sebastián.



Dr. Amanda Sierra

Spanish.

Doctor in Neuroscience in 2003 from the Complutense University of Madrid.

More than 10 years of experience in Neurobiology at research centres in Spain (Cajal Institute) and the USA (Rockefeller University, Stony Brook University and the Baylor Medical College).

Research field: Microglial cells in the interaction between phagocytosis and inflammation in the diseased brain. Cellular and molecular mechanisms affected in the regulation of microglial phagocytosis efficiency and its implications for the functional recovery of homeostasis tissue.

Comes from the Baylor Medical College/Neurological Research Institute (Houston, Texas).

Has joined the Neuroscience department of the Faculty of Medicine of the UPV/EHU.



Dr. Eugeny Sherman

Russian.

Doctor in Theoretical Physics in 1990 from the Landau Theoretical Physics Institute of Russia.

With 18 years of research experience at centres in Canada, Austria, Russia and Germany.



Dr. Vyacheslav Silkin

Russian.

Doctor in Physics and Materials Science in 1990 from the Russian Academy of Science.

With 17 years of research experience at centres in Russia and Spain.



Dr. Dmitri Sokolovski

British.

Doctor in Theoretical physics in 1985 from the "Bonch-Bruевич" Communication University of Leningrad.

More than 20 years of research experience at centres in Russia, Germany and the United Kingdom.

Research field: Quantum theory.

Comes from Queen's University in Belfast.

Has joined the Physics-Chemistry department of the UPV/EHU in Leioa.



Research field: Organic chemistry, fluorinated chemistry, chiral nanotechnology, astrochemistry.

Comes from the State University of New York in Stony Brook, USA.

Has joined the Organic Chemistry department of the UPV/EHU in San Sebastián.

Dr. Enrique Solano

Peruvian.

Doctor in Physics in 2000 from the Federal University of Rio de Janeiro, Brazil.

10 years of research experience in Peru, France, Germany and Brazil.

Research field: Multidisciplinary research in quantum optics; quantum information; quantum mechanics; condensed matter.

Comes from the position of Researcher at the Ludwig-Maximilian University of Munich, Germany.

Has joined the Chemistry-Physics department of the Faculty of Science and Technology of the UPV/EHU in Leioa.



Dr. Vadim Soloshonok

American.

Doctor in Organic Chemistry in 1987 from the Academy of Science in Ukraine.

More than 20 years of research and teaching experience in Ukraine, Russia, Poland, Italy, Japan and the USA.



With 15 years of research experience at centres in the United States, Russia and Germany.

Research field: Quantum physics and nanostructures.

Comes from the position of Researcher of the Electronic Technology Institute of Moscow.

Has joined the Materials Physics department of the Faculty of Chemistry of the UPV/EHU in San Sebastián.

Dr. Francesca Tinti

Italian.

Doctor in the History of the Medieval Church. Thesis awarded a prize by the University of Padua (Italy) in 2000.

More than 10 years of research experience at the University of Cambridge (United Kingdom) and the University of Bologna (Italy).

Research field: church organisation of the High Middle Ages, papal correspondence, preservation and transmission of documents of the High Middle Ages.

Comes from the Palaeography and Medieval Studies department of the University of Bologna.

Has joined the Medieval, Modern and American History department of the UPV/EHU in Vitoria-Gasteiz.



Dr. Ivo Souza

Portuguese.

Doctor in Physics in 2000 from the University of Illinois.

Physics Professor of the University of California, Berkeley (2004-2010).

Research field: condensed matter theory. Computational electronic structure.

Comes from the University of California, Berkeley (USA).

Has joined the Materials Physics Centre in Donostia - San Sebastian.



Dr. Ilya Tokatly

Russian.

Doctor in Physics in 1992 from the Electronic Technology Institute of Moscow.



Dr. Radmila Tomovska

Macedonian.

Doctor in Chemical Engineering from the University of "St. Cyril and Methodius" of Skopje, Macedonia.

More than 15 years of research experience in engineering, materials and laser chemistry.

Research field: photochemistry, photocatalysis, preparation and characterisation of materials, polymer surface modification.

Comes from the University of "St. Cyril and Methodius", Technology and Metallurgy department of Skopje, Macedonia.

Has joined the Joxe Mari Korta Centre, POLYMAT Institute of the UPV/EHU in Donostia - San Sebastián.

More than 15 years of research experience in Turkey and the United Kingdom.

Research field: Interactions of the structure of fluids for aerodynamic and/or hydrodynamic applications, turbulences modelling for different movement scenarios, renewable energy.

Comes from the University of Mersin, Turkey.

Has joined the Mondragon Unibertsitatea.



Dr. Paolo Vavassori

Italian.

Doctor in Physics in 1994 from the Politecnico di Milano, Italy.

More than 10 years of research experience at centres in Italy, the USA and France.

Research field: Changing magnetisation, related characterised dynamics and methods. Manufacturing and characterisation of magnetic nanostructures.

Comes from the Physics department of the University of Ferrara and the CNR-INFN National Research Centre of Modena (Italy).

Has joined the CIC NanoGUNE.



Dr. Alexei Verkhatsky

British / Ukrainian.

Doctor In Medical Sciences in 1993 from the Physiology Institute of Bogomoletz.

More than 15 years of experience at centres in Europe and Asia.

Research field: Neurosciences, cellular signalling, neurodegeneration.

Comes from the University of Manchester, Faculty of Life Sciences.

Has joined the Neuroscience department of the Faculty of Medicine of the UPV/EHU.



Dr. Koen Vandenbroeck

Belgian.

Doctor in Molecular Biology in 1998 from the Catholic University of Leuven, Belgium.

With 10 years of research experience at centres in Belgium, Italy and the United Kingdom.

Research field: Pharmacogenomics and the genetics of autoimmune diseases.

Comes from the position as Applied Genomics Professor at Queen's University, Belfast, United Kingdom.

Head of the Neurogenomics laboratory of the Neuroscience department of the UPV/EHU.



Dr. Mustafa Tutar

Turkish.

Doctor in Computation Fluid Dynamics in 1998, department of Mechanical and Aerospace Engineering of the University of Hertfordshire, United Kingdom.



Dr. José Vilar

Catalan.

Doctor in Physics in 1998 from the University of Barcelona.

10 years of research experience at Biotechnology research centres in the United States.

Research field:
Computational biology.

Comes from the position as Laboratory Director of the Sloan-Kettering Memorial Cancer Center of New York, United States.

Has joined the Biochemistry and Molecular biology department of the Faculty of Science and Technology of the UPV/EHU in Leioa.

NOTEWORTHY RESEARCH

José Vilar wins an international scientific competition on leukaemia diagnosis

José Vilar, an Ikerbasque researcher who is in the Biophysics Unit (CSIC-UPV/EHU), has won a prestigious international competition within the framework of the DREAM project, consisting in using computational methods for the diagnosis acute myeloid leukaemia based on molecular data obtained with a cellular analytical technique called flow cytometry.

The Ikerbasque researcher, José Vilar got his doctor's degree from the University of Barcelona and he has been working at the Biophysics Unit since 2008, performing computational studies of cellular processes, after having directed a computational biology group at the Sloan-Kettering Memorial Cancer Center of New York. Previously he did his Biophysics postdoctorate at the Princeton and Rockefeller universities.

The DREAM (Dialogue for Reverse Engineering Assessments and Methods) project was hatched 6 years ago by internationally renowned entities such as Columbia University, the National Institutes of Health (NIH) of the USA, IBM's Computational Biology center, and the New York Academy of Sciences. Its aim is to catalyse the interaction between the experimental and the theoretical part in the area of inference of the cellular networks and the creation of quantitative models in biological systems.

The DREAM Project annually organises a conference and, among other activities, reveals who have won the competitions that it has set in motion in the previous months, a set of tests to be overcome in scientific terms with the aim of progressing in techniques that allow for more effective action in the treatment of different diseases. The organisers propose an unknown in scientific terms, offering an incomplete set of information that

the researchers must complete based on their scientific capabilities. The researcher who manages to come up with the best proposal with regards to the posed question is the winner of the test.

"In computational biology this is called training the algorithm", asserts Dr. Vilar. "In other words, you have a method for making predictions and these provide you with a set of data to train it. With the data that this gives you, you adjust the method, and then with the adjusted algorithm one must predict data that you do not know". One of the four competitions of this edition was that relating to the diagnosis of acute myeloid leukaemia. About 20 research groups from around the world have participated in this competition. The organisation published the results of this year's edition during the course of the RECOMB/DREAM international conference, held in Barcelona. The method for the diagnosis of acute myeloid leukaemia based on data from flow cytometry developed by Dr Vilar, has obtained the best result, coming out ahead of institutions of great prestige such the MD Anderson Cancer Center (Texas University), which is catalogued as the best cancer hospital in the United States.



Dr. Agustín Vicente

Basque.

Doctor in Philosophy from the UPV/EHU.

Research experience as a postdoctoral researcher at the University of Barcelona and guest researcher at the University of North Carolina, at Brown University, at the University College of London and at the University of Valladolid.

Research field: philosophy of the mind; specifically in mental causation and emergentism, relationships between language and thought.

Comes from the University of Valladolid.

Has joined the Logic and Philosophy of Science department of the UPV/EHU in Donostia-San Sebastián.



Dr. Ferdinando Villa

Italian.

Doctor in Ecology in 1993 from the University of Parma, Italy.

Interdisciplinary research for 14 years on Ecological Economics at the universities of Maryland and Vermont.

Research field: Theoretical ecology.

Comes from the Gund Institute of Ecological Economy at the University of Vermont, USA.

Has joined the BC3 (Basque Centre for Climate Change).

Comes from the Max-Planck Institute in Stuttgart.

Has joined the Physical Matter department (CSIC-UPV/EHU) in Donostia - San Sebastián.



Dr. Lian-Ao Wu

Canadian.

Doctor in Physics in 1989 from the University of Jilin (China).

17 years of experience at research centres in China, Japan, Europe and the United States.

Research field: Quantum information theory.

Comes from the position as Researcher at the Quantum Information Centre of the Chemistry department of the University of Toronto (Canada).

Has joined the Chemistry-Physics department of the Faculty of Science and Technology of the UPV/EHU in Leioa.



Dr. John Walton

British.

Doctor in Social History in 1974 from the University of Lancaster.

More than 20 years of research experience in the United Kingdom. Director of research for the University, 2003-2004.

Research field: Social history and the culture of tourism and that of coastal resorts, especially in the United Kingdom and Spain. Editor of the newspaper the History of Tourism (Routledge) since 2009. He has held research management positions at the Central University of Lancashire and at the Metropolitan University of Leeds, in the United Kingdom.

Comes from the History department of the University of Lancaster, United Kingdom.

Has joined the Contemporary History department of the UPV/EHU in Leioa.



Dr. Lucia Vitali

Italian.

Doctor (Dr. Rer. Nat.) in Physics in the Karl-Franzens University Graz, Austria.

Postdoctoral stay at the Max-Planck Institute for Solid State Research in Stuttgart, Germany

Research field: surface science, spectroscopic and local scale structural research based on tunnel effect techniques.



Dr. Ronen Zangi

Israeli.

Doctor in Chemistry in 1999 from the University of Chicago.

12 years of research experience at research centres in Europe and the USA.

Research field: Quantum computational physics.

Comes from the position of Researcher of the University of Columbia in New York, United States.

Has joined the Organic Chemistry department of the Faculty of Chemistry of the UPV/EHU in Donostia-San Sebastián.

More than 10 years of experience at research centres in Asia and Europe.

Research Field: Phase transition models. Differential partial equations analysis.

Comes from the position as researcher at the University of Darmstadt in Germany.

Has joined the BCAM (Basque Centre for Applied Mathematics).



Dr. Jose Luis Zugaza

Basque.

Doctor in Pharmacy in 1993 from the University of Santiago de Compostela.

20 years of research experience at centres in the United Kingdom, France and Spain.

Research field: Cellular signalling in cancer and neurodegeneration.

Comes from the Initiative of Andalusia for Advanced Therapy, Health Council, Regional Government of Andalusia, Seville.

Has joined the Faculty of Science and Technology of the UPV/EHU in Leioa.



Dr. Arkady Zhukov

Spanish.

Doctor in Science in 1988 from the Physics Institute of the Russian Academy of Science. Qualification (Doctor in Science) from the State University of Moscow in 2010.

Manuel Laborde Werlinden award 2004.

More than 20 years of experience at research centres in Russia and Spain.

Research field: Magnetic materials, magnetic cables, amorphous nano-crystalline and granular magnetic materials, magnetoelectric effects, transport properties, magnetic properties.

Has joined the Materials Physics department of the UPV/EHU in Donostia-San Sebastián.



Dr. Peicheng Zhu

Chinese.

Doctor in Applied Mathematics in 1997 from Fudan University in Shanghai, China.

Doctor in fluid dynamics from Kyushu University in Fukuoka, Japan (2001).

Attracting Talent

IKERBASQUE RESEARCHERS ERC

The ERC (European Research Council) was created by the European Union in 2007. It is the first European organisation that promotes research projects based on scientific excellence.

ERC Advanced Grants

The ERC Advanced Grants programme is aimed at researchers with an exceptional background and leadership skills, who have undertaken pioneering and highly ambitious projects in life sciences, physical sciences and engineering or social sciences and humanities.

ERC Starting Grants

The aim of the ERC Starting Grants is to provide support to young researchers so that they develop their research career in Europe; these are intended for researchers who have demonstrated their capacity to become independent leaders.

These projects are granted for the research fields of life sciences, physical sciences and engineering research or social sciences and humanities

ERC ADVANCED GRANTS



Dr. Manuel Carreiras

Galician.

Doctor in Psychology in 1984 from the University of La Laguna.

25 years of research experience at centres in Spain, the USA, the United Kingdom, Sweden and Australia.

Research field: psycholinguistics, language neurocognition.

Comes from the position as professor at the University of La Laguna, Spain.

Has joined the BCBL (Basque Centre on Cognition, Brain and Language) as Scientific Director.

Manuel Carreiras has obtained an ERC Advanced Grant project called Bi-literacy: Learning to read in L1 and in L2.

The aim of this research project is to identify the neural substrates of the reading process and the cognitive components these are comprised of, with special attention to individual differences and reading disabilities, as well as researching the relationship between the specific cognitive functions and the changes that take place in the neural activity during the reading learning process in L1 and in L2.

The results of this project will provide a greater understanding of how the general factors and the specific neurocognitive factors of language underlie the individual differences - and reading disabilities - in the acquisition of reading of L1 and L2.



Dr. Enrique Zuazua

Basque.

Doctor in Mathematics in 1988 from Pierre and Marie Curie University, France and from the University of the Basque Country-Euskal Herriko Unibertsitatea in 1987.

Euskadi award 2006 for Science and Technology from the Basque Government and the National "Julio Rey Pastor" award from the MICINN.

20 years of research experience at centres in France, Spain, Brazil and the United States.

Research field: Differential partial equations, numerical methods, control theory and optimal design.

Comes from the position as professor of the Autonomous University of Madrid.

Has joined the BCAM (Basque Centre for Applied Mathematics) as Scientific Director.

Enrique Zuazua has obtained the ERC Advanced Grant project NUMERIWAVES. The research that he is carrying out with this project has the aim of obtaining new analytical tools and numerical schemes. Moreover, this will contribute towards significant progress in some applied fields, where the matters that are the object of the study play a decisive role. Together with the analytical and numerical analysis of these problems, a mathematical simulation platform will be installed to perform computer simulations and explore and visualize some of the most significant and complex phenomena.

ERC STARTING GRANTS



Dr. Rainer Hillenbrand

German.

Doctor in Physics in 2001 from the Technical University of Munich.

He has been a collaborator of the DIPIC from the Max Planck Institute.

Research field: Nano-optics and materials characterisation.

He comes from the position as head of the research group at the Max Planck Institute.

Has joined the CIC NanoGUNE.

The grant's project is called “Close Field Spectroscopic Nanotomography in Infrared and Terahertz Frequencies”, and its main aim is the development of a new microscopic technique to obtain 3D images of extremely small structures, measured in nanometres (millionths of a metre).



Dr. Luis Hueso

Galician.

Doctor in Physics in 2002 from the University of Santiago de Compostela.

Research experience in Italy and the United Kingdom.

Research field:
Electronic devices with organic semiconductors and nanofibres. Memory devices.

Comes from the University of Leeds in the United Kingdom.

Has joined the CIC NanoGUNE.

“*Spin Transport in Organic Semiconductors*” is the title of the project which has obtained the European grant, the aim of which is the research of new materials to manufacture electronic devices at a nanometric scale, replacing the silicon with organic molecules. It is therefore a search for a possible alternative to current electronics, in which physics, materials science and electronic engineering converge.



Dr. Thomas Schäfer

German.

Doctor in Chemical engineering.

With 15 years of research experience in the engineering of biological procedures, the separation of membranes and monitoring techniques at research centres in Germany, the Netherlands, Australia, Portugal, Italy and Spain.

Research field: sustainable separation processes through the use of benign materials, interfaces of stimuli sequences for separation systems and artificial smell systems, membranes separation in microreactor technology.

Comes from the Rovira i Virgili University, Tarragona.

Has joined the POLYMAT in Donostia-San Sebastián.

MATRIX” (“Mixed-Matrix Interfaces for Enhanced Fine Chemicals Downstream Processing and Monitoring”) is the name of the project obtained by Thomas Schafer. It involves a multidisciplinary project. Joining the recent progress made in biology/biochemistry, chemistry and materials science and combining these fields with the principles of chemical engineering, the project's aim is to create a more selective and versatile synthetic membrane for use in subsequent transformation processes of the chemicals industry.



Dr. Geza Tóth

Hungarian.

Doctor in Electric Engineering in 2000 from the University of Notre Dame, Indiana, USA.

8 years of research experience at research centres in Great Britain, Germany, Hungary and Spain.

Research field: Quantum information.

Comes from the position as Researcher of the ICFO (Photonic Sciences Institute) in Barcelona.

Has joined the Theoretical Physics and History of Science department of the Faculty of Science and Technology of UPV/EHU in Leioa.

The work has been presented under the caption of “Generation and detection of multi-particle entanglement in quantum optical systems”. It is largely theoretical research, although applicable to experimentation, on the so-called quantum entanglement, a phenomenon discovered in 1935 by three physicists, including Albert Einstein. This phenomenon has application in metrology, as it allows for a great degree of precision to be achieved when measuring certain quantities on an atomic scale.

GUEST RESEARCHERS

Ikerbasque Visiting Fellowship. 5th Call

Intended for senior researchers interested in research in the Basque Country for a maximum of 12 months.

Since 2007, the year in which the first call was launched, Ikerbasque has managed to attract a total of 87 guest researchers.

The aim of this initiative is to promote the transfer of knowledge and strengthen the international research networks.

The Fellowship initiative requires a joint application between the Host Research Group and the researcher.

The applications received are assessed by an Evaluation Committee that is independent of the Basque Science system, based on the following criteria:

- Interest and potential of the research project.
- The candidate's profile and experience.
- Level of excellence of the Host Group.

Arellano, Rogelio

Origin

Mexico

Current centre

Neurobiology Institute,
National Autonomous
University of Mexico

Host centre

Fac. of Medicine and
Odontology, UPV/EHU

Project title

Relevance of adenosine
receptors in oligodendrocytes
to health and disease

Field

Physiology

Baumberg, Jeremy

Origin

United Kingdom

Current centre

University of Cambridge

Host centre

DIPC

Project title

Optoelectronic properties
in subnanometre
scale plasmonics

Field

Physics

De Fazio, Dario

Origin

Italy

Current centre

Italian National Research
Council (CNR)

Host centre

Fac. of Science and
Technology, UPV/EHU

Project title

High accuracy quantum
description of the chemistry
of the early universe
(acronymous: earlyuniv)

Field

Chemistry

Gagalowicz, André

Origin

France

Current centre

Institut National de
Recherche en Informatique et
Automatique INRIA, France

Host centre

Fac. of of Information
Technology, UPV/EHU

Project title

Semantic tracking of non
verbal expressions of
human faces from video

Field

Information technology

Gagnon, Marie Pierre

Origin

Canada

Current centre

University of Québec

Host centre

BIOEF

Project title

Assessing Organisational
Readiness for Knowledge
Translation in Chronic Care

Field

Public health care

Hulden, Mans

Origin

Finland

Current centre

University of Helsinki, Finland

Host centre

Fac. of of Information
Technology, UPV/EHU

Project title

Induction of phonology and
morphology with inductive
logic learning strategies

Field

Linguistics

Lukas, John C.

Origin

Greece

Current centre

Consultations
Pharmaceutiques, France

Host centre

Fac. of Medicine and
Odontology, UPV/EHU

Project title

Neonatal and paediatric
treatment individualisation
for pain and heart regulation

Field

Physics

Marin, Raul Hector**Origin**

Argentina

Current centre

CONICET (Argentina)

Host centre

Neiker Tecnalia

Project title

The impact of changes in group
size and phenotypic appearance
on immunological and welfare
related parameters in laying
hens kept in alternative
production systems-MODELAY

Field

Biology

Melnik, Roderick**Origin**

Australia

Current centre

Wilfrid Laurier University
of Canada

Host centre

BCAM – Basque Centre for
Applied Mathematics

Project title

Analysis and Control
of Low Dimensional
Nanostructures in Coupled
Magneto-Electromechanical
Fields (“AnaCoNda”)

Field

Mathematics

Molnar, Sandor**Origin**

USA

Current centre

LeCosPA, National
University of Taiwan

Host centre

Fac of Science and
Technology, UPV/EHU

Project title

Cosmology with
Galaxy Clusters

Field

Cosmology

Raam, Frost**Origin**

Austria

Current centre

University of Israel

Host centre

BCBL. Basque Center on

Cognition, Brain and Language

Project title

Acquiring Literacy in
Spanish as a Second
Language: From Cognitions
to Brain neurocircuitry

Field

Psychology

Rogach, Andrey**Origin**

Germany

Current centre

University of Hong Kong

Host centre

Materials Physics Centre (CFM),
Mixed Centre CSIC-UPV/EHU

Project title

Research of factors influencing
growth mechanism,
morphology, Raman sensing
capabilities and exciton-
plasmonic, interactions of
multi-spiked gold nanoparticles
and J-aggregates / NANOSTAR

Field

Physics

Roversi, Pietro**Origin**

Italy

Current centre

University of Oxford

Host centre

CIC bioGUNE

Project title

HCV-REEXO

Field

Chemistry

Sharma, Sansar**Origin**

USA

Current centre

New York Medical College

Host centre

Fac. of Medicine and
Odontology, UPV/EHU

Project title

Regeneration of Optic Axons
in Experimental Conditions

Field

Biology

Sorochinsky, Alexander**Origin**

Ukraine

Current centre

Academy of Science of Ukraine

Host centre

Faculty of Chemistry, UPV/EHU

Project title

Fluorinated α -Hydroxy- β -
Amino and α,β -Diamino Acids:
New Synthetic Approach

Field

Chemistry

Stulberg, Joseph**Origin**

USA

Current centre

State University of Ohio, USA.

Host centre

Faculty of Law,
University of Deusto

Project title

Mediation Theory and
Institutional Design: The
Role of Cultural Values in
Shaping Policy and Practice

Field

Law/Philosophy

Traini, Daniela**Origin**

Australia

Current centre

University of Sydney

Host centre

Faculty of Pharmacy, UPV/EHU

Project title

Multiphase particle systems
to target respiratory infection

Field

Pharmacy

Zorec, Robert**Origin**

Slovenia

Current centre

Neuroendocrinology laboratory.
University of Ljubljana

Host centre

Biodonostia

Project

The role of vesicular
trafficking in astrocytes in the
Alzheimer's disease model

Field

Neurosciences

Attracting Talent

POSTDOCTORAL RESEARCHERS

Ikerbasque manages the DKR Program (Financial Aid Programme for Training and Perfecting Research Personnel) of the Department of Education, Universities and Research of the Basque Government.

The DKR is a program to finance the training of postdoctoral researchers which includes a training period abroad.

THE 2010 CALL



Barbero González, Iker

Destination abroad
Centre for Citizenship, identities and governance, UK
Destination in Euskadi
UPV / EHU. Administrative Law department
Project title
Migrations and new citizenship models
Field. Humanities



Laresgoiti Garay, Usue

Destination abroad
University of Cambridge, UK
Destination in Euskadi
UPV / EHU. Department of Genetics, Physical Anthropology and Animal Physiology
Project title
Study of the cellular and molecular mechanisms involved in foetal maturation and development of the murine lung tumour
Field. Biology



Granados Mateo, Eduardo

Destination abroad
MIT, USA.
Destination in Euskadi
Donostia International Physics Centre
Project title
Single-cycle optical pulses and isolated attosecond pulse generation
Field. Physics



López Romo, Raúl

Destination abroad
Queen's University of Belfast, UK
Destination in Euskadi
UPV / EHU. Contemporary History Department
Project title
The seventies: the lead decade. Discourses and social practices on the victims of terrorism in the Basque Country and Northern Ireland
Field. Humanities



Moreno Cano, Antonia

Destination abroad
"FCV" Cardiovascular Foundation (Colombia)
Destination in Euskadi
UPV / EHU. Journalism Department
Project title
Survey of Social Perception of Climate Science and Change in Colombia
Field. Journalism



García Echarri, Aitzol Imanol

Destination abroad
University of Stanford, USA.
Destination in Euskadi
Donostia International Physics Centre

Project title

The theoretical and experimental tools that will enable a three-dimensional negative index metamaterial fluid

Field. Physics



Prieto Sobrino, Ailette

Destination abroad

Helmholtz Centrum for Environmental Research-UFZ, Germany

Destination in Euskadi

UPV / EHU. Department of Analytical Chemistry

Project title

Development of automated or semi-automated analytical approaches using new extraction materials and monitoring strategies of emerging contaminants by means of passive sampling procedures

Field. Chemistry



Uria Garin, Larraitz

Destination abroad

Laboratoire IKER. Campus de la Nive (UPPA), France

Destination in Euskadi

UPV / EHU. IXA Group

Project title

Analysis and processing of dialects in the French Basque Country

Field. Humanities



Salsamendi Pagola, Egoitz

Destination abroad

University of Ulm, Germany

Destination in Euskadi

UPV / EHU. Zoology and Animal Biology department.

Project title

The relation between the deterioration of habitat and the occurrence of viral pathogens in bats which are harmful for human health

Field. Biology



Vidal Postigo, Maider

Destination abroad

University of Copenhagen, Denmark

Destination in Euskadi

UPV / EHU. Faculty of Chemical Sciences

Project title

Exhaustive assessment of the problems in chemical image analysis and the development of chemometric tools for its examination.

Field. Chemistry



Salado Rivera, Javier

Destination abroad

University of Birmingham

Destination in Euskadi

UPV/EHU. Inorganic Chemistry department

Project title

High resolution structural characterization and precise

synthetic control of gold shell nanostructures for protein immobilization

Field. Chemistry



Vara Ferrero, Natalia

Destination abroad

Universidad de Chicago, EE.UU.

Destination in Euskadi

UPV / EHU. Departamento de Filología Hispánica, Románica y Teoría de la Literatura

Project title

Horizons of irony, satire and parody in the postmodern literature in Spain

Field. Humanities

THE 2011 CALL

To date, Ikerbasque has recruited 24 post-doctoral researchers 12 of whom are in their second year of training and the rest of whom were chosen during the selection round in 2011.

This is a programme to finance the training of post-doctoral researchers which includes a period of training abroad.

The contract is valid for three years and allows the researchers who live in the Basque Country to temporarily move abroad to continue their training activities and their scientific and technical specialisation for 2/3 of the contract validity period.

This programme offers the Basque Science System an opportunity to establish or consolidate research ties between researchers from the Basque Country and other research groups and research centres throughout the world.



Arrizabalaga, Onetsine

Destination abroad

GSI Helmholtzzentrum für Schwerionenforschung GmbH, Germany.

Destination in Euskadi

ESS Bilbao

Project title

Radiobiological studies on Embryonic Stem Cells related to Ion Beam Therapy.

Field. Biomedicine



Del Castillo, Urko

Destination abroad

Feinberg School of Medicine, Northwestern University, (Chicago, EE.UU.)

Destination in Euskadi

Biophysics Unit (CSIC-UPV/EHU)

Project title

Regulation of motor-mediated microtubule sliding

Field: Cellular biology



Acha Sagredo, Amelia

Destination abroad

University of Liverpool, UK.

Destination in Euskadi

Fac. of Medicine and Odontology

Project title

Epigenetic profiling and biomarker development for the clinical management of head and neck tumours

Field. Medicine



Calzada Mujika, Igor

Destination abroad

University of Oxford, Reino Unido.

Destination in Euskadi

Mondragon Unibertsitatea

Project title

Basque City & Future of Cities and Regions

Field. Social Sciences



Errea, Ion

Destination abroad

IMPMC in Paris, France

Destination in Euskadi

DIPC

Project title

Anharmonic effects in superconductors

Field. Physics



Jelenkovic, Aline

Destination abroad

University of Helsinki, Finland

Destination in Euskadi

Department of Genetics,
Physical Anthropology
and Animal Physiology

Project title

Cardiovascular Disease:
Determining risk factors
and mode in which they
are influenced by physical
development in childhood
and adolescence

Field. Biology



López de la Calle, Oier

Destination abroad

University of Edinburgh

Destination in Euskadi

UPV-EHU. IXA Group

Project title

Automatic Knowledge
Extraction by Reading
Wikipedia

Field. Computing



Marin, Eugenia

Destination abroad

Massachusetts Institute of
Technology, Cambridge, EE.UU.

Destination in Euskadi

BCBL- Basque Center on
Cognition, Brain and Language

Project title

Behavioral and Neural
Study of Priming Effect

Field. Psychology



Olabarria, Markel

Destination abroad

Columbia University, USA.

Destination in Euskadi

UPV-EHU. Department
of Neuroscience

Project title

Targeting astroglial alterations
as a potential therapeutic
approach in Alzheimer's
disease and other major
neurodegenerative diseases

Field. Neuroscience



Suárez Bilbao, Saioa

Destination abroad

School of Earth and
Sciences. Cardiff University
(Cardiff, Gales, UK).

Destination in Euskadi

UPV/EHU. Department of
Mineralogy and Petrology

Project title

Evolution of the platinum
group minerals and platinum
group elements in oxidising
surface environments
(gossans and laterites). From
deserts to tropical areas

Field. Geology



Valverde, Laura

Destination abroad

Institute of Legal Medicine.
University of Münster
(WWM), Germany

Destination in Euskadi

UPV/EHU. BIOMICS
Research Group

Project title

Epigenetic approach for
discriminating monozygotic
twins in criminalistics

Field. Genetics



**Zarraonandia Martínez,
Iratxe**

Destination abroad

National Laboratory,
Chicago, USA.

Destination in Euskadi

Department of Genetics,
Physical Anthropology
and Animal Physiology

Project title

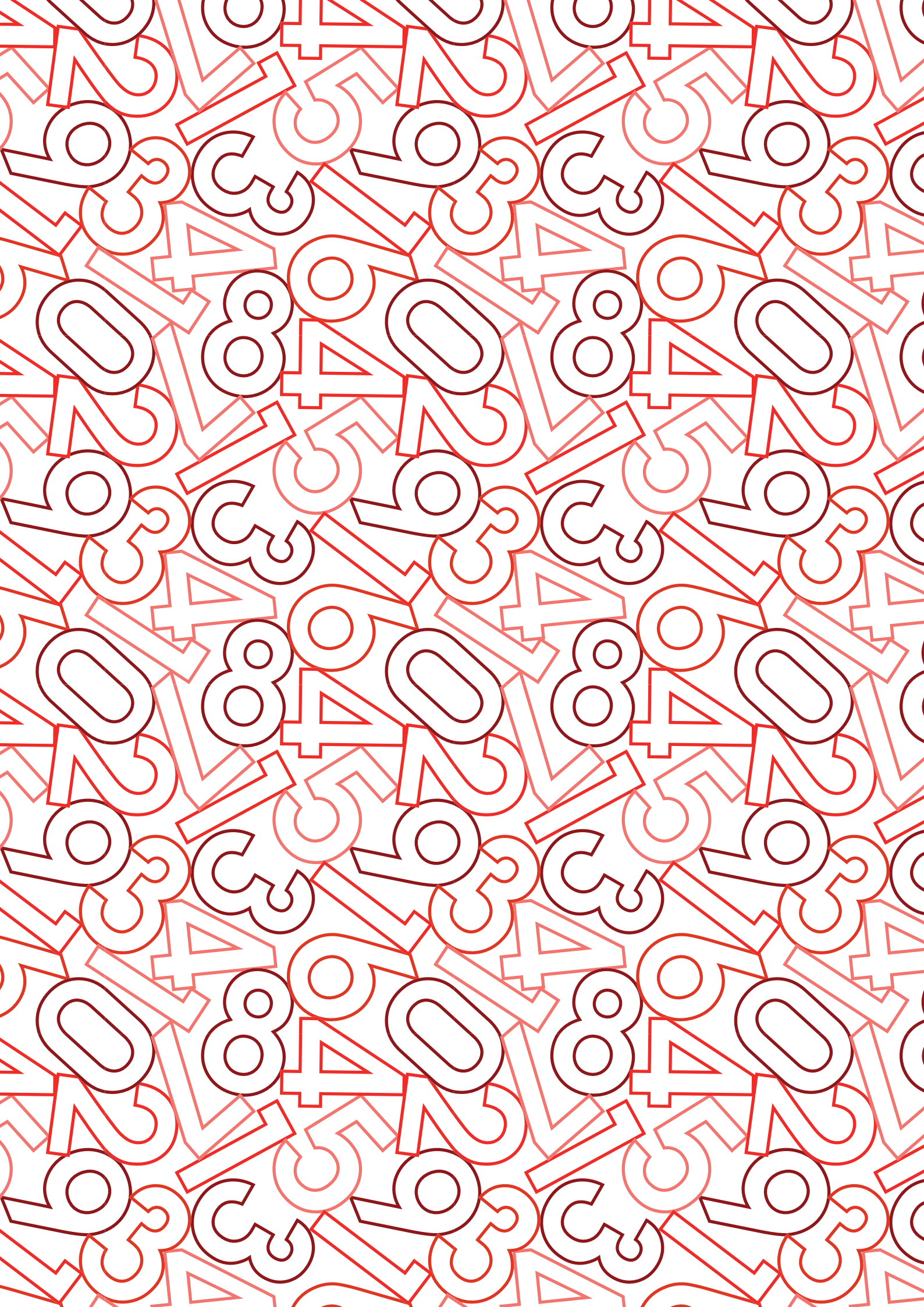
Marine biodiversity and impact
in the ecosystem: Metagenomics

Field. Genetics



Scientific Production

**KEY
DATA**
50



Scientific Production

KEY DATA



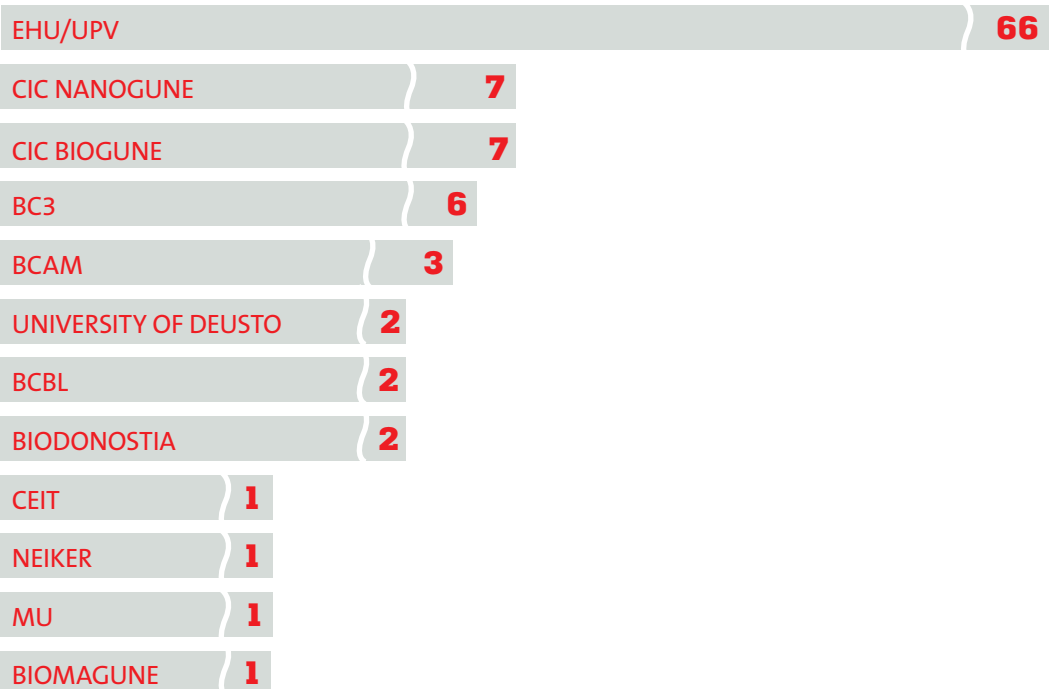
ARTICLES AND PUBLICATIONS 4.19 Articles in ISI Database journals per researcher 5.25 This includes papers in the ISI Database, chapters in books and complete books.	PAPERS AND COMMUNICATIONS 2.44 No. of papers presented at international conferences per researcher FUNDS 151,036 Funds obtained by Ikerbasque Researcher as director or member of the research group	PROJECTS 229 Projects with external financing in which Ikerbasque researchers participate
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Due to some researchers having started to work in Ikerbasque over the course of 2011, they have not worked for a full year. Taking this variable into account the ratios are calculated for 89 researchers.

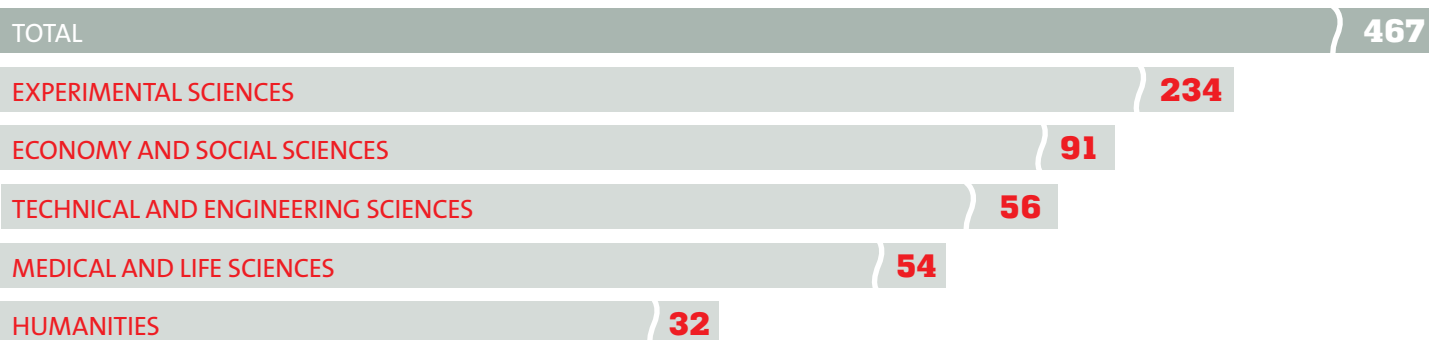
IKERBASQUE RESEARCHERS per knowledge area:



APPOINTMENT CENTRES for Ikerbasque researchers:

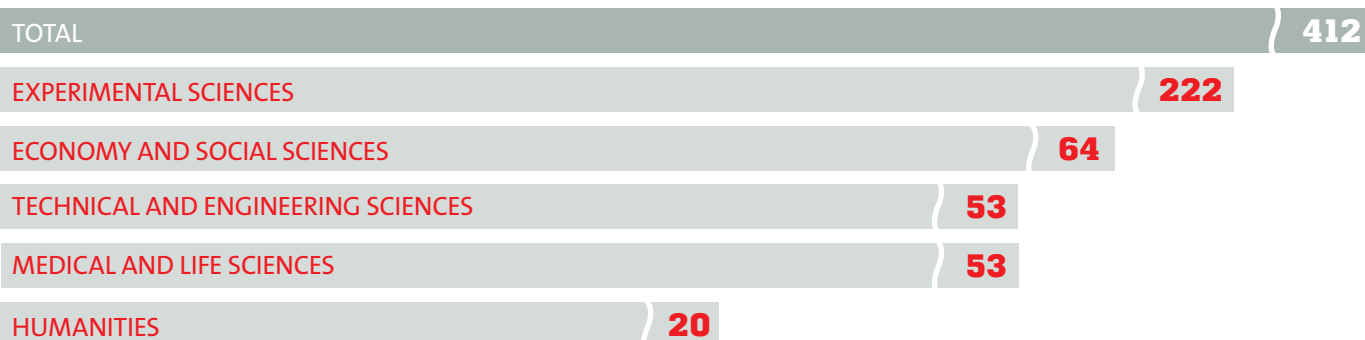


NO. PUBLICATIONS 2011 per research area:



** Including published documents, books and chapters*

NO. PUBLICATIONS indexed in the ISI Database:



Research Centres

BERC

The BERC are Research Centres of excellence tied to the university environment.

The current BERC network has six research centres:



DIPC - Donostia International Physics Center Donostia-San Sebastián

Under the chairmanship of Pedro Miguel Echenique, it researches the areas of:

- Electronic properties in the nano-scale.
- Surfaces and interfaces.
- Polymers and soft matter
- Photonics and plasmonics.
- Computational chemistry and physical chemistry.

No. of publications indexed in 2011: 208



Materials Physics Center Donostia-San Sebastián

Under the leadership of Ricardo Díez Muiño, it researches the areas of:

- Chemical-physical properties of complex materials.
- Electronic properties in the nano-scale.
- Photonics.
- Polymers and soft condensed matter

No. of publications indexed in 2011: 127



Biophysics Foundation of Biscay Leioa

Under the leadership of Felix Goñi,
it researches the areas of:

- Biological membranes.
- Biophotonics and microscopy.
- Computational and integrative biology.
- Cellular biology.

No. of publications indexed in 2011: 30



BC3 - Basque Centre of Climate Change Bilbao

Under the leadership of Anil Markandya,
it researches the areas of:

- Adaption to climate change and consequences of the change.
- Measures for mitigating the consequences of climate change.
- International dimensions of climate policies.

No. of publications indexed in 2011: 21



BCAM - Basque Center for Applied Mathematics Bilbao

Under the leadership of Enrique Zuazua,
it researches the areas of:

- Equations in partial derivatives and control theory.
- Design, analysis and optimisation of networks.
- Computational mathematics.
- Computational mechanics of fluids.
- Mathematical biology and molecular simulation.

No. of publications indexed in 2011: 77



BCBL - Basque Center on Cognition, Brain and Language Donostia-San Sebastián

Under the leadership of Manuel Carreiras,
it researches the areas of:

- Language acquisition, representation and processing.
- Multilingualism.
- Neurodegeneration, language and disorders in learning.
- Advanced methods in cognitive neuroscience.

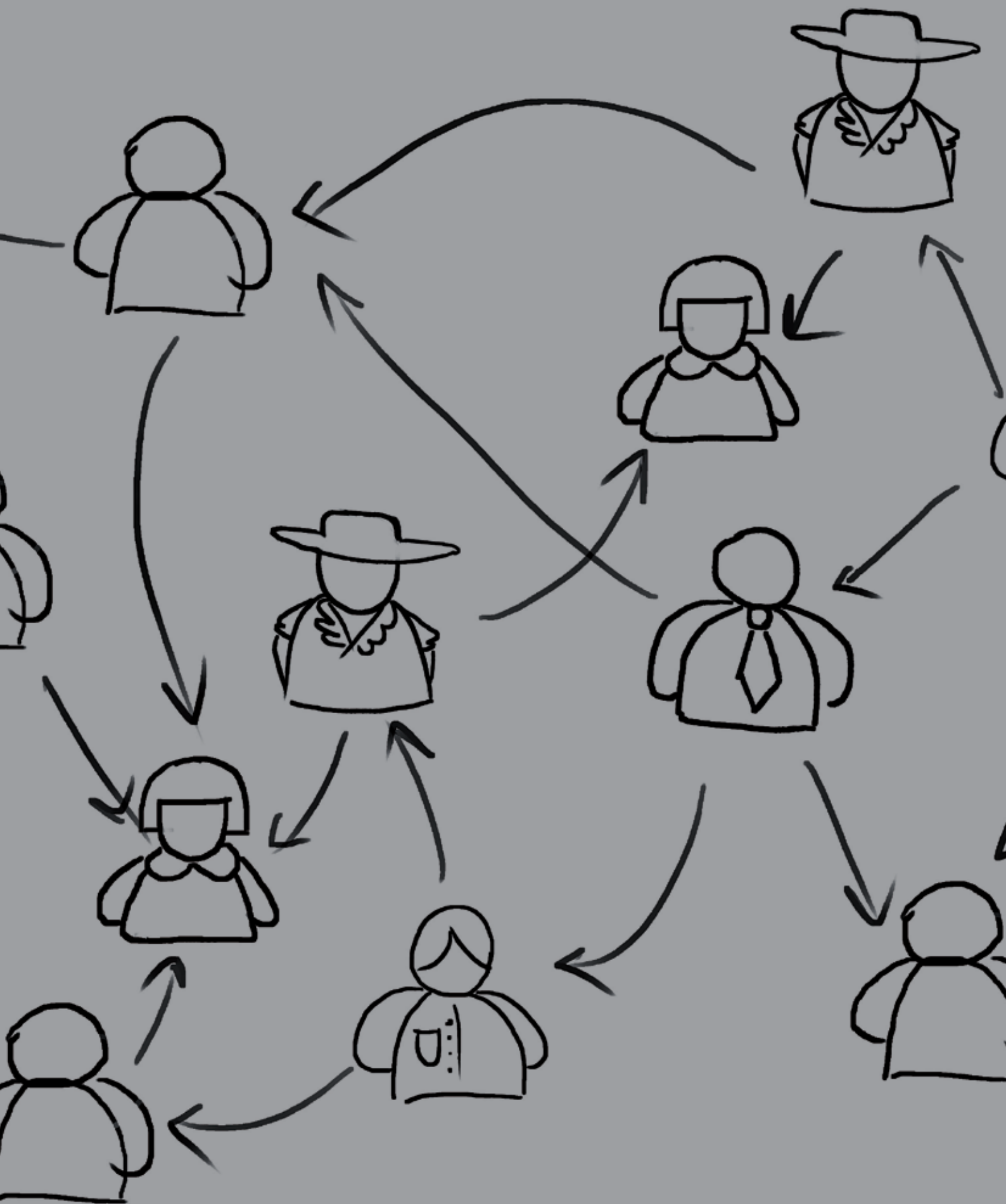
No. of publications indexed in 2011: 37

Diffusion of Science

**ZIENTZIA
FORO**
56

**SUMMER
COURSE**
58

**TRAINING
CARAVAN**
59



Diffusion of Science

ZIENTZIA FOROA'11



It is a scientific diffusion initiative launched in 2008 which periodically brings internationally renowned researchers and scientists to the Basque capital cities. To date, "Zientzia Foroa" has been comprised of approximately twenty conferences during which first class scientists have aimed to bring the public at large closer to topical issues related to medicine, physics, chemistry, mathematics, the economy and linguistics or have discussed issues such as climate change, the origin and evolution of man or cerebral processes.

Date: 12th May
Place: Paraninfo of the UPV/EHU

"Chemistry and Sustainable Development: Our life and our future"

Luis Oro

He studied chemistry at the University of Zaragoza, graduating in 1967 and completed his doctorate in 1970. He also did post-doctoral studies at the University of Cambridge (1972-1973). After having occupied various academic posts at the Universities of Zaragoza, Complutense de Madrid and Santander, since 1982 he has held the chair for Inorganic Chemistry at the University of Zaragoza. He is currently director of the University Institute of Homogeneous Catalysis.

He was vice-chairman of the "European Science Foundation" and member of the "European Science and Technology Assembly" of the European Union. Since October 2008, he has been president of the European Association for Chemistry and Molecular Sciences (EuChemS).



Date: 16th June
Place: Alhóndiga Bilbao

"Speech processing from a multilingual perspective"

Tanja Schultz

Tanja Schultz obtained a master and a doctorate in Computing at the University of Karlsruhe, Germany in 1995 and 2000 respectively. In 2000 she joined the Carnegie Mellon University where she is a member of the lecturing staff in the Language Technologies Institute as a research scientist in computing. Her specialist area is multilingual perspectives and she researches on the portability of speech processing systems to many different languages.

She has, amongst others, been awarded the FZI prize for her outstanding doctoral thesis, the Allen Newell Medal for research excellence and the ISCA prize for the best paper in the publication on acoustic modelling independent from language.





Date: 6th October
Place: Paraninfo of the UPV/EHU

“Cellular immortality and the keys to cancer and aging”

María Blasco

Maria Blasco obtained her doctorate in 1993 at the Centre of Molecular Biology "Severo Ochoa" under the supervision of Margarita Salas. In the same year she joined the Cold Spring Harbor Laboratory in New York (USA) for a post-doctoral placement under the leadership of CW Greider. In 1997 she started her own research group in the National Centre of Biotechnology in Madrid. She joined the CNIO in 2003 as Director of the Molecular Oncology Programme and leader of the Telomeres and Telomerase Group and in 2005 was appointed vice-chairwoman. Nowadays she is Director of CNIO.



Date: 13th October
Place: Kursaal Donostia

“Chemistry in the repair of the human body: from the bionic man to nano-medicine”

María Vallet

María Vallet Regí is a Doctor in Chemical Sciences from the Complutense University of Madrid and Professor of Inorganic Chemistry at the same university. In 2011 she was awarded the Leonardo Torres Quevedo National Research Price in Engineering for her unique contribution to the field of ceramic biomaterials and other biomaterials for their application in traumatology, odontology and tissue engineering.



Date: 29th November
Place: Kutxa Andia Room – Donostia

The new human biology: interpreting the Genome”

Sydney Brenner

Sydney Brenner, a South African biologist awarded the Nobel Prize for Medicine in 2002, is one of the founding fathers of molecular biology. His name is associated with fundamental discoveries in this discipline such as the deciphering of the genetic code or the demonstration of the messenger RNA. He is undoubtedly the most important biologist of the second half of the 20th century.

He graduated in medicine at the University of Witwatersrand and in 1952, having graduated, he moved to Oxford where he started work on the genetics of bacteriophages.



Date: 1st December
Place: Guggenheim Museum

“What kind of Europe do we want? The current crisis is not a debt crisis. Debts are the expression and consequence of a political crisis”

Ulrich Beck

Ulrich Beck is director of the Sociology Institute of the University Ludwig-Maximilian in Munich and professor in the London School of Economics. He studies psychology, sociology, political sciences and philosophy, the discipline in which he obtained his doctorate in 1972 in the University of Munich where he currently lectures.

Some of his books and studies have laid the foundations for current sociology. The most outstanding of those are 'Towards a new modernity' (1986), 'What is globalisation? Fallacies of globalism, responses to globalisation' (1997), 'Democracy and its enemies' (1998), 'A new happy world. The perversion of work in the era of globalisation' (2000), or 'The cosmopolitan gaze or war is peace', 2006.

Diffusion of Science

SUMMER COURSE

Social Responsibility of Science

Ikerbasque participated in the summer courses at the University of the Basque Country – Euskal Herriko Unibertsitatea (UPV-EHU) with a course which had the objective of analysing the role played by scientists and journalists in the transmission of scientific information and the importance of scientific education as an essential requirement for democracy.



Following the success of the course in 2010, which signalled the first participation by the Foundation in the UPV's summer courses, this year Ikerbasque put forward a course aimed at emphasising the need to rectify the considerable imbalance between enormous scientific development and the scarce true knowledge that the lay public has on this subject. This distancing comes to the fore not only in the lack of technical and scientific vocations amongst our young people but it is also highly visible in the impact made on society by the most frequent information on medical (such as bird flu) or food (the recent E.coli bacteria crisis) scares.

This is why Ikerbasque suggested that UPV-EHU should ascertain the degree of responsibility that researchers and journalists have in the correct diffusion of scientific information. This innovative focus tries to make scientists themselves extend their collaboration with the mass media to eradicate misleading information and to create what Daniel Innerarity refers to as 'scientific citizenship'; i.e. to promote education in order to generate a critical mass which rejects news which has no scientific refutation and which knows and values the contribution made by researchers in both social and economic development.

The course programme included the participation of Milagros Pérez Oliva, expert editor and defender of the reader in the newspaper 'El País'; Itziar Nogeras, general director of the Elhuyar Foundation, dedicated to scientific diffusion in the Basque language; Juan Ignacio Pérez Iglesias, professor of biology and ex-rector of the UPV; Miguel Ángel Sierra Rodríguez, professor of organic chemistry at the Complutense University; Daniel Innerarity, Ikerbasque researcher also known for his extensive work as an essayist and collaborator in various communication media; Gemma Revuelta, assistant director at the Observatory of Scientific Communication at the Pompeu Fabra University; and Malen Ruiz Elvira, journalist at the newspaper 'El País' (where she was in charge of the 'Future' supplement) and winner in 1987 of the CSIC prize for Scientific Journalism.

Furthermore, the course also saw the participation of Fernando Cossio Mora, president of the Ikerbasque Executive Commission and professor at the UPV, and Begoña Ochoa, director of Scientific Policy for the Basque Government.



Diffusion of Science

TRAINING CARAVAN

Sustainability Strategy

➤ Talk by Dr. Martin Cooke

⬆ Talk by Dr. Tinti

The Department of Education, Universities and Research of the Basque Government, Ikerbasque and the BC3 (Basque Centre for Climate Change) joined forces to launch the Training Caravan, a pioneering initiative with the objective of raising vocational awareness amongst higher secondary school pupils in the region. Throughout the course, leading researchers of renowned international prestige went to schools at their request to explain firsthand to pupils what their work consists of and the development that their work contributes to society.

The first edition had an excellent reaction by pupils in approximately thirty selected schools. In surveys carried out after the visit by the researchers to the schools, 43% of the pupils participating admitted starting to focus their academic and professional training on the area of science.

This initiative is headed by researchers who are members of Ikerbasque and the BC3 and, given that many of them are from different countries, the meetings with pupils are conducted in English.

SCIENCE CAREERS.EU

The Internet website gets consolidated with employment vacancies in research in the Basque Country launched by Ikerbasque.

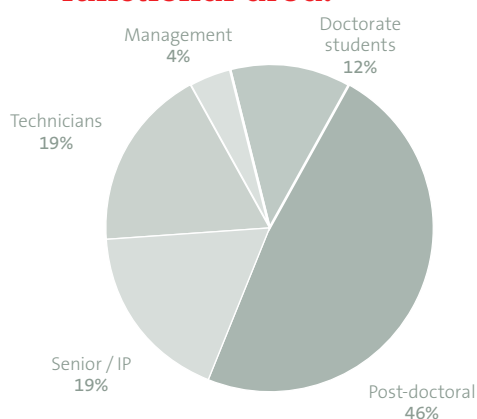
In 2010, Ikerbasque launched the sciencecareers.eu website which has already become a reference for research staff all over the world who choose the Basque Country to develop their professional career.

ScienceCareers is a useful tool both for researchers and for research institutions. For the former it provides a unique venue from where they can access all professional opportunities offered by the Basque System of Science and Technology, including a flagging service which occasionally gives information on any vacancies which arise. For universities, technology and research centres in the Basque Country they are given a space where their employment vacancies get a greater publicity. This aspect is fundamental in such an internationalised and competitive era such as the one characterising scientific research.

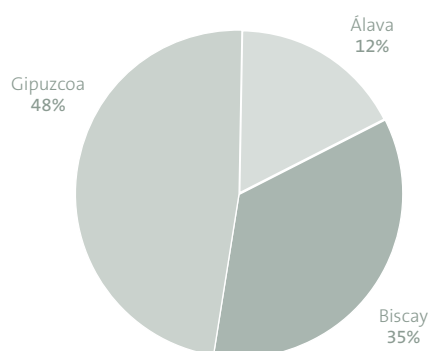
There are other web services which offer the same features as ScienceCareers.eu, however the advantage of this website is that it is based on the centralisation of data thus enabling those who publish employment vacancies to have these more widely disseminated by virtue of automatically exporting information to other international websites such as Euraxess (the European portal managed by the European Commission) and NatureJobs (from the prestigious Nature journal), in such a way that the Basque centres that publish their vacancies in ScienceCareers do not have to double their efforts by publishing the same information in various websites.

In the eighteen months that this new service has been up and running, 20 research institutes in the Basque Science, Technology and Innovation Network have published 110 employment vacancies to cover 180 positions with different profiles.

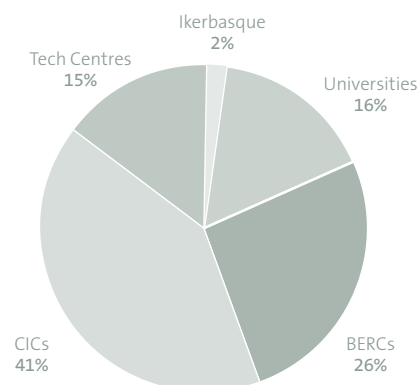
Classification of positions by their **category** or **functional area**:



Classification of positions by their **Historical Territory**:



Classification of positions by **Institution**:



Basque Observatory of Science and Technology

IKERBOOST

In 2010, Ikerbasque set up the Basque Observatory of Science and Technology, a tool for monitoring the advance of science and technology in the Basque Country.

Ikerbasque developed and launched the Observatory in 2010, with a base of more than 50 synthetic indicators regarding the main aspects related to research activity such as the research population, research results, research incentives, technological transfer, projects and training of researchers.

The same year the first “Report on Science in the Basque Country” was published. This document featured the main result indicators in the area of scientific and research production in our environment over a period ranging from 2000-2009, which therefore reflects the most recent plans in science, technology and innovation which have been implemented in the Basque Country.



Some details worth highlighting:

- 1** The world production of scientific documents already exceed two million of which Spain contributes approximately 2.75%. The contribution made by the Basque country to the total Spanish production is 5%, after regions in Spain with a higher number of inhabitant and, therefore, with larger research communities.
- 2** Nevertheless, the growth rate in the Basque Country is greater than the Spanish and world average which indicates an increase in scientific production and productivity which is fruit of the sustained commitment made to science and technology by successive plans by the Basque Government.
- 3** If we relate the production volume of each of the Spanish regions with the quotation, and therefore, repercussion and notoreity of its scientific results a correlation can be seen with the data of previous indicators. However it can be appreciated more graphically which regions produce more quoted and visible science.
- 4** This boost to science is based on the commitment to investment in R&D in the Basque Country which, for the first time, exceeds 2% of the GDP (2.08%), with a total of 1,360 million euros. This investment represents an increase of 6.2% with regard to the previous year. The Basque Country has increased its scientific production (8%) above this increase in investment in R&D which means that we have improved our research productivity during the last year.

Some details worth highlighting:

- 5 When comparing the ratios given by the scientific group of the Basque Country, the most recent information available indicates that the percentage of research experts of the active population is just below 1%, specifically 0.94%. This average is the same as that registered for the entire State and is close to the European average (1.03%), however is still far from leading countries in the world, a list which is headed by Luxemburg (2.23%) and Finland (2.10%).
- 6 The Basque Country has a science system based on the classical scientific branches (Primarily Physics, Chemistry and Materials Science), although in recent years diversification has taken place towards more transversal and interdisciplinary branches (Biomedicine, IT, Social Sciences and Humanities, amongst others).

Figure 1

The international impact of scientific production in the Spanish regions (*Source: Scopus*). Values above 1 with regard to standardised quotes indicate an impact above the world average

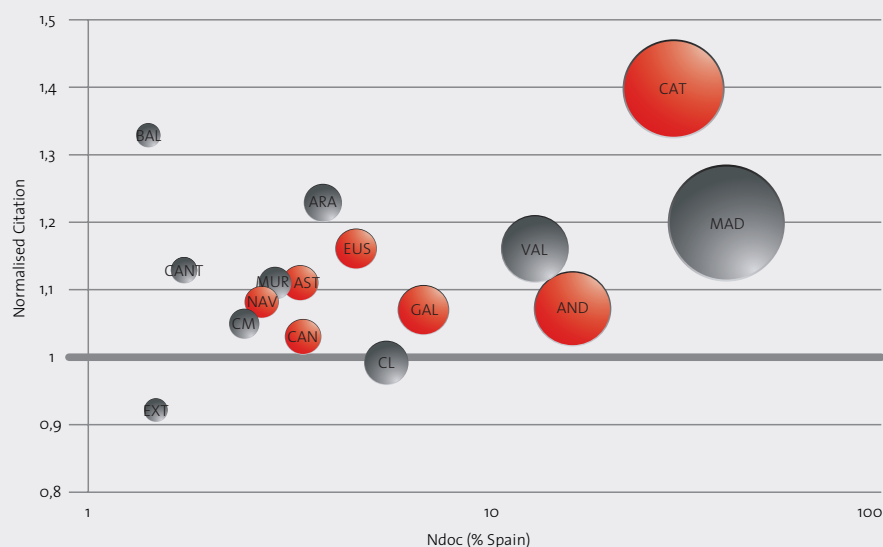


Figure 2

Researchers per thousand of people occupied in various states, parts of the European Union (EU) and the Basque Autonomous Region.

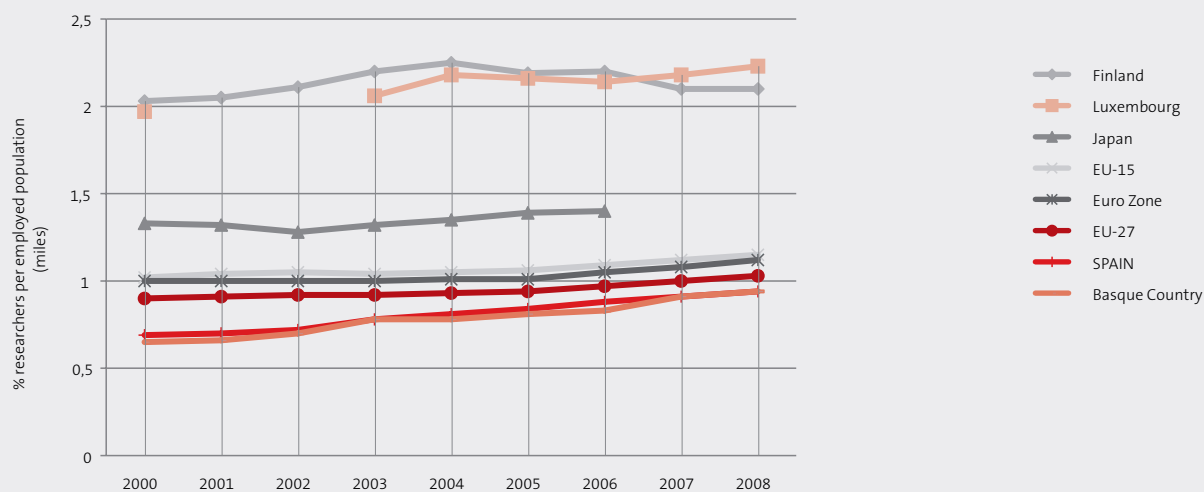
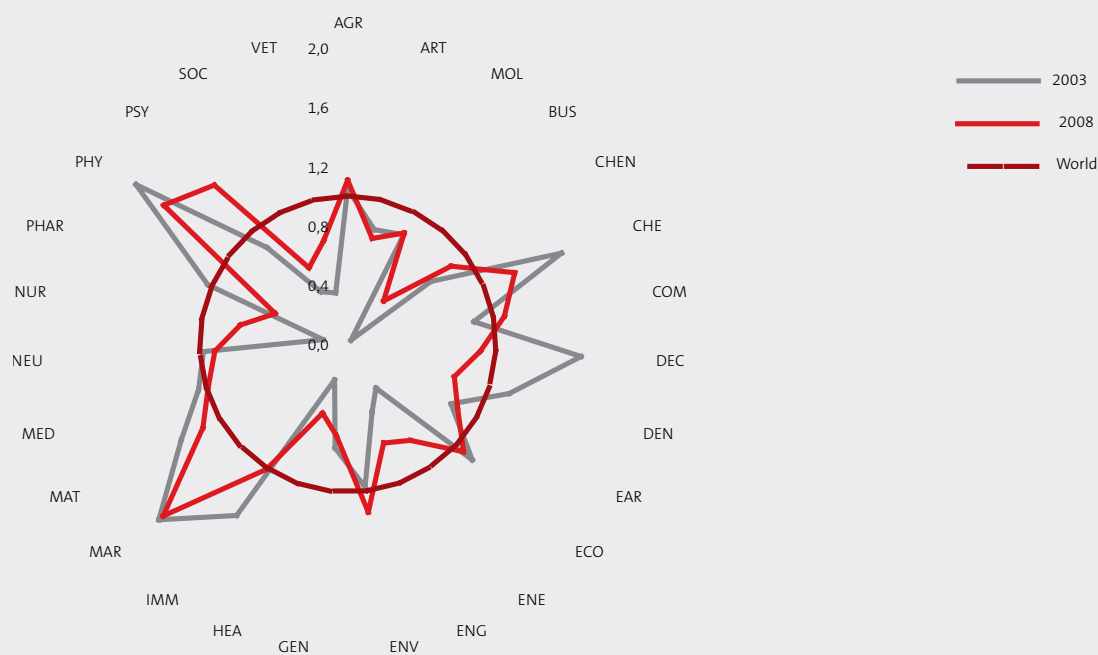


Figure 3

Evolution in the Basque indexed production in R&D&I in relation to the world average and grouped by thematic areas. (Source: Scopus)



WORKSHOP

Twice a year the "Ikerbasque Workshop" are celebrated with a double objective. On the one hand the objective is to create a space where the researchers can share personal and professional experiences, and, on the other, create a network amongst the Ikerbasque researchers which enables boosting knowledge transfer.

Talent House

Donostia-San Sebastián

On 6th May we held the 7th Ikerbasque Workshop. The meeting, which was held on the premises of the Talent House residence - launched in San Sebastián to welcome and incorporate research staff to the city - brought together Ikerbasque researchers with institutional representatives. The meeting used the World Café methodology; a collaborative dialogue in reduced groups which ended with an open knowledge sharing session and a lunch.



Maritime Museum Bilbao

On 7th November we held the 8th Ikerbasque Workshop in the Maritime Museum of Bilbao in which 75 Ikerbasque researchers from approximately twenty countries participated.

As the event unfolded, general lines were presented on scientific policy in the Basque Country as well as the Ikerbasque strategy in the area of research. Jorge Velasco, representative of the CSIC in Brussels presented a paper on ERC grants.



LIST OF PUBLICATIONS

Published during 2011.

ARTICLES

A list of all the articles published by Ikerbasque researchers in 2011 is given below.

ECONOMY AND SOCIAL SCIENCES

Anil Markandya

Aportaciones desde la economía de la adaptación a la toma de decisiones sobre Cambio Climático: un ejemplo para la Comunidad Autónoma del País Vasco
A. Markandya, I. Galarraga, N. Osés, A. Chiabai and K. Khatun / *Agrarian Economy and Natural Resources* - Vol.

What Have We Learnt in the Last 30 years?
A. Markandya / *Rivista di Politica Economica* Vol.

Equity and Distributional Implications of Climate Change
A. Markandya / *World Development* - Vol. 39,6 - Pp. 1051-1060

Green Taxes on Aviation: The Case of Italy: The Proposal of the Green Taxation Matrix
A. Markandya and E. Ricci / *Rivista di Politica Economica* - Vol. VII-IX - Pp. 171-210

Handbook for Sustainable Energy
A. Markandya, I. Galarraga and Gonzalez-Eguino / *Edward Elgar, Cheltenham* - Pp. 612pp

Introduction: Sustainable Development, Energy and Climate Change
Halsnaes, K, A. Markandya and P. Shukla / *World Development* - Vol. 39 - Pp. 983-986

Linking Reduced Deforestation and a Global Carbon Market: Implications for Clean Energy Technology and Policy Flexibility
A. Markandya, V. Bosetti, R. Lubowski and A. Golub / *Environment and Development*

The Internalization of Externalities in the production of electricity: Willingness to pay for the attributes of a policy for renewable energy"
A. Longo, A. Markandya and M. Petrucci / *Ecological Economics* Vol. 67-1 - Pp. 140-152

The Road to Copenhagen-COP 15
I. Galarraga and A. Markandya / *Elhuyar*

Annick Laruelle

Consensus versus dichotomous voting
Annick Laruelle and Federico Valenciano / *Studies in Fuzziness and Soft Computing* - Vol. 267 - Pp. 135-143

Majorities with a quorum
Annick Laruelle and Federico Valenciano / *Journal of Theoretical Politics* - Vol. 23(2) - Pp. 241-259

Turnout Intention and Social Networks
Constanza Fosco, Annick Laruelle and Angel Sanchez / *Advances in Complex Systems* - Vol. 14/1 - Pp. 31-53

Arthur Samuel

Perception of exuberant exponence in Batsbi: Functional or incidental?
Alice C. Harris & Arthur G. Samuel / *Economy and Social Sciences* - Vol. Language - Pp. 447-469

Perceptual learning evidence for contextually-specific representations
Tanya Kraljic & Arthur G. Samuel / *Cognition* - Vol. 121 - Pp. 459-465

Daniel Innerarity

¿Qué es eso de la gobernanza? / What is governance? / Qu'est-que la gouvernance? / Zer da gobernantza delako ori?
Daniel Innerarity / *www.globernance.org* - Pp. 10

El diálogo entre saber y poder
Daniel Innerarity / *Claves de razón práctica* Vol. (289) enero/febrero 2011 - Pp. 12-20

La política después de la indignación
Daniel Innerarity / *Claves de razón práctica* Vol. 218 (diciembre 2011) - Pp. 30-42

Dirk Rübbelke

Emissionsvermeidung oder Anpassung an den Klimawandel: Welche Zukunft hat die Klimapolitik?
Bardt, Hubertus, Lars P. Feld, Kai A. Konrad, Marcel Thum, Wolfgang Buchholz, Dirk Rübbelke, Christian Hey, Karin Holm-Müller, Michael Weber, Rüdiger Pethig, Joachim Weimann and Timo Goeschl / *ifo Schnelldienst* - Vol. 64 - Pp. 3-29

Impacts of Climate Change on European Critical Infrastructures: The Case of the Power Sector
Rübbelke, Dirk and Stefan Vögele / *Environmental Science & Policy* - Vol. 14 - 53-63

Interior Matching Equilibria in a Public Good Economy: An Aggregative Game Approach
Buchholz, Wolfgang, Richard Cornes and Dirk Rübbelke / *Journal of Public Economics* - Vol. 95 - Pp. 639-645

International Support of Climate Change Policies in Developing Countries: Strategic, Moral and Fairness Aspects
Rübbelke, Dirk / *Ecological Economics* - Vol. 70 - Pp. 1470-1480

Durk Gorter

A Multilingual Approach: Conclusions and Future Perspectives: Afterword
D. Gorter & J. Cenoz / *The Modern Language Journal* - Vol. 95 - Pp. 442-445

Colloquium – Beyond bilingualism and SLA: Acquiring several languages in school contexts, American Association for Applied Linguistics Colloquia, 2010. Research in progress
Cenoz, Jasone & Gorter, Durk / *Language Teaching* - Vol. 44 - Pp. 1-4

Focus on Multilingualism: a Study of Trilingual Writing
J. Cenoz and D. Gorter / *Modern Language Journal* - Vol. 95 - Pp. 356-369

Multilingualism and language policy: questions for Michael Clyne
D. Gorter / *Language Policy* - Vol. 10 - 59-68

Gonzalo Bacigalupe

A review of the Immigrant Task Force Draft Report
Gonzalo Bacigalupe / *The Family Psychologist: Bulletin of the Society of Family Psychology* - Vol. 27 - Pp. 11-12

Adherencia a una dieta libre de gluten entre familias con un menor con enfermedad celiaca. Estrategias para el éxito o el fracaso. [Gluten free diet among familie with a child diagnosed with celiac disease: Success and failure strategies.]
Gonzalo Bacigalupe / *Grano de Mazorca: Boletín Informativo* - Vol. 2 - Pp. 2-3

Families, emergent technologies, and adolescence
Gonzalo Bacigalupe / *The Family Psychologist: Bulletin of the Society of Family Psychology* - Vol. 27(2) 2, - Pp. 11-13

Is there a role for social technologies in collaborative healthcare?
Gonzalo Bacigalupe / *Families, Systems, & Health* - Vol. 29 - Pp. 1-14

Salud 2.0 Part 2: Broadening the Collaborative Web in Healthcare and Emerging Technologies
Gonzalo Bacigalupe / *Collaborative Family Healthcare Association* - July 28

Virtualizing Intimacy: Information Communication Technologies and Transnational Families in Therapy
Gonzalo Bacigalupe & Susan Lambe / *Family Process* - Vol. 50 - Pp. 12-26

Manuel Carreiras

A person is not a number: discourse involvement in subject-verb agreement computation
Mancini, S., Molinaro, N., Rizzi, L. & Carreiras, M. / *Brain Research* - Vol. 48 - Pp. 1361–1371

Can masked priming effects be obtained with handwritten words?
Gil-López, C., Perea, M., Moret-Tatay, C. & Carreiras, M. / *Attention, Perception, & Psychophysics*, DOI 10.3758/s13414-011-0174-y - Vol. 73 - 1643–1649

Efectos de la estructura silábica en el priming silábico
Carreiras, M., & Perea, M. / *Revista de Logopedia, Foniatria y Audiología*. - Vol. 31 - Pp. 22-27

Electrophysiological correlates of language switching in second language learners
Van der Meij, M., Cuetos, F., Carreiras, M., Barber, H. / *Psychophysiology* - Vol. 48 - Pp. 44–54

Electrophysiological effects of semantic context in picture and word naming
Janssen, N., Carreiras, M. & Barber, H.A. / *Neuroimage* - Vol. 57 - Pp. 1243–1250

Facilitation vs. Inhibition in the masked priming same-different matching task
Perea, M., Moret-Tatay, C., & Carreiras, M. / *Quarterly Journal of Experimental Psychology* - Vol. 64 (10) - Pp. 2065–2079.

Gender and Number processing in Chinese Learners of Spanish – Evidence from Event Related Potentials
Gillon Dowens, M., Guo, T., Guo, J., Barber, H. & Carreiras, M. / *Neuropsychologia* - Vol. 49 - Pp. 1651–1659

Grammatical agreement processing in reading: ERP findings and future directions
Molinaro, N., Barber, H.A., & Carreiras, M. / *Cortex* - Vol. 47 - Pp. 908-930

Is morpho-orthographic decomposition purely orthographic? Evidence from masked priming in the same-different task
Duñabeitia, J.A., Kinoshita, S., Carreiras, M., & Norris, D. / *Language and Cognitive Processes* - Pp. 509-529

Masked priming effects are modulated by expertise in the script
Perea, M., Abu Mallouh, R., García-Orza, J. and Carreiras, M. / *Quarterly Journal of Experimental Psychology* - Vol. 64 (5) - Pp. 902–919

Masked translation priming effects with low proficient bilinguals
Dimitropoulou, M., Duñabeitia, J.A. & Carreiras, M. / *Memory and Cognition* - Vol. 39 - Pp. 260–275

Phonology by itself: Masked phonological priming effects with and without orthographic overlap
Dimitropoulou, M., Duñabeitia, J.A., & Carreiras, M. / *Journal of Cognitive Psychology* - Vol. 23 (2) - Pp. 185 - 203

Pronoun resolution in Italian: The role of grammatical gender and context
Cacciari, C., Corradini P., Padovani R. & Carreiras, M. / *Journal of Cognitive Psychology* - Pp. 416-434

Smart phone, smart science: how the use of smartphones can revolutionize research in cognitive science
Dufau, S., Duñabeitia, J.A., Moret-Tatay, C., McGonigal, A., Peeters, D., Alario, F.-X., Balota, D.A., Brysbaert, M., Carreiras, M., Ferrand, L., Ktori, M., Perea, M., Rastle, K., Sasburg, O., Yap, M.J., Ziegler, J.C., & Grainger, J. / *PLoS ONE* - Vol. 6(9) - Pp. e24974

The processing of consonants and vowels during letter identity and letter position assignment in visual-word recognition: An ERP study
Vergara-Martínez, M., Perea, M., Marín, A. & Carreiras, M. / *Brain & Language* - Pp. 105-117

The relative position priming effect depends on whether letters are vowels or consonants
Duñabeitia, J.A., & Carreiras, M. / *Journal of Experimental Psychology: Learning, Memory and Cognition*. - Vol 37(5) - Pp. 1143-1163

Through the looking-glass: Mirror reading
Duñabeitia, J.A., Molinaro, N., & Carreiras, M. / *Neuroimage* - Vol. 54 - 3004-3009

Transliteration and transcription effects in bi-scriptal readers: The case of Greeklish
Dimitropoulou, M., Duñabeitia, J.A., & Carreiras, M. / *Psychonomic Bulletin & Review* - Vol. 18(4) - Pp. 729-735

Two words, one meaning: Evidence of automatic co-activation of translation equivalents
Dimitropoulou, M., Duñabeitia, J.A., & Carreiras, M. / *Frontiers in Psychology* - Vol. 188 (2) - Pp. 1-20

When persons disagree: an ERP study of Unagreement in Spanish
Mancini, S., Molinaro, N., Rizzi, L. & Carreiras, M. / *Psychophysiology* - Vol. 48(10) - Pp. 1361–1371

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Divergences in Long Run Trends in the Prices of Energy and Energy Services
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Long run trends in energy-related external costs
Fouquet, R. / *Ecological Economics* - Vol. 70 - Pp. 2380-9

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Journal Impact Revisited
Ulf-Dietrich Reips / *International Journal of Internet Science* - Vol. 6 - Pp. 1-7

Mining Twitter: Microblogging as a source for psychological wisdom of the crowds
Reips, U.-D., & Garaizar, P. / *Behavior Research Methods* - Vol. 43 - Pp. 635-642

Sliders for the smart: Type of rating scale on the Web interacts with educational level
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Cost-benefit analysis in the context of ecosystem services for human well-being: A multidisciplinary critique
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Cost-effectiveness targeting under multiple conservation goals and equity considerations in the Andes
Narloch, U., Pascual, U., Drucker, A.G. / *Environmental Conservation* - Vol. 38 - Pp. 417-425

Payments for agrobiodiversity conservation services for sustained on-farm utilization of plant and animal genetic resources
Narloch, U., Drucker A. and Pascual, U / *Ecological Economics*
Vol. 70 - Pp. 1837-1845

Payments for Environmental Services: Perspectives and innovative experiences for nature conservation and rural development
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The economics of agrobiodiversity conservation for food security under climate change
Pascual, U., Narloch, U., Nordhagen, S., Drucker, A. / *Economía Agraria y Recursos Naturales* - Vol. 11 - Pp. 191-220

The role of ethnobotanical skills and agricultural labor in forest clearance. Evidence from the Bolivian Amazon
Reyes-García, V., Pascual, U., Vadez, V., Huanca, T. *Ambio* - Vol. 40 - Pp. 310-321

Towards a unified scheme for environmental and social protection: Learning from PES and CCT experiences in developing countries
Rodríguez, L.C., Pascual, U., Muradian, R., Pazmino, N., Whitten S. / *Ecological Economics* - Vol. 70 - Pp. 2163-2174

Urbanization and the viability of local agricultural economies
Wu, J., Fisher, M., Pascual, U / *Land Economics* - Vol. 87 - Pp. 109-125

EXPERIMENTAL SCIENCES

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Engineered Tobacco mosaic virus mutants with distinct physical characteristics in planta and enhanced metallization properties
A. Kadri, E. Maiss, N. Amsharov, A.M. Bittner, S. Balci, K. Kern, H. Jeske, C. Wege / *Virus Res.* - Vol. 157 - Pp. 35-46

Inducible Site-Selective Bottom-Up Assembly of Virus-Derived Nanotube Arrays on RNA-Equipped Wafers
A. Mueller, F.J. Eber, C. Azucena, A. Petershans, A.M. Bittner, H. Gliemann, H. Jeske, C. Wege / *ACS Nano* - Vol. 5 - Pp. 4512-4520

Andreas Heidenreich

Kinetic energy distribution of multiply charged ions in Coulomb explosion of Xe clusters
Andreas Heidenreich and Joshua Jortner / *J. Chem. Phys.*, also selected for the March 2011 issue of the *Virtual Journal of Ultrafast Science* - Vol. 134 - Pp. 074315, 1-11

Andrey Chuvilin

Experimental analysis of charge redistribution due to chemical bonding by high-resolution transmission electron microscopy
Meyer JC, Kurasch S, Park HJ, Skakalova V, Kunzel D, Gross A, Chuvilin A, Algara-Siller G, Roth S, Iwasaki T, Starke U, Smet JH, Kaiser U / *Nature Materials* - Vol. 10 - 209-215

Functionalised endohedral fullerenes in single-walled carbon nanotubes
Maria del Carmen Gimenez-Lopez, Andrey Chuvilin, Ute Kaiser, Andrei N. Khlobystov / *CHEMICAL COMMUNICATIONS* - Vol. 47 - Pp. 2116-2118

Nanofocusing of mid-infrared energy with tapered transmission lines
M. Schnell, P. Alonso-González, L. Arzubia, F. Casanova, L. E. Hueso, A. Chuvilin & R. Hillenbrand / *Nature Photonics - On-line publications*

Self-assembly of a sulphur-terminated graphene nanoribbon within a single-walled carbon nanotube
Chuvilin A., Bichoutskaia E., Gimenez-Lopez M. C., Chamberlain T. W., Rance G. A., Kuganathan N., Biskupek J., Kaiser U., Khlobystov A.N. / *NATURE MATERIALS* - Vol. 10 - Pp. 687-692

Whispering gallery mode resonators with J-aggregates
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Annealing effect on local nucleation fields in bistable microwires
M. Ipatov, V. Zhukova, J. Gonzalez, and A. Zhukov / *Phys. Status Solidi A* - Vol. 208 - Pp. 549–552

Correlation of surface domain structure and magneto-impedance in amorphous microwires
M. Ipatov, A. Chizhik, V. Zhukova, J. Gonzalez, and A. Zhukov / *J. Appl. Phys.* - Vol. 109 - Pp. 113924

Development of magnetically soft microwires with GMI effect
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Direct measurements of field-induced adiabatic temperature changes near compound phase transitions in Ni–Mn–In based Heusler alloys
A. P. Kazakov, V. N. Prudnikov, A. B. Granovsky, A. P. Zhukov, J. Gonzalez, I. Dubenko, A. K. Pathak, S. Stadler, and N. Ali / *Appl. Phys. Lett* - Vol. 98 - Pp. 131911

Domain structure of magnetic nanotube with transverse anisotropy
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Domain wall propagation in Fe-rich amorphous microwires
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Effect of applied stresses on domain wall propagation in glass-coated amorphous microwires
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Evaluation of use of magnetically bistable microwires for magnetic labels
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Giant magnetoresistance of granular microwires: spin dependent scattering in intergranular Spacers
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Interaction of bistable glass-coated microwires in different positional relationship
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Magnetic and structural properties of Ni-Mn-Ga Heusler-type microwires
R.Varga, T. Ryba, Z. Vargova, K. Saksl, V. Zhukova, A. Zhukov / *Scripta Materialia* - Vol. 65 - Pp. 703-706

Magnetic field effects in artificial dielectrics with arrays of magnetic wires at microwaves
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V. Zhukova, J. M. Blanco, M. Ipatov and A. Zhukov / *IEEE Trans. Magn.* Vol. 47 - Pp. 3783-3787

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Microwave metamaterials with ferromagnetic microwires

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Nucleation and transformation of circular magnetic-domain structure in amorphous microwires

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F. X. Qin, H. X. Peng, V. V. Popov, L. V. Panina, M. Ipatov, V. Zhukova, A. Zhukov, and J. Gonzalez / *J. Appl. Phys.* - Vol. 109 - Pp. 07A310

Surface magnetization reversal and magnetic domain structure in amorphous microwires

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The defects influence on domain wall propagation in bistable glass-coated microwires

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Tunable effective permittivity of composites based on ferromagnetic microwires with high magneto-impedance effect

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Polymeric Ionic Liquids: Broadening the properties and applications of polyelectrolytes

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Self-limited oxide formation in Ni(111) oxidation
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Physical Review Letters
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Inclusive Measurements of Inelastic Electron and Positron Scattering from Unpolarized Hydrogen and Deuterium Targets

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The HERMES Collaboration, A. Airapetian et al. / *Physics Letters B* Vol. 704 - Pp. 15-23

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The HERMES Collaboration, A. Airapetian et al. / *European Physical Journal A* Vol. 47 - Pp. 1-8

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Extended supersymmetry in massless conformal higher spin theory

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Superembedding Approach to Dp-Branes, M-Branes and Multiple D(0)-Brane Systems

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Towards the M(atrix) model action in an arbitrary 11D supergravity background. Progress report

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Personality Traits and the effects of DHA supplementation in the Budgerigar (*Melopsittacus undulatus*)

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Superconductivity, BCS theory and mathematical physics
J.-B. Bru and W. de Siqueira Pedra
/ IAMP News Bulletin
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Synergy between quantum dots and 1,10-phenanthroline-copper(II) complex towards cleaving DNA.
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Magnetic Vortex Excitation Frequencies and Eigenmodes in a Pair of Coupled Circular Dots
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Magnetization Configurations and Reversal of Magnetic Nanotubes with Uniaxial Anisotropy
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Optical detection of vortex spin wave eigenmodes in microstructured ferromagnetic dots
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Slow magnetization dynamics and energy barriers near vortex state nucleation in circular permalloy dots
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Vol. 99 / Pp. 052512 (1-3)

Spin excitations of nanomagnets over a non-uniform magnetization ground state: Topological gauge field approach
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Spin torque and critical currents for magnetic vortex nanooscillator in nanopillars
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Thermal relaxation and energy barriers near vortex nucleation field in circular permalloy dot arrays
K.Y. Guslienko, G.N. Kakazei, M. Ilyn, O. Chubykalo-Fesenko, J. Gonzalez, A.A. Serga, A.V. Chumak, and B. Hillebrands / *Proceed. of the Conference "Trends in Nanotechnology" (TNT2011), Tenerife, Spain, Nov. 21-25, 2011*
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Deterministic chaos can act as a decoherence suppressor
Jing Zhang, Yu-xi Liu, Wei-Min Zhang, Lian-Ao Wu, Re-Bing Wu, and Tzyh-Jong Tarn / *Phys. Rev. B* 84, 214304 (2011)
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Fast cooling of mechanical resonator with time-controllable optical cavities
Y. Li, L. -A. Wu and Z. D. Wang / *Phys. Rev. A* 83, 043804 (2011)
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Heisenberg spin bus as a robust transmission line for quantum-state transfer

S. Oh, L.-A. Wu, Y.-P. Shim, J. Fei, M. Friesen, and X. Hu / *Phys. Rev. A* 84, 022330 (2011)
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Nondeterministic ultrafast ground-state cooling of a mechanical resonator

Y. Li, L.-A. Wu, Y. Wang and L. Yang / *Phys. Rev. B* 84, 094502 (2011)
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Quantum and classical correlations in the one-dimensional XY model with Dzyaloshinskii-Moriya interaction

B.-Q. Liu, B. Shao, J.-G. Li, J. Zou, and L.-A. Wu / *Phys. Rev. A* 83, 052112 (2011).
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Quantum correlation transfer through two parallel XXZ spin chains with phase shift control

J. Zhang, B. Shao, B.-Q. Liu, J. Zou, Q.-S. Li, and L.-A. Wu / *Phys. Rev. A* 84, 012327 (2011)
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Quantum effects in thermal conduction: Nonequilibrium quantum discord and entanglement

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Quantum gates and their coexisting geometric phases

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Repeated measurements and nuclear spin polarization

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Theory of quantum energy transfer in spin chains: Superexchange and ballistic motion

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Robin Ohmann, Giacomo Levita, Lucia Vitali, Alessandro De Vita, and Klaus Kern / *ACS nano*
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Nanofocusing of Mid-Infrared Energy with Tapered Transmission Lines

M. Schnell, P. Alonso-González, F. Casanova, L. Arzubaga, L. E. Hueso, A. Chuvin, R. Hillenbrand / *Nature Photonics*
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Glycolytic and non-glycolytic functions of the fructose-1,6-bisphosphate aldolase of Mycobacterium tuberculosis, an essential enzyme produced by replicating and persistent bacilli

Santangelo, M.P., Gest, P.M., Guerin, M.E., Coincon, M., Pham, H., Ryan, G., Puckett, S.E., Spencer, J.S., Gonzalez-Juarrero, M., Daher, R., Lenaerts, A.J., Schnappinger, D., Therisod, M., Ehrst, S., Sygusch, J., and Jackson, M. / *Journal of Biological Chemistry*
Vol. 286 - Pp. 40219-40231

Mario Piris

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M. Piris, X. Lopez, F. Ruipérez, J. M. Matxain, J.M. Ugalde / *The Journal of Chemical Physics*
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Vol. 12 - Pp. 1061

Homolytic molecular dissociation in natural orbital functional theory

J. M. Matxain, M. Piris, F. Ruipérez, X. Lopez, J. M. Ugalde / *Phys. Chem. Chem. Phys. (Front Cover Article)*
Vol. 13 - Pp. 20129-20135

Natural orbital functional theory and reactivity studies of diradical rearrangements: ethylene torsion as a case study

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Thermal stability of endohedral first-row transition-metal TM@ZnSi structures, i=12, 16

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Observation of subdiffusion of a disordered interacting system

E. Lucioni, B. Deissler, L. Tanzi, G. Roati, M. Modugno, M. Zaccanti, M. Inguscio, and G. Modugno / *Phys. Rev. Lett.*
Vol. 106 - Pp. 4 (+4)

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Collapse of hard-axis behavior in uniaxial Co films

O. Idigoras, A. K. Suszka, P. Vavassori, P. Landeros, J. M. Porro, and A. Berger / *Physical Review B*
Vol. 84 - Pp. 132403-1 - 132403-4

Comment on "Mapping of localized spin-wave excitations by near-field Brillouin light scattering" [Appl. Phys. Lett. 97, 152502 (2010)]

L. Giovannini, F. Montoncello, F. Nizzoli, P. Vavassori, and M. Grimsditch / *Applied Physics Letters*
Vol. 99 - Pp. 186101

Fourier magnetic imaging

T. Verduci, C. Rufo, A. Berger, V. Metlushko, B. Ilic, and P. Vavassori / *Applied Physics Letters*
Vol. 99 - Pp. 092501-1 - 092501-3

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Tailoring the magnetization reversal in antidot nanostructures using lithographically engineered inhomogeneities

D. Tripathy, P. Vavassori, and A. O. Adeyeye / *Journal of Applied Physics* Vol. 109 - Pp. 07B902-1 - 07B902-3

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Interface motion by interface diffusion: Justification of a diffusive interface model as approximation of a sharp interface model

Alber, H.-D., Zhu, P. / *Published Online Aug. 10, 2010 in Continuum Mech. Thermo.* Vol. 23 - Pp. 43

Solutions to a model with Neumann boundary conditions for phase transitions driven by configurational forces

Han-Dieter Alber and Peicheng Zhu / *Nonlinear Analysis: Real World Applications* Published online 21 Dec. 2010 Vol. 13

Solvability via viscosity solutions for a model of phase transitions driven by configurational forces

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Spherically symmetric solutions to a model for phase transitions driven by configurational forces

Yaobin Ou and Peicheng Zhu / *J Math Phys* Vol. 52 - Pp. 093708 - 093728

Traveling waves to for models of phase transitions of solids driven by configurational forces

S. Kawashima, P. Zhu / *Published Online Nov., 2010 in Discrete and Continuous Dynamical Systems* Vol. 15, Issue: 1 - Pp. 309 - 323

Traveling waves to models of solid-solid phase transitions driven by configurational forces

Peicheng Zhu / *GAMM mitteilungen (GAMM Reports)*, Vol. 34 - Pp. 135-139

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Radmila Tomovska, Vesna Daniloska and Jose M. Asua / *Journal of Material Chemistry* Vol. 21 - Pp. 17492–17497

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Mirror symmetry in magnetization reversal and coexistence of positive and negative exchange bias in Ni/FeF₂

M. Kovylna, M. Erekhinsky, R. Morales, I. K. Schuller, A. Labarta, and X. Batlle. / *Applied Physics Letters* Vol. 98 - Pp. 152507

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Infrared-spectroscopic nanoimaging with a thermal source

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Longitudinal and transverse coupling in infrared gold nanoantenna arrays: long range versus short range interaction regimes

D. Weber, P. Albella, P. Alonso-Gonzalez, F. Neubrech, H. Gui, T. Nagao, R. Hillenbrand, J. Aizpurua, and A. Pucci / *Optics Express* Vol. 19 - Pp. 15047

Nanofocusing of Mid-Infrared Energy with Tapered Transmission Lines

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Nanoscale Infrared Absorption Spectroscopy of Individual Nanoparticles Enabled by Scattering-Type Near-Field Microscopy

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Plasmonic Nickel Nanoantennas

J.Chen, P. Albella, Z. Pirzadeh, P. Alonso-Gonzalez, F. Huth, S. Bonetti, V. Bonanni, J. Åkerman, J. Nogués, P. Vavassori, A. Dmitriev, J. Azpurua, and R. Hillenbrand / *Small* Vol. 7 - Pp. 2341

Real-space mapping of Fano interference in plasmonic metamolecules

P. Alonso-González, M. Schnell, P. Sarriugarte, H. Sobhani, C. Wu, N. Arju, A. Khanikaev, F. Golmar, P. Albella, L. Arzubiega, F. Casanova, L. Hueso, P. Nordlander, G. Shvets, and R. Hillenbrand / *Nano Letters* Vol. 11 - Pp. 3922

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Korotov S., Krizek, M. / *Applied Mathematics Letters* Vol. 24 - Pp. 817-821

On angle conditions in the finite element method

Brandts J., Hannukainen A., Korotov S., Krizek M. / *SeMA Journal* Vol. 56 - Pp. 81-95

On modifications of continuous and discrete maximum principles for reaction-diffusion problems

Farago I., Korotov S., Szabo T. / *Advances in Applied Mathematics and Mechanics* Vol. 3 - Pp. 109-120

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Variation of lipid membrane composition caused by strong bending
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1 Magnetic moment distribution in non-stoichiometric Ni-Mn-Ga ferromagnetic shape memory alloys

P. Lázpita, J. M. Barandiarán, J. Feuchtwanger, J. Gutiérrez, I. Rodríguez, V. A. Chernenko, A. Stunault, C. Mondelli / *Journal of Physics: Conference Series*
012016 (7p).

Specific heat of shape memory alloys with soft elastic moduli

V. A. Chernenko, D. V. Homenko, V. A. L'vov, J. M. Barandiarán / *J.Appl. Phys.*
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Features of quasiparticle decay in 2D electronic systems with spin-orbit interaction

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Relationship Between Conformational Flexibility and Chelate Cooperativity.

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Ionotropic ATP receptors in neuronal-glia communication
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Mitochondria adjust Ca2+ signaling regime to a pattern of stimulation in salivary acinar cells
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Voitenko N., Verkhratsky A. & Fedirko N. / *Biochim Biophys Acta.*
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Neuroglial roots of neurodegenerative diseases?
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Increased hippocampal CA1 density of serotonergic terminals in a triple transgenic mouse model of Alzheimer's disease: an ultrastructural study

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Fortian A, Castaño D, Gonzalez E, Laín A, Falcon-Perez JM, Millet O. / *Adv Protein Chem Struct Biol.*
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IL28B polymorphisms are not associated with the response to interferon-beta in multiple sclerosis

Malhotra S., Morcillo-Suárez C., Brassat D., Goertsches R., Urcelay E., Fernández O., Drulovic J., García-Merino A., Martinelli Boneschi F., Chan A., Vandenbroeck K., Navarro A., Bustamante M.F., Río J., Oksenberg J., Montalban X. et al. / *Journal of Neuroimmunology*
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Validation of IRF5 as multiple sclerosis risk gene: putative role in interferon beta therapy and human herpes virus 6 infection

Vandenbroeck K., Alloza I., Swaminathan B., Antigüedad A., Otaegui D., Olascoaga J., García Barcina M., de las Heras V., Bartolomé M., Fernández-Arquero M., Arroyo R., Alvarez-Lafuente R., Cénit M.C. and Urcelay E. / *Genes and Immunity*
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Involvement of the subthalamic nucleus in impulse control disorders associated with Parkinson's disease

Rodríguez-Oroz MC, López-Azcárate J, García-García D, Alegre M, Toledo J, Valencia M, Guridi J, Artieda J, Obeso JA / *Brain* Vol. 134 - Pp. 36-49

LINGO1 gene analysis in Parkinson's disease phenotypes

Lorenzo-Betancor O, Samaranch L, García-Martín E, Cervantes S, Agúndez JA, Jiménez-Jiménez FJ, Alonso-Navarro H, Luengo A, Coria F, Lorenzo E, Irigoyen J, Pastor P; Iberian Parkinson's Disease Genetics Study Group Researchers / *Mov Disord* Vol. 26(4) - Pp. 722-7

LRKK2 haplotype-sharing analysis in Parkinson's disease reveals a novel p.S1761R mutation

Lorenzo-Betancor O, Samaranch L, Ezquerro M, Tolosa E, Lorenzo E, Irigoyen J, Gaig C, Pastor MA, Soto-Ortolaza AI, Ross OA, Rodríguez-Oroz MC, Valldeoriola F, Martí MJ, Luquin MR, Perez-Tur J, Burguera JA, Obeso JA, Pastor P / *Mov Disord*

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Structures of respiratory syncytial virus nucleocapsid protein from two crystal forms: details of potential packing interactions in the native helical form

El Omari, Dhaliwal, B., Ren, J., Abrescia, N. G. A., Lockyer, M., Powell, K. L., Hawkins, A. R., Stammers, D. K. / *Acta Cryst. F67* Vol. F67 - Pp. 1179-1183

The use of low resolution phasing followed by phase extension from 7.6Å to 2.5Å resolution with non-crystallographic symmetry to solve the structure of a bacteriophage capsid protein

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London: Earthscan - Patrick Ten Brink

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Penser l'histoire. De Karl Marx aux siècles des catastrophes
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Routledge Handbook of Applied Linguistics
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Introduction: From Communities of Practice to Knowledge Communities
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Center for Basque Studies,
University of Nevada, Reno
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Knowledge Communities

J. Echeverria, A. Alonso and P. Oiarzabal (eds.), 260 p.
Center for Basque Studies,
University of Nevada, Reno

Leibniz

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Estudio Introductorio. Leibniz: la pluralidad infinita
Pp. XI-XCIV
Madrid, Ed. Gredos
J. Echeverria

Probabilities, Laws, and Structures

J. Echeverria
Technomathematical models in Social Sciences
Pp. 347-360
Springer, Dordrecht,
WEBER, M., DIEKS, D., GONZALEZ, W. J., HARTMAN, S., STADLER, F., and STÄLTZNER, M.

Roger Fouquet

Global Energy Assessment

Yeager, K., F. Dayo, M. Dominik, R. Fouquet, A. Gilau, R. Hosier, A. Miller, S. Rao, S. Sethi
Economy and Energy
Cambridge
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Handbook of Sustainable Energy

Roger Fouquet
The Sustainability of 'Sustainable' Energy Use: Historical Evidence on the Relationship between Economic Growth and Renewable Energy
Cheltenham, England and Northampton, MA, USA
I. Galarraga, M. González-Eguino and A. Markandya

Ulf-Dietrich Reips

Internet in Psychological Research

Reips, U.-D.
Privacy and the disclosure of information on the Internet: Issues and measurement
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Warsaw: UKSW Publishing House
A. Blachnio, A. Przepiórka & T. Rowinski

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Plant viral nanoscale biotemplates: from virowires to dumbbells and arrays
Pp. 385-409
Baden-Württemberg Stiftung GmbH, Karlsruhe
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Guided self-assembly of block copolymer for CMOS technology: a comparative study between grapho-epitaxy and surface chemical modification
79700P - USA - DJC. Herr

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Time-dependent deformation functional theory
Pp. 462-476 - Springer
Marques, M.A.L.; Maitra, N.T.; Nogueira, F.M.d.S.; Gross, E.K.U.; Rubio, A.

José Pomposo

CLICK CHEMISTRY IN POLYMER SCIENCE

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Metal-Free Polymethyl Methacrylate (PMMA) Nanoparticles by Enamine Click Chemistry
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Brandts J., Korotov S., Krizek, M.
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Bentham Science Publishers
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Books and chapters

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Springer Dordrecht Heidelberg London New York
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Volodymyr Chernenko

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TTP, Switzerland - V.A. Chernenko

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'Introduction', pp. 1-17, and 'Port and resort: symbiosis and conflict in "Old Whitby"', Pp. 129-49
xvi + 216 - Bristol, UK
Channel View

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'Introduction' (with other editors) and (with F. Molina), 'An alternative co-operative tradition: the Basque co-operatives of Mondragón'
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Manchester, Tokyo and New York
Manchester University Press and United Nations University Press

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John K. Walton
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New York and London
Continuum

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Pp. viii-xiv
New York and London

Humanities
Existential Utopia: New Perspectives on Utopian Thought
Michael Marder and Patricia Vieira, editors
Pp. 172
New York and London - Continuum

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IOS press - J.C. Augusto et al.

Martin Cooke

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Towards a quantitative model of Mandarin Chinese perception of English consonants
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Frankfurt am Main: Peter Lang Verlag
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