

## **KARNATAKA SCIENCE AND TECHNOLOGY (KSTA)**

Karnataka Science and Technology (KSTA) is an autonomous organization under the Department of Science and Technology, Govt. of Karnataka, which was established under the Chairmanship of distinguished Space Scientist Padma Vibhushan Late **Prof. U R Rao** Former Chairman, ISRO/Secretary, DOS, GoI. Consequent to the sad demise of Prof. U R Rao, **Dr. S K Shivakumar**, Former Director, ISAC/ISTRAC, ISRO, Govt. of India has take over as Chairman of KSTA. Further, KSTA has 19 members comprising of eminent scientist, well-known educationists and senior administrators. **Dr. H Honne Gowda** Special Director (Technical), DST, Govt. of Karnataka is the Member Secretary of KSTA.

### **ABOUT THE WORKSHOP:**

Research is the cornerstone to broaden the horizon of our knowledge through systematic investigation. It will establish or confirm facts or reaffirm results of previous work or solve new or existing problem or support theorems or develop new theories. Further, it could also be an extension of previous works in the field. In view of this, it is essential to design a sound research methodological process to overcome challenges, while carrying out research. A good research methodology is a key to get quality output.

In this context, it is necessary to expose PG Students and research scholars to research methodology. Hence, a short training workshop has been designed to cover fundamentals of research methodology, focusing on various aspects related to defining research problems, designing of research method, sampling design, testing of hypothesis, Intellectual Property Rights (IPRs), interpretation & report writing etc. as per Visvesvaraya Technological University (VTU) syllabus. Thus, the proposed workshop intends to provide an opportunity to participants to broaden the horizon of their knowledge in research methodology as well as to enrich their skills in conducting quality research.

### **PARTICIPANTS:**

The Faculty Members /Research Scholars/PG Students of Science and Engineering disciplines.

## **OBJECTIVES OF THE WORKSHOP**

**Following are the main objectives of the proposed training workshop:**

- To acquaint with the basics of Research Methodology
- To expose the participants to new & emerging trends in research
- To enable the participants to understand how to define research problems and to develop a suitable methodology for addressing key issues.
- To help participants to know the various stages of research process.

### **TOPICS TO BE COVERED:**

#### DAY 1 – JANUARY 2, 2019 (Wednesday)

- Research objectives and Characteristics, research method and developing a research plan.
- Identification of Research Problem and Gap in Research
- Art of Literature Review & Identifying research problem
- Hypothesis Development
- Research Design and methods

#### DAY 2 – JANUARY 3, 2019 (Thursday)

- Research in Engineering Areas
- Sample design and methods of data collection
- Data analysis by testing of hypothesis
- IPR & protection of IPRs
- Data Interpretation, Report & Thesis writing
- Introduction to statistical concepts & its application

#### DAY 3 – JANUARY 4, 2019 (Friday)

- Research Proposals and Grant Writing
- Individual Hands-on training with R-Software
- Correlation & Regression
- Parametric & non-parametric tests
- Latex and Bibliography management

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**Quiz Competition**

## REGISTRATION:

Registration Fee: Rs. 100/- for PG Students  
: Rs. 200/- for Research Scholars/Faculty  
(Includes Kit, Working Lunch, Tea and Snacks)

Registration fee can be transferred online to the Bank Account No. given below:

Name of Account Holder: **Karnataka Science and Technology Academy**  
Bank: State Bank of India; Account No: **64001018807**  
IFSC: **SBIN0040463**

The participants are requested to confirm their participation through e-mail as early as possible by filling up the enclosed registration form along fee transaction no.

**Quiz Competition is being  
Conducted on  
January 4, 2019  
Between 10:00 am -11:00 am**

### Prices for Quiz Competition

1<sup>st</sup> Prize: Rs. 5000/-  
2<sup>nd</sup> Prize: Rs. 3000/-  
3<sup>rd</sup> Prize: Rs. 2000/-

### REGISTRATION FORM

Name:.....  
Designation:.....  
Specialisation:.....  
Department:.....  
Institution/Organization:  
.....  
Mailing Address: .....  
Mobile No:.....  
Phone No:.....  
E-mail ID:.....  
Signature of Applicant:.....  
Date:.....



## KARNATAKA SCIENCE AND TECHNOLOGY ACADEMY

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## THREE DAY WORKSHOP

ON

# “RESEARCH METHODOLOGY AND DATA ANALYSIS USING STATISTICAL TOOLS”

DATE: JANUARY 2-4, 2019

Registration: 9:00 am – 9:30 am

### CONVENOR:

**Dr. A M Ramesh**  
Chief Executive Officer  
KSTA

### COORDINATOR:

**Shri V K Srinivasu**  
Scientific Officer  
KSTA