



**National Institute of Technology Durgapur**  
Mahatma Gandhi Avenue Durgapur 713209, West Bengal, India  
[www.nitdgp.ac.in](http://www.nitdgp.ac.in)

## **Anveshan: AIU Student Research Convention 2012-13 (East Zone)**

**Organized by**  
**Association of Indian Universities (AIU) in Association with**  
**National Institute of Technology Durgapur**

**Venue: National Institute of Technology Durgapur**  
**Duration: February 19-21, 2013**

### **Introduction**

Spirit of inquiry, creativity and innovativeness are some of the natural endowments bestowed upon human beings, which are the keys to transformation of life. These factors, when manifested in the form of research, open new frontiers of knowledge, which is instrumental for all forms of development. Perhaps, this is the reason for which research is recognized as one of the core functions of the universities/institutions of higher learning and the universities have been rendering this responsibility with utmost diligence. India's noteworthy progress in the field of Information Technology, Energy and Space etc are the outcome of consistent endeavour of our intellectual resources. India, currently producing a solid core of knowledge workers in tertiary and scientific and technical education and its economy and industrial sector set for an unparalleled growth is poised to become the future global knowledge hub. However, the onus lies largely on our Higher Education system and particularly on our universities. But, of late, research has become a subservient component in the university functioning. Resource constraints, lack of commitment, proper incentive etc., are the impediments that are affecting the quality of research in our institutions of higher education. Other important factors for the deterioration of the quality of research are the absence of adequate training and other capacity building endeavour in our system, which have restricted students' creativity only to rote memory. On the contrary, their potential should be nurtured and exploited for the benefit of the society. The current boom in Indian economy signaling an era of transformation should provide ample opportunity for success to innovative young brains to become trend setters and role models of a vibrant India.

With a view to inculcating research culture in our higher education institutions, the Association of Indian Universities has taken a pioneering initiative to organize student research conventions for the aspiring researchers through out the country. These conventions aim at identifying the young and rising talents who would be promoted through proper encouragement and incentives. Also an attempt shall be made to commercialize their research projects with industrial collaboration. The endeavour may accelerate scientific research and innovation and their application towards community development percolating to the grassroot level.

National Institute of Technology has collaborated with Association of Indian Universities to organize Anveshan: AIU Student Research Convention 2012-13 (East Zone) at National Institute of Technology Durgapur during February 19-21, 2013.

### **Objectives**

- To identify young talents with research aptitude and interest to take up research as career.
- To promote the talent in research throughout the country.
- To nurture the talent through specialized training and education in some of the nationally and internationally reputed premier institutions of higher learning in the country.
- To augment financial and physical resources through collaboration with different sponsors for supporting education and training of the young researchers.
- To provide proper incentives to enhance the skill of potential students
- To initiate an intensive research culture in a selected group of institutions

**Areas/Fields** The areas/fields in which Projects (**Individual and group projects\***) are invited:

- **Agriculture**
- **Basic Sciences**
- **Engineering & Technology**
- **Health Sciences and Allied Subjects, Pharmacy, Nutrition, etc.**
- **Social Sciences, Humanities, Commerce and Law (objective and result oriented projects)**

\* In case of a **Group project**, only three members [one principal investigator and two major contributors] are allowed to participate in the zonal/ national convention.

## Type of Project

- Projects on the above mentioned areas must have undergone some exploration/ ground work in order to show its impact

## Methodology

- The duration of the convention will be three days
- The convention will be held in three phases.
  - i. In the First Phase, all universities in the country must have organized an exhibition of research projects at University level in which students from affiliated/constituent colleges, research institutions and university post graduate departments have participated.
  - ii. In the Second Phase, like in other zones, the East Zone convention will be held at National Institute of Technology Durgapur during February 19-21, 2013. From each zone best 15 projects will be given entry to compete at the National level.
  - iii. In the Third Phase, the exhibition/competition will be held at National level. The Association of Indian Universities will call for the successful projects, selected through the zonal competition, for National level competition. A total of 75 selected projects will be displayed for assessment at the National level out of which 15 projects will be finally selected.

## Criteria for Assessment of Projects

All the projects will be assessed on the basis of following criteria. Each criterion is assigned some weightage. The final selection of projects will be based on the cumulative weightage given on all criteria.

## Number of Projects

- Each university is allowed to send a maximum number of **five** projects for the zonal level Student Research Convention.
- In case of the universities/ institutes not having courses/ programmes in all the above mentioned categories, entry of five projects in their respective fields shall also be entertained.
- The selected projects duly countersigned by the head of the [organization must reach Dr. Pathik Kumbhakar, Organizing Secretary, NIT Durgapur latest by February 08, 2013](#). Registration form for zonal level convention is enclosed.

The projects will be assessed by a panel of experts drawn from various disciplines. The students whose projects will be selected in the final stage at national level convention will be promoted through proper incentives for career development in research.

## Criteria

- |                                      |                |                      |
|--------------------------------------|----------------|----------------------|
| • Scientific Thoughts and Principles | • Thoroughness | • Cost Effectiveness |
| • Creativity                         | • Skill        | • Teamwork           |
|                                      | • Relevance    |                      |

Apart from the above criteria, **Scope of Commercialization** of the projects will be considered as an **additional merit**. However, there will be no weightage point for this criterion. In case of the projects having scored equal cumulative weightage point, this criterion will be considered for making the final decision.

## Eligibility for Participation

Entries of the research projects will be purely **Institutional** and only bonafide fulltime students from undergraduate to Doctoral degree level are eligible to take part in the convention.

## National Institute of Technology Durgapur

National Institute of Technology Durgapur is an "Institute of National Importance" under the Ministry of Human Resource Development, Government of India. It offers nine B. Tech., sixteen M. Tech., three M. Sc., MBA and MCA programmes. It also offers PhD programmes in sixteen disciplines and is a QIP centre.

Since its transformation from REC to NIT, the Institute has been striving hard to create a research-oriented project-based teaching-learning environment in technical education with inclusive growth, focus on excellence and innovation, commitment to community, and increased global presence. The Institute has undertaken huge expansion programme by way of increased intake of students and augmentation of infrastructure.

National Institute of Technology of Durgapur has chosen a fully inclusive growth path, carrying all students, faculty members and staff with it. Primary focus is on excellence and innovation with post graduate education and research being attributed greater emphasis. In pursuance of the "*catch them young*" policy, the undergraduate

students are being initiated to research very early. Faculty members are encouraged to take up more sponsored projects. Greater awareness will be created among faculty members, staff and students on patents, IPR and technology transfer.

NIT Durgapur has research collaboration with more than 25 universities/ institutes all over the world. In the last three years, 99 students presented papers in international conferences abroad and had undertaken summer internship in various foreign universities and institutes, including CERN, MIT, University of Michigan Dearborn, ETH Zurich, NUS Singapore, universities of Germany under DAAD, etc. More than 50 projects sponsored by are being handled by the Institute presently. Seven departments are sponsored by DST, Government of India under FIST programme. In the year 2011-12, 334 papers were published by the faculty members/accepted for publication in premier peer-reviewed journals.

Durgapur is an important railway station on the Howrah – New Delhi railway route, 158 km away from Howrah. It is a three-hour drive from Kolkata airport along Durgapur Expressway and NH 2. The Institute is located at a distance of 9 km from the railway station and less than one kilometer off NH 2.

### **Entry Fee/Registration**

Entry fee - **Rs. 500/-** (per participant / escort)

(The entry fee for **zonal** level competition in the form of **Demand Draft** drawn in favour of **Association of Indian Universities, New Delhi** and the **Registration form** should be sent to the Coordinator, Research Division, Association of Indian Universities, New Delhi with a **copy** to **Dr. Pathik Kumbhakar, Organizing Secretary** at [p.kumbhakar@gmail.com](mailto:p.kumbhakar@gmail.com) / **09434788090**.

**Filled-in Registration form** forwarded by competent authority should reach **Dr. Pathik Kumbhakar** by post on or before **February 08, 2013**. A scanned advance copy **along with one-page synopsis of the project** must be e-mailed to him as an attachment.

### **Boarding and Lodging**

NIT Durgapur will make the arrangement for accommodation in students' hostel, working lunch and tea. The breakfast and dinner will be available at reasonable rates on payment in the students' canteen. Interested participants requiring accommodation may contact **Shri P. S. Bhowmik, Organizing Secretary** at [psbhowmik@gmail.com](mailto:psbhowmik@gmail.com)/ **09434788174**.

### **Local Organizing Committee**

Prof. T. Kumar	Director	Patron
Prof. S. Haldar	Dean (Planning & Development)	Advisor
Prof. D. K. Mondal	Dean (Academic)	Advisor
Prof. S. K. Mitra	Dean (Faculty Welfare)	Advisor
Prof. J. P. Sarkar	Dean (Administration)	Advisor
Prof. G. Sanyal	Dean (Students' Welfare)	Advisor
Prof. N. K. Roy	Associate Dean (Academic)	Chairman
Dr. P. Kumbhakar	Associate Professor (PH)	Organizing Secretary
Shri P. S. Bhowmik	Assistant Professor (EE)	Organizing Secretary
Dr. M. K. Mondal	Assistant Professor (PH)	Treasurer
Dr. S. Nandi	Assistant Professor (CSE)	Member
Dr. J. Banerjee	Assistant Professor (HSS)	Member
Dr. J. Chakrabarty	Assistant Professor (CH)	Member
Prof. P. Gupta	Dean (Research & Consultancy)	Coordinator

### **CONTACT DETAILS**

#### **Dr. Pathik Kumbhakar**

Department of Physics

Organizing Secretary, Anveshan: AIU Students' Research Convention 2012 (East Zone)

National Institute of Technology Durgapur 713209, West Bengal

**Email Id:** [p.kumbhakar@gmail.com](mailto:p.kumbhakar@gmail.com); **Mobile:** **09434788090**

#### **Shri P. S. Bhowmik**

Department of Electrical Engineering

Organizing Secretary, Anveshan: AIU Students' Research Convention 2012 (East Zone)

National Institute of Technology Durgapur 713209, West Bengal

**Email Id:** [psbhowmik@gmail.com](mailto:psbhowmik@gmail.com); **Mobile:** **09434788174**.

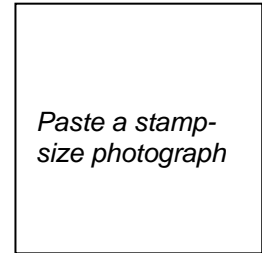
**Website of AIU:** [www.aiuweb.org](http://www.aiuweb.org)

**Website of NIT Durgapur:** [www.nitdgp.ac.in](http://www.nitdgp.ac.in)

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**Registration Form**

*(Last date of receipt of Registration form: February 08, 2013)*

Name: .....

Father/Guardian's name: .....

Name of the college/ institute where studying:

Name of University to which the college is affiliated:

Name of the Zone: **EAST**

Degree for which registered:

Branch:

Year:

Address for Communication: .....

.....

Phone: (Off) .....(Res)..... (Mob).....

Fax..... E-mail: .....

Title of the Project: .....

Area.....

Date of completion of the Project.....

Application of the Project if done..... Yes/ No

If Yes, Where and How? (Mention briefly).....

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Whether the project has been sent for some other competition earlier? Yes/No

If Yes, mention place and date .....

Accommodation required: Yes / No

Date.....

Signature of Nominee

**(Signature of the Competent Authority/Head of the organization)**