POSTGRADUATE PROGRAM IN NATURAL SCIENCES - PPGCN

SELECTION NOTICE PPGCN-2023-1- SELECTION PROCESS:
MASTER AND DOCTORATE DEGREES - ANNEXES

ANNEX 1

NÚMERO DE VAGAS PARA MESTRADO E DOUTORADO - 2023/1

LINHAS DE PESQUISA	MASTER VACANCIES	DOCTORATE VACANCIES	TOTAL
Bioorganic e Bioinorganic	07	05	12
Environmental Science	10	10	20
Materials Science and Technology	08	03	11
Science Education	08	04	12
TOTAL OF VACANCIES	**33**	**22**	**55**

LIST OF VACANCIES BY LINES OF RESEARCH, ADVISOR AND RESEARCH THEME - EACH CANDIDATE MAY APPLY FOR A SINGLE PLACEMENT, INDICATING THE LEVEL, ADVISOR AND CODE OF THE INTENDED VACANCIE

LINE OF RESEARCH: BIOORGANICAND BIOINORGANIC - TOTAL = 12 VACANCIES (07 MASTER VACANCIES AND 05 DOCTORADE VACANCIES)				
LEVEL: MASTER - 07 VACANCIES				
ADVISOR	**LEVEL**	**VACANCIES**	**RESEARCH THEME**	**VACANCY CODE**
Carlos Roberto Ribeiro Matos	M	01	Synthesis of bioactive substances	PPGCN-MBIO-01
Jan Schripsema	M	01	Applications of metabolomics in food or medicinal plants	PPGCN-MBIO-02
Leda Mathias	M	02	Study of fixed and volatile constituents of plant species in the Atlantic Forest biome	PPGCN-MBIO-03
Luana Pereira de Moraes	M	01	Processes for the production of enzymes and the use of agro-industrial residues	PPGCN-MBIO-04
Nádia Pereira Rosa	M	01	Process of extraction of bioactive substances from plant matrices with microwave application	PPGCN-MBIO-05
Rodrigo Rodrigues de Oliveira	M	01	Phytochemistry and Chemosystematics of Angiosperms	PPGCN-MBIO-06
LEVEL: DOCTORADE - 05 VACANCIES				
ADVISOR	**LEVEL**	**VACANCIES**	**RESEARCH THEME**	**VACANCY CODE**
Ivo José Curcino Vieira	D	01	Isolation and purification of substances bioproduced by Atlantic Forest species	PPGCN-DBIO-01
Jan Schripsema	D	01	Applications of metabolomics in food or medicinal plants	PPGCN-DBIO-02
Leda Mathias	D	01	Study of fixed and volatile constituents of plant species in the Atlantic Forest biome	PPGCN-DBIO-03
Maria Raquel Garcia Vega	D	01	Metabolic profile of plant-microorganism interaction	PPGCN-DBIO-04
Rodrigo rodrigues de Oliveira	D	01	Phytochemistry and Chemosystematics of Angiosperm	PPGCN-DBIO-05

LINE OF RESEARCH: ENVIRONMENTAL SCIENCE - TOTAL = 20 VACANCIES (10 MASTER VACANCIES AND 10 DOCTORADE VACANCIES)				
LEVEL: MASTER (10 VACANCIES)				
ADVISOR	**LEVEL**	**VACANCIES**	**RESEARCH THEME**	**VACANCY CODE**
Eliane Barbosa Santos	M	01	Analysis and modeling of hydrological extremes	PPGCN-MCA-01
Jan Schripsema	M	01	Metabolomics applied to environmental sciences	PPGCN-MCA-02
Jefferson Rodrigues de Souza	M	01	Determination of potentially toxic chemical elements in samples of environmental interest using new calibration strategies in atomic spectrometry	PPGCN-MCA-03
Marcelo Gomes da Silva	M	01	Gases in Biological Systems	PPGCN-MCA-04
Maria Cristina Canela Gazotti	M	01	HPA analysis in biological samples of elasmobranchs	PPGCN-MCA-05
Maria Priscila Pessanha Castro	M	01	Photoacoustics applied to the measurement of human exhalation biomarkers	PPGCN-MCA-06
Murilo de Oliveira Souza	M	02	Chemometrics applied to Environmental Sciences	PPGCN-MCA-07
Victor Haber Perez	M	01	Biophysical effects of magnetic fields in bioprocess	PPGCN-MCA-08
Victor Haber Perez	M	01	Unconventional production of biofuels	PPGCN-MCA-09
LEVEL: DOCTORADE (10 VACANCIES)				
ADVISOR	**LEVEL**	**VACANCIES**	**RESEARCH THEME**	**VACANCY CODE**
Cibele Stivanin de Almeida	D	01	Studies of potentially toxic elements in tissues of marine animals	PPGCN-DCA-01
Cibele Stivanin de Almeida	D	01	Determination of metals associated with microplastics collected in elasmobranchs fished on the northern coast of Rio de Janeiro	PPGCN-DCA-02
Eliane Barbosa Santos	D	01	Analysis and modeling of hydrological extremes	PPGCN-DCA-03
Jan Schripsema	D	01	Metabolomics applied to environmental sciences	PPGCN-DCA-04
Leonardo Mota	D	01	Gases in Biological Systems	LPPGCN-DCA-05
Marcelo Gomes da Silva	D	01	Gases in Biological Systems	PPGCN-DCA-06
Marcelo Silva Sthel	D	01	Gases in Biological Systems	PPGCN-DCA-07
Victor Haber Perez	D	02	Thermochemical transformation of biomass from different sources. Technical-economic analysis and environmental impact	PPGCN-DCA-08
Sergio Luis Cardoso	D	01	Mineral and metabolic composition of plants associated with nutrition, genotype and plant-pathogen interaction	PPGCN-DCA-09

LINE OF RESEARCH: MATERIAL SCIENCE AND TECHNOLOGY - TOTAL = 11 VACANCIES (08 MASTER VACANCIES AND 03 DOCTORADE VACANCIES)				
LEVEL: MASTER (08 VACANCIES)				
ADVISOR	**LEVEL**	**VACANCIES**	**RESEARCH THEME**	**VACANCY CODE**
André Oliveira Guimarães	M	01	Evaluation of the antioxidant capacity of natural products with electronic paramagnetic resonance	PPGCN-MCTM-01
Luís Guilherme Mansor Basso	M	02	Study of systems of biological interest by spectroscopic techniques	PPGCN-MCTM-02
Max Erik Soffner	M	01	Synthesis and characterization of glassy materials aiming at the use of waste rocks	PPGCN-MCTM-03
Max Erik Soffner	M	01	Synthesis and characterization of glassy materials with luminescent properties for technological applications	PPGCN-MCTM-04
Pablo Leite Bernardo	M	01	Study of magnetic hyperthermia with nanoparticles for technological applications	PPGCN-MCTM-05
Pablo Leite Bernardo	M	01	Functionalization of magnetic nanoparticles for drug delivery	PPGCN-MCTM-06
Sergio Luis Cardoso	M	01	Nanoscience: nanomaterials applied to biological systems	PPGCN-MCTM-07
LEVEL: DOCTORADE (03 VACANCIES)				
ADVISOR	**LEVEL**	**VACANCIES**	**RESEARCH THEME**	**VACANCY CODE**
André Oliveira Guimarães	D	01	Photothermal and electronic paramagnetic resonance applied to petrophysics	PPGCN-DCTM-01
Luís Guilherme Mansor Basso	D	01	Study of systems of biological interest by spectroscopic techniques	PPGCN-DCTM-02
Roberto da Trindade Faria Junior	D	01	Application of photothermal techniques in the characterization of soil-plant-atmosphere systems	PPGCN-DCTM-03

LINE OF RESEARCH: SCIENCE EDUCATION - TOTAL =12 VACANCIES (08 MASTER VACANCIES AND 04 DOCTORAL VACANCIES)				
LEVEL: MASTER (08 VACANCIES)				
ADVISOR	**LEVEL**	**VACANCIES**	**RESEARCH THEME**	**VACANCY CODE**
Carlos Eduardo Batista de Sousa	M	01	Philosophy, History and Science Teaching	PPGCN-MEC-01
Carlos Eduardo Batista de Sousa	M	01	Neuroeducation	PPGCN-MEC-02
Fernando Luna de Oliveira	M	02	Use of the history of sciences in the teaching of chemistry/physics/biology	PPGCN-MEC-03
Leonardo Mota	M	02	Active Teaching-Learning Methodologies	PPGCN-MEC-04
Roberto da Trindade Faria Junior*	M	01	Science teaching-learning skills through everyday activities	PPGCN-MEC-05
Simonne Teixeira	M	01	Culture, Nature and Science: interdisciplinary studies	PPGCN-MEC-06
LEVEL: DOCTORADE (04 VACANCIES)				
ADVISOR	**LEVEL**	**VACANCIES**	**RESEARCH THEME**	**VACANCY CODE**
Aline Chaves Intorne*	D	01	Science teaching practice	PPGCN-DEC-01
Carlos Eduardo Batista de Sousa	D	01	Neuroeducation	PPGCN-DEC-01
Fernando Luna de Oliveira	D	01	Use of the history of sciences in the teaching of chemistry/physics/biology	PPGCN-DEC-01
Jan Schripsema	D	01	Chemistry teaching in the northern region of Fluminense and surroundings	PPGCN-DEC-01

ANNEX 2
SCHEDULE OF THE SELECTION PROCESS

DATA	EVENTOS	OBSERVAÇÕES
07/11/2022	INITIAL DATE FOR APPLICATIONS	From 00:01 h am
27/11/2022	FINAL DATE FOR APPLICATIONS	Until 23:59 h
28/11/2022	DISCLOSURE OF APPROVED APPLICATIONS	Schedule for 18:00 h
28/11/2022	DISCLOSURE OF THE EVALUATION AND APPLEAL COMMITTEES	Schedule for 18:00 h
28/11/2022	INITIAL DATE FOR INTERPOSITION OF APPEALS RELATING TO APPLICATION APPROVAL	From 19:00 h
28/11/2022	INITIAL DATE FOR INTERPOSITION OF APPEALS RELATING TO EVALUATION AND APPLEAL COMMITTEES	From 20:00 h
30/11/2022	FINAL DATE FOR INTERPOSITION OF APPEALS RELATING TO APPLICATION APPROVAL	Until 20:00 h
30/11/2022	FINAL DATE FOR INTERPOSITION OF APPEALS RELATING TO EVALUATION AND APPLEAL COMMITTEES	Until 19:00 h
01/12/2022	EVALUATION OF APPLEALS ANALYSIS BY THE APPLEALS COMMITTEE	
01/12/2022	DISCLOSURE AT SELECTION PROCESS WEBPAGE OF DEFINITIVE APPLICATION LIST (APPROVED AND NON-APPROVED) AND EVALUATION COMMITTEES AFTER APPEALS	Schedule for 18:00 h
01/12/2022	START OF CURRICULUM VITAE AND ACADEMIC RECORD EVALUATION PHASE	
02/12/2022	END OF CURRICULUM VITAE AND ACADEMIC RECORD EVALUATION PHASE	
02/12/2022	DISCLOSURE OF CURRICULUM VITAE AND ACADEMIC RECORD EVALUATION PHASE RESULTS	Schedule for 18:00 h
02/12/2022	INITIAL DATE FOR INTERPOSITION OF APPEALS RELATING TO CURRICULUM VITAE AND ACADEMIC RECORD EVALUATION PHASE RESULTS	From 19:00 h
04/12/2022	FINAL DATE FOR INTERPOSITION OF APPEALS RELATING TO CURRICULUM VITAE AND ACADEMIC RECORD EVALUATION PHASE RESULTS	Until 19:00 h
05/12/2022	DISCLOSURE OF APPEALS EVALUATION RELATING TO CURRICULUM VITAE AND ACADEMIC RECORD EVALUATION PHASE	Schedule for 09:00 h
07/12/2022	GENERAL KNOWLEDGE TEST APPLICATION	From 9:00 to 12:00 h
07/12/2022	FOREIGN LANGUAGE (ENGLISH)/SCIENTIFIC ARTICLE INTERPRETATION TEST APPLICATION	From 14:00 to 17:00 h
09/12/2022	DISCLOSURE OF KNOWLEDGE TESTS PHASE RESULTS	Schedule for 12:00 h
09/12/2022	INITIAL DATE FOR INTERPOSITION OF APPEALS RELATING TO KNOWLEDGE TESTS PHASD RESULTS	From 13:00 h
11/12/2022	FINAL DATE FOR INTERPOSITION OF APPEALS RELATING TO KNOWLEDGE TESTS PHASE RESULTS	Until 13:00 h
12/12/2022	DISCLOSURE OF APPEALS EVALUATION RELATING TO KNOWLEDGE TESTS PHASE RESULTS	Schedule for 12:00 h
13/12/2022	MASTER INTERVIEWS/DOCTORADE INTERVIEWS AND RESEARCH PROJECT	As scheduled
14/12/2022	MASTER INTERVIEWS/DOCTORADE INTERVIEWS AND RESEARCH PROJECT	As scheduled
15/12/2022	MASTER INTERVIEWS/DOCTORADE INTERVIEWS AND RESEARCH PROJECT	As scheduled
16/12/2022	MASTER INTERVIEWS/DOCTORADE INTERVIEWS AND RESEARCH PROJECT	As scheduled
16/12/2022	DISCLOSURE OF MASTER INTERVIEWS/DOCTORADE INTERVIEWS AND RESEARCH PROJECT RESULTS	Schedule for 18:00 h
16/12/2022	INITIAL DATE FOR INTERPOSITION OF APPEALS RELATING TO MASTER INTERVIEWS/DOCTORADE INTERVIEWS AND RESEARCH PROJECT RESULTS	A partir das 19:00 h
18/12/2022	FINAL DATE FOR INTERPOSITION OF APPEALS RELATING TO MASTER INTERVIEWS/DOCTORADE INTERVIEWS AND RESEARCH PROJECT RESULTS	Até as 19:00 h
19/12/2022	DISCLOSURE OF APPEALS EVALUATION RELATING TO MASTER INTERVIEWS/DOCTORADE INTERVIEWS AND RESEARCH PROJECT RESULTS	From 12:00 h

19/12/2022	DISCLOSURE OF SELECTIVE PROCESS PGCN-2023-1 PRELIMINAR RESULT	Schedule for s 12:00 h
21/12/2022	INITIAL DATE FOR INTERPOSITION OF APPEALS RELATING TO SELECTIVE PROCESS PGCN-2021-1 PRELIMINAR RESULT	From 13:00 h
23/12/2022	FINAL DATE FOR INTERPOSITION OF APPEALS RELATING TO SELECTIVE PROCESS PGCN-2021-1 PRELIMINAR RESULT	Until 13:00 h
23/12/2022	DISCLOSURE OF APPEALS EVALUATION RELATING TO SELECTIVE PROCESS PGCN-2021-1 PRELIMINAR RESULT	Schedule for 18:00 h
23/12/2022	DISCLOSURE OF SELECTIVE PROCESS PGCN-2023-1 FINAL RESULT	Schedule for 18:00 h
20/01/2022	DEADLINE FOR CALLING CANDIDATES ON WAITING LIST	Schedule for 12:00 h
13/02/2023	INICIAL DATE FOR PRÉ-REGISTRATION 2023-1	
28/02/2023	FINAL DDATE FOR PRÉ-REGISTRATION 2023-1	
01/03/2023	IMCIAL DATE FOR REFGISTRATION 2023-1	
02/03/2023	FINAL DATE FOR REGISTRATION 2023-1	
06/03/2023	ÍNICIO DO PERÍODO LETIVO DE 2023-2	
OBS.	O INÍCIO DA CONVOCAÇÃO DE CANDIDATOS PARA PRÉ MATRÍCULA E MATRÍCULA PODERÁ OCORRER EM PERÍODO ESPECIAL A PARTIR DE 02/01/2023 CASO EXISTA NECESSIDADE OPERACIONAL DE IMPLANTAÇÃO DE BOLSAS DISPONÍVEIS NO PROGRAMA	

ANNEX 3
SCORE TABLE – MASTER

Item	Max. Score	Sub item	DETAILING	Candidate Self Evaluation Score[1]	Evaluation Committee Score
1- Professional Experience	**Up to 1,00 point**	**1.1**	Professional Experience in activities related to the program proposal (Month (workload higher or equal to 8 hours week) x 0,50 / 12)		
		1.2	Professional Experience in activities related to the program proposal (Month (workload lower than 8 hours week x 0,25 / 12); (minimum 4 months).		
2- Graduate Academic Record[2]	**Uo tp 2,50 points**	**2.1**	GRADE = Accumulated yield coefficient (CRA) x 0,30		
3- Graduation courses in related areas to the program proposal (certificate or equivalent)[3]	**Up to 1,00 point**	**3.1**	1,00 for courses with classification 4 or higher in MEC evaluation.		
			0,75 for courses with classification 3		
			0,0 for Other Courses		
4- Academic and introductory science activities (in the last 5 years)	**Up to 3,50 points**	**4.1**	Introductory Science and Technological Activities and/or teaching introductory programs (0,50 by semester) (maximum 2,00 points)		
		4.2	Participation in extension projects (0,50 by semester) (maximum 2,00 points)		
		4.3	Tutoring in undergraduate courses or Tutorial Education programs (TEP) (0,50 by semester) (maximum 1,00 points))		
		4.4	Lato Sensu specialization related to the program proposal. Minimum 300 course hours; (1,00 point by specialization) (maximum 1,00 point)		
		4.5	Academic Exchange Abroad (0,50 by semester) - (Maximum 0,50 point)		
		4.6	Abstracts in Congress Annals:0,25 for local events, 0,50 for national events and 0,75 for international events (maximum 1,00 points)		
		4.7	Complete articles with 3 or more pages in Congress, 0,50 for local events, 0,75 for national events and 1,00 for international events (maximum 1,50 points)		
		4.8	Prizes (0,10 each); (maximum 0,50 point)		
5- Scientific Production (in the last 5 years)[4]	**Up to 2,00 points**	**5.1**	Published and/or accepted papers in scientific periodicals ; Published Books and/or Book chapters – score will be counted following the current Qualis Capes classification Sum of the number of articles multiplied by weight according to Qualis classification	'	
			TOTAL (MAXIMUM 10,0)		

[1] The candidate must fill in only the total values of his/her self-assessment for each item/sub-item. You must not exceed the maximum values allowed in each item/sub-item when filling in, even if you have more evidences documentations for the same item/sub-item than required in the maximum score the evidence documents should be numbered according with each item/subitem.. If there is more than one evidence document for the same sub-item then the candidate must use the cumulative numbering in the sequence: Example, 4.1.1; 4.1.2......Keep the established numbering, even if you don't have evidence documents in some of the items.

[2] For Academic Records that do not have CRA, the evaluation committee will make the calculation considering the grades obtained and the number of credits (hours) of the subjects that appear in the Academic Record.

[3] For candidates with graduation from other countries, international assessments equivalent to MEC will be considered

[4] Score for articles in scientific journals will be counted following the Qualis/Capes classification: A1 = 1,00; A2 = 0,875; A3 = 0,75; A4 = 0,625; B1 = 0,50; B2 = 0,375 ;B3 = 0,25; B4 = 0,125; C = 0 (zero). Se If the article does not have a Qualis/CAPES classification, then it will be classified under the item Complete works in Congress Annals

ANNEX 4
SCORE TABLE – DOCTORATE

Item	Max. Score	Sub item	DETAILING	Candidate Self Evaluation Score[1]	Evaluation Committee Score
1- Professional Experience	**Up to 1,00 point**	1.1	Professional Experience in activities related to the program proposal (Month (workload higher or equal to 8 hours week) x 0,50 / 12)		
		1.2	Professional Experience in activities related to the program proposal (Month (workload lower than 8 hours week x 0,25 / 12); (minimum 4 months).		
2- Master Academic Record[2]	**Up to 2,00 points**	2.1	GRADE = Accumulated yield coefficient (CRA)		
3- *Stricto Sensu* Postgraduation courses in related areas to the program proposal (certificate or equivalent)[3]	**Up to 1,00 point**	3.1	1,00 for courses with classification 4 or higher in CAPES evaluation.		
		3.2	0,50 courses with classification 3		
		3.3	0,0 for Other Courses		
4- Academic and introductory science activities (in the last 5 years)	**Up to 3,00 points**	4.1	Introductory Science Programs (0,50 by semester) (maximum 1,00 point)		
		4.2	Higher Education Introductory Teaching Programs (0,50 by semester) Maximum (1,00 point)		
		4.3	Participation in extension programs or projects or Tutorial Education Programs - TEP (0,50 by semester) (maximum 1,00 point)		
		4.4	Tutoring in undergraduate courses disciplines (0,50 by semester (maximum 0,50 point)		
		4.5	Academic Exchange Abroad (0,50 by semester) - (Maximum 1,00 point)		
		4.6	Lato Sensu specialization related to the program lines of research: Minimum 300 course hours; (0,50 point by specialization) (maximum 0,50 point)		
		4.7	Abstracts in Congress Annals:0,25 for local events, 0,50 for national events and 0,75 for international events (maximum 1,00 points)		
		4.8	Complete articles with 3 or more pages in Congress, 0,50 for local events, 0,75 for national events and 1,00 for international events (maximum 1,50 points)		
		4.9	Prizes (0,10 each); (maximum 0,50 point)		
5- Scientific Production (in the last 5 years)[4]	**Up to 3,00 points**	5.1	Artigos publicados e/ou aceitos em periódicos ; Published and/or accepted papers in scientific periodicals ; Published Books and/or Book chapters – score will be counted following the current Qualis Capes classification Sum of the number of articles multiplied by weight according to Qualis classification		
			TOTAL (MAXIMUM 10,0)		

[1] The candidate must fill in only the total values of his/her self-assessment for each item/sub-item. You must not exceed the maximum values allowed in each item/sub-item when filling in, even if you have more evidences documentations for the same item/sub-item than required in the maximum score   the evidence documents should be numbered according with each item/subitem.. If there is more than one evidence document for the same sub-item then the candidate must use the cumulative numbering in the sequence: Example, 4.1.1; 4.1.2......Keep the established numbering, even if you don't have evidence documents in some of the items.

[2] For Academic Records that do not have CRA, the evaluation committee will make the calculation considering the grades obtained and the number of credits (hours) of the subjects that appear in the Academic Record.

[3] For candidates with postgraduation *stricto sensu* courses from other countries, international assessments equivalent to CAPES will be considered

[4] Score for articles in scientific journals will be counted following the Qualis/Capes classification: A1 = 1,00; A2 = 0,875; A3 = 0,75; A4 = 0,625; B1 = 0,50; B2 = 0,375 ;B3 = 0,25; B4 = 0,125; C = 0 (zero). If the article does not have a Qualis/CAPES classification, then it will be classified under the item Complete works in Congress Annals

ANNEX 5
Projeto de pesquisa (only for doctorate candidates)

The candidate must demonstrate the ability to clearly and concisely write a summarized research project proposal on a subject related to the research line and theme chosen by the candidate at the time of application. The project schedule should be expected to be between 6 and 24 months.

Requirements for the Project writing

1) The project must have a maximum of 10 pages (except preamble)
2) The writing must follow the ABNT (or similar international standards) for projects
3) The project can be written in Portuguese or entirely in English

The project must have the following division

A) Preamble

i) Front page with candidate identification
ii) Abstract in Portuguese (for projects written in Portuguese)
iii) Abstract in English (for projects written in Portuguese or English

B) Project Structure

i) Introduction
ii) Aims
iii) Methodology
iv) Expected Results
v) Schedule
vi) Bibliographical References (at least 5 references must have being published in the last 3 years and being classified by QUALIS/CAPES

A zero score will be given to projects that:

1) are outside of the required standards
4) Present plagiarism or self-plagiarism

Observations:

References citing websites should be restricted to those in which there is no information reported in another written source, such as statistical data from official bodies.

The project must not be the same as the one presented for the development of the master's.

Project Evaluation

The candidate must present the project to an examining committee, followed by an inquiry.

The form of presentation, the candidate's ability to know the scientific writing, the originality of the idea and the feasibility of the proposed schedule will be evaluated by the examining committee.

ANNEX 6

QUOTA RESERVE (ONLY FOR BRAZILIAM CANDIDATES)

SPECIFIC INSTRUCTIONS FOR CANDIDATES FOR THE VACANCIES IN THE QUOTA SYSTEM

NOT TRANSLATED TO ENGLISH (SEE ANNEXES IN PORTUGUESE)