

NOTICE OF SELECTION FOR RESEARCH POSITION

(Art. 51 comma 6 L. 449/97 and regulation for research [grants] of the Università di Bologna, promulgated with D.R. n. 1152 of 15/06/2004)

Art.1 - Object

The Centro Interdipartimentale di Ricerca per le Scienze Ambientali - C.I.R.S.A. – in Ravenna, Via Tombesi Dall’Ova 55, 48100 Ravenna of the Alma Mater Studiorum Università di Bologna announces a competition for a research position to carry out research activities relative to the **numerical modelling and forecasting of the marine ecosystem for the Adriatic Sea**, as outlined in the attached research program. The activities will take place at the Centro Interdipartimentale di Ricerca per le Scienze Ambientali di Ravenna, Via S Alberto 163, Ravenna Italy.

Art 2 – Requirements for Admission

The selection is open to researchers in Environmental Sciences, Physics, Information Technology, and Engineering, with a Ph.D., from Italian or foreign Universities, accompanied by a scientific-professional *curriculum vitae*.

Candidates must possess the requirements for admission by the deadline for this **Notice of Selection**.

Art. 3 – Application for Admission

The application to participate in the selection shall be completed on plain paper, in the attached format, and sent to the Director of the **Centro Interdipartimentale di Ricerca per le Scienze Ambientali - C.I.R.S.A. – in Ravenna, Via Tombesi Dall’Ova 55, 48100 Ravenna** no later than **March 1, 2008**. Late applications will not be considered.

The application may be either hand-delivered or sent via registered mail with return receipt. Hand deliveries shall be made to the Secretariat of the **Centro Interdipartimentale di Ricerca per le Scienze Ambientali - C.I.R.S.A. –con sede in Ravenna, Via Tombesi Dall’Ova n. 55**, at the above address from Monday to Friday from 9 a.m. to 12 p.m.

Receipt of the application shall be verified as follows:

- for hand deliveries, by the date indicated on the receipt signed by the staff member of the intake office;
- in the case of mailed applications, by the official time stamp of the Centro.

The Centro will not assume any responsibility for lost communications due to errors or omissions in contact information provided by the candidate, or to late or no notice of change of address indicated in

the application, nor for postal, telegraphic, or any other error attributable to any third party, whether due to chance or to *force majeure*.

The candidates shall provide and attest to the following:

- last and first name
- date and place of birth
- citizenship
- residence and contact information for purposes of the selection;
- to not have been convicted of any crime or to have any criminal proceedings underway (otherwise indicate which);
- to possess a graduate degree in ___[*subject*]___ received from ___[*university*]_____ on _____[*date*]_____;
- to possess the title of Doctorate of Research in ___[*subject*]___ received from ___[*university*]_____ on _____[*date*]_____.

A foreign Degree may be deemed admissible by the Adjudicating Commission for the sole purpose of admission to the selection. In such a case the candidate shall attach to the application the documents translated and a statement declaring that the translation complies with the original documents. The translation and the statement of compliance is not needed for the documents written in English. The winner of the selection will be asked to provide, within 30 days from the end of the selection procedure, the translations of the documents certified by the competent diplomatic or consular representatives in the country of origin, in accordance with the prevailing laws.

The following shall be attached to the application:

- scientific-professional curriculum vitae;
- qualification documents as set forth in Art 4 of this notice (*[the title of academic studies and professional titles] may be auto-certified in place of the certification norms, or presented in simple photocopy, if accompanied by the relevant equivalent declaration (see attached form). If the equivalent declaration is not signed in the presence of the receiving officer, it must be accompanied by a photocopy of a document of identity*).

Handicapped candidates, as defined under Art 3 of Law n.104 del 5.12.1992 may request the benefits of Art 20 of such law in their application, attaching – in original or authenticated copy – certification regarding the specific handicap provided by the competent medical Commission for the territory.

The signature of the application need not be authenticated, and is obligatory. Failure to sign the application may result in nullification of the same.

Art. 4 – Comparative Evaluation of the Candidates and the Adjudicating Commission

The comparative evaluation of the candidates will be made by an Adjudicating Commission nominated by the Council of the CIRSA, which shall be formed by a minimum of three members qualified in the area of research under this notice.

The selection will be determined by the examination of documents indicated in subsection 4 below and on an interview to determine the candidate's qualifications to carry out the research program.

In the course of the interview, the Commission will also verify the candidate's knowledge of the English language on topics in the relevant subject matter.

The following shall be considered as qualification documents: doctorate of research, diplomas in specialisation and proof of attendance in post-graduate studies, obtained in Italy or in a foreign country, as well as documented research activities carried out in public or private institutions in Italy or in a foreign country.

Also admissible are documented publications pertinent to the sector of numerical modelling of marine ecosystems, for which the grant is to be conferred, including scientific publications, graduate or specialisation theses, presentations to conventions, etc.

The Commission will award points based on the following:

- up to 40 points for the academic titles
- up to 60 points for the interview

Candidates who receive between 21 to 40 points for their title(s) shall be granted an interview. The list of candidates admitted to the interview shall be posted at the entrance to the Laboratorio of CIRSA of Via S. Alberto, 163, Ravenna **on March 11, 2008, beginning 11:00.**

For information, call 0544/937311 or 0544/937322 or 0544/937324 (between 13.00 and 19.00)

The interviews will take place at the Laboratorio of CIRSA, Via S. Alberto, 163 – Ravenna **on March 19, 2008, beginning at 11:00.**

In order to enter the interview, each candidate must present a valid identification document.

A passing grade for the interview shall be from 31 to 60 points.

At the conclusion of the selection process, the Commission will rank the candidates and post the list at the exam site.

In case of equal scores, preference shall go to the younger candidate.

The Director of CIRSA will declare the formal approval of the Commission's decision.

Art 5- Duration of the Assignment

The contract shall have a duration of 12 months and will be renewable within the terms of the Regulation for Research Assignments of the University of Bologna.

Art 6 – Remuneration

The amount for the research assignment is 16.138 Euro (gross) annually. Such amount shall be exempt from withholdings [taxes] and includes social security, for which the recipient is responsible by law.

The above amount shall be disbursed in 12 monthly payments, at the end of each month.

The researcher will also be covered by insurance against [accidents/illness], if the requested contributions are made.

Art. 7 – Formalisation of Relationship

The winning candidate will be invited to sign a research collaboration contract with the CIRSA. The contract must be signed by **March 30, 2008**.

The contract will begin no later than the first day of the month following its signature.

In the event the candidate fails to accept the terms communicated by the Centro, selection will proceed to the next candidate(s) on the list.

Art. 8 – Suspension of the Assignment/Grant

The period of assignment may be suspended for pregnancy, military service, or prolonged illness. In such cases, the duration of the relationship will be extended by the length of time remaining, starting from the date that the cause of suspension ends.

Art. 9 – Non-cumulative, Incompatibilities, Leave

The research grant may not be cumulative with any scholarships, fellowships or other grants, except those given by national or foreign institutions that may be useful to complete, through travel abroad, the research activities of the grant recipients.

Employment or self-employment is compatible with the research assignment only with prior authorisation by the Council of CIRSA, or its delegated body, with the prior recommendation of the tutor.

People working in public administration, other than those of Art 2 above, may be put on leave without [pay] for the period of the research assignment, subject to the limits and procedures of the relevant administrative body.

The prohibition on accumulation, and the provisions on incompatibility and leave, will come into effect upon signature of the contract by the winning candidate.

Art. 10 – Doctorate of Research

The grant-holder may attend research doctorate courses, even waiving the set number, as long as he or she passes the entrance exams and does not use the grant for such purpose.

Art. 11 – [Forfeiture]

Any candidate who does not sign the contract within the time communicated by the [Centro], except for duly proven reasons of health or *force majeure*, shall forfeit their right to the research grant.

Art 12 – Other Provisions

Matters not covered by this notice are covered by the regulations for research [grants] of the Università' degli Studi di Bologna promulgated by Rectoral Decree No. 1152 of 15.06.04, and by the relevant laws in force and effect.

Personal data provided by the candidates in their applications, as provided under Articles 7 and 13 of Legislative Decree No. 196 of 13.06.03, will be used for the purpose of running the selection process.

Ravenna, November 30, 2007

[Research Program – Annex to the Request for Research Collaboration Grant]

Tutor Prof. Nadia Pinardi

The Biogeochemical Flux Model (BFM), a numerical ecosystem model, should be coupled with a general circulation model, the Princeton Ocean Model, at a spatial resolution of 2 Km for the entire Adriatic Sea.

The numerical simulations will be conducted using interannually variable air-sea fluxes (wind stress, water and heat fluxes, river runoff and nutrient loads) derived from the operational analyses of the European Center for Medium-Range Weather Forecasts.

The simulated values of nutrients, chlorophyll, algal biomass, dissolved organic carbon, and primary and bacterial production will be analyzed and compared with available observational data.

Research Activities of the Project Researcher

The selected researcher shall carry out the following activities:

- Implementation of the physical/biogeochemical coupled model in the Adriatic Sea;
- Preparation of a numerical control experiment (1970-1999). In this experiment, the surface atmospheric fluxes will be obtained through simulations of the atmospheric circulation conducted under actual conditions of CO₂ concentration;
- Preparation of numerical scenario experiments (2060-2089). These experiments will be conducted using atmospheric forces obtained through the simulations of atmospheric circulation in conditions of twice the CO₂ concentration with respect to actual conditions (scenario IPCC). Characteristics of the continental contribution of fresh water and nutritive salts will also be variegated;
- Comparative analysis of marine ecosystem behaviour and of the carbon fluxes under different scenarios.

The above activities will be carried out at the Laboratory Numerical simulations of climate and marine ecosystems (SiNCEM) of C.I.R.S.A of the University of Bologna.

The candidate must have a solid background in some of the following disciplines: computer science, oceanography, marine biogeochemistry and the numerical models of ecosystems, as well as a good familiarity with the program Fortran (77/90) and the operating system UNIX.

Application Form (to be completed on plain paper)

To the Director of the Department (or other body)
of.....
Alma Mater Studiorum Università di Bologna.

The undersigned....., born in.....[city/state/province]....., on[date].....,
resident of.....[city/state/province]....., at[street address]....., zip code....., tel.
.....

REQUESTS

to be admitted to participate in the selection for the award of a research contract at the CIRSA in the
Alma Mater Studiorum Università di Bologna, Ravenna campus.

To this end, recognizing the responsibilities in the case of false statements

DECLARES

- to be a citizen of
- to not have received any criminal convictions ,or have any ongoing criminal proceedings (otherwise,
indicate which)
- to possess an undergraduate degree in
or specialization in, awarded by
..... on[date]....,
- to possess a doctorate in....., awarded by
..... on[date]...
- to request that the Adjudicating Commission [evaluate] the following qualifying documents under
Art. 4 of this notice (*see attached form for equivalent declarations*).
.....
.....
.....
- to be disabled and to need the following support:

Further requests that every communication relative to the present selection is sent to the
following address:

The undersigned encloses the following documents with this application:
(list enclosures)

Place and Date:

Signature of candidate.....
(obligatory; applications without signature shall be nullified)

Equivalent Declaration

Rendered pursuant to DPR 28 Dicembre 2000 n. 445

(to be enclosed with the application as provided in Art. 3 of the Notice)

The undersigned....., born in.....[*city/state/province*]....., on[*date*]....., resident of.....[*city/state/province*]....., at[*street address*]....., zip code....., tel.

Recognizing that, as provided by Articles 75 and 76 of DPR 28 December 2000 n. 445, in the event of deliberate misrepresentations, false acts or use thereof, the candidate shall be subject to criminal sanctions and shall be immediately disqualified from receiving the [grant].

DECLARES

1. to possess a degree (vecchio ordinamento) in
or [specialisation] (nuovo ordinamento) in, awarded by on[*date*]....,
2. to possess a doctorate in....., awarded by
..... on[*date*]... (*only if applicable*)
3. to possess the following additional professional and/or academic [titles] (*include all information necessary for verification*)
4. that the photocopies pertaining to the following [titles] are a true copy of the originals.

Place and Date:

Signature of candidate.....
(obligatory; applications without signature shall be nullified)

(attach photocopy of the identifying document if the declaration is not signed in the presence of the receiving official)

STATEMENT

The undersigned....., born in.....[city/state/province]....., on[date]....., resident of.....[city/state/province]....., at[street address]....., zip code....., tel.

DECLARES

That the attached translations of the following documents

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Is complying with the original,

Place and Date:

Signature of candidate.....
(obligatory; applications without signature shall be nullified)