

ROYAL UNIVERSITY OF BHUTAN

POSITION PROFILE

1. JOB IDENTIFICATION

- 1.1 Position Title : Assistant Lecturer/Associate Lecturer/Lecturer
- 1.2 Position Level : PL6/PL5/PL4
- 1.3 Discipline : BSc/MSc in Physics(*Preference will be given to MSc candidates and background in Electronics*)
- 1.4 Occupational Group : Academics
- 1.5 Requirement : 2
- 1.6 Mode of Employment : Regular
- 1.7 College : Sherubtse College

2. MAIN PURPOSE OF THE POSITION:

Purpose: Undertake to teach BSc in Physics Programme, and carry out research/publication works (of minimum standards acceptable at the **regional level**).

3. GENERAL ROLES AND RESPONSIBILITIES: (*Use Representative Work Activities as provided in Position Directory*)

4. Lecturer (Position Level 4)

Teaching

- 4.1 Teach and assess within own subject area at a range of levels from undergraduate to postgraduate;
- 4.2 Contribute to curriculum development and the design and revision of programme units in the subject area;
- 4.3 Contribute to the development or improvement of approaches to teaching-learning and assessment in the subject area;
- 4.4 Participate actively in the development of the discipline's teaching-learning and assessment strategies;
- 4.5 Contribute to the organization of wider area of work;
- 4.6 Advise others (particularly those at the entry-level) on aspects of teaching-learning and assessment;
- 4.7 Take responsibility for the effective management of allocated resources;

Research and Innovation

- 4.8 Generate funds for the University through research projects, consultancies and advice
- 4.9 Undertake a specific role in a research project or projects, taking responsibility for some element(s) of the planned research;
- 4.10 Supervise research projects for both undergraduate and postgraduate levels. May also supervise research-based programme if found qualified to do so;
- 4.11 Develop and carry out a plan to open up or extend an area of personal research or contribute as a team member to developing a broader programme. In some fields, this may include contributing to the writing of bids for research grants;
- 4.12 Plan and carry out a work programme appropriate to the research activity;
- 4.13 Contribute to dissemination/publication of personal and/or research team's findings as appropriate to the field;

Services

- 4.14 Contribute as resource persons, coordinators or organisers for various professional development activities within the College/University as well as those outside.
- 4.15 Participate in developing and promoting a clear vision of the College's/unit's strategic direction;
- 4.16 Participate as a team member to support senior colleagues, who have delegated responsibility for specific strands of work/sub-units;
- 4.17 Contribute to the running of the University by participating in decision-making and governance, including committees or task force as appropriate, at College and/or University level;
- 4.18 Represent and promote the University externally – nationally and internationally, e.g. managing relations with external partners and stakeholders;
- 4.19 Coordinate the organization of conferences, seminars, workshops and/or working with relevant experts in the area of specialization;
- 4.20 Provide guidance to other staff and students; and
- 4.21 Mentor and develop junior colleagues.

5. Associate Lecturer (Position Level 5)

Teaching

- 5.1 Teach modules (full load) and support students within own subject area at least up to the undergraduate level;
- 5.2 Set and mark assessments, and advise students on their progress;
- 5.3 Develop and deploy teaching-learning materials in the area of own expertise;
- 5.4 Plan and review own approach to learning;

- 5.5 Take responsibility for organizing own activities and for the management of allocated resources;

Research and Innovation

- 5.6 Generate funds for the University through research projects, consultancies and advice;
- 5.7 Supervise research projects and dissertation where these are part of the programme(s) of study;
- 5.8 Contribute to design of research projects and define methods such as conducting surveys and focused interviews;
- 5.9 Carry out literature searches within pre-specified parameters;
- 5.10 Run analysis/interpreting data using specified and agreed techniques/models;
- 5.11 Prepare summary reports of research methods/findings;
- 5.12 Contribute to dissemination and publication of research findings; and
- 5.13 Carry out small-scale research projects on their own or as a lead in a team and publish some quality papers, including a few in reputed journals.

Services

- 5.14 Contribute as resource persons, coordinators or organisers for various professional development activities within the College/University as well as for those outsiders.
- 5.15 Participate in developing and promoting a clear vision of the College's/unit's strategic direction;
- 5.16 Participate as a team member to support senior colleagues, who have delegated responsibility for specific strands of work/sub-units;
- 5.17 Contribute to the operation of the University by participating in decision-making and governance, including committees or task force as appropriate, at College and/or University level;
- 5.18 Represent and promote the University externally – nationally and internationally, e.g. managing relations with external partners and stakeholders;
- 5.19 Coordinate the organisation of conferences, seminars, workshops and/or working with relevant experts in the area of specialisation; and
- 5.20 Provide guidance to other staff and students.

6. Assistant Lecturer (Position Level 6)

Teaching

- 6.1 Contribute to elements of teaching within clear and established programmes as conducting tutorial classes or team teaching with a senior academic;

- 6.2 Support learners and/or supervise class activities in specific areas of activity according to established procedures as language lab or practical work;
- 6.3 Monitor student progress and provide feedback;
- 6.4 Assist with the administration and support in marking of assessments;
- 6.5 Assist senior academics with the preparation of module/programme materials;
- 6.6 Prepare lesson plans and teach full modules by at least the second year at this level. However, they may teach diploma programmes immediately;

Research

- 6.7 Assist academics and researchers in planning and implementing experiments, conducting interviews, administering surveys, or coordinating for focus group discussions;
- 6.8 Search for scholarly literature relevant to the research project, searching the library, copying articles, ordering additional articles and books, and formulating bibliography;
- 6.9 Contribute to data analysis (on quantitative data or quantitatively coded qualitative data);
- 6.10 Contribute to designing and development of research projects for generation of research funds;
- 6.11 Assist academics or researchers in preparing presentations about research project results for conferences, academic discourse and research presentations;
- 6.12 Help academic and researchers in the preparation of manuscript such as general layout, proofreading for editorials, binding and compiling of materials etc., for submission to academic and scholarly journals or publications;
- 6.13 Carry out research with senior academics and researchers and contribute to major publications as co-authors;

Services

- 6.14 Contribute as resource persons, coordinators or organisers for various professional development activities within the College/University as well as for those outside;
- 6.15 Participate in developing and promoting a clear vision of the College's/unit's strategic direction;
- 6.16 Participate as a team member to support senior colleagues, who have delegated responsibility for specific strands of work/sub-units;
- 6.17 Contribute to the running of the University by participating in decision-making and governance, including committees or task force as appropriate, at College and/or University level;
- 6.18 Represent and promote the University externally – nationally and internationally, e.g. managing relations with external partners and stakeholders;

- 6.19 Coordinate the organisation of conferences, seminars, workshops and/or working with relevant experts in the area of specialisation;
- 6.20 Provide guidance to other staff and students;
- 6.21 Organise and coordinate meetings and discussions related to administrative and managerial issues in respective department/school/programme unit;
- 6.22 Assist in the preparation and organisation of university/college-wide functions; and
- 6.23 Assist in the organisation of community services.

7. SPECIFIC ROLES AND RESPONSIBILITIES:

The new recruit is expected to teach Physics/Mathematics modules, including laboratory practicals. The lists of modules are as follows:

BSc in Physics/BSc in Chemistry Programmes:

1. *FPH101: Foundations of Physics I*
2. *FPH102: Foundations of Practical Physics*
3. *MEC102: Waves and Oscillations*
4. *TPH201: Thermal Physics*
5. *MPH305:Nuclear Physics*
6. *ELE201: Electronic Circuits and Devices*
7. *ELE302: Digital and Analogue Electronics*
8. *MMP201: Mathematical Physics*
9. *RSM301: Research Methods*
10. *MPH305: Solid State Physics*

8. **KNOWLEDGE, SKILLS & ABILITIES (KSA) REQUIREMENTS** (Use KSA and Position Profile Matrix in Position Directory as a guide):

8.1 Education (Use Position Profile Matrix): **BSc/Honours in Physics/MSc in Physics/PhD in Physics**

Note# Applicants with B.Ed. or M.Ed. qualifications are not eligible

8.2 Experience (Use Position Profile Matrix): **NA**

8.3 Knowledge Skills and Abilities (Use KSA in Position Directory):

- (a) Demonstrate sound knowledge of the terms, concepts, methods, principles and theories of the various branches of physics
- (b) Describe and analyse quantitative processes, relationships and techniques related to the areas of chemistry and interdisciplinary modules
- (c) Analyse critically, and solve problems using appropriate mathematical tools related to topics included in the physics programme
- (d) Carry out laboratory investigations using standard procedures in various branches of physics/modern physics, and perform laboratory experiments using standard equipment and apparatus

- (e) Analyse, interpret and critically evaluate experimental data, evaluate the errors in the experimental measurements and draw valid conclusions from the results of experimental investigations