



Best Practice – II

Ecosystem to Advance Scientific Social Responsibility (SSR)

➤ Objectives:

The Practice draws upon the framework and principles of the Department of Science and Technology (DST) Scientific Social Responsibility (SSR) Guidelines (2022) with these objectives:

- Facilitate transfer of scientific knowledge and resources to society
- Cultivate a culture of social responsibility and ethical engagement within the scientific community
- Enhance the capacity and capability of marginalised sections of society through scientific interventions
- Promote optimal utilization of existing scientific infrastructure and human resources for societal needs
- Encourage the development of innovative solutions and entrepreneurial activities with social impact
- Enhance the social reputation and public trust in science and University

➤ The Context:

- Situated in Chhattisgarh, a region marked by specific developmental challenges and opportunities, the university recognises its ethical obligation to extend the benefits of scientific inquiry to underserved populations
- Bridge the existing gap between scientific advancements and societal needs
- Cultivate robust inter- and transdisciplinary research ecosystems to address this imperative

- Synergize diverse expertise and resources within the University and with external stakeholders, including local communities, government agencies, and non-governmental organizations
- By fostering collaboration, a seamless translation of scientific knowledge and technological solutions to address pressing social issues
- Empower marginalised communities and promote sustainable development within Chhattisgarh and beyond
- Align with the constitutional mandate to foster a scientific temper amongst citizens
- Enhance public trust in science and amplify the social impact of the University's endeavors

➤ **The Practice:**

- The practice involves a multifaceted approach to nurture an ecosystem for interdisciplinary research and collaboration with tangible applications for societal benefit. **The Fintech Project**, an interdisciplinary initiative focuses on developing accessible and user-friendly financial technology solutions tailored to the needs of tribal populations to enhance financial inclusion, promote economic empowerment, and contribute to sustainable livelihoods within the region.
- **Visits of faculty members to schools** further strengthen community engagement and knowledge dissemination. These visits serve as platforms to share expertise, conduct awareness programs on pertinent scientific and technological advancements, understand grassroots challenges, and identify potential areas to address community needs. It also serves as an inspiration for school children to pursue their higher studies in basic sciences. Conversely, the University encourages **Visits of school and college students to Campus/Labs** to provide young minds with first hand exposure to the exciting world of scientific research, igniting curiosity, fostering a scientific temper and hands on experience.
- To cultivate a culture of innovation and problem-solving with a social conscience, the Institution Innovation Council organizes **Innovation and Ideation Challenges**. These events provide a platform for students and faculty to collaboratively brainstorm and develop innovative solutions to pressing social, economic, and environmental challenges. Winning ideas

are provided with mentorship and resources to facilitate their translation into tangible solutions with real-world impact.

- The faculty members participate on **television shows and interviews**. These interactions demystify complex scientific concepts, raise awareness about important issues, and foster informed public discourse on science and technology.
- **Public Outreach Lectures** are conducted through invited experts and alumni on topics of scientific developments and their societal relevance. By making scientific knowledge accessible to a wider audience, the University strives to enhance public trust in science and its potential to contribute to societal progress.
- Faculty members contribute **popular science articles** for newsletters. Science promotion activities are also conducted regularly. On the occasion of 75th Year of India's Independence, "Azadi Ka Amrit Mahotsav", a celebration was witnessed at 75 locations across the India, including a Science Fest at PRSU with hands-on experiments, and science lit activities such as visit to science expo, competitions, science live demonstrations, science films, and rallies.

Through these interconnected initiatives, the University is actively building a robust research ecosystem that prioritizes scientific social responsibility, ensuring that our research endeavors are not only academically rigorous but also deeply impactful and contribute meaningfully to the well-being and sustainable development of Chhattisgarh and beyond.

➤ **Evidence of Success:**

The institution's practice to advance Scientific Social Responsibility demonstrates tangible success through:

- Interdisciplinary collaboration, exemplified by the Fintech Project, unites diverse expertise (from biotechnology, chemistry, computer science, economics, electronics, pharmacy, physics and sociology) to develop accessible financial solutions for tribal communities.
- Preliminary data indicates promising early adoption of Fintech solutions, suggesting improved financial literacy and access to economic opportunities within local circles.

- Anecdotal reports of faculty and student-led outreach initiatives to local communities and schools have enhanced their awareness of scientific principles and technological advancements.
- Visits of school children to campus laboratories have sparked enthusiasm for basic science disciplines. There is increased enrolment inquiries and participation in university-organized science events.
- The Institution Innovation Council's Ideathon competitions have proven fertile ground for generating commercially viable ideas and there is increased interest fostered by these events.
- Public outreach via expert lectures and television shows has broadened the dissemination of scientific knowledge beyond academic boundaries.
- Enthusiastic participation in science promotion events underscores community engagement.
- Shared research resources have facilitated interdisciplinary networking and novel collaborations. The emergence of novel research avenues transcending disciplinary silos is evident.
- This interconnected ecosystem is demonstrably fostering impactful research contributing to well-being and sustainable development of Chhattisgarh and beyond.

➤ **Problems Encountered and Resources Required:**

- Bridging established departmental silos, fostering a culture of collaboration across diverse academic cultures
- Significant time and effort required from faculty members in addition to their existing teaching, administrative and research responsibilities
- Logistical challenges in organizing and executing visits related to transportation, accommodation and communication.
- Connecting with tribal population, who often find difficult to integrate with urban populations
- Maintaining long-term, meaningful engagement with local communities require consistent effort, trust-building and a deep understanding of their evolving needs.
- To ensure that our research and outreach efforts remain relevant and impactful over time is an ongoing challenge.

- Ensuring adequate and equitable resource allocation and recognition for interdisciplinary work.
- Developing appropriate evaluation metrics for quantifying long-term societal impact
- recognize and reward interdisciplinary contributions of the faculty members

Link to the relevant documents:

1. Ecosystem to advance scientific social responsibility- [Click Here](#)
2. Fintech Projects - [Click Here](#)