

Uka Tarsadia University

27th July 2019

Report on One day expert session on Research Methodology

IQAC, Uka Tarsadia University has organized one day expert session on Research Methodology on 27th July 2019. Dr. Shailesh A. Shah IQAC Coordinator along with members of IQAC cell coordinated the expert session. 150 faculty members from the various programme computer science, biotechnology, pharmacy, engineering & technology, nursing, chemistry etc. participated in this session. All the sessions were systematically arranged keeping in mind the need of the participants.

The objective of the session was to equip the participants with set of skills and potentiality to undertake the research very effectively in their respective disciplines and to turn completed research into publishable material of high quality in the form of articles, book chapters and books. This session provided the practical tips for research grant proposal writing and writing research article. At the end of session participants are expected to develop conceptual clarity and practical knowledge to undertake quality research and writing good research papers, good research proposals and project proposals etc. To cater to the above mentioned interests, IQAC, UTU has organized this session on research methodology. The key objective of this one day session was to enable the participants:

- 1. To create awareness and sensitize participants towards quality research through grant proposal and high impact research paper writing.
- 2. To write a research grant proposal.
- 3. To write a good Research Paper.

The session commenced, after the registration of participants, introductions and Welcome note. The session opened with a formal welcome note by Dr. Shailesh A. Shah, IQAC Director at 9:00 am. The session was attended by 150 participants from across the Uka Tarsadia University. All of the participants who attended this session were research scholars, faculty who were directly involved in research process. Dr. Shailesh Shah in his welcome note highlighted need of quality research for personal and professional growth. He also said that research not only generates useful insight and confidence but also acts as a stimulant for academic growth. Conceptual understanding of various research methods, research

instruments, tools and techniques is an essential prerequisite for conducting empirical research. Dr. Shah explained the interrelation amongst research proposal for grants and dissemination of knowledge in public domain by publishing research paper in good journals. The session continued between 9:10 am to 3:00 pm with tea and lunch breaks. The technical sessions of day included four sessions comprising of following experts:

- 1. Introductory note and Welcome Dr. Shailesh A. Shah 9:00am to 9:10am
- Session I; Writing a successful grant application I by Dr. Sanjay Tiwari 9:10am to 9:55am
- Session II; Writing a successful grant application II by– Dr. Mitesh Dwivedi 10:00am to 11:00am
- 5. Lunch 11:00 am to 12:00 noon
- Session III; Funding opportunities for Research by Dr. N. Amaresan 12:00 noon to 1:30pm
- 7. Session IV; Research Paper writing by Dr. Furqan Maulvi 1:30pm to 2:40pm
- 8. Feedback and Vote of Thanks by Dr. Ketan Ranch 2:40pm to 3:00pm

The first technical session was deliberated by Dr. Sanjay Tiwari, Asso. Prof., Maliba Pharmacy College on "Writing a successful grant application - I" who introduced the participants to the basic aspects of research proposal. Research proposal is expected to respond to a gap in resources, knowledge, or opportunity that needs to be filled. A clearly written proposal presents the vision of Principal Investigator (PI) on how to fill this gap effectively. In this sense, the proposal is a clear, direct document written to a particular funding agency with the purpose of persuading the reviewers to provide PI financial support because he/she has fully viable plan to advance a valuable cause. Most grant applications ask for similar information, but they often have different formats. An adherence to the format of respective funding agency ensures a successful funding.

In his talk, Dr. Sanjay discussed the important aspects of writing a research grant. The following key points were elaborated for project formulation:

- Why the study should be done?
- Specific purpose of the study and the research questions it attempts to answer
- The decision to why the research design and methods used where chosen over other options

• The potential implications emerging from proposed study of the research problem These points were elaborated in context to writing abstract, study objectives and literature review as per the guidelines of Science and Engineering Research Board (SERB), New Delhi.



The second session on "Writing a successful grant application – II" was taken by Dr. Mitesh Dwivedi, Asst. Prof. CG Bhakta Inst of Biotechnology. The main objective of a research proposal is to persuade somebody else to support a piece of research. The deliberations included the writing of effective research plan and methodology followed by the preparation of timeline for the research activities carried out in the project by giving examples and through gantt chart. The gantt chart included the research activities as work package, deliverables and milestones to be achieved during the project duration. Budget preparation is another crucial aspect which has direct impact on project proposal and hence, proper budget estimation and its justification must be given. Recurring and non-recurring components were discussed with examples. In addition to these, plan of work for utilization of research outcome, potential environmental impact assessment, risk analysis and its management aspects were also discussed with examples.



The importance of mentioning relevant expertise in effective way, role of investigator and coinvestigator was emphasized. At last, certain do's and don'ts were discussed for writing a successful research proposal.

The third session was conducted by Dr.N. Amresan, Asst. Prof. CG Bhakta Inst of Biotechnology on Funding opportunities for Research. The idea of the lecture was to introduce different funding agencies available in India and at global level. The need of research at university level was emphasized and the available funding agencies to the delegates. During the talk a total of 28 National funding agencies and five state level funding agencies were introduced. Apart from the state level and national level funding agencies, the available NGO's and global level funding agencies were also discussed. Some important funding agencies such as GUJCOST, AICTE, DST, DRDO, CSIR, ICMR, DoC, DoD, etc were elaborated in detail about their different schemes. The important websites such as https://www.serbonline.in, https://www.onlinedst.gov.in,https://www.ncbs.res.in/rdo/sponsor-grants, http://ird.iitd.ac.in/call/proposals were also introduced to the delegates to get the knowledge of different schemes.



Dr. Furqan Maulvi, Asst. Prof., Maliba Pharmacy College delivered last session of day on Research Paper writing. The deliberation emphasized on lecture content included the practical advice to young UTU faculty members on the importance of doing research, the steps for planning a project and do's and don'ts of writing and publishing a scientific research paper. When applying for funding, researchers must demonstrate their productivity. For most funding organizations, a key measure of productivity is the number of papers published. The road to publication is rarely straightforward; this lecture provides practical guidance to researchers who are struggling to publish their research work. The entire structure of paper including title, graphical abstract, abstract, materials, methodology, data presentation, graphs, tables, results, interpretation, discussions, conclusion, limitation, and future studies/planning were discussed with practical examples of published papers.



The entire day session concluded with a vote of thanks by Dr. Ketan Ranch, IQAC member. He extended his gratitude to Hon. Provost Dr. D.R. Shah for his constant support and motivation to conduct such learning sessions at UTU. He also extended thanks to Dr. Shailesh A. Shah and all the resource persons of the day for sharing their valuable knowledge and expertise with participants. He extended his expression of gratitude to all partners who contributed for the realization of the workshop. All the four speakers were appreciated with certificate. At the end of the session each participant was required to fill a online google doc feedback form.

Speakers' Profile

Dr. Sanjay Tiwari is presently working as Associate Professor of Pharmaceutics, at Maliba Pharmacy College, UKA Tarsadia University. He is the Program Coordinatorfor postgraduate studies at Maliba Pharmacy College. He earned his M. Pharm. AndPh.D. from Indian Institute of Technology (BHU), Varanasi. He has received fellowshipsof UGC, ICMR and CSIR during M. Pharm. and Ph.D. He received Gandhian Technological Innovation Award (GYTI-2014) from SRISTI, New Delhi, on his Ph.D.research on 'targeted delivery of anti-TB drugs'.He received Postdoctoral Fellowship of Hebrew University, Israel, for his Research on targeted theranostics. He received research grants of 40 Lakhs from theagencies, such as, Gujarat Council on Science & amp; Technology (GUJCOST) and Science and Engineering Research Board (SERB). He has authored more than 25 publicationsin national and international journals.

Dr. Mitesh Dwivedi has completed PhD from Department of Biochemistry, The M. S. University of Baroda, Vadodara (2013); M.Sc. Microbiology from University of Mysore (2006) and B.Sc. Microbiology from Sardar Patel University (2004). Since 2014, he is serving as Assistant Professor at C. G. Bhakta Institute of Biotechnology, UkaTarsadia

University. He has published 42 research papers in reputed journals and written 5 book chapters. He has h-index of 18 with total citations of 1000 for his research papers. He has been serving as an editorial board member and reviewer of many international journals. He has been honoured with national as well as international Young Scientist awards for excellent research performance. He has contributed significantly in the field of vitiligo. He has been awarded with DST-SERB Early Career Research Award (2018), with a Major research project of Rs. 39 Lakhs. He has successfully completed 4 minor research projects. He wrote research proposals during his PhD as well which were successfully granted by DBT, ICMR and UGC. His current research interests include exploring the immunological, genetic causes and therapeutics for autoimmune diseases such as Vitiligo, rheumatoid arthritis, thyroidism, etc. and use of probiotics in human health.

Dr. N. Amaresan is presently working as Assistant Professor at C.G. Bhakta Institute of Biotechnology, Uka Tarsadia University, Gujarat. He has received his undergraduate degree from University of Madras, post graduate & amp; doctorate degree in Microbiology fromBharathidasan University, Tamil Nadu. He has over fifteen years of experience in teaching & amp; research and made several original and novel discoveries, especially in molecular plant-microbeinteractions, bioremediation & amp; phytoremediation, molecular microbial diversity & amp; metagenomics. For his original discoveries on agriculturally important microorganisms he hasbeen awarded Young scientist awards by Association of Microbiologists of India, New Delhi andNational Academy of Biological Sciences, Chennai. He also has been awarded Early CareerResearch Award by Department of Science & amp; Technology, Govt. of India, New Delhi. He is arecipient of visiting scientist fellowship from National Academy of India to learn advanced techniques. To his credit he has published more than 35 research articles, 9 book chapters, andedited 4 books for CRC Press, UK & amp; Elsevier publisher, USA and 4 books for Govt. of India onIntegrated Pest Management. He has also deposited over 500 gene sequences in the Genbank, USA and also preserved over 150 microbial germplasm in various culture collection centres of India. He has organized 5 National & amp; International conferences, Inspire programme etc as Organizing Secretary & amp; Co-ordinator with help of various funding agencies of India. He has completed 3 minor projects, 1 project as Co-ordinator. Currently he has two major ongoingprojects & amp; 1 recommended project by DST-SERB, GEMI & amp; DBT.

Dr. Furqan A. Maulvi, M. Pharmaceutics, Ph.D. Assistant professor, Maliba Pharmacy College, Bardoli, Project Consultant; LeoLens Technology Project, San Diego, CA. 92131, USA

Areas of exposure: Biomaterials, Drug eluting contact lenses, surface science and nanotechnology and digital inkjet printing technology.

Summary

- 1. Ten years of experience
- 2. Significant expertise in leading, mentoring and monitoring research projects in various novel ophthalmic drug delivery systems, surface science field and nanotechnology by LeoLens Technology, California, USA
- 3. Young scientist award for 'Outstanding Researcher in Pharmaceutics' by Venus International Foundation, Healthcare Awards VIHA 2018.
- 4. Awarded for best paper presentation at various International and National conference
- 5. Total 11 National and International Research Projects worth rupee 1.4 cr.
- 6. Two students pursuing PhD
- 7. Guided 15 master students

Published 26 research papers in journals of high repute with high impact factor ranging from 1 to 8.37.

Reviewer of 34 National and International Journals

Presented 12 research papers, Attended 58 seminars/conferences/workshops/FDP

Total 8 Invited expert lectures

Feedback Analysis

-	-	Frequency	%	Valid %	Cumulative %
Valid	Good	7	8.4	8.4	8.4
	Very Good	34	41.0	41.0	49.4
	Excellent	42	50.6	50.6	100.0
	Total	83	100.0	100.0	

The information presented was relevant to your needs and expectations

Sufficient opportunity was provided for questions/discussion after

lecture							
	_	Frequency	%	Valid %	Cumulative %		
Valid	Poor	1	1.2	1.2	1.2		
	Fair	1	1.2	1.2	2.4		
	Good	5	6.0	6.0	8.4		
	Very Good	28	33.7	33.7	42.2		
	Excellent	48	57.8	57.8	100.0		
	Total	83	100.0	100.0			

I have acquired new skills or knowledge in relation to topics discussed

-	-	Frequency	%	Valid %	Cumulative %
Valid	Fair	4	4.8	4.8	4.8
	Good	8	9.6	9.6	14.5
	Very Good	35	42.2	42.2	56.6
	Excellent	36	43.4	43.4	100.0
	Total	83	100.0	100.0	

- More than 80% respondents said about speakers that; Content was presented clearly, concisely and effectively; covered the material sufficiently; Presented useful examples
- 100 % respondents suggested to organize such session in future
- More than 70% respondents suggested to keep half day session in future