

REGISTRATION FORM

# National Workshop on

## COMPUTER INTERFACED SCIENCE EXPERIMENTS USING ExpEYES

### 30<sup>th</sup>-31<sup>st</sup> March, 2019

- Name & Designation of the Applicant .....  
.....
- Name of College/School & University to which your college is affiliated .....  
.....
- Mobile : .....
- Email: .....
- Date of Birth (Format: 12-Sep 1980): .....
- Educational / Professional Qualification: .....
- Nature of Present Job/Study: .....
- Programming languages known): .....
- Bank Draft/Cheque No. .... with Bank Name..... Date:..... Rs.: .....  
(infavour of Renewable Energy Technology & Management payable at SBI Pt. Ravishankar Shukla University, Branch,Raipur)  
  
For Online payment Account Name :  
**Renewable Energy Technology & Management**  
SBI Account No. : 35885979190  
IFSC code : SBIN0003739
- Have you attended such program earlier (Yes/ No) and motivation behind participation: .....  
.....
- Accommodation needed on payment : Yes/No

Signature of Applicant

Recommendation of Head of the Deptt/Institute



## Organizing Committee

### Patron :

Prof. Keshari Lal Verma  
Hon'ble Vice-Chancellor

### Coordinator :

Dr. Sanjay Tiwari  
Professor & Head

### Deputy Coordinators :

- B. Gopal Krishna (8349640006)
- Gajendra Singh Rathore(9827966082)
- Naman Shukla(7566853784)

### Treasurer :

Mrs. Manisha Ratre

### Local Organizing Committee :

Dr. Kavita Thakur, Anil Verma, Dharmendra Kumar  
Neha Devangon, Dr. Mohan Patel, Yogesh Dongre  
Dr. Krishna Jibon Mondal, Dr. Rajesh Awasthy  
Dr. Swati Sahu, Likhendra Sahu, Amrit Shende  
Dr. Alka Panda, Umesh Yadav, Monika Sahu  
Sarita Sahu, Surendra Singh, A.P. Tigga

### Registration:

Faculty, Scientists & Tech. Asst. : ₹ 800/-

Students & Ph.D.Scholars : ₹ 500/-

### Eligibility:

Scientist / Faculty Members Physics / Electronic/  
Computer Science of Colleges / Universities and  
Teachers of High School & Higher Secondary,  
Ph.D. Student, M. Tech., M.Sc. Students.

**Application Deadline:20th March, 2019**



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## COMPUTER INTERFACED SCIENCE EXPERIMENTS USING ExpEYES

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## Convert your PC into Physics Laboratory

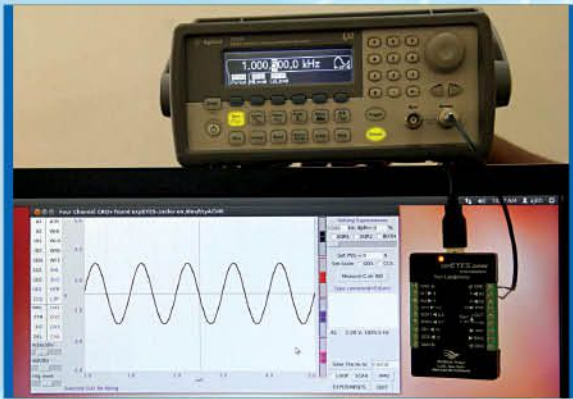
### Organizers:

School of Studies in Electronics & Photonics  
Institute of Renewable Energy Technology & Management

Pt. Ravishankar Shukla University, Raipur (C.G.)  
&  
Inter University Accelerator Center, New Delhi

## Motivation :

An understanding of science and technology is necessary in every student's life. The main challenge in the field of science Education at a global level is the declining interest of students into science. Unfortunately the performance of a student is often measured by the ability to memorize than the real understanding; as a result most of them fail to apply what they learn in the classroom to the things they encounter in real life. Students also lose interest because of absence of appropriate motivation and also due to the lack of equipment. The key to combating this is the adoption of an inquiry-based, 'learn-by doing' approach i.e. learning by exploring and experimenting. However, almost everywhere science is mostly taught from the textbooks without giving importance to experiments, partly due to lack of equipment. ExpEYES (Experiments for Young Engineers and Scientists) is the most affordable solution to this problem. ExpEYES brings the ability to perform experiments with reasonable accuracy, opens up an entirely new path for learning science.



## About Department :

School of Studies in Electronics & Photonics of Pt. Ravishankar Shukla University, Raipur is a bridge that connects pure and basic science like physics or material science with applied sciences and engineering practices. Faculty and students in Electronics & Photonics employ fundamental physical principles to create innovative new technologies. These novel solutions are then handed off to engineering disciplines to be refined, enhanced and used to address important societal problems.

## About Training:

ExpEYES (Experiments for Young Engineers and Scientists) is a hardware & software framework for developing science experiments, demonstrations and projects without getting in to the details of electronics or computer programming. Design of ExpEYES combines the real-time measurement capability of micro-controllers with the ease and flexibility of Python programming language for data analysis and visualization. ExpEyes is developed in IUAC, New Delhi as part of their outreach program, with an objective of developing affordable laboratory equipment. Software is distributed under GNU General Public License and the hardware designs are under CERN OHL. ExpEYES-17 is a multi-purpose, USB-powered instrumentation tool that packs a set of fundamental data acquisition and control tools such as oscilloscopes, frequency counters, RC meters and the ability to easily acquire data from Plug and Play I2C sensors without any technical know-how. The hardware features sub micro-second response times and numerous communication channels that makes it capable of measuring a wide variety of parameters pertaining to science experiments. Design of ExpEyes combines the real-time measurement capability of microcontrollers with the ease and flexibility of Python programming language for data analysis and visualisation. Most of the electronics experiments in the BSc syllabus and several physics experiments in UG and PG level can be performed with this device. Students, teachers and hobbyists can use ExpEyes as test equipment for all types of experiments in Physics, Electronics and other branches of Science & Engineering.

*Learn from yesterday. live for today,  
hope for tomorrow. The important  
thing is to not stop questioning.*

Albert Einstein

## Topics to be covered :

The workshop covers topics on how the experiments using ExpEyes can empower students and teachers of science and engineering branches. **Dr. Ajith Kumar B.P. Senior Scientist, IUAC, New Delhi** and the founder developer of the ExpEyes project will lead the classes & hands-on sessions. Motivated faculty members of Science & Engineering colleges, Physics & Electronics Teachers of High School & Higher Secondary can register for the program. Registered participants would be provided with experimental kit during the program for hands on training. **Participants are requested to bring a laptop and a pen drive of minimum 4 GB capacity.**

***Last date for receiving application:  
20th March 2019***

The number of participants is limited to 50 (first come, first served basis). Interested participants may apply in the attached proforma. Applications can also be mailed to [renewable.prsu@gmail.com](mailto:renewable.prsu@gmail.com) along with receipt of registration fee paid. Application form can be downloaded from : [www.prsu.ac.in](http://www.prsu.ac.in)

All correspondence should be addressed to:

**Dr. Sanjay Tiwari**

Coordinator, NWCISE

Professor & Head

S.O.S. in Electronics & Photonics

Coordinator, Institute of Renewable Energy

Technology & Management

Pt. Ravishankar Shukla University

Raipur 492010 (C.G.)

Mob: 9424225771



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### National Workshop

ON

### Computer Interfaced Science Experiments Using ExpEYES



30<sup>th</sup> – 31<sup>st</sup> MARCH, 2019

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E-mail: .....

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