# Career Opportunities for Graduate and Post-Graduate Students



Presented by

## **Career and Placement Cell Aggarwal College Ballabgarh**

# What is Career Planning?

More practical than academic Understand interrelated ideas Don't allow circumstances to plan for you



## A job search strategy is only one part of your career plan

# **Fundamentals of Career Planning Basics**



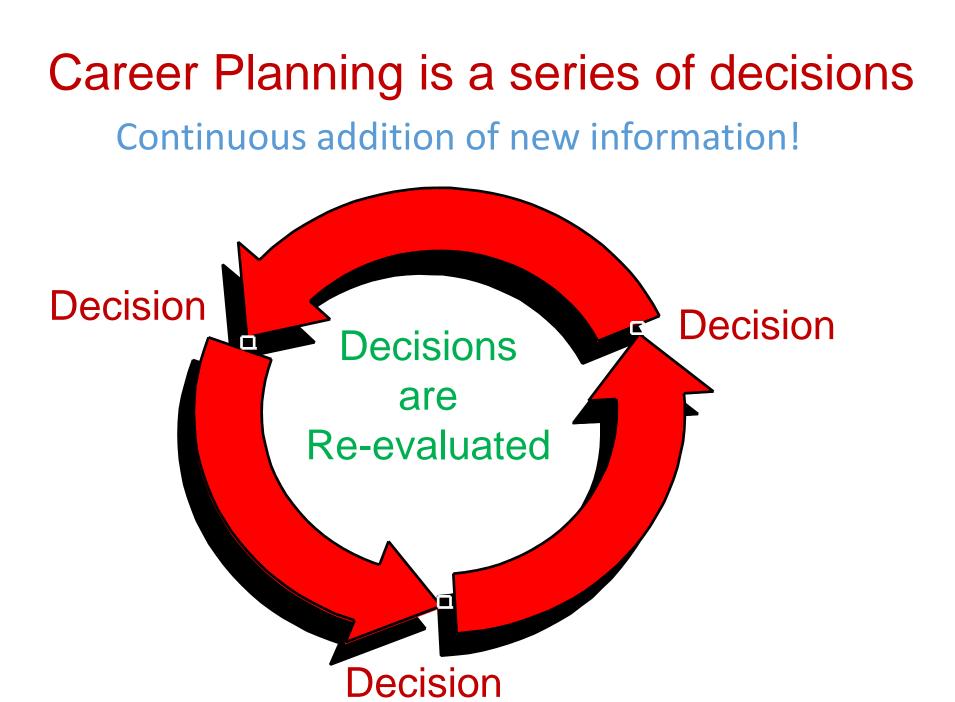
## TAKE CHARGE

- 1. Yourself
- 2. Career desires
- 3. Marketplace

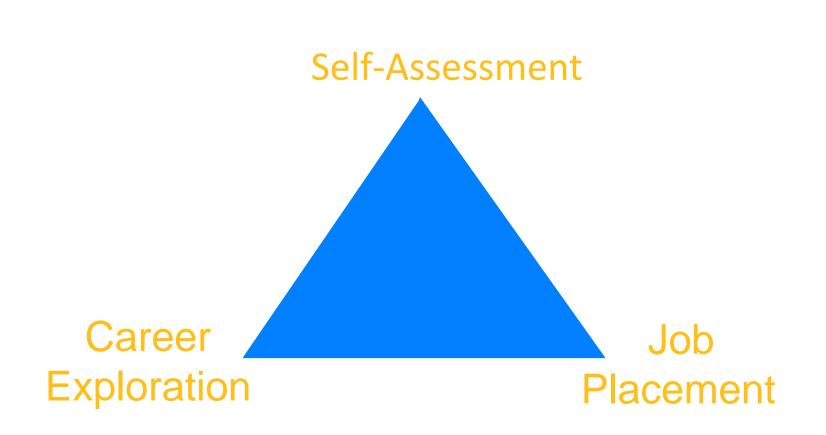
## **Avoid**

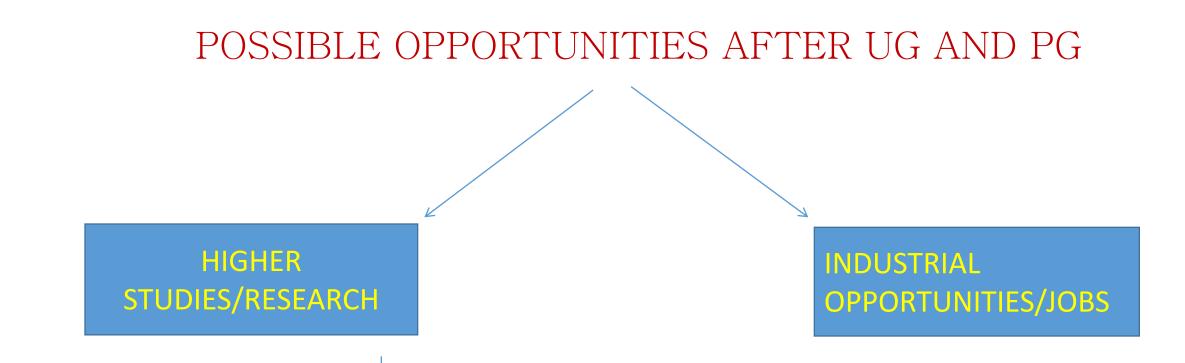
1.Job desperation

2. Reactive behavior



# **Career Planning**





- Research Institutes and Laboratories
- > Agricultural Research services
- > Educational Institutes
- > Hospítals
- > RSO in Nuclear Establishments

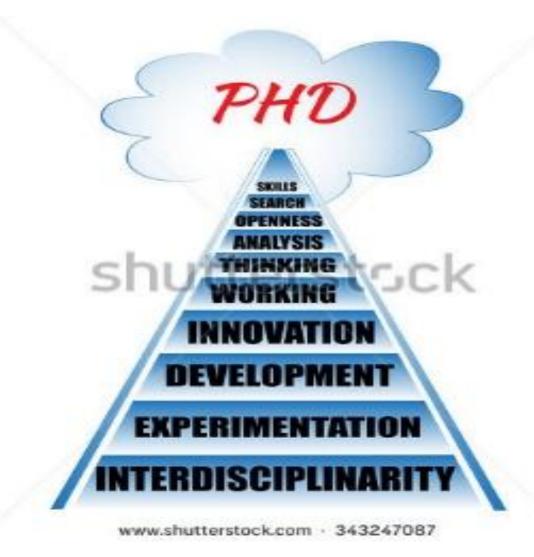
- Programming and Software industry
- Power Generating Companies
- Aviation Industry
- Construction Firms
- Insurance sector
- > Food Technology

# **HIGHER STUDIES/RESEARCH**

> M. Sc Acoustics > M. Sc Applied Electronics > M. Sc Astronomy > M. Sc Electronics/Instrumentation > M. Sc Geophysics > M. Sc Medical Physics > M. Sc Nuclear physics > M. Sc Physics/Chemistry/Maths/Enviornmental Science > M. Sc Pharmacology/ Industrial chemistry > Master in Atomic and Molecular Physics > PG Díploma in Radiological Physics > Postgraduate Certificate in Education Physics > Integrated M.Sc. + Ph.D. Programme > Bachelor in Education

# **Doctoral and Post doctoral courses**

- Doctor of Philosophy (PhD) in Nanotehnology
- Doctor of Philosophy (PhD) in Bio-nanotehnology
- Doctor of Philosophy (Ph.D.) in Biophysics
- > Ph.D. in Chemical Thermodynamics
- > Ph.D. in Nuclear Physics/ Material Science
- > Ph.D. in Food Technology/Nutrition
- > Ph.D. in Material Science
- ≻ Ph.D. in Chemistry
- > Ph.D. in Environmental Science



### NATIONAL INSTITUTE OF ELECTRONICS & INFORMATION TECHNOLOGY, DELHI / DEFENCE RESEARCH AND DEVELOPMENT ORGANIZATION

Centre for Personnel Talent Management (CEPTEM)

Qualification – Master in Science

## BHABHA ATOMIC RESEARCH CENTRE ( BARC ), MUMBAI

**DRM:** Diploma in Radiation Medicine at BARC.

**DMRIT:** Diploma in Medical Radio Isotope Techniques at BARC

(**Dip.R.P.**) : the Diploma in Radiological Physics

M.Sc. (Engg.) also offered at BARC, IGCAR, VECC and RRCAT

**OCES ( ONE YEAR ORIENTATION COURSE FOR SCIENCE POSTGRADUATES ) AT BARC** 

- Training Schools: BARC Training School at Mumbai , Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, Raja Ramanna Centre for Advanced Technology(RRCAT), Indore, Nuclear Fuel Complex, Hyderabad, Minerals Directorate for Exploration and Research (AMD), Hyderabad
- OCES Program Successful candidate posted as <u>Scientific Officer 'C'</u> in DAE units

## **INSTITUTE OF PHYSICS, BHUBNESHWAR (IOPB)/INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH (IGCAR ), KALPAKKAM, TAMILNADU**

- ➢ JRF, SRF, Scientific Officer, Scientific Assistant,
- Technical Officer, Research Associates, etc.

## VARIABLE ENERGY CYCLOTRON CENTRE (VECC), KOLKATA/SAHA INSTITUTE OF NUCLEAR PHYSICS, KOLKATA

- ≻ M.Sc./ Ph.D.
- Summer Training
- Undergraduate Associateship
- Research Associate

## NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH, ODISHA

- > Prestigious fellowships -DST-Inspire, DBT-Welcome, Ramanujan and Ramalingaswami etc.
- ➤ Integrated 5-year M.Sc. for 10+2
- ➤ Integrated M.Sc.+ Ph.D. after B.Sc.
- ➢ Ph.D. after M.Sc.

## **INTER UNIVERSITY ACCELERATOR CENTRE(IUAC)**, **NEW DELHI**

- Research facility for researchers
- ≻ M.Sc, M.Phil/Ph.D ,RA
- Summer Internship -Second / third ,B. Sc. (Physics) / integrated M. Sc. (Physics) in June

## INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH (IISER), PUNE KOLKATA, MOHALI, BHOPAL, THIRUVANANTPURAM & TIRUPATI

- ➢ M.Sc(Engg.), M.Phil/Ph.D ,RA
- Scientific Research Series For masters level students (I and II year M.Sc.)
- Science Fun Series For bachelor degree (I, II and III year B.Sc.)

### **COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH (CSIR)**

- ➢ CSIR PROGRAMME ON YOUTH FOR LEADERSHIP IN SCIENCE
- Junior Research Fellowship (JRF)
- Senior Research Fellowship (SRF)
- ➢ RESEARCH INTERN
- Post Graduate Research Programme in Engineering (PGRPE)

## Various Entrance Examinations

#### INDIAN INSTITUTE OF TECHNOLOGY (IIT)- JAM

➢ Joint Admission Test for M.Sc. In all IITs , NITs

Admission to M.Sc. (Two Year), Joint M.Sc.-Ph.D., M.Sc.-Ph.D. Dual Degree and other post-bachelor's degree program Eligibility : B.Sc.

#### **GRADUATE RECORD EXAMINATIONS (GRE)**

Admissions in programs (e.g. M.S. and Ph.D.) in **physics/chemistry/maths etc.** (mostly in universities in the United States). examination administered by the Educational Testing Service (ETS).

#### JOINT ENTRANCE SCREENING TEST(JEST)

Ph.D. / Integrated Ph.D Programme in (Physics or Theoretical Computer Science or Neuroscience or Computational )
Participating Institutes :

Aryabhatta Research Institute of Observational Sciences(ARIES), Nainital, Bose Institute, Kolkata, Homi Bhabha, National Institute, Mumbai, International centre for theoretical sciences, Bangalore Indian Institute of Science, Bangalore etc.

#### NATIONAL ELIGIBILITY TEST FOR LECTURERSHIP IN COLLEGES/UNIVERSITIES

Organized by UGC/CSIR twice in a year

## SCHOLARSHIPS AVAILABLE

#### Council of Scientific & Industrial Research(CSIR )-UGC NET JRF

- Stipend 32500/- Per month
- Eligibility M.sc or Equivalent master degree
- Career Ph.D., Assistant Prof. and Research fellow

#### **Graduate aptitude test in Engineering (GATE)**

Career : Scientist , Ph.D. (Scholarship 25000/- ), M.Tech (Scholarship 12400/- ), and PSU etc.
 Qualification required : M.Sc.

#### **INSPIRE Programme** (*Scholarship Amount:* Rs 80,000 annually)

- Offered by: Ministry of Science & Technology
- UG Or PG in natural or basic sciences. Research (INSPIRE) has three components:
- Scheme for Early Attraction of Talent (SEATS)
- Scholarship for Higher Education (SHE)
- Assured Opportunity for Research Careers (AORC)

### TATA INSTITUTE OF FUNDAMENTAL RESEARCH (TIFR)

UG, PG and Ph.D programmes in various disciplines.
The Visiting Students' Research Program (VSRP)

Eligibility: Bachelor's or Master's - Physics/Chemistry/Biology/Mathematics/ Computer & Systems Sciences Stipend - Rs 7000/- per month

## **DEPARTMENT OF SCIENCE & TECHNOLOGY (DST)**

### > Programme for Science Students:

Kishore Vaigyanik Protsahan Yojana (KVPY) Science Olympiad Programme Women Scientist Scheme-B(WOS-B): M.Sc in Basic or Applied Sciences , Fellowship - Rs.30,000/- per month

## **INSTITUTE FOR PLASMA RESEARCH (IPR)**, Gandhinagar

- > 1 Year Technical Training Program, stipend -Rs.5400 per month, (regular appointment)
- ➢ six-week Summer School Program , stipend Rs.10,500/
- > Ph. D Program, Fellowship Rs- 16,000/- for 1st and 2nd year and Rs -18,000/- for subsequent years

## INTER-UNIVERSITY CENTRE FOR ASTRONOMY AND ASTROPHYSICS (IUCAA), PUNE

- > Sophisticated research facility for researchers
- ➢ Research Associate , Ph.D.
- ▶ Project Assistant, 6 months to 03 years ,Remuneration: Rs. 28,000/- per month

## **INDIAN INSTITUTE OF SCIENCE (IISC) , BANGALORE**

- Research Associate
- ➢ Project Assistants : Stipend − Rs24000/- pm upwards
- > Ph.D. , M.Tech
- > Specially Ph.D. and M.Tech in Aerospace Engineering
- Short term course
- National Programme on Technology Enhanced Learning (NPTEL) ONLINE COURSE Link - <u>https://onlinecourses.nptel.ac.in/</u>
- ➢ Massive open online course (MOOC)
- Courses for DTH Short term courses

# **INDUSTRIAL OPPORTUNITIES**

- ≻Oil industry
- ➢Paint industry
- ➤Cement industry
- Pharmaceutical industry
- >FMCG industry
- Energy/Power sector
- >Automobile/ mechanical industry
- ≻IT industry
- ➤Textile industry
- ≻Agriculture sector etc.

#### Local industries in NCR

- > Indian Oil Corporation
- > Orient craft Limited, Gurgaon
- Star Wire PVT ltd, Ballabgarh
- > High Polymer Ind Pvt Ltd, Ballabgarh
- > National Council of Cement & Building Materials, Ballabgarh
- > Thomson Press, Faridabad
- > Hindustan Syringes, Ballabgarh
- > Hyderabad Industries ltd, Ballabgarh
- > NTPC, NHPC
- Good Year, Faridabad
- > Escorts, Faridabad
- > Stork Rubber Products Pvt Ltd, Gurgaon
- > Kohinoor Foods Ltd, Ballabgarh
- Alchem International Pvt Ltd
- Havells India Ltd, Faridabad
- > Service centres of various companies etc.

# **Global Opportunities**



# **Common Job Types**

- Lab Supervísor
  Researcher
- > Technician
- > Teacher
- ➤ Scientist
- > Consulting Physicist
- > Research Associate
- > Assistant Scientist
- > Public Relation Officer
- > Polítical Advisor

- Radiation Oncologist
   Radiologist/Radiation Safety
   Officer
- > Human Resources Manager
- Statistical Officer
- > Marketing Manager
- > Banker
- > Counselor
- ➢ Patent Officer
- > Self Employment

