"The farther the experiment is from theory, the closer it is to the Nobel Prize."

IRÈNE JOLIOT-CURIE

Radioactivity

Poland • 1897 - 1956

Education

Education was important to Marie Curie the mother of Irène. So her education began at a school near the Observatory which had a more challenging curriculum than the regular schools.
Irene studied at the Faculty of Science in Paris. Her studies interrupted by First world war where sh served as a nurse radiographer. After the war, Irène returned to the Sorbonne in Paris to complete her second baccalaureate degree in mathematics and physics in 1918. She became Doctor of Science in 1925, having prepared a thesis on the alpha rays of polonium.

Academic career

From 1928 together with her husband Frédéric, they studied the atomic nuclei. Unfortunately they failed to interpret the significance of the results and the discoveries such as discovery of the electron or model of atom.
However, in 1933, they calculated first the accurate mass of the neutron. They also came up with a new theory about protons changed into neutrons and positrons for which they received much criticism. In 1934 Irène discovered the positron emission or beta decay for which she awarded the Nobel Prize and which led to application of radioactive materials for use in medicine. In 1948, using work on nuclear fission, she along with other scientists created the first French nuclear reactor.

Awards

Nobel Prize in Chemistry in 1935 for the discovery of artificial radioactivity with Frédéric Joliot-Curie.

Barnard Gold Medal for Meritorious Service to Science in 1940 with Frédéric Joliot-Curie.

Officer of the Legion of Honor.

Main contribution

Her main discovery for which she awarded the Nobel Prize is formally known as positron emission or beta decay, where a proton in the radioactive nucleus changes to a neutron and releases a positron and an electron neutrino. Moreover her work on the project Atomic Energy Commission, led to the creation of the first French nuclear reactor. Because of the work of the Joliot-Curies, France in 2020 generates approximately 75% of its electricity from nuclear energy and exports surplus energy to other European countries.

Woman in Science

Irène became actively involved in promoting women's education, serving on the National Committee of the Union of French Women (Comité National de l'Union des Femmes Françaises) and the World Peace Council.

The Joliot-Curies were given memberships to the French Légion d'honneur; Irène as an officer and Frédéric as a commissioner, recognizing his earlier work for the resistance

Links

Biography of Irene Joliot Curie
https://www.nobelprize.org/prizes/chemistry/1935/joliot-curie/biographical/

Short video
https://www.youtube.com/watch?v=hyhKJ-f-tqg

“Robots are here to improve our lives, not to rebel against us”

ELENA GARCÍA ARMADA

Robotics, bioengineering

Spain • Date of birth 1971

Education

She holds a PhD in Robotics (2009) from the Universidade Politeunica de Madrid

Academic career

After receiving her PhD in robotics, she began designing robots based on industry. However, in 2009 he met Daniela, a girl who was left with a severe quadriplegia after a car accident. This meeting caused a radical change in her research career and since then she has focused on building devices designed to improve physical abilities, contribute to the rehabilitation and increase mobility of children suffering from degenerative neuromuscular diseases. She is also the founder of Marsi Bionics, a company whose aim is to research and create paediatric exoskeletons. These structures are adjustable supports modelled to the child's legs and chest , and which incorporate small engines that mimic the functioning of muscles, providing strength to walk and stand up.

Awards

Elena Garcia Armada is considered one of the 10 most brilliant scientists in Spain and has received awards for her scientific and innovative activity, such as the Innova Award eVIA 2014, the CEPY - ME 2015 Award for Best Business Program or the ABC Health Award for Best Health Technology in 2016. In 2018, she received the Gold Medal of Madrid.

ELENA GARCÍA ARMADA

Main contribution

Research and creation of paediatric exoskeletons.Her ATLAS2020 model is equipped with smart joints that interpret the movements of the patient, detecting what are desired and unwanted movements.Today she is a persistent scientist at the Center for Automation and Robotics (CAR) CSIC University Universitatea de Madrid,

Woman in Science

Elena Garcia Armadaaced lots of hours without sleep in order to combine motherhood and research. Her inspiration was a girl suffering from tetraplegia after an accident. On this occasion, she developed the first bionic exocadarma in the world for children with spinal muscular atrophy, which affects nearly 2,000 minors in Spain. Today, her contribution to pediatric robotics is very important because more than 120,000 children in the world can walk again, thanks to the bionic exoxadarma.

Links

Biography of Elena García Armada
http://fseneca.es/entrecientificas/en/elena-garcia-armada

https://es.wikipedia.org/wiki/Elena_Garc%C3%ADa_Armada

Short video
https://www.youtube.com/watch?v=xWRDi9qnjVM

Interview
https://www.youtube.com/watch?v=C07TW6ax-L0

“Let’s support it… I don’t care who gets…”

ESTEFANIA MATESANZ ROMERO

Astraunaut

Spain • Date of birth 1980

ESTEFANIA MATESANZ ROMERO

Education

Aeronautical engineer from the Polytechnic University of Madrid and PDD from the IESE University of Navarre.

Academic career

She is responsible for the Production Engineering / Technical Office of MRO and Continued Airworthiness at Airbus Helicopters responsible for the Aviation Safety Board and Renewer of Airworthiness Certificates of the Army helicopter fleet of Earth .Previously, she was an auditor of the Quality Department of Pullmantur Air , head of fleet in the Swiftair Engineering Department , technical representative in Swiftair's Technical Directorate, head of electrical design at Crespo and Blasco and Head of Production at Bruesa Construcción, at the airport from Madrid-Barajas.

Awards

She received the "Woman to Follow" award in 2017 in the Science and Technology category. Appointed Dean of the Official College of Aeronautical Engineers of Spain, the first in its history and the youngest President of the Association.

ESTEFANIA MATESANZ ROMERO

Main contribution

She started her work activity in the field of airport construction, carrying out projects and executing projects. She is responsible for the area of Production Engineering and the Technical Office of MRO and Continuous Airworthiness at Airbus Helicopters , head of Aviation Safety Board and Renewal of Airworthiness Certificates of the helicopter fleet of the Army. She was previously auditor of the Quality Department of Pullmantur Air, fleet manager of the Engineering Department of Swiftair, technical representative in the Technical Management of Swiftair , head of electrical design at Crespo and Blasco and head of production at Bruesa Construcción, in Madrid-Barajas airport.

Woman in Science

She faced the challenge to be accepted as a head of aeronautical engineers because of being a woman in this position which is not usual. Today is head of Production Quality FALs&MRO - Airbus. She is the first woman to hold the position and the youngest.

Links

Estefania Matesanz Romero

https://es.linkedin.com/in/estefan%C3%ADa-matesanz-romero-57788620

https://translate.google.com/translate?hl=el&sl=es&u=https://es.wikipedia.org/wiki/Estefan%25C3%25ADa_Matesanz_Romero&prev=search&pto=aue

"...or how to use what you discover to improve people's lives"

GABRIELA MORREALE

Early endocrinoligist

Italy • 1930 - 2017

Education

Morreale studied Chemistry at the University of Granada, graduated in 1951 and immediately began her doctorate, which she completed with a stay at the Dutch University of Leiden.

Academic career

When she returned to Spain in 1957, she joined the CSIC as a scientific collaborator and joined the Center for Biological Research; She founded the Thyroid Studies Section of the Gregorio Marañón Institute and from there she moved with her group to the UAM Faculty of Medicine, creating the base of what later became the Institute of Biomedical Research, of which she was Deputy Director. She was also part of and chaired the Spanish Society of Endocrinology and the European Thyroid Association in 1977.

Awards

In 1977 it was recognized with the National Prize for Research in Medicine, in 1983 with the Reina Sofía for the Prevention of Mental Deficiencies and in 1997 with the Research Prize of the European Thyroid Association.

Main contribution

She has dedicated her life to the study of the role of iodine and thyroid hormones in the development of the fetal and infant brain. She is one of the founders of modern Endocrinology in Spain.

Woman in Science

Gabriela dedicated a large part of her life to the study of the thyroid gland and is responsible for the fact that, in Spain, the public health system implemented the techniques of early detection of congenital hypothyroidism by measuring TSH and T4 in the blood of the heel of newly born. Although, her program has avoided thousands of cases of cretinism, a congenital deficiency of the gland that causes a delay in mental and physical growth. Gabriela Morreale worked with her lifelong scientific partner and husband forming an exemplary couple like the Curies. She remained always the indisputable leader.

Links

Gabriela Morreale

https://ast.wikipedia.org/wiki/Gabriela_Morreale

http://www.huellasdemujeresgeniales.com/gabriella-morreale/

https://elpais.com/especiales/2018/mujeres-de-la-ciencia/gabriela-morreale.html

https://compromiso.atresmedia.com/constantes-vitales/premios/2017/gabriela-morreale-de-castro-premio-trayectoria-cientifica-en-investigacion-biomedica_2017102559f192d30cf2abf23880fd31.html

“When I was young, women were not considered capable of research.”

MARGARITA SALAS

Biochemistry, molecular genetics

Spain • 1938 – 2019

Education

She graduated from the Complutense University of Madrid with a B.A. in chemistry. In 1958, on a visit home, she had an inspirational meeting with a distant relative — the biochemist Severo Ochoa, who was awarded a Nobel prize the following year. Fascinated by the emerging discoveries in biochemistry, Salas did a PhD on yeast metabolism in the laboratory of enzymologist Alberto Sols in Madrid.

Academic career

After finishing their thesis, in August of 1964, Salas and her husband travelled to the United States to work with Severo Ochoa. On their return to Spain, Salas and her husband established a laboratory to research molecular biology at the Center for Biological Research in Madrid. Viñuela began a different field of research in 1970, studying the African plague virus, so that Salas would be recognised on her own merits.
Salas was a professor of molecular genetics at the Complutense University Faculty of Chemistry from 1968 to 1992.She was also a professor of research at the Severo Ochoa Center for Molecular Biology from 1974, and its director from 1992 until January 1994.

Awards

Salas won the L'Oréal-UNESCO Awards for Women in Science in its first year, 2000.

She was awarded honorary doctorates by the University of Oviedo, University of Extremadura, University of Murcia and the University of Cádiz.

The most recent awards that she has received are the following:

- 2014: Chemistry Excellence Award, awarded by the General Council of Associations of Chemists of Spain.
- 2016: Medalla Echegaray, the highest award from the Spanish Royal Academy of Sciences
- 2018: ManchaArte Award 2018
- 2019: European Inventor Award Lifetime Achievement Award and Audience Award
- by European Patent Office

Main contribution

She was responsible for promoting Spanish research in the fields of biochemistry and molecular biology. She was an honorary professor at the Spanish National Research Council (CSIC) in the field of biotechnology. Margarita Salas discovered a new mechanism for the replication of DNA. The enzyme she isolated as the key to it has transformed the process of amplifying DNA from very small samples, and is now widely used in forensics, studies of ancient DNA and oncology, as well as in basic research. Her invention, the most profitable patent ever filed by the Spanish National Research Council (CSIC), was recognized earlier this year by a lifetime achievement award from the European Patent Office.

Woman in Science

Salas was a courageous role model. She was the first woman director of the Foundation for Biomedical Research at the Gregorio Marañón Hospital (2001–2004) and of the Institute of Spain (1995–2003) and president of the Spanish Biochemistry and Molecular Biology Society. She was a member of Spanish Royal Academy of Sciences, European Academy of Sciences and Arts,American Academy of Arts and Sciences, American Academy of Microbiology, United States National Academy of Sciences, and the Severo Ochoa Foundation.
Margarita was a shy person with an austere lifestyle. After ceremonies she usually invited her current and former students to dinner. Here, she would talk informally, about topics unrelated to science, from Bach's music to modern Spanish literature, revealing her wide interest in culture. Margarita conveyed her passion for scientific research and the thrill of discovery to her students, fostering their motivation, creativity, rigour and perseverance. She created a true school, teaching molecular biologists from different places and of different origins how to conduct — and take joy in — research. Many of her trainees are now research leaders. For generations of Spanish scientists, she was a guiding light.

Links

Margarita Salas

https://en.wikipedia.org/wiki/Margarita_Salas#Early_life_and_career

https://www.nature.com/articles/d41586-019-03758-z

https://www.publico.es/ciencias/margarita-salas-joven-mujeres-no-consideraba-capacitadas-investigar.html

“It will be useful for you to know your biological age and maybe to change your lifestyle habits if you find you have short telomeres.”

MARIA BLASCO MARHUENDA

Cancer research

Spain • Date of birth 1965

Education

She obtained her PhD in 1993 for her research at the Centro de Biología Molecular Severo Ochoa (UAM-CSIC), under the supervision of Margarita Salas.

Academic career

In 1993, Blasco joined the Cold Spring Harbor Laboratory in New York (USA) as a Postdoctoral Fellow under the leadership of Carol W. Greider (who was to win a Nobel Prize in 2009). In 1997 she returned to Spain to start her own research at the Centro Nacional de Biotecnología in Madrid. She joined the Centro Nacional de Investigaciones Oncológicas (CNIO) in 2003 as Director of the Molecular Oncology Programme and Leader of the Telomeres and Telomerase Group. In 2005 she was also assigned as Vice-Director of Basic Research and in 2011 she was appointed as CNIO Director.Today is Director of the Spanish National Cancer Research Centre (CNIO) and Head of the Telomeres and Telomerase Group – CNIO.

Awards

Her achievements have been recognized by the following international and national awards: Josef Steiner Cancer Research Award, Swiss Bridge Award for Research in Cancer, Körber European Science Award, the EMBO Gold Medal for best European researcher under the age of 40, the Rey Jaime I Award in Basic Research, the Fundación Lilly Preclinical Research Award, and the Santiago Ramón y Cajal National Award in Biology. Blasco holds two Doctorate Honoris Causa from the Universidad Carlos III of Madrid and from Universidad de Alicante and in October 2017 she received the Scientific Merit Award of the Generalitat Valenciana.

MARIA BLASCO MARHUENDA

Main contribution

For more than 20 years, Blascoś work has focused in demonstrating the importance of telomeres and telomerase in cancer, as well as in age-related diseases. Blasco has published more than 250 papers in international journals and has an h-index of 81.

Woman in Science

She is appointed director of the Spanish National Cancer Research Centre an institution in which nearly five hundred people work to fight cancer.
She is a representative role model because she succeeded in facing the behaviour against her from colleagues from the point she reached the top managerial position of the director of cancer research centre.

Links

Biography of Maria Blasco Marhuenda
https://en.wikipedia.org/wiki/Mar%C3%ADa_Blasco_Marhuenda

https://www.cnio.es/en/personas/maria-a-blasco-2/

https://www.longevityworldforum.com/maria-blasco/

Quotes
https://www.brainyquote.com/quotes/mar%C3%ADa_blasco_marhuenda_759837

Short video in Spanish
https://www.youtube.com/watch?v=jWhl0y5rIS0

“Every day of the year is women’s day in science”

MARTA MACHO STAEDLER

Geometry, Topology, scientific disseminator

Spain • Date of birth 1962

Education

Macho obtained a degree in mathematics from the University of the Basque Country in 1985, and started working as a lecturer in the Department of Mathematics at the same university. In 1987, she did research with Professor Gilbert Hector at the University Claude Bernard in Lyon, where she finished her 1996 Ph.D. thesis Isomorphisme de Thom pour les feuilletages presque sans holonomie (Thom isomorphism for foliation almost without holonomy).

Academic career

She is now associate professor of geometry and topology at the UPV/EHU. Macho teaches the subjects of topology and ampliation of topology (third and fourth courses) of the undergraduate degree of mathematics at the Department of Science and Technology of the University of the Basque Country UPV/EHU and the optional topic "Mathematics in daily life: society and culture in the Classroom of Experience of Biscay UPV/EHU". She is an instructor of the master's degree in modelling and mathematics research, statistics and computing (MATG6), and specific master in mathematics and applied mathematics research.

Awards

In 2015, she was awarded the Equality Prize from the Universidad de Alicante because of her contributions to scientific divulgation and actions supporting the visibility of women's scientific milestones for social development.

She also received the medal of the Royal Spanish Mathematical Society due to her contributions to the divulgation of mathematics, her compromise with gender equality, and her work building bridges of knowledge between teachers of mathematics and different educational statements.

On November 2016, she was awarded the Emakunde Equality Prize as a recognition of her work in high-quality divulgation and promotion of women's scientific knowledge —including gender perspective—and her work in scientific and educational commissions to promote gender equality in the university. The money associated with the award was donated to refugee women and victims of gender violence who are studying at the University of the Basque Country.

MARTA MACHO STAEDLER

Main contribution

Her primary research area is the geometric theory of foliations. Macho's activities in scientific divulgation started in 1999, when she collaborated in the organization of a conference cycle titled "A stroll through geometry" during 10 academic courses. One of the main areas of her interest concerns scientific divulgation and the presence of mathematics in literature, which lead her to study the relation between scientific content and mathematical structure with texts from novels, comics, poetry, and plays.She is the main contributor to the sections "Literature and Mathematics" and "Theatre and Mathematics" in DivulgaMAT of the RSME. She has collaborated in different activities in cultural spaces or educational institutions in order to involve students and ordinary people in science and also has collaborated in different blogs, such as ZTFNews.org (Science and Technology Department, UPV/EHU) and Cuaderno de cultura científica ("Scientific culture notebook", Scientific culture chair, UPV/EHU). She also organizes the cultural event "Ellas hacen ciencia" ("They make science"), held yearly in the Bidebarrieta Library of Bilbao.

Woman in Science

She fought against gender inequality in the field of mathematics. Especially,in May 2014, she created the digital space named "Women with science", which belongs to the Scientific Culture Chair of the University of the Basque Country, where she is the editor in chief. The purpose of "Women with science" is to spread the role of women in science and make visible the important work and contributions of past pioneers and present researchers, including cross-curricular subjects such as science and gender inequalities. One of her main interests in divulgation is the visibility of women's contributions in the scientific world.Macho is a member of the Women's Commission of the Royal Spanish Mathematical Society (RSME, from Spanish) and an active collaborator in several social activities to improve the connection between science and civil society.

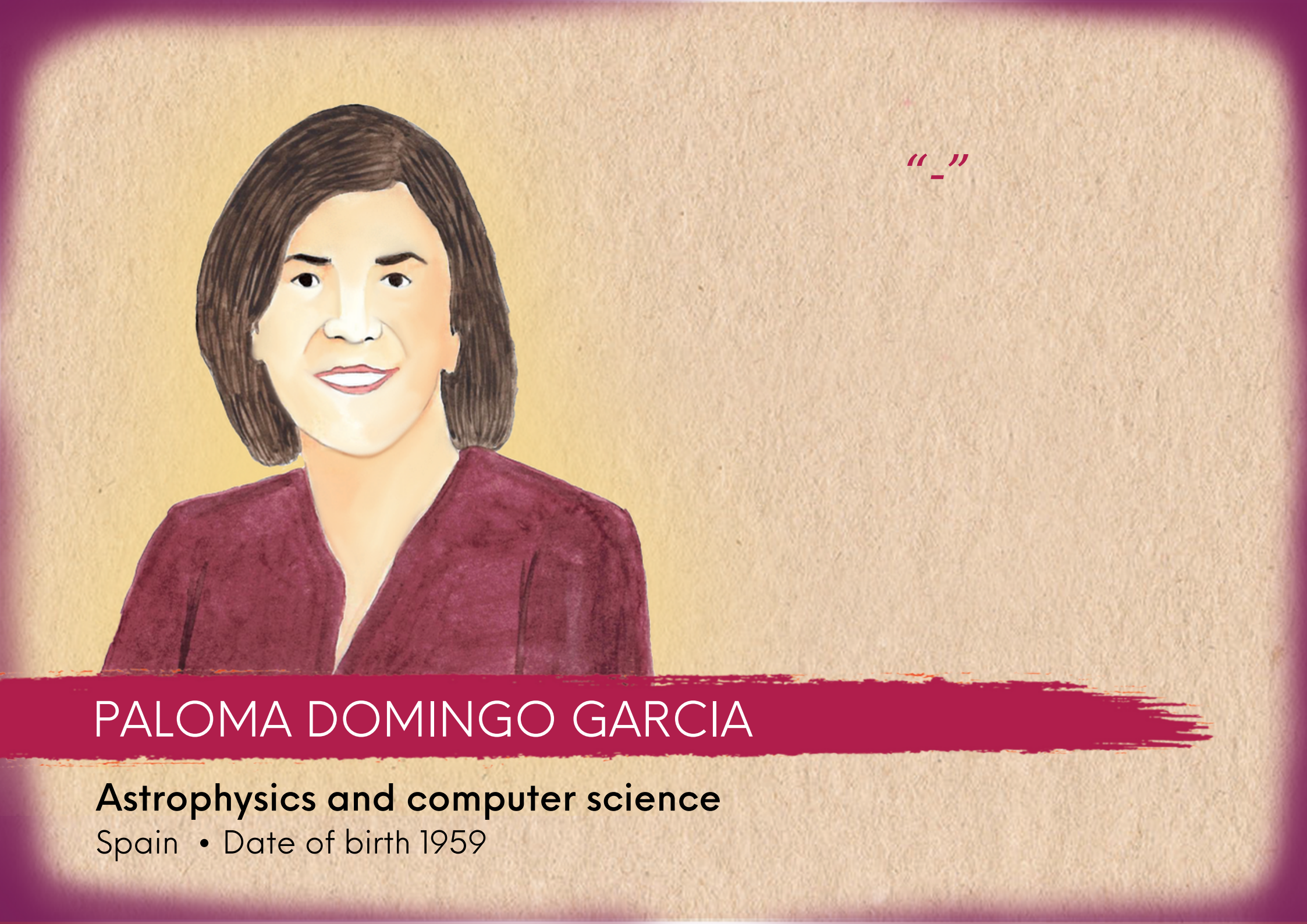
Links

Biography of Marta Macho Stadler
https://en.wikipedia.org/wiki/Marta_Macho_Stadler

https://mujeresconciencia.com/mujeres-con-ciencia/

Article
https://www.icmat.es/newsletter/2017/html-news-14/boletinICMAT_20170410EN_119.html

Interview in Spanish
https://www.youtube.com/watch?v=g3wzeTkGqTY



Astrophysics and computer science

Spain • Date of birth 1959

Education

Paloma has a degree in Physical Sciences, specializing in Astrophysics from the Complutense University of Madrid and a PhD in Computer Science from the Polytechnic University of Madrid

Academic career

Furthermore, between 1989 and 1994 she was director of knowledge engineering also at Entel. After her experiences at Entel, she moved to teaching at the Carlos III University of Madrid , where she taught computer science classes from 1994 to 2000 .

Awards

-

“_”

ROZA MENENDEZ

Materials energy biomedicine

Spain • Date of birth 1956

PALOMA DOMINGO GARCIA

Main contribution

After her experience as a teacher, she was promoted to Head of Academic Practices in Business also at the Carlos III Madrid University , where she held the position of 2000 to 2002 when she was promoted as Deputy Director of Science Park, which she held until 2012. In 2018 she was appointed Director General of the Spanish Foundation for Science and Technology (FECYT) .

Woman in Science

Holds both managerial positions and scientific ones, since she is engaged in both entrepreneurship, innovation, science and software development.

Links

Paloma Domingo Garcia

https://es.wikipedia.org/wiki/Paloma_Domingo_Garc%C3%ADa

Short video
https://www.youtube.com/watch?v=WNR3NE-YsNo

Education

Menéndez López graduated in organic chemistry at the University of Oviedo in 1980 and subsequently received her doctorate at the same university in 1986.

Academic career

She started working at the CSIC at the National Institute of Coal of Oviedo In May 2003, through an internal promotion process, he entered the scale of Research Professors of the Higher Council for Scientific Research.
During her professional career, she has collaborated with numerous industries in the electrical, aeronautical, carbochemical and petrochemical sectors. She has chaired the European Association for Carbon Materials (ECA). She has also stayed at various foreign research centers, such as the Northern Carbon Research Laboratories of the University of Newcastle , in Newcastle upon Tyne , in the United Kingdom ; the University of Clemson in Carolina of the South , in EE. UU .; at the Imperial College of London and the University of Nottingham .

On November 17, 2017, at the proposal of the Ministry of Economy and Competitiveness of Spain , the Spanish government approved the appointment of Rosa María Menéndez as president of the Higher Council for Scientific Research, replacing Emilio Lora-Tamayo in office. , after she occupied it since January 2012, and previously between 2003 and 2004. Menéndez thus becomes the first woman to chair the largest public research body in Spain, with a staff of 13 000 researchers, of which 35.7% are women.
On June 1, 2018 she was appointed vice president of Science Europe , a non-profit association based in Brussels that brings together the most important European research and innovation funding agencies, in total 43 organizations, with the primary objective of representing the voice of the scientific community before the institutions of the European Union

Awards

She has received the following awards:

- 1996 "Shunk Carbon Award", awarded by the German company Shunk to young researchers, for their contribution to the development of the science of carbon materials.
- 2007 "Álvarez Buylla Vital Prize", awarded by UNESCO and the Municipality of Mieres , for their contribution to the development and dissemination of science.
- 2009 "DuPont Prize for Science".
- 2016 "Prize of the Spanish Materials Association", for his scientific career,
- 2016 "Expert Talent Award" awarded by the Human Age and Five Days ,
- 2016 "Innova Diario de León Award".
- 2018 "Amuravela de Oro Award", awarded by the Association of Friends of Cudillero.
- 2018 Inclusion in the "Periodic Table of Women Scientists" around the world, to commemorate the International Year of the Periodic Table of Chemical Elements , which celebrates in 2019 the 150th anniversary of the publication of Mendeléyev .
- 2018 "Prize for Chemical Excellence", awarded by Antonio Macho, President of the General Council of Chemical Colleges of Spain.

Main contribution

Her work as a researcher is related to materials and energy, having dealt with the optimization of the processes of conversion of coal and revaluation of its derivatives, as well as those from petroleum through its use as precursors of carbon materials , starting a line of research on graphene and its use in various applications, such as energy storage and nuclear fusion reactors, and also in the field of biomedicine .She has participated in more than thirty regional, national and European research projects, leading twenty of them as principal investigator and coordinating five Europeans. In addition, she has published more than 200 articles in high -impact international journals , several book chapters, two popular books, and has directed several doctoral theses. It also has nine patents.

Woman in Science

She is the first woman appointed president of the Higher Council for Scientific Research in Spain. Also She served as vice president of Science Europe. Worried about spanish low rate of integration of women in STEM careers, she is an advocate of gender equality trying to sensitize young girls.

Links

Biography of Roza Menendez
https://es.wikipedia.org/wiki/Rosa_Men%C3%A9ndez

“To be young forever doesn't mean to be 20 years old. Its mean to be optimistic, to feel good, to have an idea to fight for and to achieve it”

ANA ASLAN

Gerontologist, biologist, physician

Romania • 15 August 1897 – 1988

Education

She started her school years at Romașcanu College from Brăila, but after the death of her father, she moved to Bucharest and graduated from the Central School of Bucharest in 1915, then she attended the Faculty of Medicine, Bucharest, from 1915 to 1922. During her studies, in order to support herself, she works in parallel in hospitals. After graduating from the Faculty of Medicine in 1922, she began working with Daniel Danielopolu who supervised her doctoral thesis. She obtained her M.D. degree in cardiovascular physiology in 1924.

Academic career

She experimented on the effects that procaine had on arthritis. and discovered other beneficial effects of this drug. She made a three-year study which led to the invention of a drug called Gerovital (H3), which she prescribed for the effects of aging. Aslan kicked off a research study to prove the results of the new drug. Over a period of two years, blood samples were taken from 15,000 people, with some of them receiving Gerovital and some receiving a placebo. 40% of the people who took Gerovital had less sick-leave days, and mortality rate from the flu epidemic was 13% in placebo patients while only being 2.7% in patients who took the drug. In 1976, with a pharmacist named Elena Polovrăgeanu, they invented another drug named Aslavital, which was a similar drug to Gerovital aimed to delay the skin aging process

Awards

- "Cross of Merit" – First Class of the Order of Merit, Germany, 1971
- "Cavalier de la Nouvelle Europe" Prize Oscar, Italy, 1973
- "Les Palmes Academiques", France, 1974
- "Honorary Foreign Citizen and Honorary Professor of Sciences", Philippines, 1978
- "Member Honoris Causa" Diploma of the Bohemo-Slovakian Society of Gerontology, 1981
- "Leon Bernard" Prize, important distinction granted by the World Health Organization upon nomination and endorsement by officials of a member state (in this case by the Romanian Nicolae Ceauşescu) for contributing to the development of gerontology and geriatrics, 1982

Main contribution

Her focus was on physiology and the process of aging. Her main contribution in research was discovering beneficial effects of procaine as well as inventing the drugs Gerovital and Aslavital aiming to delay the aging.

Ana Aslan was considered a pioneer of social medicine. Years after becoming the head of the physiology department at the Institute of Endocrinology of Bucharest, she founded the Institute of Geriatrics of Bucharest. Ana Aslan is known for coining the term "gerontology", and in 1959 organized the Romanian Society of Gerontology and Geriatrics. The Romanian Society of Gerontology was the first in the world to channel its research into clinic, experimental, and social researches, devise a therapeutic strategy to prevent the process of aging, and organize and national health network for the prevention of aging. Her drug was used by many famous politicians and celebrities around the world, including John F. Kennedy.

Woman in Science

Ana Aslan faced her mother's opposition to her will to become a physician because of financial strains, and went on a hunger strike until her mother accepted it.

She was the first that explored and worked in the field of "gerontology", she founded the Institute of Geriatrics of Bucharestand and in 1959 organized the Romanian Society of Gerontology and Geriatrics.

Links

Ana Aslan

https://en.wikipedia.org/wiki/Ana_Aslan#Early_life

https://twitter.com/leadarati/status/1085249047462596612

https://web.archive.org/web/20130116131100/http://www.ana-aslan.ro/index_en.htm

Documentary in Romanian
https://www.youtube.com/watch?v=EBvSXnTOGhE

Short video in Romanian
https://www.youtube.com/watch?v=LQD-BXERNnE

"Mathematics has been for me a source of joy, of comfort and solace in times of crisis, of in dependence and strength"

ALEXANDRA BELLOW

Ergodic theory, probability and analysis

Romania • Date of birth 1935

Education

She graduated from high school at the top of her class in June 1953 and was admitted to the University of Bucharest, the Department of Mathematics, in the fall. At the university she was awarded the Republican Fellowship and she finished her studies in three years instead of four, graduating with the equivalent of a master's degree in mathematics. She received her M.S. in mathematics from the University of Bucharest .

In 1957, she met and married her first husband, Cassius Ionescu-Tulcea. She accompanied her husband to the United States in 1957 and received her Ph.D. from Yale University in 1959 under the direction of Shizuo Kakutani with thesis Ergodic Theory of Random Series.

Academic career

After receiving her degree, she worked as a research associate at Yale from 1959 until 1961, and as an assistant professor at the University of Pennsylvania from 1962 to 1964. From 1964 until 1967 she was an associate professor at the University of Illinois at Urbana–Champaign. In 1967 she moved to Northwestern University as a Professor of Mathematics. She was at Northwestern until her retirement in 1996, when she became Professor Emeritus

Awards

1977–80 Member, Visiting Committee, Harvard University Mathematics Department

1980 Fairchild Distinguished Scholar Award, California Institute of Technology, Winter Term

1987 Humboldt Prize, Alexander von Humboldt Foundation, Bonn, Germany

1991 Emmy Noether Lecture, San Francisco

1997 International Conference in Honor of Alexandra Bellow, on the occasion of her retirement, held at Northwestern University, October 23–26, 1997. A Proceedings of this Conference appeared as a special issue of the Illinois Journal of Mathematics, Fall 1999, Vol. 43, No. 3.

2017 class of Fellows of the American Mathematical Society "for contributions to analysis, particularly ergodic theory and measure theory, and for exposition".

Main contribution

Her main areas of interest in mathematics was in ergodic theory. This was accomplished by exploiting the interplay with probability and harmonic analysis, in the modern context (the Central limit theorem, transference principles, square functions and other singular integral techniques are now part of the daily arsenal of people working in this area of ergodic theory) and by attracting a number of talented mathematicians who were very active in this areacs were ergodic theory and probability.

Woman in Science

In love with math from school years, her mother taught her through games. When she started the Phd, the math department at Yale in those days was a male preserve par excellence. There were very few women among the graduate students in math at Yale and no women on the faculty. Consequently female moral support, which could have been invaluable, was nonexistent; caucus groups and social media were still far into the future. She spent a lot of time talking to her husband but was otherwise in virtual isolation, studying math, deconstructing and rearranging my English. But the patronizing attitude of her male classmates lasted only until she gave my first seminar talk. After that she was treated with respect. Her monograph about lifting theory is a standard reference in this field. Appointed Fellow of the American Mathematical Society in 2017.

Links

Alexandra Bellow

https://en.wikipedia.org/wiki/Alexandra_Bellow

https://www.ams.org/publications/journals/notices/201608/rnoti-p931.pdf

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https://www.math.northwestern.edu/about/newsletter/alexandra-bellow-full-length-interview.html

https://www.mathgenealogy.org/id.php?id=8598

http://www.worldcat.org/identities/lccn-no88004547/

"The reward for the devoted researcher to science does not come from outside, but is the thrills of happiness he has in discovering the truth"

ȘTEFANIA MĂRĂCINEANU

Radioactivity

Romania • 1822 – 1944

Education

She attended high school at the Normal School "Elena Doamna" , then she went to the Central School in Bucharest, graduated it in 1903, after this she attended the university at the Faculty of Physical and Chemical Sciences of the University of Bucharest, where she took her bachelor's exam in 1910. Her degree was in physical and chemical sciences. She attended Sorbonne University of Paris - for her Ph.D in 1924.

Academic career

Her senior thesis, titled Light interference and its application to wavelength measurement, earned her a 300 lei prize.
Mărăcineanu also investigated the possibility of sunlight inducing radioactivity; work which was contested by other researchers.
Mărăcineanu went on to work at the Paris Observatory until 1929, after which she returned to Romania, and started teaching at the University of Bucharest.
She performed experiments in meteorological phenomena and investigated the link between radioactivity and rainfall, and rainfall with earthquakes with the support of professors Bungeţianu and Vasile Karpen and aviator Bâzu Cantacuzino
She continued her research in Algeria, with the support of the French government.
Unfortunately, she faced cancer due to exposition to radioactivity during her research.

Awards

On 24 June 1936, she asked the Academy of Sciences to recognize the priority of her work.Her request was granted, and on 21 December 1937 she was elected corresponding member of the Romanian Academy of Sciences, Physics section. In 1937 she was named Director of Research by the Academy, and in 1941 she was promoted to Associate Professor

Main contribution

Her main discovery was the process of artificially triggering rain with the help of radioactive salts and establishing the link between earthquakes and precipitation. In 1931 she caused the artificial rain in the world in Bărăgan.
She also reported for the first time that on the eve of an earthquake, radioactivity increases in the epicenter area.
Her main works were: Actions spéciales du soleil sur la radioactivité du polonium et du plomb (Paris, 1926), Radioactivitatea şi constituţia materiei (Bucureşti, 1929), Radioactivité, soleil, pluie artificielle (Bucureşti, 1934) şi La radioactivité du globe, les radiations et les tremblements de terre. Les pluies et les tremblements de terre.

Woman in Science

She had an unhappy childhood with health problems which draw her back at school. After graduation from university, she taught at high schools in Bucharest, Ploieștilași, and Câmpulung in order to make her living. In 1915, she secured a teaching position at the Central School for Girls in Bucharest, a position she held until 1940.
However, she had the opportunity to work with Marie Curie, and had a lot of innovative ideas. Ștefania Mărăcineanu was a very capable experimentalist. She was appointed director of research by the Academy of Sciences.

Links

Ștefania Mărăcineanu

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https://www.mnt-leonida.ro/09Noutati/090043Noutati2013.10.17/StMaracineanu2013AR.pdf

https://www.youtube.com/watch?v=f0TXopc_k6k

“I did not feel the constraints of the communists. It was simple in math.”

CABRIA ANDREIAN CAZACU

Complex analysis

Romania • February 19, 1928 – May 22, 2018

Education

Towards the end of World War II, her family became refugees in Bucharest, where she completed her high school studies. After studying at the University of Bucharest, she became a lecturer there in 1950. She became a student of Simion Stoilow, completing a doctorate in 1955 under his supervision, with the dissertation Normally Exhaustible Riemann Surfaces. She completed a habilitation in 1967, with the habilitation thesis Classes of Riemann coverings, and was promoted to full professor in 1968.

Academic career

She was a visiting professor at Freie Universität Berlin in 1974, 1976 and 1977. She held numerous scientific communications at prestigious international scientific conferences and seminars, in countries like Belgium, Bulgaria, Canada, Czech Republic, Finland, France, Germany, Hungary, Israel, Italy, Republic of Moldova, Poland, Russia, Spain, Switzerland, Ukraine and Great Britain. She is the main Romanian organizer of 11 international Romanian–Finnish seminars on complex functions, succeeding to impose over time this scientific tradition as an essential one in the field of international complex analysis. The papers of four such seminars (for which she was editor) appeared in Lecture Notes in Mathematics, Springer-Verlag (vol. 743, 783, 1013, 1014).

Awards

Andreian Cazacu won the Simion Stoilow Prize of the Romanian Academy in 1966.

In 1998 the University of Craiova gave her an honorary doctorate.

She became an honorary member of the Romanian Academy in 2006.

In 2010, the journal Complex Variables and Elliptic Equations published a special issue in honor of her 80th birthday.

Main contribution

She worked in a multitude of areas regarding complex analysis, such as the topological theory of analytic functions, quasiconformality theory, the theory of Riemann and Klein surfaces, the theory of value distribution after Nevanlinna, functions of several complex variables, and Teichmüller spaces. This is truly remarkable these days when normally a researcher in mathematics develops her activity in one or at most two areas of this kind.

Andreian Cazacu wrote "approximately 100 scientific papers and six books".The books include:

- Probleme moderne de teoria funcţiilor [Modern problems of the theory of functions], with C. Constantinescu and M. Jurchescu, Editura Academiei Republicii Popular Române, Bucharest, 1965,
- Topologie, categorii, suprafeţe riemanniene [Topology, categories, Riemann surfaces], with A. Deleanu and M. Jurchescu, Editura Academiei Republicii Popular Române, Bucharest, 1966,
- Theorie der Funktionen mehrerer komplexer Veränderlicher [Theory of functions of several complex variables], Birkhäuser, 1975,

Woman in Science

In all fairness, she is considered the most devoted feminine figure in Romanian mathematics. She is a fortunate joining of scientific, human and didactic qualities, discretion and modesty. She has guided generations of students, young researchers and teachers; she created a strong group of researchers inside the field of complex analysis. Became the first woman lecturer at the University of Bucharest.

Links

Cabiria Andreian Cazacu

https://en.wikipedia.org/wiki/Cabiria_Andreian_Cazacu

https://www.tandfonline.com/doi/full/10.1080/17476930902999082

https://adevarul.ro/educatie/universitar/interviu-cabiria-andreian-cazacu-eram-suparata-altul-rezolva-problema-lmi-luabucuria-1_541c53400d133766a843d86f/index.html

A pioneer in neural plasticity and the negative consequences of squinting leading to strabismic amblyopia

RUXANDRA SIRETEANU-CONSTANTINESCU

Biophysics, human vision

Romania • September 19, 1945 - September 1, 2008

RUXANDRA SIRETEANU-CONSTANTINESCU

Education

After the baccalaureate (1963), Ruxandra Sireteanu studied at the Faculty of Physics of the University of Bucharest , obtaining in 1968 the degree in physics , the biophysics specialty.

Academic career

She prepared her doctorate in biophysics at the Scuola Normale Superiore in Pisa, performing the experimental part (neurophysiology and psychophysics) at the Laboratorio di Neurofisiologia del CNR, In 1976 she defended his doctoral dissertation entitled "Contributions to the study of visual function, using spatially periodic stimuli".
In the following years she was a postdoctoral researcher at the universities of Ulm and Lausanne.
In 1979 he joined the Wolf Singer research group at the Max Planck Institute for Psychiatry in Munich.
In 1982, she transferred to the Max Planck Institute for Brain Research in Frankfurt am Main.
In 1990, she defended at the Johannes Gutenberg University of Mainz the dissertation of Habilitation entitled "Development and plasticity of visual functions: psychophysical, electrophysiological and clinical studies", obtaining venia legendi in zoology .
As an associate professor, she has taught the Physiological Psychology course at the Johann Wolfgang Goethe University in Frankfurt am Main since 1995. In 1999, she became a full professor at the newly established department of Physiological Psychology / Biopsychology .

Awards

For her scientific achievements, she received awards from the “Dr. Heinz und Helene Adam” Foundation in 1991 and from the “Bielschowsky Society for the study of Strabismus. Ruxandra was a gifted speaker, a steadfast educator and a caring laboratory head, devoted to excellence in science and creative interaction.

RUXANDRA SIRETEANU-CONSTANTINESCU

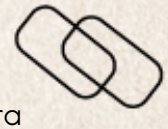
Main contribution

The research undertaken by Ruxandra Sireteanu focused on the human visual system, especially neural plasticity and amblyopia. She has made original contributions to the research of visual psychophysics of healthy people, perceptual learning in adults and clinical neuropsychology. The results regarding the neural bases of amblyopia, binocular vision and the development of the visual system in newborns, in the perspective of the changes that appeared during the whole life, have a pioneering character.

Woman in Science

She was appointed head of the Psychophysics group at the Max Planck Institute for Brain Research, for her fundamental contributions to neural plasticity and amblyopia. She has been affiliated with the Association for Research in Vision and Ophthalmology, the European Brain and Behavior Society and the International Society on Infant Studies . She was part of the editorial staff of the journals Vision Research and Investigative Ophthalmology & Visual Science.
She is a gifted speaker, a steadfast educator and a caring laboratory head, devoted to excellence in science and creative interaction

Links



Biography of Ruxandra Sireteanu-Constantinescu

https://ro.wikipedia.org/wiki/Ruxandra_Sireteanu-Constantinescu

http://visionscience.com/documents/sireteanu.html

http://hans-strasburger.userweb.mwn.de/reprints/ruxandra_sireteanu_obituary_pp.pdf

http://www.cvrsoc.org/docs/ruxandra.php

Exceptional chemist, full member of the Romanian Academy - Based on her research , the first synthetic drugs in Romania were created.

ECATERINA CIORĂNESCU-NENIȚESCU

Drug synthesis

Romania • 1909 - 2000

ECATERINA CIORĂNESCU-NENIȚESCU

Education

She attended the courses of the Faculty of Physics and Chemistry of the University of Bucharest . In 1936, She defended her doctoral thesis in chemistry entitled "Synthesis with aluminum chloride in the series of aliphatic and alicyclic hydrocarbons" , under the coordination of Professor Costin Nenițescu , to whom she would later become a collaborator.

Academic career

She dealt with research in organic chemistry, certain syntheses (alpha-aminocetones from alzactones and aromatic hydrocarbons, drugs and intermediates for the organic chemical industry: sulfamides, antituberculosis drugs or insecticides) and created new substances with antitumor action, using cytostatic grafting (1961 - 1980).
She published several studies in the country and abroad (in German), including the first course on drug synthesis at a Romanian university and the first treatise on synthetic drugs , the Technology of Synthetic Drugs (1957 , 1966).

Awards

Corresponding member (March 21, 1963) and

titular (March 1, 1974) of the Romanian Academy ,

member of the Tiberina Academy in Rome (1971) and

of the Chemistry Society of New York (1971).

ECATERINA CIORĂNESCU-NENIȚESCU

Main contribution

Based on her research, the first synthetic drugs in Romania were created. She published studies on the first course of drug synthesis and technology of synthetic drugs.
She laid the foundations of pharmaceutical chemistry at the Bucharest Polytechnic Institute, created and organized research and teaching laboratories in the field of organic chemistry, some of them together with her husband.

Woman in Science

In 1936, she made her debut in university education as an assistant, being the first woman assistant at the Department of Organic Chemistry of the Bucharest Polytechnic .
In 1941, she became head of works at the Department of Organic Chemistry of the Bucharest Polytechnic.
Like her father who was the initiator of education of deaf mute, she was a devoted educator, author of the first course of synthesis of drugs in Romania.

Links

Biography of Ecaterina Ciorănescu-Nenițescu

https://ro.wikipedia.org/wiki/Ecaterina_Cior%C4%83nescu-Neni%C8%9Bescu

http://enciclopediaromaniei.ro/wiki/Ecaterina_Cior%C4%83nescu-Neni%C5%A3escu

"Women can accomplish everything"

BURCU ÖZSOY

Works on sea ice remote sensing

Turkey • Date of birth 1976

Education

Burcu graduated from Yıldız Technical University with Bachelor and Master degrees in Geodesy-Photogrammetry Engineering. In 2001, she started serving as Research Assistant at the Istanbul Technical University. In 2003, she joined the Remote Sensing and Geoinformatics Lab, Department of Geological Sciences at University of Texas at San Antonio (UTSA). She always had an interest in statistical mathematics and geo-physical sciences and combined both fields by becoming a remote sensing expert. In 2005, she worked on her PhD at the UTSA. During her work there, she met key U.S. and other international scientists and institutions, including those who worked at the NASA Goddard Space Flight Center. She was interested in Antarctic remote sensing and looked forward to the chance to hop onto an icebreaker to cruise to Antarctica and see, feel, smell, hear, and taste Antarctic sea ice and landscape for the first time.

Academic career

In 2007, she established American Society of Photogrammetry and Remote Sensing department in UTSA. She is the founder and director of Istanbul Technical University Polar Research Center (ITU PolReC) which is in charge of all polar sciences in Turkey. She was included in the Scientific Committee of the International Circumpolar Observatory. She led first, second and third Turkish Antarctic Expeditions under the auspices of the Presidency of Turkey and under the coordination of the Ministry of Industry and Technology and Istanbul Technical University (ITU) Polar Research Center (PolReC).

Awards

Her awards include:
In 2006 second place at Student Papers/Presentations with the presentation.

In 2009 she got first place at the ASPRS Mid-South Student Award for her presentation.

In 2014, she got June Grant by The Scientific and Technological Research Council of Turkey

BURCU ÖZSOY

Main contribution

She is a scientist who works with sea ice remote sensing in Antarctica. While she was working on her Ph.D, she learned that communication across disciplines and across scientific knowledge levels is the key to make people understand new results and theories in the field of and the threats accompanied with climate change. Therefore, after having returned to Turkey in 2011, she worked hard against resistance and old-fashioned opinions to promote the importance of polar research in Turkey; from the 1st grade school kid to the well-established professor and up into the highest political levels. Her initiatives also raised public awareness about the importance of the Polar Regions Research.

Woman in Science

She was one of the two women in the Antarctica expedition and said that the two women scientists showed that Turkish women can accomplish anything. During that expedition, she was the deputy leader. One of the projects she worked on during the expedition involved climate change. The UTSA exhibited geospatial related works to hundreds of San Antonio school kids at the San Antonio GIS Day led by her.

Links

Biography of Burcu Özsoy
https://en.wikipedia.org/wiki/Burcu_%C3%96zsoy

Tedex talk
https://www.youtube.com/watch?v=HXxRsNYSL4o

Tedex talk
https://www.youtube.com/watch?v=8DczVgr03BQ

"She is best known in the scientific world for inventing a new method of treating pre-malignant dermatological cancers."

RODICA-MARIANA ION

Photochemistry and nanomaterials

Romania • Date of birth 1958

Education

Graduated from the Technical University of Bucharest, Department of Chemistry, Bucharest, Romania.

Academic career

Rodica-Mariana Ion (born in 1958) is a Romanian chemist, Professor of Nanomaterials at the Department of Materials Engineering (Faculty of Materials Engineering and Mechanics) and Director of the Research Centre for Nanomaterials for micromechanical systems (NANOMEC) at University Valahia, Romania. She further serves as Group Leader in Evaluation and Conservation of Cultural Heritage at ICECHIM, Bucharest

Awards

In 2018 it was decorated with the OPERA OMNIA Award for the entire scientific activity, conferred by the University of Wallachia, Targoviste.

She received over 60 diplomas and medals obtained at Invention Salons in the country and abroad.

Main contribution

Her research activities are focused on nanoscience, nanotechnology in Cultural Heritage but also in Medicine.In recent years, she has initiated a new direction of research: conservation and restoration of heritage pieces, focusing on their complex chemical investigations in order to identify the best solutions to save the investigated pieces. She set up a new laboratory for physico-chemical and mechanical investigations of various materials involved in heritage pieces (paper, stone, seals, stuccos, etc.), as well as the implementation of a new method of their restoration based on the use of nanomaterials.

Woman in Science

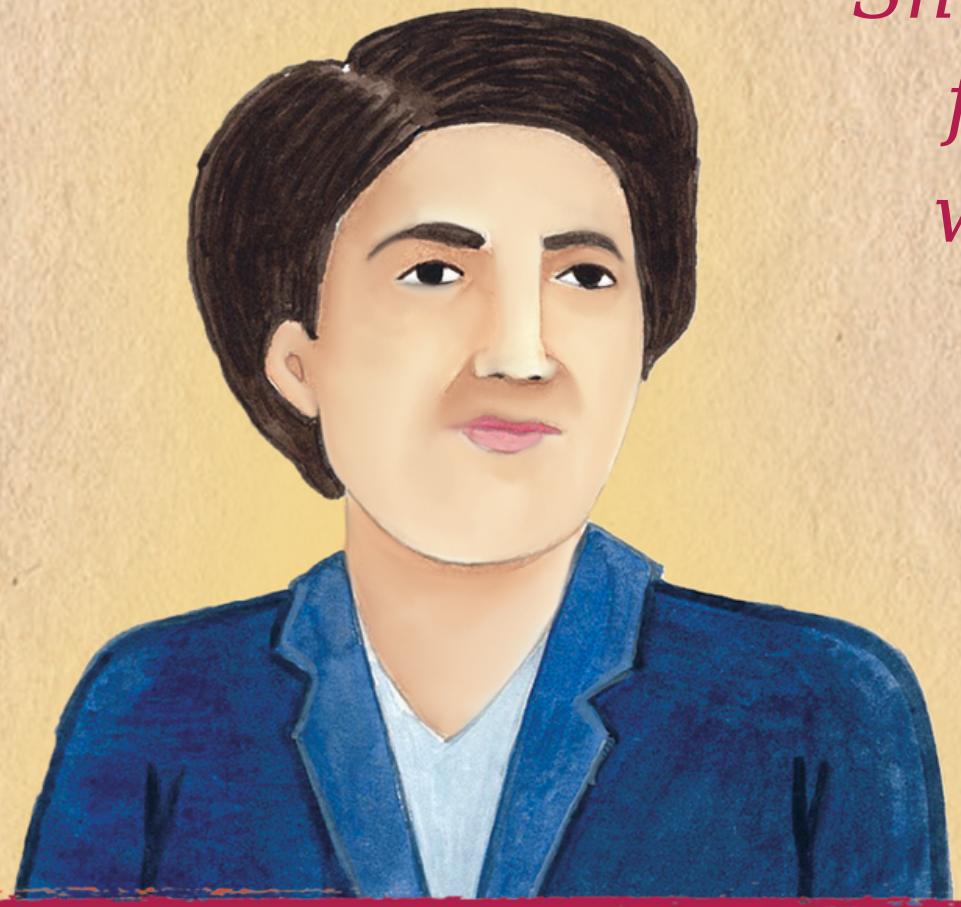
Invented a new method of treating pre-malignant dermatological cancers. Appointed leader of Cultural Heritage Assessment-Conservation research group.Unlike other scientists of her era, her inventions and scientific techniques cover a wide range of applications from cancer to paper heritage pieces.

Links

Biography of Rodica-Mariana Ion

https://www.pubfacts.com/author/Rodica-Mariana+Ion

https://www.intechopen.com/profiles/171504/rodica-mariana-ion



She was said to be the first female engineer in the world- " and for me too little matters, what mattered was to consistently follow my call"

ELISA LEONIDA ZAMFIRESCU

Engineer, geology

Romania • 10 November 1887 – 25 November 1973

Education

She attended primary school in her hometown, and high school at the Central School for Girls in Bucharest, taking her baccalaureate at the real section of the "Mihai Viteazul" High School.
Due to prejudices against women in the sciences, Zamfirescu was rejected by the School of Bridges and Roads in Bucharest. In 1909 she was accepted at the Royal Academy of Technology Berlin, Charlottenburg. She graduated in 1912, with a degree in engineering. It has been claimed that Zamfirescu was the world's first female engineer, but Englishwoman Nina Cameron Graham also gained a degree in civil engineering in 1912, from the University of Liverpool and the Irish engineer Alice Perry graduated six years before either of them: in 1906.

Academic career

Returning to Romania, Zamfirescu worked as an assistant at the Geological Institute of Romania. During World War I, she joined the Red Cross and ran a hospital at Mărășești Romania. In 1917 her hospital received the wounded from the Battle of Mărășești between the German and the Romanian armies. It was a victory by Romania over 28 days during which there were over 12,000 Romanian and over 10,000 of the invaders who were wounded.After the war, Zamfirescu returned to the Geological Institute. She led several geology laboratories and participated in various field studies. Zamfirescu retired in 1963, aged 75. In retirement she was involved in activism for disarmament

Awards

A street in Sector 1 of Bucharest bears her name, and she was honoured with a Google Doodle on the anniversary of her birthday in 2018.

An award for women working in science and technology was established in her name, the Prize Elisa Leonida-Zamfirescu

Main contribution

Her research includes various fields including some that identified new resources of coal, shale, natural gas, chromium, bauxite and copper. Zamfirescu also taught physics and chemistry. Her humanitarian contribution during her work in a hospital during WWI and also after retirement in the disarmament movement is also well recognized.

Woman in Science

Due to prejudices against women in the sciences, Zamfirescu was rejected by the School of Bridges and Roads in Bucharest. Zamfirescu was one of the first women to obtain a degree in engineering.
During her career, he led 12 laboratories at the Institute of Geology, performing 85,000 analyzes and contributing to the identification in Romania of new resources of coal, oil shale, oil, natural gas, building rocks, chromium, bauxite or copper. , about whom she wrote several specialized books.
In parallel with her activity as an engineer, Eliza Leonida Zamfirescu taught physics and chemistry at high schools in Bucharest. She was the first female member of AGIR (General Association of Romanian Engineers) and was part of the International Association of University Women.

Links

Elisa Leonida Zamfirescu

https://www.youtube.com/watch?v=dk-eGa9vmHA

https://www.europeana.eu/en/exhibitions/pioneers/elisa-leonida-zamfirescu

https://www.viata-libera.ro/eveniment/34227-viata-libera-galati-galateni-care-au-uimit-lumea-eliza-leonida-zamfirescu

https://www.independent.co.uk/life-style/gadgets-and-tech/news/elisa-leonida-zamfirescu-google-doodle-death-engineer-romania-red-cross-ww1-geology-a8626306.html

https://www.worldrecordacademy.org/records/technology/worlds-first-female-chemical-engineer-elisa-leonida-zamfirescu-218266

“Have a broad vision and adhere to it resolutely, regardless of the obstacles you face”

ÖZLEM TÜRECİ

Physics, Immunology, and Cancer Research

Turkey, Germany • Date of birth 6 March 1967

Education

Özlem Türeci was born to immigrant parents from Turkey.
She earned her M.D. from Saarland University Faculty of Medicine, Homburg. She filled more than 80 international patent applications, was granted several patents and published more than 110 articles in peer-reviewed scientific journals.

Academic career

In 2001, she co-founded Ganymed Pharmaceuticals AG, a clinical stage biotech company developing unique high-precision antibodies against various solid cancers. She served as Chief Scientific Officer and was its Chief Executive Officer from 2008-2017, developing a new generation of first-in-class antibodies in solid cancers
Since 2018, Özlem has been Chief Medical Officer of BioNTech SE – one of Europe's most innovative biopharmaceutical companies pioneering the development of individualized therapies for cancer and other diseases. She is also a chair and co-initiator of Ci3, the German Cluster Initiative of Individualized ImmunIntervention(Ci3) e.V., based in Mainz, Germany. She is also President of the Association for Cancer Immunotherapy (CIMT) e.V.

Awards

1995: Vincenz Czerny Prize of the German Society of Hematology and Oncology (DGHO)

1997: Calogero Paglierello Research Award

2005: Georges Köhler Prize [de] of the German Society of Immunology

2020: The National German Sustainability Award

2020: Financial Times Person of the Year

2021: Axel Springer Award (with Uğur Şahin)

2021: Order of Merit of the Federal Republic of Germany

Main contribution

Özlem Türeci is one of the researchers the world has to thank for the first who validated vaccine against coronavirus.
She is recipient of the Vincenz Czerny Prize of the German Association of Hematology and Oncology as well as various other prizes and scholarships. She is a recent recipient of the German Sustainability Award, among other notable recognitions. She has authored over 110 peer-reviewed publications and is an inventor on more than 80 patents and patent applications.

Woman in Science

Özlem Türeci, M.D., Co-Founder and Chief Medical Officer of BioNTech, is a physician, immunologist, and cancer researcher with translational and clinical experience with over 25 years of experience, specifically in the identification of immunotherapeutic drug targets and the development of antibodies, as well as vaccine-based therapies. Dr. Türeci dedicated more than two decades of her professional career to the discovery of unique drug targets exhibiting exceptional selectivity to cancer cells, and to the creation of potent immunotherapy drug platforms to enable treatment of patients in an individualized and tailored manner.

Links

Özlem Türeci

https://biontech.de/our-dna/leadership

https://en.wikipedia.org/wiki/%C3%96zlem_T%C3%BCreci

The project "FEMALES- Female legends of Science" is based on the values of gender equality and non-discrimination between women and men in the fields of science, technology, engineering, mathematics, innovation and innovative entrepreneurship.

According to surveys, women make up only 33% of researchers, 28% of doctoral students in engineering and construction, 21% of computer science, 21% of senior researchers, 28% of board members, 22% of the leaders of the board.

The **objectives** of the project are:
-to highlight the important role of women scientists in STEM (Science, Technology, Engineering and Mathematics)
-to fight stereotypes of students and teachers for women scientists
-to encourage girls through role models women to pursue STEM careers
-to enhance skills and competencies for the STEM career by all students (boys and girls)
-to enrich teachers' skills in the integration of girls in STEM

For more information about the project visit our website **https://www.femalesproject.eu**

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