Form No. **BTR-2 for Thesis proposals** (to be filled by Ph.D Students only)

**BEAM TIME REQUEST FOR THE UTILISATION OF IUAC PELLETRON**

INTER-UNIVERSITY ACCELERATOR CENTRE
Accelerator Based Research Centre of UGC

<table>
<thead>
<tr>
<th>INFORMATION ABOUT BTR - FORMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTR-1 Beam Time Request for Fresh Proposals</td>
</tr>
<tr>
<td>BTR-2 Beam Time Account (BTA) for Thesis Proposals</td>
</tr>
<tr>
<td>BTR-3 Request of Funds (along with Beam Time) for Fresh Proposals from Universities</td>
</tr>
<tr>
<td>BTR-4 Beam Time Request for Ongoing Proposals</td>
</tr>
</tbody>
</table>

**Note:** Accelerator Users Committee (AUC) allocates highest priority to the Ph.D projects from universities and teaching institutions. Once a Ph.D. thesis proposal is accepted by AUC, a Beam Time Account (BTA) may be opened for the project using this form. The BTA takes care of the beam time requirement for the entire Ph.D work over a period of about 3 years. The actual scheduling of the beam time from the BTA can be made on a rapid scale through a simple process which just requires submission of BTR-4 to the Convenor, AUC (at least six weeks in advance of the proposed run). There is no need to wait for an AUC meeting to get the request for a subsequent run sanctioned.

**Proposal No. A U C [ ] [ ] [ ] [ ] [ ] (to be filled by IUAC)**

Field (Please tick the relevant one)
- Atomic Physics
- Materials Science
- Nuclear Physics
- Radiation Biology
- AMS
- Others

1. **Name of the Student**
   **Thesis Title**

2. **Mailing Address**
   **Phone:**
   **Mobile no.:**
   **Fax:**
   **e-mail:**

3. **Ph.D. Registration Details**
   **Date of Registration**
   **Department**
   **University**

4. **Ph.D. Supervisor(s)**
   **Name / Designation**
   **Department**
   **University / Institution**

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Contact No.  
E-Mail ID  
Name / Designation  
Department  
University / Institution  
Contact no.  

5A. BRIEF BIO-DATA OF BOTH STUDENT AND GUIDE  
(Please attach separately as per the format given in the Annexure)  

5B. Please submit your detailed PhD Thesis proposal giving following sections:

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1</strong></td>
<td>Title of the Thesis with a brief abstract of the proposal</td>
</tr>
</tbody>
</table>
| **Section 2** | Survey of the work existing in the literature (Max.500 words)  
A list of most recent publications in journal in the field relevant to the project must be included |
| **Section 3** | Definition of the Thesis Problem (Max.500 words) |
| **Section 4** | Experimental Plan (Max.400 words) |
| **Section 5** | Facilities Required |

6A. Name and Affiliation of the theoretical physicist(s) associated with this proposal:

6B. Theoretical simulations / calculations in support of the experimental ideas:  
(Limit to maximum of 100 words only)

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6C. Details of offline studies and associated visits, if required:

7. BEAM TIME REQUIREMENT (Normally one type of ion in one run, but for more than one ion species in one run, requirement is to be given in order, changes are not possible later. Justify the requirement in the annexures)

<table>
<thead>
<tr>
<th>No. of runs</th>
<th>No. of shifts in each run</th>
<th>Ion species</th>
<th>Energy (MeV)</th>
<th>Current (pA)</th>
<th>DC/Pulsed</th>
<th>Charge state (if relevant)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1 shift = 8 hrs)</td>
<td></td>
<td></td>
<td>Min.</td>
<td>Max.</td>
<td>Min.</td>
<td>Max.</td>
</tr>
<tr>
<td>I.</td>
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<td>II.</td>
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<td>III.</td>
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<td>IV.</td>
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</table>
8 (A) BEAM LINE TO BE USED (please tick the appropriate one):

BIO      LIBR      HIRA      MAT.SC.      GDA      GPSC

8 (B) ACCESS-TIME NEEDED IN HOURS (with justification)

<table>
<thead>
<tr>
<th></th>
<th>Prior to run</th>
<th>After the run</th>
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<tbody>
<tr>
<td>For the Beam Line</td>
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<tr>
<td>For the Data</td>
<td></td>
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<tr>
<td>Acquisition System</td>
<td></td>
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</tbody>
</table>

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9. TARGET / SAMPLE DETAILS

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness (µg/cm²)</th>
<th>Backing (if any)</th>
<th>Any special property</th>
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<tbody>
<tr>
<td></td>
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<td>e.g. hygroscopic, toxic etc.</td>
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</table>

Note:

1) Users are requested to bring their targets properly mounted on standard target frames or on standard strip to be fixed on the ladder. Please make sure that no material is to be used which can outgas. Any residual radio-activity associated with the targets after irradiation should be thoroughly checked in consultation with the health physics group at IUAC.

2) If targets are to be prepared at IUAC, user must write to Convenor AUC well in advance, to book target laboratory time and prepare the targets himself/herself at IUAC. Consultation will be provided.

10. COLLABORATORS (including IUAC personnel, Research Scholars) *

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Name</th>
<th>Affiliation</th>
<th>Contact Phone No. &amp; Fax No.</th>
<th>E-Mail Address</th>
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* Names to be included with consent.

Date: __________________________

Signature:

Signature of Supervisor

Research Scholar

E-Mail to: academic@iuac.res.in

Send hard copy to: The Convenor, AUC, Inter-University Accelerator Centre,
Post Box No.10502, Aruna Asaf Ali Marg, New Delhi 110 067, India
[Phone: 26893955 / 26892601, Fax (91-11)-26893666]

Last date for submission: May 31 for July AUC // Nov. 10 for Dec. AUC
Bio-data of Principal Investigator

**Name**

**Designation**

**Affiliation**:

**Past Affiliation(s)**:

**Date of Birth**:

**Contact No**:-

**E-mail ID**:-

**Category** (kindly X the box):

- General
- SC
- ST
- OBC
- Others

**Academic Qualifications**:

**List of previous Projects / Beam Times at IUAC (if any)**:

<table>
<thead>
<tr>
<th>AUC No.</th>
<th>Sanctioned Year/Month</th>
<th>Title</th>
<th>Status: completed or running</th>
</tr>
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<tr>
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</table>

**Brief Research Experiences**:

*Signature of PI*
11. Brief summary of all the projects (Completed / Continuing) by using IUAC facilities.

(Additional sheet may be added, if required.)

Signature of PI