EARTH SCIENCES

Cycle | XXXV
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Coordinator | Prof. Mario TRIBAUDINO  
Department of Chemistry, Life Sciences and Environmental Sustainability  
email: mario.tribaudino@unipr.it
Duration | 3 years
Starting date of the PhD program | 01/11/2019

Research Topics
- Turbidite sedimentation from hypercritical turbid flows in confined basins
- Experimental study and numerical modelling of infiltration and flow processes in low-permeability landslide complexes
- Mineralogy of bottom ashes from MSWI: an investigation on the amorphous phases
- Messinian salinity crisis and ecological impact in the adriatic-balcan area

Training Objectives
The main goal of the Doctoral Course in Earth Sciences is to provide highly qualified educational and research training in numerous Scientific Disciplinary Sectors specific to Geosciences, aiming at an interdisciplinary perspective

Admission requirements
Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:
- Laurea specialistica or Laurea magistrale (second cycle master's degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programs
Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2019.

POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>4</th>
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<tbody>
<tr>
<td>TOTAL</td>
<td>4</td>
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Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Scholarship Ministerial funds</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>Scholarship co-funded by Fondazione Cariparma</td>
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</tbody>
</table>
Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>BOUND RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by the Department of Chemistry, Life Sciences and Environmental Sustainability</td>
<td>• Mineralogy of bottom ashes from MSWI: an investigation on the amorphous phases</td>
</tr>
</tbody>
</table>

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 40 points  
(a minimum score of 15 points shall be required to be admitted to the Oral Exam)

ORAL EXAM: up to 80 points

Minimum score for ELIGIBILITY: 70/120

Foreign Language  
Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH**.  
The evaluation of the knowledge of this language will be oral and will consist in translating a paragraph of scientific text

Possibility of videoconference for candidates residing or temporarily abroad  
(the relevant request shall be submitted using the form attached to the competitive examination announcement)

THE INTERVIEW MAY BE HELD ALSO IN ENGLISH

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

Mandatory documents to be attached to the on-line application

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a **valid identification document** with photo
- **Curriculum Vitae et studiorum** (art. 4 of the Call for Applications)
- **Abstract of the second cycle master’s degree thesis.** Undergraduate applicants may submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10,000 characters including spaces)
- **Certificates and academic transcript of records for both Bachelor’ and Master’ degrees** containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - Date of graduation
  - Final mark
  - List of exams and corresponding scores (academic transcript of records)
  - Translation into Italian or English (only for degrees issued in languages other than Italian or English)

Further qualifications that may be attached to the application, if in possession of the applicant  
(only qualifications attested by a document drawn up in Italian or in English)
- **Research Project**: The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focus on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, experimental procedure, expected results; it does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board;

- **Statement of Research Interest**: Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate’s reasons to attend the PhD programme and at describing the specific her/his research interests, assessed in the curriculum vitae;

- **Scientific Publications**:
  - Articles on national and international journals, papers presented at conferences or symposia, book chapters
  - Abstracts of papers or posters presented at conventions or meetings

- **Reference Letters**: A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities

- **Academic qualifications**: First or second level Master’s degree obtained in Italy other Master’s and/or specialization degreee, in subjects consistent with the research topics of this PhD program

- **Mobility experience abroad** (e.g. Erasmus or similar);

- **Any other document** certifying the applicant’s training and abilities (grants, awards, etc.)

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### EVALUATION CRITERIA

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
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</thead>
<tbody>
<tr>
<td>Curriculum Vitae et studiorum</td>
<td>Including academic and postgraduate experience, Master’s and/or specialization degree, mobility experience abroad</td>
<td>Up to 10 points</td>
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</tbody>
</table>
| Graduation mark                        | Score related to the final mark:  
  - 110 and 110 with honours (magna cum laude): 10 points  
  - from 107 to 109: 9 points  
  - from 105 to 106: 7 points  
  - from 100 to 104: 5 points  
  - from 95 to 99: 2 points  
  - under 95: 1 point | Up to 10 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2019) | Score related to the average of the exam marks:  
  - from 28 to 30: 10 points  
  - from 27 to 27.99: 9 points  
  - from 26.5 to 26.99: 7 points  
  - from 26 to 26.49: 5 points  
  - form 25 to 25.99: 2 points  
  - under 25: 1 point | Up to 10 points |
| Graduation thesis                      | Scientific quality of work performed and consistency of the Master’s Degree thesis with the doctoral program research topics | Up to 10 points |
| Research Project                       | Points relating to the research project shall be allocated on the basis of the following criteria:  
  o Scientific value and ground-breaking nature of the proposal: 1 point  
  o description and structure of the proposal: 1 point  
  o proposal feasibility: 1 point | Up to 3 points |
### Scientific publications
- Abstract presented at a national or international congress: 1 point
- Articles on scientific journals (ISI): 5 points
- Other publication (related to the topics of PhD program): 1 point

### Reference Letters
A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities

### ORAL EXAMINATION

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
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<tbody>
<tr>
<td>o knowledge of foreign languages: 5 points</td>
<td>Up to 80 points</td>
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<tr>
<td>o research project presentation: 50 points</td>
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<td>o general knowledge of issues connected to the PhD course: 25 points</td>
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### SCHEDULE OF THE ADMISSION EXAMS

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<thead>
<tr>
<th>ORAL EXAM</th>
<th>DATE</th>
<th>TIME</th>
<th>PLACE</th>
</tr>
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<tbody>
<tr>
<td>DATE</td>
<td>12 September 2019</td>
<td>09:00 am</td>
<td>Plexus of Earth Sciences Parco Area delle Scienze, 157/A – 43124 PARMA - ITALY</td>
</tr>
</tbody>
</table>

### OTHER INFORMATIONS
For foreign candidates, the admission examinations may be held in English at the candidate’s choice.