

INDUSTRY CONNECT PROGRAM



Office of Dean, Research & Development
Indian Institute of Technology (Indian School of Mines), Dhanbad

2018

Invitation for Expression of interest (EOI) under Industry Connect Program (ICP)

INDUSTRY CONNECT PROGRAM

Brief about Institute

The Institute, Indian Institute of Technology (Indian School of Mines), Dhanbad which was started in 1926 to impart mining education, has graduated into a full-fledged technical institution of international acclaim offering Bachelors, Masters and PhD Programs with total students of over 7000. The serene campus comprises academic buildings, student hostels and 100% residential facilities for faculty and staff apart from other infrastructure facilities for a cosmopolitan community. The Institute has links with reputed universities and institutes across the globe and has a strong alumni base all over the world. Today, the Institute is making foray into the newer areas of academic endeavours in tune with the changing times. With a vision to grow with innovative research in emerging fields, the Institute is planning to develop a Research Hub with state-of-the-art facilities. The research programs in the Institute have made many significant contributions in advancing technologies in the field of Earth science, Mining, Petroleum, Fuel & Mineral engineering along with all other advance fields like Computer Science, Electrical and Electronics engineering, etc. and Basic Sciences. The total publications in SCI Journals of the Institute in recent time is comparable with leading IITs with more than **4500** publications in Scopus indexed journals last 5 years. Earth science, Mining Engineering and Petroleum Engineering Departments are pioneer in their respective area and comparable to any reputed Institutes worldwide. Schlumberger established a modern reservoir characterization laboratory at the Department of Petroleum Engineering for real time data analysis and simulation. The Institute is having memorandum of understanding (MoU) with a number of foreign universities from America, Canada, Europe and other countries in addition to Indian Institutes like GSI, PAN-IIT. Under Prime Minister mandated Indo-Australian Joint Research Initiative, IIT (ISM) has established Australia-India Centre for

Clean Coal and Energy Technologies (AICCET), with three Australian Universities / Organizations, viz. Curtin University of Technology, University of New Castle and CSIRO.

The Institute is working in right direction to improve the future research by developing the infrastructure and facility and collaboration with industries and other research institutes. In line with that the institute has established a number of research centres covering all the fields of science and engineering.

Major Achievements:

- Department of Mining Engineering in collaboration with M/s Jaya Bharat Equipments Pvt Ltd., Hyderabad has unveiled a medium duty Self-Advancing Goaf Edge Support (SAGES) for underground coal mines (<https://www.iitism.ac.in/assets/department/all/notice/SAGES-Brochure.pdf>)
- IIT(ISM) conducts the first ever multiple layered blasting of 20m Overburden and 23m of coal together using electronic detonators and smart design developed by IIT(ISM) Dhanbad at one of the largest opencast coal project, Nigahi, NCL, of the country.
- Department of Petroleum Engineering developed a lots of tailor made surfactants/water shut-off and hydro-fracturing gels for their application in enhanced oil recovery in collaboration with Oil India Ltd. and ONGC.
- Department of Applied Geology and Geophysics established a couple of concealed ore deposits in India and abroad including the largest Manganese deposits of India.
- Department of Applied Geophysics for the first time carried out optimization of geophysical data using Swarm Intelligence.

Objectives

IIT (ISM) Dhanbad is planning to initiate a mutually symbiotic partnership with the industries through the "Industry Connect Program" (ICP). ICP aims to facilitate a robust

and continuous industry partnership for research and development in various branches of engineering and science.

ICP is not only about giving money, it is more about particular technology, process and consulting development. Apart from monetary contributions, your company can donate equipment, sponsor students and mentorship to students by your employee or employee volunteering. It is more about "giving back to society" and being a responsible corporate citizen.

Different modes of interactions under the ***Industry Connect Program*** are:

- *Corporate Social Responsibility (CSR)*: Companies can partner with IIT (ISM) Dhanbad under CSR scheme and contribute towards strengthening the Institute's civil and technical infrastructure.
- *Corporate Sponsorship*: Your Company sponsors a laboratory or donate funds and equipment to laboratory that can be used by students and faculty to conduct research.
- *New Product Development*: Your Company can sponsor and collaborate for the promotion of research and development that also happen to be your main points and thus can benefit in long-term.
- Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.
- *Technology Incubation*: Your Company can even create a spin-off and incubate at the incubation center for developing products.
- *Patent/Know-how Licensing*: Your Company can identify and seek license of patent.
- Participate jointly in Government Schemes
- *Sponsor student's project*
- *Techno Park*: Development of R & D Center of your Organization at IIT(ISM)

Benefits:

The industry will gain immensely by collaborating with IIT (ISM) Dhanbad. Some benefits can be as follows:

- *Enhanced Branding*: When your company supports IIT (ISM) Dhanbad that has over 7000 students, you get brand visibility and portrays a "soft" image. ICP gives opportunity to your company to communicate your company's brand as one that is socially aligned and not merely a profit making entity.
- Bridging the gap between IIT(ISM) and your Organization
- IIT(ISM) can act as solution center for technical problems related to your company
- Joint research programmes and field studies by faculty and people from industries
- Organizing industrial seminars, symposiums, exhibitions and workshops on latest technological advancements, evaluation of project work with the collaborative efforts between industrial experts and institute departments
- Joint Venture (JV) = new organizational entity jointly owned and controlled by the parent organizations.
- *Employee loyalty*: Your Company can send employees as volunteers to help and mentor students. Students can learn a lot from experience of your employee and your employees would also get a new experience and research shows that this type of occasional breaks also increase the quality of their work and overall productivity.
- Participation in special Government Schemes funding collaborative research. ICP gives you an opportunity for the initial trust building and paving way for participating in schemes of various government ministries that mandate industry partner.
- *Hiring*: Your Company can identify good students who can be your future employees.

For further details, please contact:

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