

Section 9

Matière condensée : structures et propriétés électroniques

Condensed Matter: electronic structure and properties

The evaluation, the promotion and the hiring of scientists are based on written documents. The hiring process also includes hearings (oral presentations followed by questions/answers with the members of the section).

General remarks on the evaluation of the activity of academic scientists

Academic scientists are involved in different kinds of activities. In the evaluation process, the members of the section will consider all these activities, paying attention to their nature, scope, quality and impact.

General notes on the written application documents

The presentation should be informative, structured, clear, and synthetic. It will consider all aspects of the job. It should emphasize the applicant's personal contribution. It should highlight the positioning, motivation, originality, significant results, and scope of the activities as a whole and in their context, as well as creativity and risk-taking.

General remarks on the evaluation criteria

There is no hierarchy between the above-mentioned criteria, and they will not all be relevant to all applicants. The evaluation considers the applicant's personal scientific trajectory. Candidates are invited, if they wish, to mention events that had an impact on their professional career. The weight of the criteria is adapted to the stage of the career advancement.

Recommendations and criteria for the hiring as "chargé de recherche"

The documents to be submitted for the application (see guide for applicants), together with recommendations from the section, are listed below:

- A concise report on past work, allowing for an evaluation of **the quality and diversity of the candidate's research career**: it should stress the quality and variety of the scientific contributions, the candidate's proficiency in his/her field, selected research highlights, the originality of the work in its context, the geographical mobility, the diversity and thematic mobility, the scientific autonomy and creativity of the candidate. *There is no restriction on the number of pages. However, the section recommends that this concise report be limited to 15 pages.*
- A research program that the candidate wishes to develop, which will allow for an evaluation of **the quality of the scientific project** by indicating the CNRS laboratory(ies) where it could be conducted. This document will highlight the positioning in relation to the state of the art, the ambition, the originality, the feasibility, and the integration of the project at the national

level, the pertinence of the candidate's profile and project with regard to a topic or a laboratory identified as priority in the selection process decree (AOC in French). *There is no restriction on the number of pages. However, the section recommends limiting this document to 10 pages.*

- A choice of scientific production (maximum 10) in support of the activity report and the research program, allowing to evaluate **the scientific interest and the scope of the work** as well as the candidate's personal contribution.
- The applicants are encouraged to explain the nature of their scientific production. The report may include links allowing to measure the scientific scope of their activity.

Recommendations and criteria for the hiring of “directeurs et directrices de recherche”

The documents to be submitted for the application (see guide for applicants), together with recommendations from the section, are listed below:

- A concise report on the past work, allowing to evaluate:
 - the **quality and diversity of the research career**: the report will highlight the relevance and originality of the activity, the quality of the results, the risk-taking, the openness to interdisciplinary approaches, the geographical mobilities, the diversity and the thematic mobilities...
 - the national and international **recognition and impact** of the research work (awards, invited interventions in recognized conferences/symposia...)
 - the **quality of the collaborative mesh and the ability to design, foster, federate and manage scientific projects**: academic and/or industrial partnerships, research networks...
 - the **ability to foster** and promote the emergence of a specific topic within a laboratory
 - the **quality of technology transfer** in connection with socio-economic actors: conception, participation and piloting of projects, patents, licenses, etc.
 - the **quality of training tasks**: supervision of PhD students, teaching, organization of workshops/schools, etc.
 - **participation in the transfer of knowledge**: dissemination of scientific and technical information (organization of conferences/symposia/workshops, scientific publishing, etc.) and other interventions towards society and the public.
 - Involvement in tasks of collective interest (expertise, mediation, supervision, direction, piloting, basic participation, etc.) serving community, within a team, a laboratory, professional networks, committees, scientific societies, large (infra-)structures, national or international bodies, etc.

There is no restriction on the number of pages. However, the section recommends limiting this report to 30 pages.

- A research program that the applicant wishes to develop, which will allow to evaluate the **quality of the scientific project** by indicating the CNRS laboratory(ies) where the project could

be conducted. This document will stress the positioning with respect to the state of the art, the ambition, the originality, the feasibility and the integration of the project at the national level, the relevance of the candidate's profile and project with regard to a topic or a laboratory identified as priority in the selection process decree (AOC *in French*) and at the national and international level. *There is no restriction on the number of pages. However, the section recommends limiting this document to 15 pages.*

- A selection of scientific production (maximum 10) in support of the activity report and the research program, allowing to evaluate **the regularity, the scientific interest and the scope of the work** as well as the personal contribution.
- The applicants are encouraged to explain the nature of their scientific production. The report may include links allowing to measure the scientific scope of their activity.

Recommendations and criteria for the periodic evaluation of researchers (“vague, mi-vague”)

The section strongly recommends that the “mi-vague” and “vague” reports not exceed 15 and 25 pages respectively (excluding the bibliography provided in the appendix). The report is also an opportunity to explain the hurdles encountered.

The criteria are :

- **quality and diversity of the research career:** relevance and originality of the activity, quality of the results, risk-taking, interdisciplinarity, geographical mobility, diversity and thematic mobility, periods spent in the private sector, etc.
- **scientific interest and scope of production:** publications, talks in seminars, conferences or symposiums, reports, software, databases, etc.
- **recognition and impact**, at national and international levels, **of the research work:** awards, invited participations in recognized conferences/symposiums, etc.
- **quality of the collaborative network and ability to design, implement, federate and manage scientific projects:** academic and/or industrial partnerships, research networks, etc.
- **quality of the integration of the research activities within the laboratory**, ability to federate and promote the emergence of a specific topic within a laboratory.
- **quality of technology transfer** in connection with socio-economic actors: conception, participation and piloting of projects, patents, licenses, etc.
- **quality of training tasks:** supervision of PhD students, teaching, organization of workshops/schools, etc.
- **participation in the transfer of knowledge:** dissemination of scientific and technical information (organization of conferences/symposia/workshops, scientific publishing, etc.) and other interventions towards society and the public.
- involvement in tasks of **collective interest** (expertise, mediation, supervision, direction, piloting, basic participation, etc.) serving community, within a team, a laboratory, professional networks, committees, scientific societies, large (infra-)structures, national or international bodies, etc.

Recommendations and criteria for the promotion of scientists

The evaluation will take into account the past works as a whole, with particular attention to activities during the last promotion or hiring. *The section strongly recommends that the entire application file not exceed 25 pages*; candidates are encouraged to explain the nature of their scientific production. The report may include, on an optional basis, links allowing to assess the scientific impact of their activity.

The criteria are :

- **quality and diversity of the research career**: relevance and originality of the activity, quality of the results, risk-taking, interdisciplinary, geographical mobility, diversity and thematic mobility, periods spent in the private sector, etc
- **regularity, scientific interest and impact of production**: publications, talks in seminars, conferences or symposiums, reports, software, databases, etc.
- **recognition and impact**, national and international, **of the research work**: awards, invited participations in recognized conferences/symposiums, etc.
- **quality of the scientific project**, its motivation in terms of (societal, scientific, etc.) challenges, its originality and its positioning with respect to the state of the art, its ambition and feasibility, the applicant's proficiency with the proposed methodologies, the project's pertinence and integration within the host laboratory and at the national and international levels.
- **quality of the collaborative network and ability to design, implement, federate and manage scientific projects**: academic and/or industrial partnerships, research networks, etc.
- **quality of the integration of the research activities within the laboratory**, ability to federate and promote the emergence of a specific topic within a laboratory.
- **quality of technology transfer** in connection with socio-economic actors: conception, participation and piloting of projects, patents, licenses, etc.
- **quality of training tasks**: supervision of PhD students, teaching, organization of workshops/schools, etc.
- **participation in the transfer of knowledge**: dissemination of scientific and technical information (organization of conferences/symposia/workshops, scientific publishing, etc.) and other interventions towards society and the public.
- involvement in tasks of **collective interest** (expertise, mediation, supervision, direction, piloting, simple participation...) serving community, within a team, a laboratory, professional networks, committees, scientific societies, large (infra-)structures, national or international bodies, etc.

Criteria for applications or renewals of emeritus status

- **Quality of the scientific activity**
- Integration of the project and scientific activity within the **collective strategy** of the laboratory and the host team
- **Engagement to enhance the collaborative network** of the host team and **to transmit knowledge and skills**.