

Expression of Interest (EOI)

MULTI MEDIA CONTENT DEVELOPMENT FOR JIGYASA – VIRTUAL LAB

Introduction

A state of art digital content in the form of audio / visuals is necessary to create awareness among school children for the purpose of student – scientist connect programmes as part of JIGYASA and also to provide awareness on life skills education. The popularization of these scientific information will be in the form of attractive and relevant audio visuals along with promo videos which will be uploaded on cloud and communicated to the young minds of this country in large numbers. The development of digital content in English and Hindi including local language for the purpose should cover Simulation based experiments, Comics, Animation based stories and videos of healthy student programme and science topics.

The Healthy student programme is to empower school children and build inherent capacities of health & wellbeing resulting in self-reliant skills that render them with creative thinking, analytical abilities and also generate tools for future proofing & resilience thereby redesign the human presence on earth.

Objectives

The objective of the assignment is to explain school students and teachers about the latest ongoing research and development activities of national importance in CSIR labs and precisely at CSIR-IICT in a simple manner with the help of Simulation based experiments, Videos, Comics, Animation based stories, games and also to inculcate excitement in students to pursue science in their future endeavors with following objectives.

- to reach every student in the remote corners of the state through ‘Jigyasa’ program,
- educate them about science
- popularization of science through attractive audio / visuals
- create interest in choosing science as career

Scope of work :

Following are some of the Research areas which have National & Global importance being designed, developed and explored by Scientists at CSIR-IICT. Creative content using Multi Media for these activities are to be developed by interested party/firm(s) based on the inputs provided by CSIR-IICT as per the details mentioned below to support a satisfactory Virtual lab content.

Task / Activity Name	Detailed Description point wise for each Activity	Number / Type / Target group
Bio- fuel Cells :	Biohydrogen production waste (solid /liquid)	3 Audio visual(AV)clips : (IV-XII) standard
Membrane Separations:	Nanofiltration, Gas separation,	3 AV clips (VI-XII),
Crop Protection –	Pheromones, technology for Integrated Pest Management	3 AV clips (VIII-XII)
Sustainable Energy materials -	Batteries beyond Li-ion , Rechargeable Al ion battery	3 AV clips (VI to XII) ,

Smart Materials :	Nanomaterials, Solar Energy harvesting materials	3 AV clips (VI to XII)
Awareness of best practices on Holistic development of Atmanirbhar Yuva	Health Care –Hygiene etiquette, Wellness. Immunity boosting food.	4 AV clips for VII to X classes
Scanning electron Microscope (SEM)	Working principle, Use & interesting SEM &TEM figures.	2 AV clips
Malaria monitoring visualization system-	A GIS based for identifying disease hotspot in India.	2 AV clips (IX to XII)
COVID19	Detection and destruction	3 AV clips (IV-XII) standard

- Each activity / experiment shall have its own topic, lab manual with the aim & objectives, principle & theory, simulator, references, pre & post experiment tests. To be designed to cater both offline and online usage.
- To Develop Pedagogy & Storyboard for each activity and wherever possible use open source software.
- The objective is to cover learning elements like focus area, instructional strategy, learning objective, cognitive levels to be achieved, tasks to be performed, its assessment and the learning outcome.
- Create a storyboard based upon the pedagogy which covers the visual elements and other relevant information for users. For example, categorize into: drafting experimental set-up, construction guide, equipment guide, tasks & flow, storyboard with sketches & instructions and the assessment scores.
- Please ensure that the virtual labs simulator should be intended for both online and offline use. Open source platforms such as Desktop (Linux, Windows), Mobile (Android & iOS) and Tablets (Linux, iOS & Windows). HTML, CSS, Javascript or any miscellaneous web based free and open source technologies (FOSS) may be used.

Confidentiality clauses

During the tenure of the discussions and thereafter, the party undertake on their behalf and on behalf of their subcontractors/ employees / representatives / associates to maintain strict confidentiality and prevent disclosure thereof, of all the information and data exchanged / generated pertaining to the assignment for any purposes.

MoU/ Duration

CSIR-IICT shall enter into a Memorandum of Understanding/ Agreement (MOU/A) for the assignment on non-exclusive basis for a period of one year.

Selection Criteria

All the applicants (firms) would be screened through a technical committee constituted by Director, CSIR-IICT. The qualification criteria include creative content development competence, samples from past experience if any, willingness to offer additional time to interact with subject experts, capability to execute within timelines and other criteria as per the guidelines of the technical committee.

The firms who are interested in the above assignment from CSIR-IICT may send their application to the undersigned by post / email.

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