**Mathematical, Physical and Life Sciences Division**

**Notes of Guidance – Higher Doctorates**

**General Information**

Higher Doctorate(s) available: **Doctor of Science (DSc)**

Responsible body with oversight of the higher doctorate(s): MPLS Divisional Board

Contact for informal enquiries: Mrs Helen Beauchamp (helen.beauchamp@mpls.ox.ac.uk)

The Board of the Division of Mathematical, Physical & Life Sciences has issued these expanded guidance notes in addition to the official regulation, so as to provide further guidance as to the standard required of candidates in submitting an application to this Board, and to judges in assessing such applications.

**Criteria**

“Judges will be asked to consider whether the evidence submitted demonstrates excellence in academic scholarship and is:

1. of the absolute highest quality;
2. substantial in scale and in the contribution it has made to knowledge;
3. sustained over time and showing current and continued contribution to scholarship;
4. authoritative, being able to demonstrate impact on the work of others;
5. of global reach and international importance within the field; and
6. of such breadth or covering such branches of knowledge appropriate to the field and in line with disciplinary norms and expectations.”

(<http://www.admin.ox.ac.uk/examregs/2017-18/grforhighdoct>)

Judges are asked to set their assessment of the ‘authoritative’ status of the candidate’s work in an international context i.e. would the leading international figures in this branch of science regard this person as having an authoritative status in the field? Has their work had a substantial impact on the direction and shape of their field over a sustained period of time?

The phrase ‘of such breadth or covering such branches of knowledge’ should be interpreted as a relatively broad field, such as might form the subject of major conference or an established journal (e.g. nanotechnology, surface science, bioinformatics, combinatorial chemistry, ecological modelling), rather than a narrow specialised topic.

Judges are also asked provide their assessment of whether the evidence submitted demonstrates ‘excellence in academic scholarship’ and is ‘of the absolute highest quality’;, e.g. by considering the standing of journals in which work has been published, H-index, Impact Factor of selected papers, papers that can be seen as defining the field.

However, *candidates and judges should note that the wording of the official regulation takes precedence in the consideration of all submissions.*

**Initial application requirements**

Applications should comprise:

* An application Form
* A covering statement
* An academic CV
* A list of key publications

The covering statement (no more than 10 sides of A4, minimum 11pt, single spaced) should state how you meet the criteria for the award, together with a brief CV, and a list of up to 12 key/representative publications that illustrates your distinction.

In your covering statement you should position your own work in relation to subject-specific expectations or context.

In your CV please include objective evidence of the significance and recognition of your research, such as plenary-level speaker invitations, major grants and funding, prizes.

Judges will be looking for evidence of internationally leading scientific research and academic distinction. In applied fields such as engineering, evidence of real-world impact would strengthen the case for the award but would be secondary to the scientific quality.

For the key/representation publications list please choose no more than 12 publications that you think best represents the academic excellence and international scholarship of your work, and explain in <500 words each why you have chosen these particular papers. There is no expected minimum or maximum figure for the total number of publications. However, a small number of discipline-defining papers (evidenced through citations, prizes or other marks of esteem) would make a stronger case for the award than a larger number of papers that give incremental gain to the field.

Collaborative working and jointly authored publications are the norm in most branches of science, and are acceptable here. However, the applicant should have played a leading role in the research, normally indicated by their being first or last author. If neither is the case, a very clear explanation should be provided as to why this is clearly your scholarship, for instance a statement setting out your contribution to framing the question, carrying out the analysis, directing the research and writing the paper.

Applicants are encouraged to compare their own track record and publication list with that expected of senior figures in the field (but without making explicit ad hominem comparisons).

There is no requirement that publications should be in a single format. While it is expected that most publications will have been rigorously peer-reviewed (as is the case for journal articles and, in some fields, conference papers), other forms of publication such as books or software would be acceptable, so long as a case can be made that they have been highly influential on the field.

Please note that one year must have elapsed between the publication of a paper or book and its submission as evidence in support of an application. If papers or books are submitted which were published in the calendar year preceding that in which an application is made, the exact date of publication must be specified. Any work previously submitted for a degree at this or any other institution shall be ineligible for consideration in support of the application.

**Screening process**

In MPLS the screening process will be conducted by the Associate Head (Research) or equivalent within the relevant subject area, who will also select another senior member of academic staff with sufficient knowledge of the subject to review the application. The panel members will review the covering statement, CV and publications list to determine if there is a *prima facie* case for the candidate to be invited to proceed to full scrutiny. The panel will not review any papers at this stage.

If it is established that there is as *prima facie* case for the candidate to be considered for the degree, the Head of Department in whose remit the research submission lies, will be asked to recommend judges to act on behalf of the responsible body.

**Full application requirements for subject area**

If/when judges are appointed, the candidate will be informed and shall then provide two copies of the publications listed in their initial application (either in hard copy, electronically, or as e-links), and a full list of all their publications to the Submissions and Research Degrees Team. The previously submitted application form, covering statement, CV, and the key/representative publications list (with their explanation statements), provided at the pre-screening stage will also be used at this point.

Contact for queries: Submissions and Research Degrees Team (higherdoctorates@admin.ox.ac.uk). Please do not send any queries to panel members.