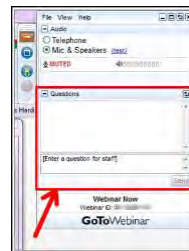


Have Questions?



Type them into questions box!

“Why am I muted?”

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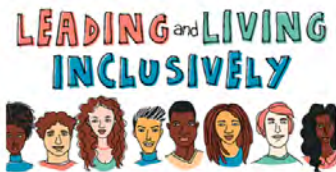
Thursday, August 6, 2020 at 2-3:30pm ET
Speakers: Coray Colina, University of Florida / Theresa Reineke, University of Minnesota and ACS Macro Letters
Moderator: Laura Stratton, Polymer Chemistry Innovations

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What You Will Learn

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- Why noncovalent conjugation is a stable way to assemble polymers with biological payloads
- State-of-the-art of molecular simulations for bioconjugation
- The effect of a variety of polymer architectures (PEGylated and beyond), grafting densities and polymer lengths on the bioconjugates structure, dynamics and function

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What You Will Learn

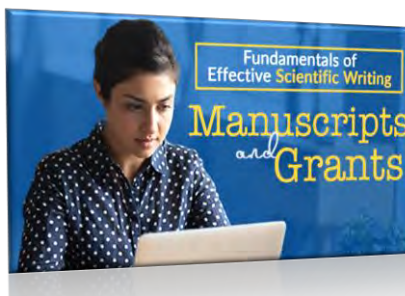
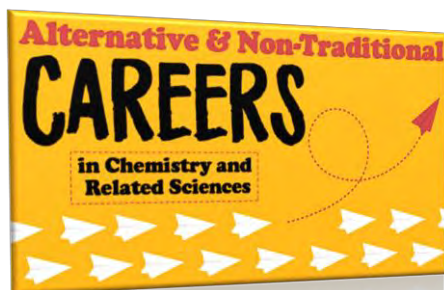
- Advantages and challenges of using personal protective equipment for community protection
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RESEARCH PROJECTS

Conceptualisation to Implementation

Co-produced with ACS International



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Research Projects: Conceptualisation to Implementation



Professor Sandeep Verma
Secretary, Science and Engineering Research Board, DST, Govt. of India



Dr. Deeksha Gupta
Associate Director-India,
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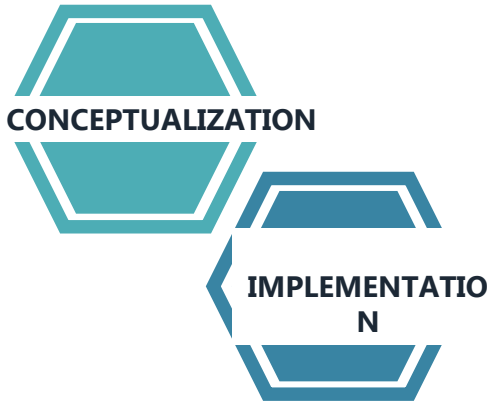
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RESEARCH PROJECTS



Sandeep Verma

Secretary
Science and Engineering Research Board
India

Indian Institute of Technology Kanpur
Kanpur, India



Science and Engineering Research Board: Statutory body under Department of Science and Technology, through an Act of Parliament (2008)

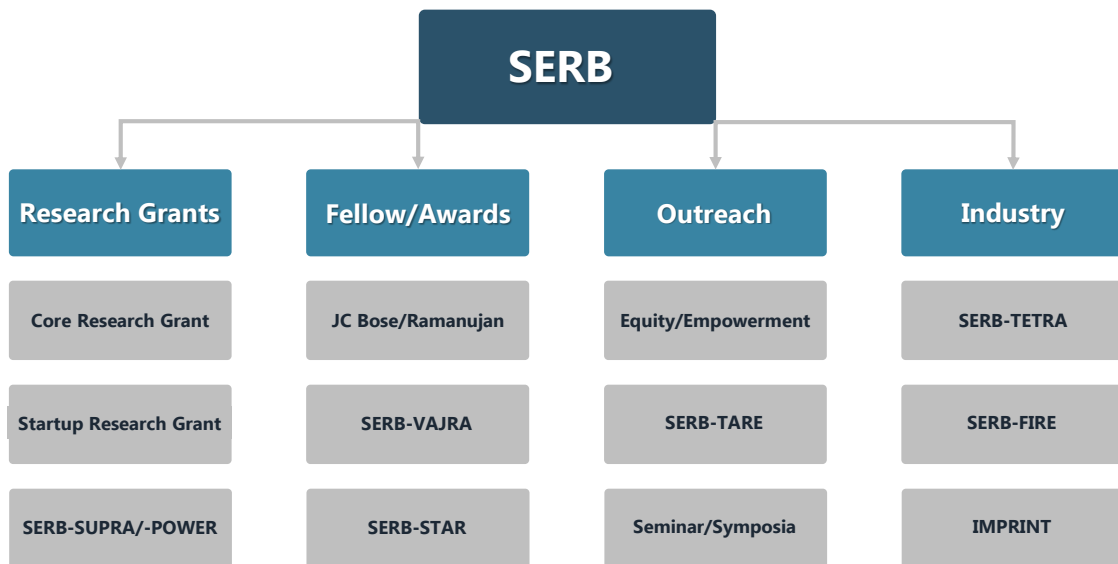
Versatile management system for research funding, monitoring and evaluation

Modern science management practices: ~100,000 PIs, @serbonline transactions for projects

Synergy between academic institutions, R&D laboratories and industry: multiple programs, awards, fellowships, travel and conference support

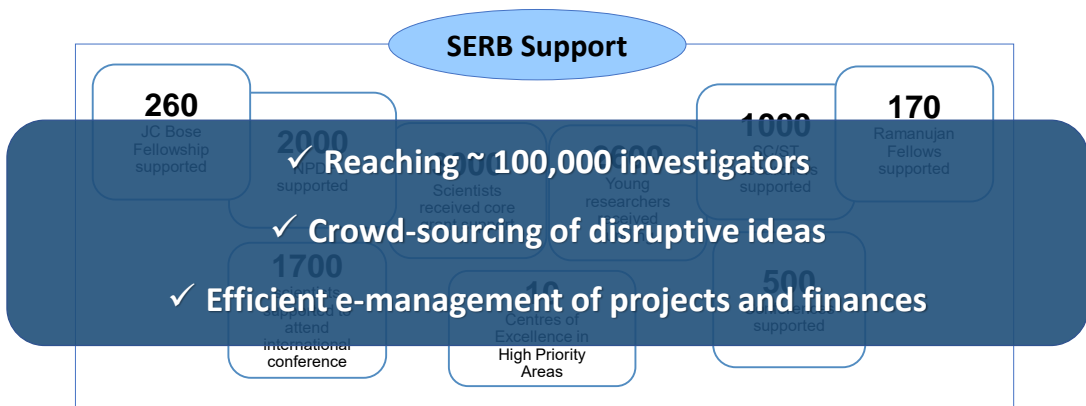


Research Schemes Portfolio

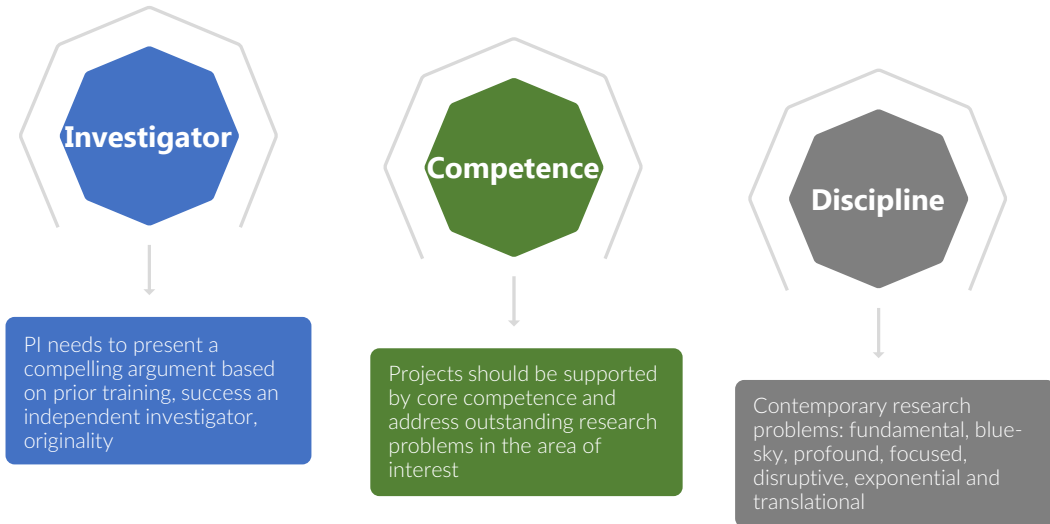


(2018-19)

- Number of Submissions \approx 28,000
- Number of New Projects/Fellowships \approx 3,400
- Number of Sanctions $>$ 13,000



Extramural Projects



Audience Survey Question

ANSWER THE QUESTION ON BLUE SCREEN IN ONE MOMENT



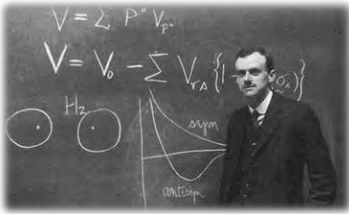
Where are you in the project lifecycle?

- Conceptualizing the project
- Writing the project
- Managing the project
- Closing the project
- Not applicable



** If your answer differs greatly from the choices above tell us in the chat!*

Project Lifecycle



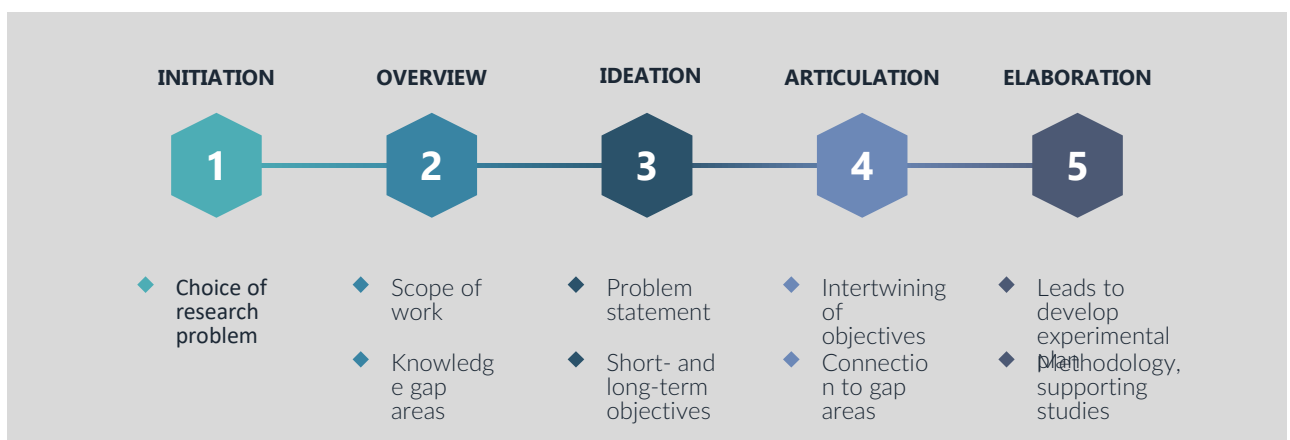
“The measure of greatness in a scientific idea is the extent to which it stimulates thought and opens up new lines of research.”

- Paul Dirac (Nobel Prize 1933, Physics)

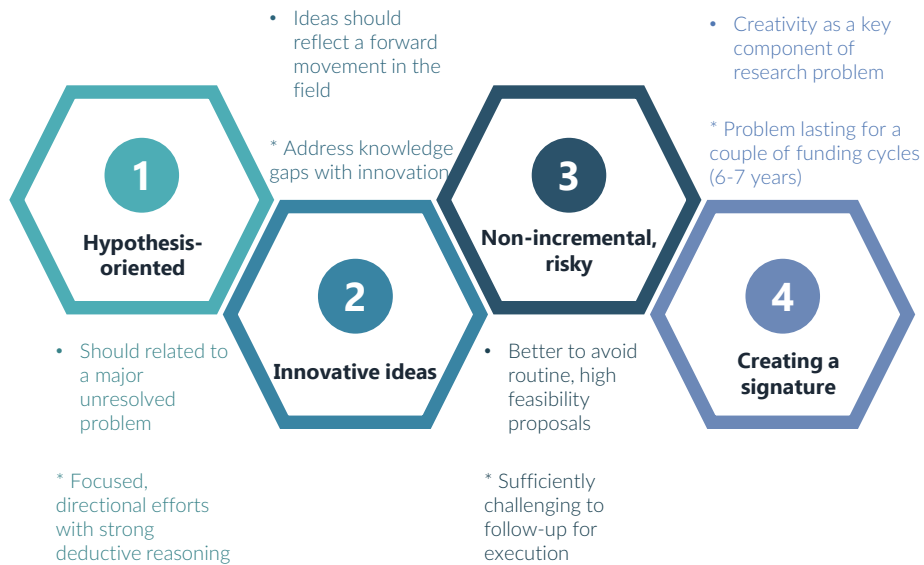


- Ideas and concepts are key to successful research
- Originality of proposed problem, novelty/relevance at national and global level

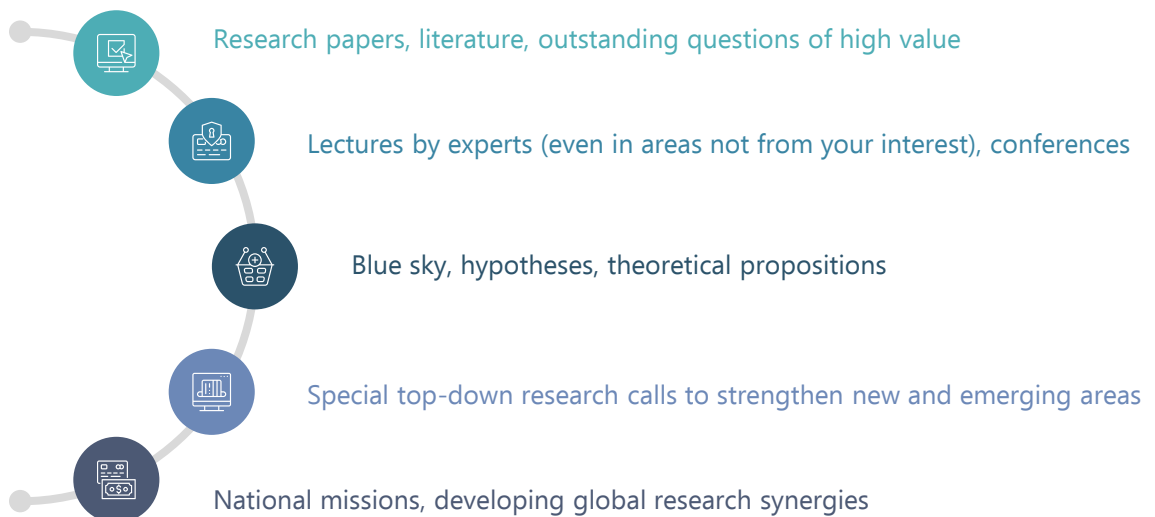
Project Writing: Conceptualization



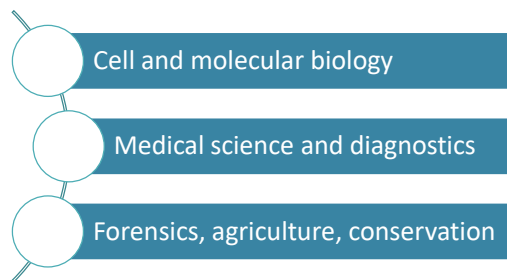
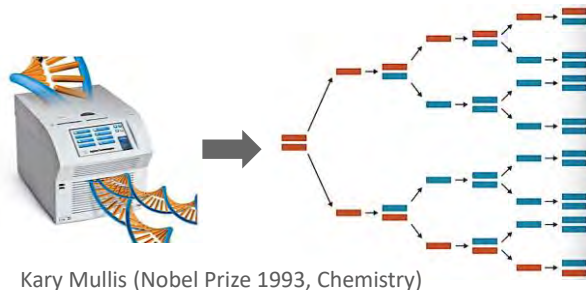
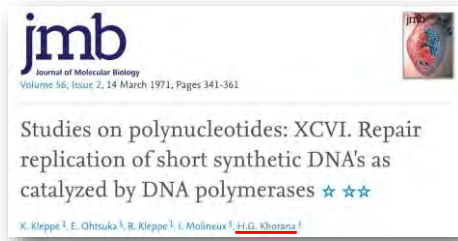
Searching for a Research Problem



Sources of Ideas/Problems



Question: DNA Amplification; Idea: Polymerase Chain Reaction 21



Project Lifecycle 22



"All outstanding work, in art as well as in science, results from immense zeal applied to a great idea." – Santiago Ramón y Cajal (Nobel Prize 1906, Physiology or Medicine)



- Introducing, explaining and justifying research problem
- Timeline of worldview, evidence-based approach

Beginning to Write: Reviewer is your Audience



Take-Home Messages from a New Proposal

Proposal must convince that objectives are worthy, competence is unquestionable, and workplan is robust



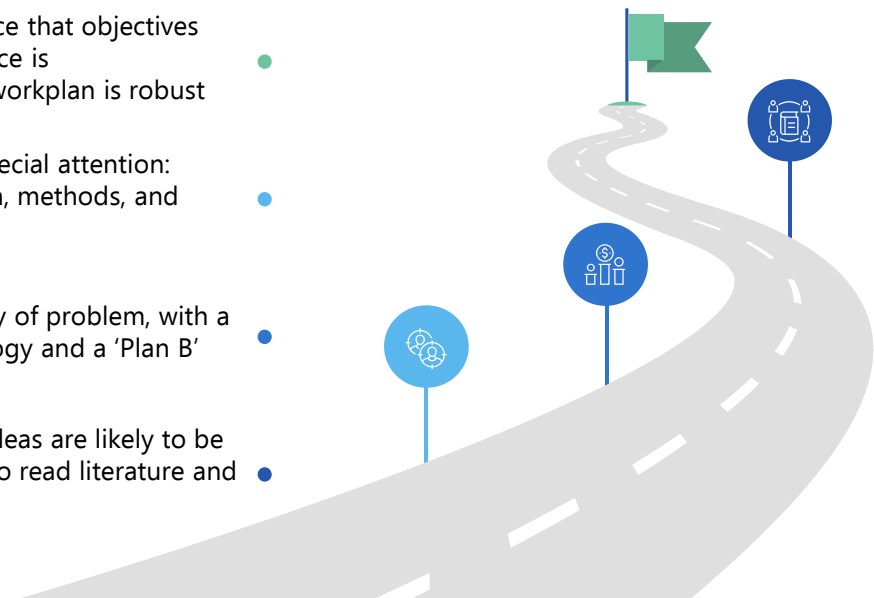
Key elements need special attention: modern problem, plan, methods, and deliverables



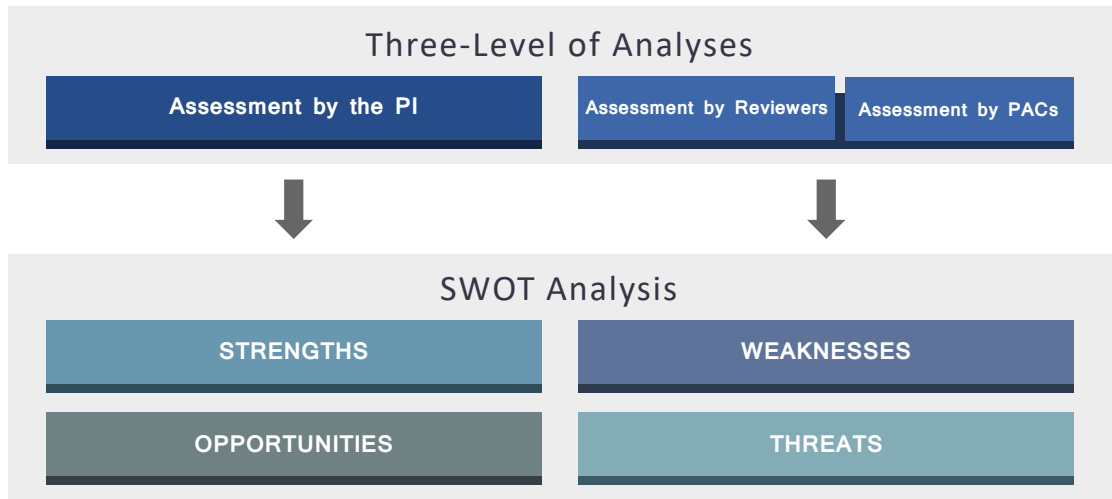
Novelty and originality of problem, with a convincing methodology and a 'Plan B'



Poorly written good ideas are likely to be rejected, spend time to read literature and connect the dots



Realistic Analysis of Research Projects (SERB)



Project Lifecycle

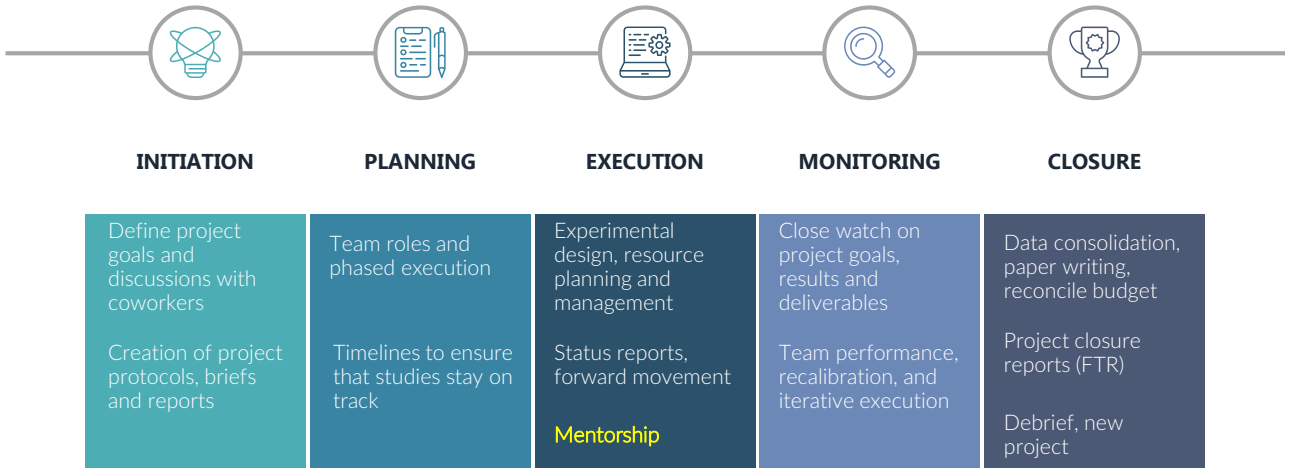


“If you know you are on the right track, if you have this inner knowledge, then nobody can turn you off... no matter what they say.” – Barbara McClintock (Nobel Prize 1983, Physiology or Medicine)

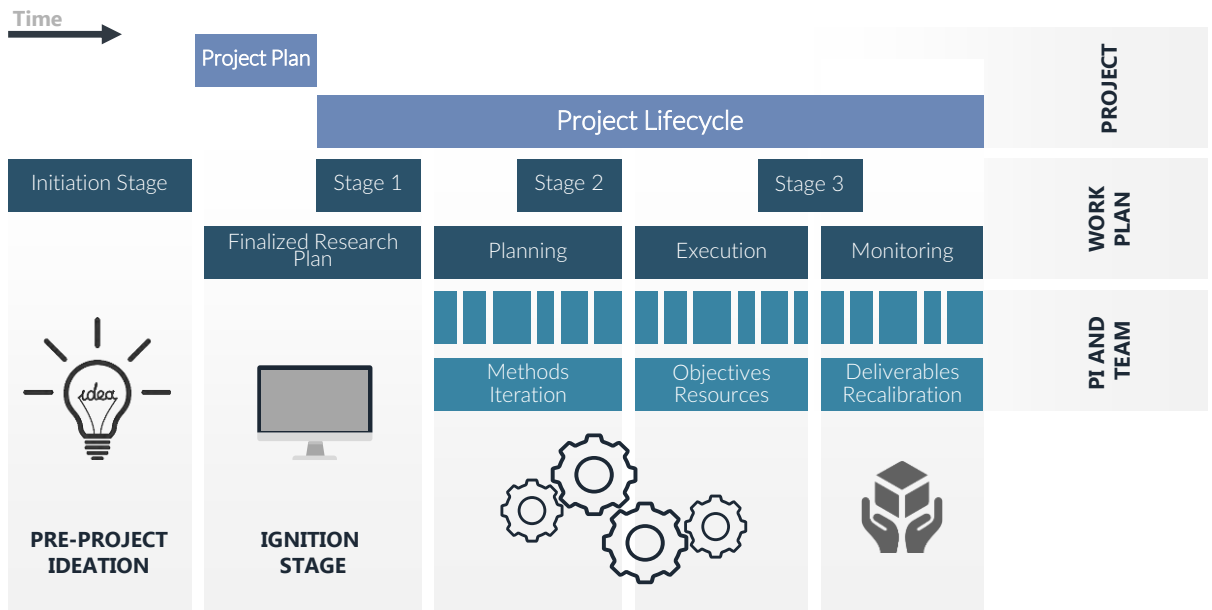


- Establish a baseline, assess half-yearly performance using realistic tracking parameters
- Benchmarking of outputs, nimble movement to ‘Plan B’ for successful execution

Managing a Funded Project



Research: Conceptualization and Implementation



SERB (India): Project Decision Path

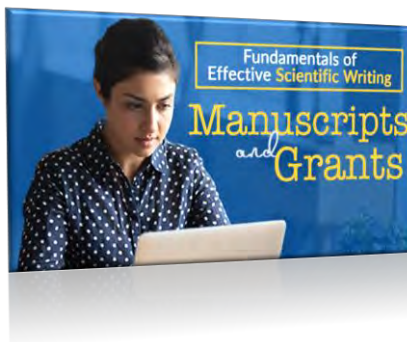
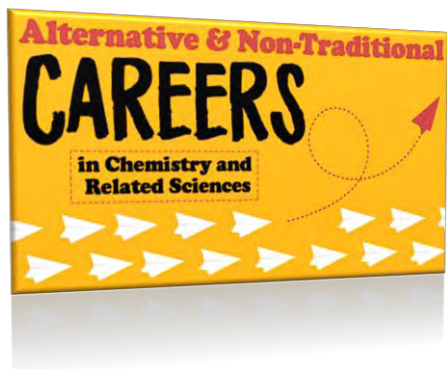


"Research is creating new knowledge" - Neil Armstrong

Thank you! Good luck with your projects!

Questions??

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Pidilite Industries
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Department of
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Research Projects: Conceptualisation to Implementation



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Secretary, Science and Engineering Research
Board, DST, Govt. of India



Dr. Deeksha Gupta
Associate Director-India,
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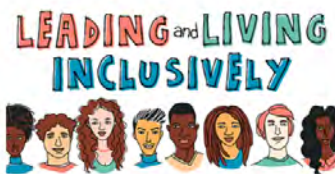
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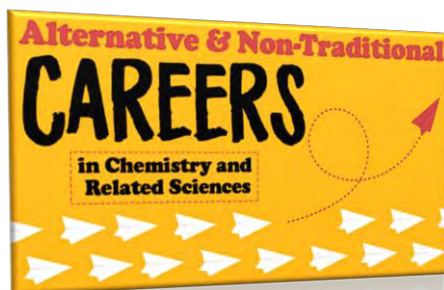
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