

MEMORANDUM OF UNDERSTANDING
between
SUBIR AND MALINI CHOWDHURY FOUNDATION, USA
and
INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR, INDIA
on
Establishing the Subir Chowdhury School of Quality and Reliability
at
Indian Institute of Technology Kharagpur (IIT Kharagpur)

The **Subir and Malini Chowdhury Foundation, USA** hereinafter referred to as the Foundation, and the **Indian Institute of Technology, Kharagpur, India** hereinafter referred to as IIT Kharagpur, hereby agree to set up the Subir Chowdhury School of Quality and Reliability at IIT Kharagpur (see proposal enclosed and made a part hereof). For this purpose, both parties agree to the following Memorandum of Understanding:

1. The Foundation, co-founded by Subir Chowdhury, a Distinguished Alumnus of IIT Kharagpur and eminent personality in the area of Quality, will provide an endowment fund of at least One million US dollars or equivalent in Rupees for establishing the School of Quality and Reliability. The investment of the endowment as per IIT Kharagpur Institute rules will be used to fund the activities of the School of Quality and Reliability. IIT Kharagpur will provide necessary space and related infrastructure for the School of Quality and Reliability. The presently existing Reliability Engineering Centre will be transformed for the above purpose and renamed The "**Subir Chowdhury School of Quality and Reliability**".
2. The Subir Chowdhury School of Quality and Reliability on its own and in collaboration with related Departments/Centres/Schools of the Institute will undertake academic activities, research, consultancy, training programmes, etc. in the broad area of Quality and Reliability and will promote industry-academic interaction. The Subir Chowdhury School of Quality and Reliability is expected to utilize its infrastructure to help generate additional resources for its continued maintenance and growth. The Foundation may consider providing additional resources for supporting various activities of the Subir Chowdhury School of Quality and Reliability. Both parties will also try to help develop other verticals and Centres of Excellence within the Subir Chowdhury School of Quality and Reliability or in collaboration with other units of IIT Kharagpur through alternative sources of funding.
3. The Subir Chowdhury School of Quality and Reliability will operate like an academic unit of IIT Kharagpur. The prevailing rules of IIT Kharagpur will apply to all academic, administrative and financial sanctions of the Subir Chowdhury School of Quality and Reliability. In addition, the functioning of the Subir Chowdhury School of Quality and Reliability will be reviewed periodically, but, at least once a year, by an Advisory Committee

headed by the Director as Chairman, a Foundation representative as a permanent member (Subir Chowdhury during his lifetime), with other members including Dean of Alumni Affairs and International Relations, Head of the Subir Chowdhury School of Quality and Reliability, Dean (SRIC), two nominees of the Director, IIT Kharagpur and one nominee of the Foundation. Any other special invitee whose interaction may benefit the Subir Chowdhury School of Quality and Reliability may be included in the Advisory Committee by the Director IIT Kharagpur. The Head of the Subir Chowdhury School of Quality and Reliability will be the Convener.

4. Both the Foundation and IIT Kharagpur shall have the options to seek amendments of the MoU in writing in the interest of the School of Quality and Reliability through mutual discussion.

The above Memorandum of Understanding will be governed by the Laws of the Republic of India and have exclusive jurisdiction in the courts of Kharagpur/West Medinipur and High Court of Kolkata, India.

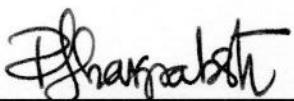
The parties have executed this MoU this 9th day of December, 2016.

The Subir and Malini Chowdhury Foundation

By: 

**Subir Chowdhury
President**

Indian Institute of Technology Kharagpur

By: 

**Partha Pratim Chakrabarti
Director**

Proposal for School of Quality and Reliability

Indian Institute of Technology Kharagpur

December 8, 2016

Background

The Indian Institute of Technology (IIT) Kharagpur, the first and largest IIT, is a premier institution of higher learning which has been the 'torch-bearer' of the IIT System. IIT Kharagpur has been at the forefront for charting Engineering and Technology education in India for more than six decades and, in addition to technology-driven education and research, has defined many new vistas in the IIT System by establishment of the Schools of Management, Intellectual Property Law, Medical Science & Technology, Telecommunications, Infrastructure Design & Management, as well as Centres of Bio-Energy, Reliability Engineering, Petroleum Engineering, etc. IIT Kharagpur alumni are well known across the world for their exceptional calibre and contributions to industry, entrepreneurship, academia, society, public life and philanthropy. Many of them have contributed back to their alma mater and supported Schools, Centres, Research Laboratories and other flagship programmes of the Institute, including substantial funding towards establishment of some of the schools and centres mentioned above.

Dr. Subir Chowdhury, Chairman and CEO of the ASI Consulting Group LLC and a Distinguished Alumnus of IIT Kharagpur, is a world leader in the area of 'Quality'. He has been a pioneer in championing the Quality Movement across the globe through his thought provoking ideas, unique methods, pedagogy and passion. Leading Institutions, companies, societies and individuals across the globe have benefited from his expertise, knowledge and experience. Dr. Subir Chowdhury is also a committed philanthropist who has through the Subir and Malini Chowdhury Foundation ("Foundation") set up several Chairs, Centres of Excellence in top rated institutions in the world and is a heritage collector of rare Indian works. Dr. Subir Chowdhury is one of the Founders and current President of the Foundation.

The Foundation and IIT Kharagpur share a common interest in developing a School of Quality and Reliability at IIT Kharagpur with the vision of becoming a global leader in producing ideas, principles, methods as well as people who would have the competencies and a missionary zeal to bring about a 'Quality' transformation. This document presents the proposal for setting up the School at IIT Kharagpur, the cherished alma mater of Dr. Subir Chowdhury.

Opportunity for Leadership

IIT Kharagpur has a strong academic and research base in the area of Quality and Reliability. The Reliability Engineering Centre at IIT Kharagpur has a long history of academic excellence in this area. It conducts Masters and Doctoral programmes in Reliability Engineering and offers several courses in this area. Many other departments and Centres like Industrial and Systems Engineering, Civil Engineering, Vinod Gupta School of Management, School of Water Resources, School of Environment Science and Engineering, Computer Science and Engineering, Electrical Engineering, Mechanical Engineering, other Engineering Departments as well as Humanities and

Social Sciences, have strong research base, offer specialized programmes and courses in the areas related to Quality and Reliability covering across products, processes, systems, ecology, environment and human resource management. Almost all academic units have related domain expertise in the area of Quality and Reliability. A large number, several hundred, of research and consultancy projects have been successfully completed with industries and strategic organizations in areas such as Defence, Atomic Energy and Space. The Institute runs a unique dual-degree (namely, B. Tech (Hons.) and M. Tech) programme in the areas of Quality Engineering Design and Manufacturing jointly supported by multiple academic units. Several faculty members across the Institute have specific research expertise in the area of Quality and Reliability.

The Institute is therefore poised to take leadership in this area and bring the focus on Quality as a major parameter in the study of natural, engineering and people's sciences and systems. The School of Quality and Reliability, possibly the first such initiative in a premier academic institution in India, is expected to become a trend-setter, as has been many of IIT Kharagpur's prior initiatives, particularly those supported by its Alumni. The School will be developed in the "Hub and Spoke" model. IIT Kharagpur plans to transform the existing Centre for Reliability Engineering to be the hub for the new school. The School will have various synergies and collaborations with all the other Departments, Centres and Schools across the Institute having interest and expertise in the areas related to Quality and Reliability.

The Foundation is keen on supporting this initiative with its contributions, and the knowledge and passion of Dr. Subir Chowdhury. Dr. Subir Chowdhury on behalf of the Foundation will also connect with top academic and industry leaders in this area to in an effort to garner them to participate in the programmes of the School. The Foundation desires to help set up several Centers of Excellence in collaboration with industry, government and international agencies. The Foundation is also keen to make a financial contribution of US \$ 1 million, and use its best efforts to obtain the support of industry experts and leaders in the area of quality, etc., to help set up the School which serves as Dr. Subir Chowdhury's alma mater. He plans to also use his best efforts to help generate additional funding through contributions from other agencies and research. The Foundation will contribute US \$1 million to the development of excellence in the School and help ensure its long term sustenance as has been the case with other Alumni donors in such cases.

Keeping in mind the contributions of the Foundation and the goals of the School, the School shall be named the "Subir Chowdhury School of Quality and Reliability".

Overall Goals

The School is being set up with the vision to be an international thought leader in education, research and mission mode programmes in the area of Quality and Reliability that will enable us to transform society. It shall strive to produce professionals with deep passion, technical expertise and leadership skills in bringing about the 'Quality' orientation across the globe. It shall be a hub for collection, creation and refinement of Intellectual Property on Quality and Reliability and shall transfer and disseminate the same for national and global deployment as appropriate and needed.

It shall address the trinity of Process, Planet and People (PPP or 3P's), targeting Engineered Systems, Natural Systems and Human Systems to cover the gamut of Quality across all domains and shall work to establish standards for quality and reliability of these systems. It shall work in Mission Mode to help bring about awareness about Quality.

The School shall strengthen the offerings already available in the institute and develop some unique new academic and research programmes to inspire next generation leaders. Over a period of time these are expected to mature into programmes like Masters in Quality and Reliability, MBA Programmes (jointly with the School of Management and other Departments/Centres/Schools), Micro-Specializations, Executive/Management Development Programmes, Certificate Outreach Programmes and Industry Driven Programmes, subject to requirements, approval of due authorities and availability of funds as needed. Research and Development activities and programmes shall be undertaken on areas and aspects related to the three Ps mentioned above in collaboration with related academic units in the Institute and other organizations. The School shall be a confluence of interdisciplinary research coupled with Core Application Verticals and try to develop specialized Centres of Excellence in various verticals.

The School shall be governed like an academic unit of IIT Kharagpur as per Institute rules and regulations. In addition, like other Alumni-supported units, it shall have an Advisory Board with the Director as Chairman and other members, as per norms, including a Foundation representative (Dr. Subir Chowdhury during his lifetime) and one nominee of the Foundation as members.

Funding and Infrastructure

In order to set up the School, the Foundation has graciously agreed to a funding of US \$ ONE million over a period of at most 5 years as donation in at most 5 regular equal instalments which shall primarily be maintained and grown under investment as an endowment with IIT Kharagpur. IIT Kharagpur commits to an equivalent matching amount in terms of providing space, cost of engaging upto 10 faculty members and permanent staff as per institute approved norms, and an annual grant to run the School as per its approved norms from the available annual grant from the Government. The Institute plans to allocate 5,000 sq ft of space initially for the school. The space to be made available in a new building, currently under construction, is expected to be ready in 2018 or earlier. Till then the current space of the Reliability Engineering Centre will be utilized for the functioning of the School.

Both the Foundation and IIT Kharagpur also intend to make efforts to obtain significant additional resources through industry/foundation/research. Dr. Chowdhury shall also use his best efforts to arrange to engage experts from his network of organizations and linkages to help develop the School.

Next Steps

This document shall serve as the Statement of Intent for setting up the aforesaid School. In order to achieve the aforesaid goals, both IIT Kharagpur and Dr. Subir Chowdhury will approve this School within their own administrative frameworks as applicable and if needed sign a document

or a suitable simple MoU as per IIT norms and norms of Dr. Subir Chowdhury or his Philanthropic Foundation that contributes to such endeavours. Once the basic intent is agreed upon, IIT Kharagpur will form a core group comprising Head Reliability Engineering Centre, Dean (Planning & Coordination), Dean (Faculty) and Dean (Alumni & International Relations) to identify the detailed steps to set up the School. It is expected that the announcement of the School shall be made on a suitable date.