FOOD SCIENCE

Cycle | XXXIII
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Duration | 3 years
Coordinator | Prof. Furio BRIGHENTI – Food and Drugs Department E-mail: furio.brighenti@unipr.it

Research Topics
(the applicant MUST indicate one research topic)

- Food resources improvement, post-harvest losses reduction and local food development in African countries.
- Development of rapid (spectroscopic) methods for assessment of fish authenticity and safety.
- Exploring the nutritional quality of nutrients of interest in pulses and tree nuts.
- Microbial characterization and safety evaluation of novel foods.
- Technological functionality of vegetable flours in complex food matrices.
- Untarget omic approaches for food quality and safety.
- The interplay between dietary bioactives, natural toxins, and the human gut microbiota.

Training objectives

Gaining high theoretical and experimental competences to answer innovation needs in the field of food sciences, with particular focus on mastering interdisciplinary topics (chemistry, agronomy, food microbiology, food technologies, sensory analysis, human nutrition, marketing and food inspection).

Academic degree required

Laurea pursuant to the previous university system, laurea specialista or laurea magistrale, or a foreign academic qualification that has been recognized as equivalent

POSITIONS PUT OUT TO COMPETITION

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<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>With Scholarship</td>
<td>5</td>
</tr>
<tr>
<td>Without Scholarship</td>
<td>1</td>
</tr>
<tr>
<td>Reserved to employees of companies having a “Industrial Engineering Doctorate” arrangement</td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>7</td>
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</tbody>
</table>

KIND OF SCHOLARSHIP

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic, if any</th>
</tr>
</thead>
</table>
| 3 | Scholarship Ministerial funds | • Local food development in African countries  
• Methods for fish authenticity and safety  
• Nutritional quality of pulses and nuts |
| 1 | Scholarship University funds | • Safety evaluation of novel foods |
Positions reserved to employees of companies having a “Industrial Engineering Doctorate” arrangement

<table>
<thead>
<tr>
<th>N°</th>
<th>Company/Institution</th>
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<tbody>
<tr>
<td>1</td>
<td>HI-FOOD S.p.A.</td>
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**ADMISSION PROCEDURES**

**Assessment of QUALIFICATIONS**: up to 30 points  
**ORAL EXAM**: up to 90 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 of a scientific text.

**Possibility of videoconference for candidates residing or temporarily abroad**: **NO**

**LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT**

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Assessment Details</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation thesis</td>
<td>Coherence of the theme of the graduation thesis with the educational objectives of the PhD (mandatory qualification)</td>
<td>Up to 6 points</td>
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</table>
| Graduation mark                                         | Score related to the final mark:  
- 110 with honours (magna cum laude): 4 points  
- 110: 3 points  
- From 105 to 109: 2 points  
- From 99 to 104: 1 points  
- Under 99: 0 points | Up to 4 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2017) | Score related to the average of the exam marks:  
- 30/30: 4 points  
- From 28/30 to 29.9/30: 3 points  
- From 26/30 to 27.9/30: 2 points  
- From 24/30 to 25.9/30: 1 point  
- Under 24/30: 0 points | Up to 4 points |
| Curriculum Vitae et studiorum and other qualifications  | Including academic career and postgraduate experience (Scholarships, prizes, experiences abroad, specialization certifications, etc.) accompanied with a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark (mandatory qualification) | Up to 8 points |
## 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 and at describing the specific research interests

### Up to 5 points

## Scientific publications

- Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.

### Up to 5 points

## 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

### Up to 2 points

## SCHEDULE OF THE ADMISSION EXAMS

### ORAL EXAM

- **ORAL EXAM DATE:** 18 September 2017
- **TIME:** 10:00am
- **PLACE:** CLASSROOM A – Didactic Center of Food and Drugs Department (Building 19 Food Project University)
  Parco Area delle Scienze, 47/A – 43124 PARMA - ITALY

### Oral Exam topics

- The Oral Exam will consist:
  1. Critical reading of a scientific publication chosen from among those proposed by the Commission within the themes of research proposals;
  2. Interview about the contents of the scientific publication chosen by each candidate.

### OTHER INFORMATIONS

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