DECLARATION OF <u>PRIORITY INTEREST</u> TO COMPETE FOR SCHOLARSHIPS LINKED TO A SPECIFIC RESEARCH TOPIC

I, _____ (*full name*), born in _____ (*place*) on _____ (*date*)

wish to express my interest in applying primarily for the following scholarships linked to a specific research topic (please tick the appropriate box and list the research topics in order of priority for greatest interest)

PhD Programme in **"Agri-Food Science, Technology and Biotechnology"**			
Specific research topic	**Interest in applying for the scholarship linked to the specific research topic YES/NO**		**If you are interested in more than one specific research topic, please enlist the topics in order of priority:**
Microbes and microbial products impacting on health, environment, food, and sustainability.	☐ YES	☐ NO	**1** _____
Polymicrobial fermentation by synthetic consortia to unravel microbe-to-microbe interactions in natural whey starter metacommunities for hard-cooked cheese production (MICROSOCIAL)	☐ YES	☐ NO	_____ **2** _____ _____
Integrated phenomics and genomics for cereal predictive breeding	☐ YES	☐ NO	**3** _____
Assessing canopy microclimate and wetness conditions to improve growth and phytopathological status of fruit trees towards sustainable crop productions	☐ YES	☐ NO	_____

PhD Programme in **"Health innovative products and technologies (HIP-TECH)"**			
Specific research topic	**Interest in applying for the scholarship linked to the specific research topic YES/NO**		**If you are interested in more than one specific research topic, please enlist the topics in order of priority:**
Study of the effects of environmental exposure to p-cresol and the associated risk of neurological diseases for sustainable development	☐ YES	☐ NO	**1** _____ _____
Innovation in the production and development of biotechnological drugs	☐ YES	☐ NO	**2** _____ _____
Use of Real-World Data, Artificial Intelligence, and Innovative Technologies in the Design, Planning, and Implementation of Clinical Trials	☐ YES	☐ NO	**3** _____ _____

PhD Programme in **"Humanities, technology and society"**		
Specific research topic	**Interest in applying for the scholarship linked to the specific research topic YES/NO**	
New Artistic Media and the Transformation of Social Relationships. On the Use of New Artistic Media (Video, Digital, and Web) in the Promotion and Consolidation of New Forms of Social Relationships Among Individuals and Communities	☐ YES	☐ NO

PhD Programme in **"Information and communication technologies (ICT)"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please enlist the topics in order of priority:
Application of Artificial Intelligence Techniques and Multi-Agent Systems for the Optimization of Medical-Diagnostic and Therapeutic Processes	☐ YES	☐ NO	**1** _____ _____
Resilient, distributed and continuous-learning artificial intelligence models based on brain functioning for energy-efficient applications	☐ YES	☐ NO	**2** _____ _____
Electric drives for green transportation applications	☐ YES	☐ NO	**3** _____
Hot Carrier effects in advanced semiconductor devices for energy and power management.	☐ YES	☐ NO	_____ **4** _____
Generative Approaches for Ethical and Privacy-Preserving Medical Imaging Data Synthesis	☐ YES	☐ NO	_____
Characterization and analysis of electrical parameters drifts in power devices	☐ YES	☐ NO	**5** _____
Multimedia Technologies for Large-Scale AI	☐ YES	☐ NO	_____
Context Aware Shared Autonomy for Robotic Manipulation Tasks	☐ YES	☐ NO	
Extending Generative AI Systems with Modularity, Efficiency and Compositionality	☐ YES	☐ NO	
Generative AI models for Content Understanding and Generation	☐ YES	☐ NO	

PhD Programme in **"Civil, environmental and materials engineering"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Development of innovative hydrological and hydraulic models based on ultra-high-resolution topographic data to enhance the resilience of rural and urban areas to extreme events	☐ YES	☐ NO

PhD Programme in **"Industrial Innovation Engineering"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please enlist the topics in order of priority:
Optimization and Artificial Intelligence Methods for Business Processes	☐ YES	☐ NO	**1** _____
Management, analysis, and utilization of planetary and extra-planetary satellite data	☐ YES	☐ NO	_____
Sustainability and Innovation: Intelligent Manufacturing Processes through Digitalization	☐ YES	☐ NO	**2** _____
Development and implementation of planning and control algorithms for autonomous surgical robots	☐ YES	☐ NO	**3** _____
Development and implementation of an advanced perception system based on deep learning for intraoperative analysis	☐ YES	☐ NO	_____
Development and implementation of control and artificial intelligence algorithms for the coordination of heterogeneous robotic systems	☐ YES	☐ NO	

PhD Programme in **"Mechanical and Vehicle Engineering"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Advanced Technologies for the Ecological and Digital Transition: Innovative Solutions for Energy Efficiency, Sustainable Mobility, and Circular Economy – Numerical and Experimental Study for the Optimization of the Combustion of Pyrolysis and Gasification Gases	☐ YES	☐ NO

PhD Programme in **"Labour, development and innovation"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please enlist the topics in order of priority:
The ageing of the working population: the governance and organisation of labour relations as a condition for promoting the well-being and skills development of workers of all ages	☐ YES	☐ NO	**1** _____
Critical factors for sustainable circular value chains in Agrifood industry	☐ YES	☐ NO	**2** _____
The evaluation of territorial care reform initiatives within the PNRR Health Mission	☐ YES	☐ NO	_____
Climate Risk and Green Investments	☐ YES	☐ NO	**3** _____ _____

PhD Programme in **"Mathematics"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please enlist the topics in order of priority:
The Geometry of Deep Learning	☐ YES	☐ NO	**1** _____
Towards greener AI: optimising hyperparameters for sustainable and adaptive intelligence	☐ YES	☐ NO	_____
Scientific machine learning for partial differential equations	☐ YES	☐ NO	**2** _____
Stochastic particle methods for optimization problems	☐ YES	☐ NO	_____ **3**
Logic and symbolic systems for rule extraction and information treatment from text in an agentic context: an integrated	☐ YES	☐ NO	_____

PhD Programme in **"Models and Methods for Material and Environmental Sciences"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please enlist the topics in order of priority:
Development of solid-state electrolytes for optimizing the performance of Li-ion batteries	☐ YES	☐ NO	**1** _____
Circular economy applied to nature-based solutions for biomass carbon capture and storage in sustainable agriculture, effects of an innovative compost on soil organisms and plants	☐ YES	☐ NO	_____ **2** _____
Organometallic complexes bearing salmen and salben ligands and their application in catalysis	☐ YES	☐ NO	_____ **3** _____
Multiparametric analytical approaches for the characterization of agri-food supply chains	☐ YES	☐ NO	_____

PhD Programme in **"Neurosciences"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please enlist the topics in order of priority:
Multiscale modelling of brain circuits for innovative digital twins and high energy efficient Artificial Intelligence models	☐ YES	☐ NO	**1** _____
Biomarker research in Amyotrophic Lateral Sclerosis	☐ YES	☐ NO	_____ **2** _____
From Principle to Practice: A multistakeholder study on Fidelity in Mental Health Services Implementing Open Dialogue	☐ YES	☐ NO	_____

PhD Programme in **"Physics and Nano Sciences"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO		If you are interested in more than one specific research topic, please list the topics in order of priority:
Flexible and green thin-film electronics with zero impact on nature	☐ YES	☐ NO	**1** _____
Design, fabrication and characterization of sustainable electronic devices	☐ YES	☐ NO	_____ **2** _____
Modeling solid state spin qubits for quantum technologies	☐ YES	☐ NO	_____
BlackHoleWeather: Advancing Black Hole Astrophysics via Simulations and Observations	☐ YES	☐ NO	**3** _____
Combining high-performance computing, machine learning and atomistic simulations to design nanostructrures for thermal energy harvesting	☐ YES	☐ NO	_____

PhD Programme in **"Legal Sciences"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Sustainable Development: Studies for a European and National Law of Sustainability	☐ YES	☐ NO

PhD Programme in **"Human Sciences: studies on language and literature, history and philosophy, communication and digital humanities"**

Specific research topic	Interest in applying for the scholarship linked to the specific research topic YES/NO	
Promoting Inclusive Slow Tourism: Cultural Heritage Exploration through Digital Media and AI	☐ YES	☐ NO

The option hereby chosen has priority over regular places, with or without scholarship.

Date and place, _____

Signature

_____