

#### **DEPARTMENT OF EARTH AND SEA SCIENCES**

VACANCY	N. 1
Academic Recruitment Field	04/A4 - GEOPHYSICS
Academic Discipline	GEO/12 - OCEANOGRAPHY AND PHYSICS OF THE ATMOSPHERE
Scientific commitment	The research activities are consistent with: the Smart Specialization Strategy of the Sicilian Region – Economy of the Sea; The DGR (Decree of the Regional Council) 7/2022 - Enhancement of the environment, natural resources and sustainable development; The PNRR (National Recovery and Resilience Plan) Mission 4 - Environmental, natural and anthropogenic risks; Implementation of NRP (National Research Plan) 21/27 - Area of intervention: Knowledge, technological innovation and sustainable management of marine ecosystems.  Proposed research: Marine circulation studies with traditional and innovative survey techniques. Development and application of 3D numerical hydrodynamic models.
Location of the research activity:	Department of Earth and Sea Sciences (DiSTeM)
Location of the teaching activity:	Department of Earth and Sea Sciences (DiSTeM)
Max number of papers:	12
Language skills:	English

#### **DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE**

VACANCY	N. 1
Academic Recruitment Field	01/A1 – MATHEMATICAL LOGIC, MATHEMATICS EDUCATION AND HISTORY OF MATHEMATICS
Academic Discipline	MAT/04 - MATHEMATICS EDUCATION AND HISTORY OF MATHEMATICS
Scientific commitment	The research activities are consistent with: the Smart Specialization Strategy of the Sicilian Region – Smart cities and communities; The PNRR (National Recovery and Resilience Plan) Mission 4 - Humanistic Culture and Cultural Heritage and



	High Performance Simulations, Computation and Data Analysis; Implementation of NRP (National Research Plan) 21/27 - Area of intervention: Digital transition – i4.0.  Proposed research: Innovative study and research actions aimed at identifying new possible scenarios of education.
Location of the research activity:	Department of Mathematics and Computer Science
Location of the teaching activity:	Department of Mathematics and Computer Science with commitment at the Agrigento Campus
Max number of papers:	12
Language skills:	English

#### **DEPARTMENT OF ENGINEERING**

VACANCY	N. 1
Academic Recruitment Field	09/D3 - CHEMICAL PLANTS AND TECHNOLOGIES
Academic Discipline	ING-IND/27 - CHEMICAL TECHNOLOGIES
Scientific commitment	The research activities are consistent with: the Smart Specialization Strategy of the Sicilian Region – Energy; The PNRR (National Recovery and Resilience Plan) Mission 4 - Energy scenarios of the future and Green energy of the future; Implementation of NRP (National Research Plan) 21/27 - Area of intervention: Environmental energy.  Proposed research: Study of hydrothermal and/or thermocatalytic conversion processes of organic matrices, including residual ones, into liquid and/or carbonated biofuels.
Location of the research activity:	Department of Engineering
Location of the teaching activity:	Department of Engineering
Max number of papers:	12
Language skills:	English

#### **DEPARTMENT OF ENGINEERING**

VACANCY	N. 1
Academic Recruitment Field	09/A3 – INDUSTRIAL DESIGN, MACHINE CONSTRUCTION AND METALLURGY
Academic Discipline	ING-IND/14 - MECHANICAL DESIGN AND MACHINE CONSTRUCTION
Scientific commitment	The research activities are consistent with: the Smart Specialization Strategy of the Sicilian Region – Energy; The DGR (Decree of the Regional Council) 7/2022 - Transition towards forms of production with lower energy and environmental impact; The PNRR (National Recovery and Resilience Plan) Mission 4 - Energy scenarios of the future and Green energy of the future; Implementation of NRP (National Research Plan) 21/27 - Area of intervention: Industrial energy.  Proposed research: Development and characterization of biocomposite laminates and green sandwich panels for green building applications.
Location of the research activity:	Department of Engineering
Location of the teaching activity:	Department of Engineering
Max number of papers:	12
Language skills:	English

## DEPARTMENT OF HEALTH PROMOTION, MOTHER AND CHILD CARE, INTERNAL MEDICINE AND MEDICAL SPECIALTIES "G. D'ALESSANDRO"

VACANCY	N. 1
Academic Recruitment Field	06/D2 - ENDOCRINOLOGY, NEPHROLOGY, FOOD AND WELLNESS SCIENCE
Academic Discipline	MED/49 - FOOD AND DIETETIC SCIENCES
Scientific commitment	The research activities are consistent with: the smart specialization strategy of the Sicily Region - Life Sciences and Agri-food;

	The PNRR (National Recovery and Resilience Plan) Mission 4 - Innovative diagnostics and therapies in precision medicine and Models for sustainable nutrition; Implementation of NRP (National Research Plan) 21/27 - Area of intervention: General issues (Health).  Proposed research: Study of the epigenetic effects of nutritional models.
Location of the research activity:	Department of Health Promotion, Mother and Child Care, Internal Medicine and Medical Specialties (PROMISE); University Hospital "P. Giaccone" - Palermo
Location of the teaching activity:	Department of Health Promotion, Mother and Child Care, Internal Medicine and Medical Specialties (PROMISE); University Hospital "P. Giaccone" - Palermo
Max number of papers:	12
Language skills:	English
Care commitment	With regard to the care committment, the candidate may carry out his or her assistance activity as a Medical / Healthcare Director at an Operating Unit in the field of applied dietary technical sciences of the University Hospital or, subject to the stipulation of a specific agreement, at a Health Authority affiliated with the NHS.

## DEPARTMENT OF HEALTH PROMOTION, MOTHER AND CHILD CARE, INTERNAL MEDICINE AND MEDICAL SPECIALTIES "G. D'ALESSANDRO"

VACANCY	N. 1
Academic Recruitment Field	06/D3 - BLOOD DISEASES, ONCOLOGY AND RHEUMATOLOGY
Academic Discipline	MED/16 - RHEUMATOLOGY
Scientific commitment	The research activities are consistent with: the smart specialization strategy of the Sicily Region - Life Sciences; The PNRR (National Recovery and Resilience Plan) Mission 4 - Innovative diagnostics and therapies in precision medicine; Implementation of NRP (National Research Plan) 21/27 - Area of intervention: Technologies for health.  Proposed research: Identification of disease course markers to personalize therapy in patients with spondyloarthritis.



Location of the research activity:	Department of Health Promotion, Mother and Child Care, Internal Medicine and Medical Specialties (PROMISE); University Hospital "P. Giaccone" - Palermo
Location of the teaching activity:	Department of Health Promotion, Mother and Child Care, Internal Medicine and Medical Specialties (PROMISE); University Hospital "P. Giaccone" - Palermo
Max number of papers:	12
Language skills:	English
Care commitment	With regard to the care committment, the candidate may carry out his or her assistance activity as a Medical Director at an Operating Unit of the University Hospital or, subject to the stipulation of a specific agreement, at a Health Authority affiliated with the NHS.

### **DEPARTMENT OF ECONOMICS, BUSINESS AND STATISTICS**

PLACES	N. 1
Academic Recruitment Field	13/D1 - STATISTICS.
Academic Discipline	SECS-S/01 - STATISTICS
Scientific commitment	The research activities are consistent with: the Smart Specialization Strategy of the Sicilian Region - Smart Cities & Communities; The DGR (Decree of the Regional Council) 7/2022 – Dissemination of the culture of innovation, sustainable development and skills on the subject of smart specialization; The National Recovery and Resilience Plan (NRRP), Mission 4 - Economic and financial sustainability of systems and territories; The implementation of the National Research Plan (NRP 21/27 - Area of intervention: Digital transition – i4.0.  Proposed research: Digitization, innovation and sustainability practices in a sample of Sicilian companies.
Location of the research activity:	Department of Economics, Business and Statistics
Location of the teaching activity:	Department of Economics, Business and Statistics, including degree courses based in decentralized campuses and teachings held in English.
Max number of papers:	12
Language skills:	English

#### **DEPARTMENT OF ECONOMICS, BUSINESS AND STATISTICS**

PLACES	N. 1
Academic Recruitment Field	13/D2 – ECONOMIC STATISTICS
Academic Discipline	SECS-S/03 - ECONOMIC STATISTICS
Scientific commitment	The research activities are consistent with: The Smart Specialization Strategy of the Sicilian Region - Smart Cities & Communities; The DGR (Decree of the Regional Council) 7/2022 – Dissemination of the culture of innovation, sustainable development and skills on the subject of smart specialization; The National Recovery and Resilience Plan (NRRP), Mission 4 - Economic and financial sustainability of systems and territories; The implementation of the National Research Plan (NRP 21/27 - Area of intervention: Digital transition – i4.0.  Proposed research: Digitization, innovation and sustainability practices in rural businesses. A statistical investigation.
Location of the research activity:	Department of Economics, Business and Statistics
Location of the teaching activity:	Department of Economics, Business and Statistics
Max number of papers:	12
Language skills:	English

PLACES	N. 1
Academic Recruitment Field	03/C1 – ORGANIC CHEMISTRY
Academic Discipline	CHIM/06 - ORGANIC CHEMISTRY
Scientific commitment	The research activities are consistent with: The Smart Specialization Strategy of the Sicilian Region – Life Sciences Industries; The National Recovery and Resilience Plan (NRRP), Mission 4 - Innovative diagnostics and therapies in precision medicine;

	The implementation of the National Research Plan (NRP 21/27 - Area of intervention: Pharmaceutical and pharmacological technologies  Proposed research: Isolation and characterization of natural molecules for human health
Location of the research activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Location of the teaching activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Max number of papers:	12
Language skills:	English

PLACES	N. 1
Academic Recruitment Field	03/D1 - MEDICINAL, TOXICOLOGICAL AND NUTRITIONAL CHEMISTRY AND APPLIED TECHNOLOGIES
Academic Discipline	CHIM/08 - PHARMACEUTICAL CHEMISTRY
Scientific commitment	The research activities are consistent with: The Smart Specialization Strategy of the Sicilian Region – Life Sciences Industries; The National Recovery and Resilience Plan (NRRP), Mission 4 - Neurosciences and Neuropharmacology; The implementation of the National Research Plan (NRP) 21/27 — Area of intervention: Pharmaceutical and pharmacological technologies  Proposed research: Design, synthesis, characterization, and biological activity of new molecules with chemotherapeutic activity
Location of the research activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Location of the teaching activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Max number of papers:	12
Language skills:	English

## DEPARTMENT OF BIOLOGICAL, CHEMICAL AND PHARMACEUTICAL SCIENCES AND TECHNOLOGIES (STEBICEF)

PLACES	N. 1
Academic Recruitment Field	03/D2 - DRUG TECHNOLOGY, SOCIOECONOMICS AND REGULATIONS
Academic Discipline	CHIM/09 - PHARMACEUTICAL AND TECHNOLOGICAL APPLICATIONS OF CHEMISTRY
Scientific commitment	The research activities are consistent with: The Smart Specialization Strategy of the Sicilian Region – Life Sciences Industries; The National Recovery and Resilience Plan (NRRP), Mission 4 - Innovative diagnostics and therapies in precision medicine; The implementation of the National Research Plan (NRP) 21/27 — Area of intervention: Pharmaceutical and pharmacological technologies Proposed research: Advanced pharmaceutical nanosystems for drug delivery in precision medicine
Location of the research activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Location of the teaching activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Max number of papers:	15
Language skills:	English

PLACES	N. 1
Academic Recruitment Field	05/B1 - ZOOLOGY AND ANTHROPOLOGY
Academic Discipline	BIO/05 - ZOOLOGY
Scientific commitment	The research activities are consistent with: The Smart Specialization Strategy of the Sicilian Region – Blue Economy; The National Recovery and Resilience Plan (NRRP), Mission 4 - Environmental, natural and anthropogenic risks and Biodiversity; The implementation of the National Research Plan (NRP) 21/27 - Area of intervention: Knowledge, technological



	innovation and sustainable management of marine ecosystems.  Proposed research: Integrated morphomolecular taxonomy and phylogeography of inland water organisms with particular reference to crustaceans, fish and chelones.
Location of the research activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Location of the teaching activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Max number of papers:	12
Language skills:	English

PLACES	N. 1
Academic Recruitment Field	05/G1 - PHARMACOLOGY, CLINICAL PHARMACOLOGY AND PHARMACOGNOSY
Academic Discipline	BIO/14 - PHARMACOLOGY
Scientific commitment	The research activities are consistent with: The Smart Specialization Strategy of the Sicilian Region – Life Sciences Industries; The National Recovery and Resilience Plan (NRRP), Mission 4 - Neurosciences and Neuropharmacology; The implementation of the National Research Plan (NRP) 21/27 – Area of intervention: Pharmaceutical and pharmacological technologies  Proposed research: New pharmacological strategies to overcome drug resistance.
Location of the research activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Location of the teaching activity:	Department of Biological, Chemical and Pharmaceutical Sciences and Technologies (STEBICEF)
Max number of papers:	12
Language skills:	English