



SOCIETY FOR RADIATION RESEARCH (SRR)

(Registration No.: Maharashtra State, Mumbai 2280, 2014 GBBSD)

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Report on

**Workshop on Emerging Opportunities and Rewarding
Career of Radiation and Cancer Research (CAREER-RCR),
Mumbai University, Mumbai- 400 032
on July 4th, 2015**

The workshop was attended by ~60 participants, mainly the graduate/post graduate students and young faculties/researchers, from various Institutes/Universities of India. It was also attended by some senior faculty Members and scientists.

Prof. P. M. Dongre, Convener, CAREER-RCR and Head, Department of Biophysics, Mumbai University welcomed participants gathered from different parts of India. He also mentioned about the Department of Biophysics and its various research activities.

A welcome note to the participants on behalf of SRR and a brief overview about the workshop was presented by Dr. Shyam Shrivastava, Vice President, SRR and Head, Department of Oncology, Tata Memorial Hospital, Mumbai. Dr Shrivastava highlighted the need of Workshop to encourage and stimulate young students/faulty members to take up radiation research as their career. Dr Shrivastava emphasized that SRR has taken such initiatives to organize the Workshops to ignite the young minds to choose the radiation and cancer research as their career.



The first session of Seminar was on **“Emerging Areas in Radiation Research with Relevance to Human Health”** by Dr. K. P Mishra, Founder President, SRR, Ex-VC, NGBU, Allahabad, Ex-Head, RB&HSD, BARC. Dr. Mishra spoke about the objectives and eventually the creation of SRR. He presented a brief history of radiation research, and how interdisciplinary subject expertise



supported the growth of radiation research. He wonderfully explained the missing links, challenges and unaddressed questions in the exciting field of Radiation Biology. He urged young students/faculty members to take up their career in this field to fill the gaps in the many areas of radiation biology especially low dose radiobiology and radiation risk assessment. He mentioned the emerging concepts in radiation biology like bystander effect, genomic instability, adaptive response and how the knowledge gained can be used for efficient translation to cancer radiotherapy.

This session was followed the presentation by Dr. Pritha Ray, ACTREC, Navi Mumbai, titled **“Cancer Research: Biology to Clinics”**. She has eloquently brought out the discovery of tyrosine kinase by Prof. Tony Hunter, where she described the experiments that led to the identification of a kinase activity associated with T antigen. Dr Ray emphasized how this discovery in turn led that the



v-Src-associated kinase activity was specific for tyrosine. She specifically mentioned a quote from the article that “Tony Hunter and Bart Sefton accomplished all of the experiments in this paper in less than one month”.

The wonderful presentation on basic cancer biology by Dr Ray was followed by equally brilliant lecture by Dr. Sandip Basu, Radiation Medical Center, BARC, Mumbai. He presented on **“Nuclear Medicine from Cancer Diagnosis to Therapy”**. He discussed about recent developments about diagnosis and therapeutic treatment of thyroid cancer patients using isotopes of Iodine and Lutetium. He emphasized with many case reports that how applications of these radioisotopes have improved diagnosis and therapy and post-therapy quality of patient life.



After these sessions Dr. Sangeeta, Scientific Secretary, Board of Research in Nuclear Sciences (BRNS), Mumbai talked about funding opportunities from various National Funding agencies including BRNS. She mentioned about various programs and initiatives of BRNS to support young faculties to take up research in areas related to mandate of Department of



Atomic Energy (DAE). She elegantly mentioned about how to write a research project and the various points needs to be considered while submission of a research proposal to funding agencies. The procedure and various steps of Project submission, evaluation and sanction of Grants at BRNS were highlighted by Dr Sangeeta in her presentation. She also mentioned about radiation sources and research facilities of DAE available in various parts of India.

‘Interaction with Participants’ Session followed after these presentations was chaired by Dr. Shyam Shrivastava. Questions/queries from participants were addressed by speakers. Many of queries were based on career building, some of them about awareness about radiation exposure and cancer. It was happy moment to note that a large number of participants showed their interest to take up radiation and cancer biology as their career. However, it was felt that

resource persons and research facilities should be made available to interested young students. Dr Shrivastava urged faculty members and scientists from various DAE units to explore the possibilities and facilitate training and education to the young students and faculty members.

Dr B. N. Pandey, Secretary, SRR and Head, Radiation Signalling and Cancer Biology Section, RB&HSD, BARC, Mumbai presented vote of thanks on behalf of SRR. Dr Pandey thanks all speakers for sparing valuable time to deliver highly informative and very interesting presentations. Dr Pandey thanked Dr Mishra, Dr Shrivastava and colleagues from BARC for their active contribution and participation. Dr Pandey mentioned the overwhelming response from the participants and thanked all of them for coming all the way from different parts of City and India. Dr Pandey expressed hearty thanks along with big applause from the audience to Prof. P. M. Dongre, Convener, CAREER-RCR, faculty Members, Students and Staff members of Department of Biophysics and staff Members of Mumbai University for taking all efforts to organize the Workshop successfully.

The Workshop was finally concluded with group photo in front of the Department of Biophysics Building with smiling face of participants, speakers and organizers, which left behind sweet memories of interaction and another evidence of success of the event.



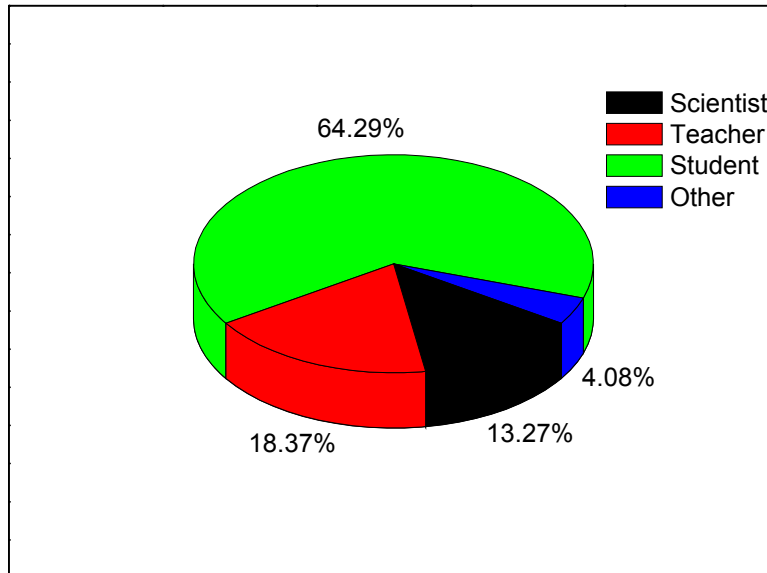
Report prepared by:

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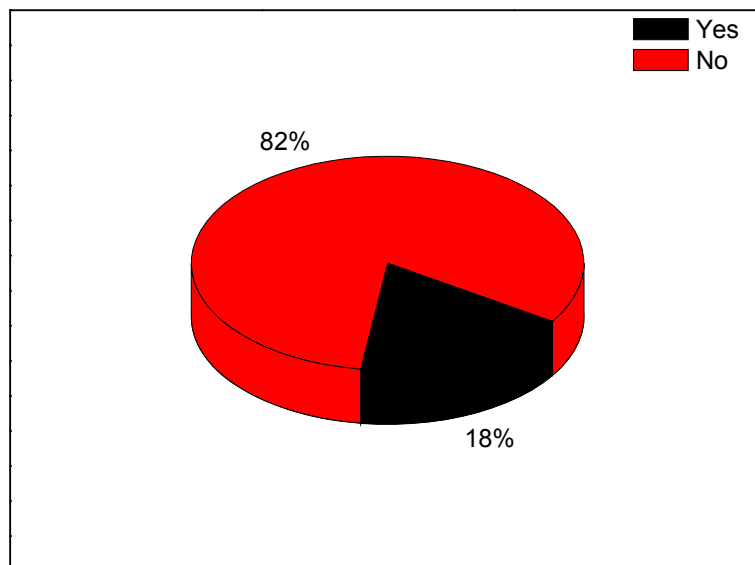
FEEDBACK of the Participants

(Total questions 9, response received: 22 participants)

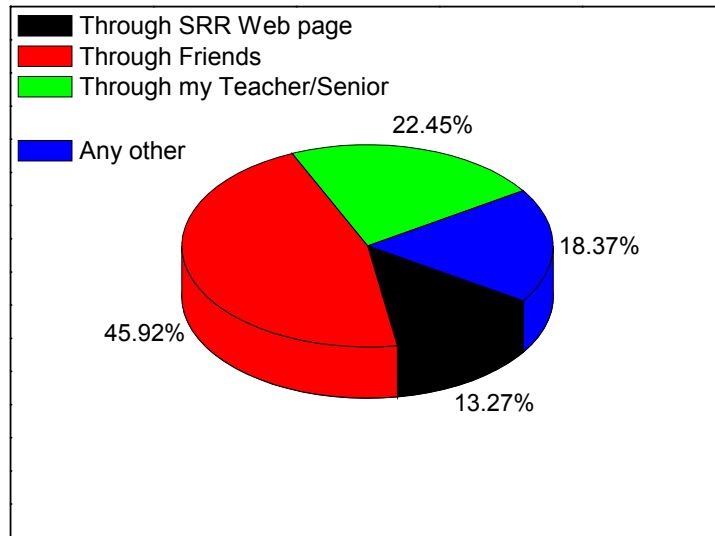
1. Your Profession?



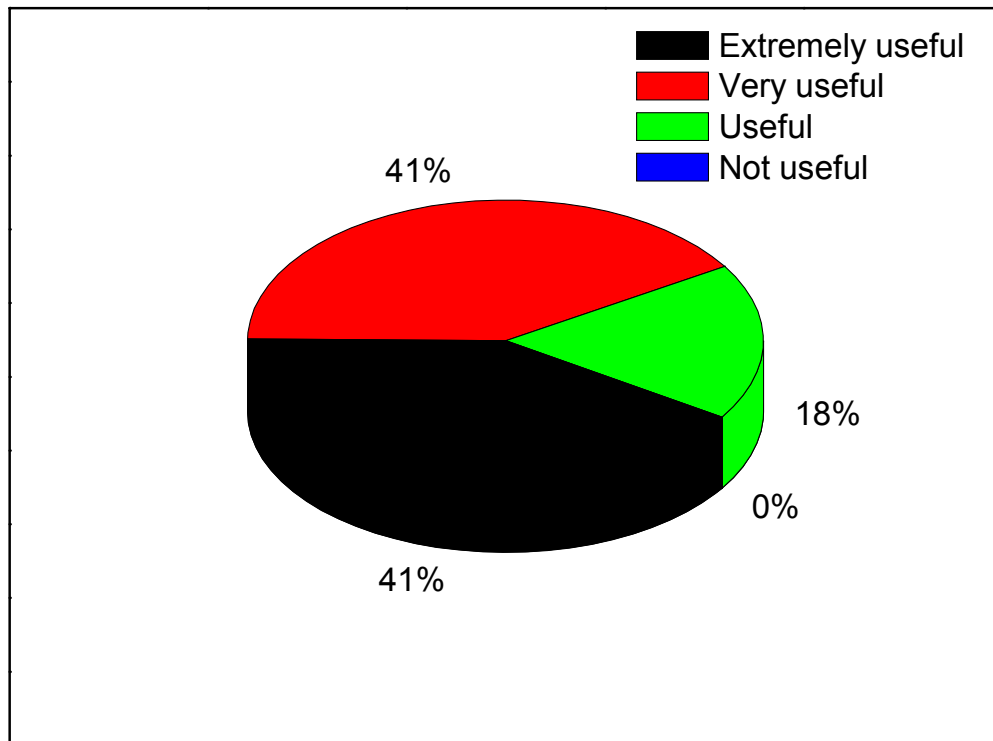
2. Are you Member of SRR?



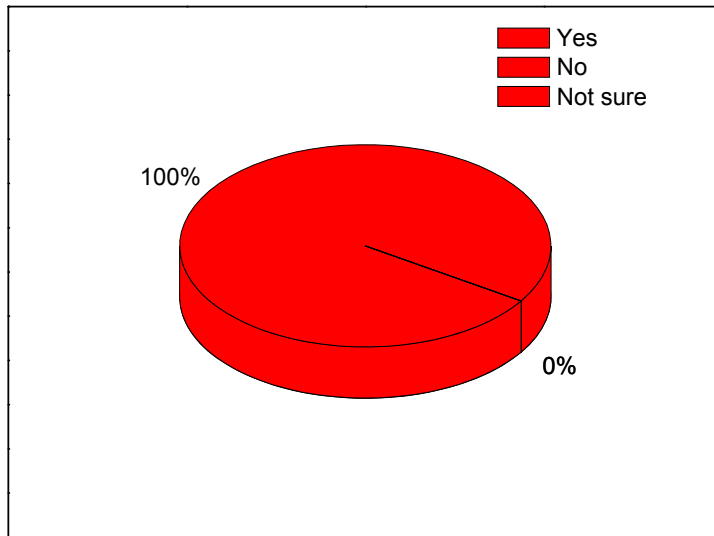
3. How you came to know about Workshop?



4. Did you find the Content of Workshop Useful to your career?



5. Do you like to attend such Workshop again?



6. What were the strong and weak aspects of the Workshop?

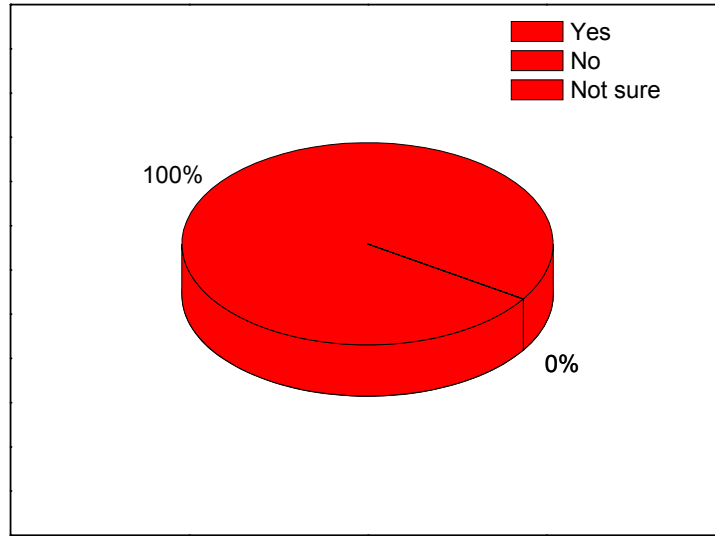
- Time for per lecture was very little, overall lectures were very good.
- Potential of radiation research in India was apparent. Capacity of the hall was underestimated.
- All lecturers were too good. Dr. K P Mishra's lecture was very informative and inspiring. There is no weak aspect as such.
- With the help of this workshop I came to know about the funding which will help me in future.(strong aspects). Time managing was not proper (weak aspects).
- Dr. K.P. Mishra delivered a really inspiring lecture and it has influenced me to take up radiobiology and cancer research as a career. Also, some very high end research was showed to us, most of us being undergrads, it was tough for us to grasp the concepts in the limited span of time.
- Information provided was very interesting and useful. A new career opportunity was introduced to all of us. All the speakers explained everything in such a manner which was easy to understand. Looking forward to attend more such workshops.
- The workshop was very good. Please give more time for details of funding and research proposals sessions.
- K.P. Mishra Sir's and Sandeep Sir's lectures were really interesting.
- Strong point for me is the blend of biology and physics emerging in a different aspect and very exciting subject to study.
- The workshop did a very good job of providing me with a sense of direction in my academic life and I now have a goal that I want to achieve. The workshop highlighted so many opportunities for making good use my summer time via summer internships as I came to know about many opportunities. The weak points in my sound opinion were not more than one, that in a few talks the content was beyond comprehension for not just me but many of my class mates. It would be better if it was toned down a little bit.
- Content of the workshop was updated

- The topic's relevance to the present day scenario was a plus point. It was a gateway to meaningful careers in fields also catering to the needs of the globe. Some talks were a little difficult to grasp being undergraduate student.
- Workshop was Awesome!!!
- Strong Aspects: 1) Got great Opportunity to meet & interact with great Pioneers ,intellects & Experts in the field of Radiation Biology & Cancer research. 2) Wholehearted inspiration , Boosting & igniting a fire to represent our country & make a mark in the field of Cancer & Radiation research. 3) Every participants were treated equally irrespective of their background or Status. Weak Aspects : 1) Some technical problems w.r.t laptop which was creating an interruption in the flow of the Workshop .
- Strong aspect was the guests speakers of the seminar. They were highly knowledgeable and eminent personalities in their respective fields. Weak point was the time management
- In the workshop the grey areas in the Radiation Biology was highlighted which would really help people like me where limited experience in the field. The other strong point was the clinician perspectives and how a Radiation biologist can aid in the problems associated with the field. I can't think of any weak points as such. Well organized and executed workshop.
- Well Organized.
- Strong Points- Good and meaningful lectures.. Especially K.P. Mishra sir's lecture and knowledge about the funding opportunities. Weak Points- Not as such but I myself wanted to know more about how to write a good abstract, a sort of demo, so that there is no more problem when it comes to providing funds.
- Very good

7. What is your suggestions to improve the Workshop in future?

- Speakers may be briefed for the objective of the Workshop.
- The organization and planning of the time schedule could be better so it wont be a problem for students coming from far away station.
- Time managing should be done
- Start a little early as it would end on time.
- It was good experience by itself.
- In my opinion the way to have a better workshop would be to have it in a bigger auditorium and with more people for having a really diverse audience and better interaction with people.
- PI keep tea break in between workshop. And keep it for whole day
- It will be good for students like me, if you arrange the workshop in the institutes like BARC where we can see how the things actually happen.
- Happy with the proceedings as per my knowledge
- Punctuality and seating arrangement should be such that even if students exceed (in case) they must be able to accommodate instead of making some students stand.
- May be some technical aspects should have been included in relation to Radiation research, which would help for budding scientists like me. Mostly safety aspects to work with Radiation.
- Organize one full day workshop
- Need to cover more applied aspects of these research areas
- Want to learn more by listening few more good speakers.
- More lectures

8. Do you like to become Member of SRR?



9. How do overall rate the Workshop? (Scale: Worst: 0, Best 100)

