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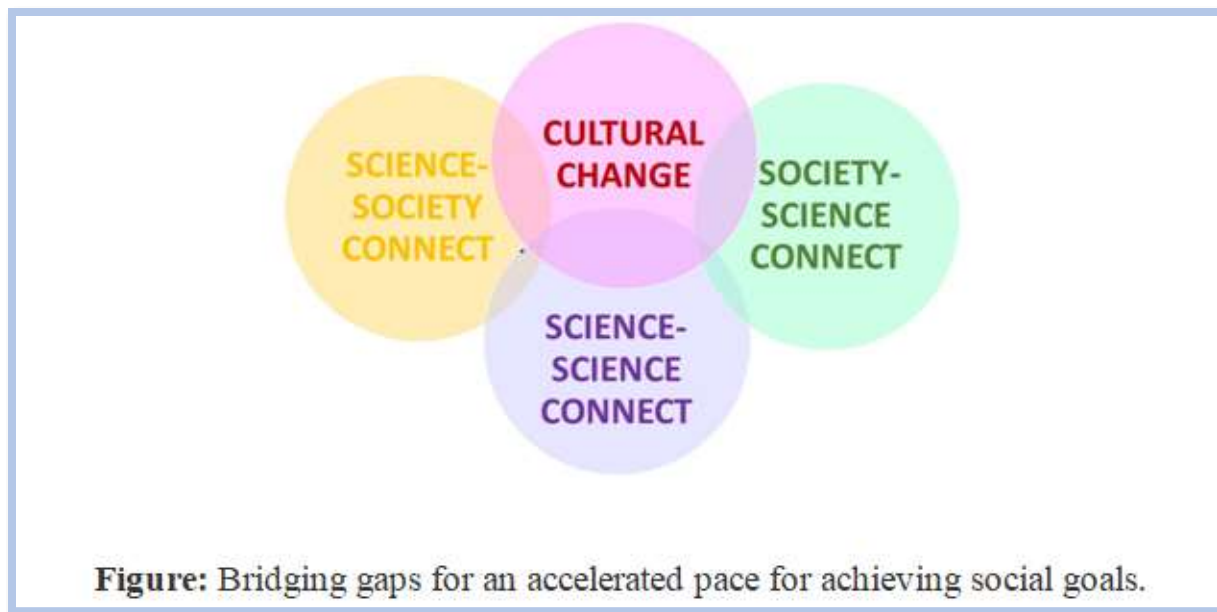
## Institutional Distinctiveness

### “Nurturing Scientific Temper as a Vehicle for Societal Transformation: RISE WITH ALL”

Article 51A of the Indian Constitution mentions that, *“It shall be the duty of every citizen of India to develop the scientific temper, humanism and the spirit of inquiry and reform.”* Scientific temper refers to **an attitude of logical, rational and scientific thinking**. Scientific temper entails employing a methodical approach in decision-making, repeatedly observing and verifying before hypothesizing. It's **not just a need but an essential requirement**.

As Nelson Mandela has quoted, **“Education is the best tool to change the world”** and visioning transformation through **Education 5.0 to Society 5.0** as focussed by the institutional vision and mission, we cherish our deep-rooted legacy of **giving back** to society and inspire our Gen Z and generations to come to be **value-based and scientifically oriented** to contribute positively towards national development. With a clear policy of **Institutional Scientific Social Responsibility (ISSR)**, it applies **scientific knowledge to societal progress**. By nurturing inquiry and innovation, it contributes to citizens' well-being and national sustainable development goals.

**Fostering scientific temperament in daily social interactions bridges gaps between science and society, enhancing trust and partnership. Accelerating science's role in social goals through responsible engagement.**



Promoting rational scientific temper, we engage in departmental and extension activities. Students contribute with a scientific approach for societal causes, fostering **positive behavior support** and **community impact**:

1. **“Research Studies on Unknown Foul Odour of Indore City-2019”**: The probable reasons were investigated and reported.
2. Brainstorming sessions are organized on themes such as **“Water and Environmental Crisis of Indore City”**, **“Rejuvenation of Rivers, conservation of water resources and Artificial recharge rainwater harvesting”** are conducted for finding out the probable solutions to the problem.
3. **“Microbial analysis of Water samples from different locations on GHSC campus”**: To provide facility of safe and healthy drinking water in college campus.
4. **“Biodiversity and Concentration of Airborne Fungi in different locations of Indore city”**: Studying Indore's outdoor air mycoflora and their link to allergic conditions.
5. **Khan River water analysis.**
- 6.
7. **Food adulteration** addressed through **lab tests and public rally**: Lectures raise awareness about consumer rights and government support for consumer forums in **"JAGO GRAHAK JAGO CAMPAIGN"**.

8. **Mass Rally** with the stewardship of **Noble Laureate Kailash Satyarthi ji** for rights of Women & Children was a major event.
9. **Research studies on reasons of red water** coming out of tube well at village Asrawad Bujurg and reporting it to Govt, Agencies.
10. Celebrating **Scientific Temperament Week** with the theme: **Integrating the Power of Science for Inclusive & Sustainable Development.**
11. In 2022, the **International Year of Basic Sciences (IYBSSD2022)** marked by the UN General Assembly-inspired activities promoting balanced, sustainable development. **Basic sciences with its spirit of inquiry** addressing crucial challenges like **food, water, energy, health, and communication** access and impact.
12. Special Lectures by Subject Experts are conducted for students on **“Scientific outlook and Awareness”**.
13. **Practical demonstrations for knowledge as well as skill enhancement**, and nurturing employability skills.
14. **International Year of Glass-2022** was celebrated with an exhibition organized for students of schools and colleges displaying old glassware and equipment alongside modern scientific trends and advanced equipment, fostering learning and appreciation.
15. To propagate the scientific temper with the perspective of self-reliant Madhya Pradesh and India and develop an ecosystem for traditional and modern sciences, the institution takes part in a **swadeshi fest like Madhya Pradesh Vigyan Sammelan and Pradarshini (MPVS-2021)** in collaborative efforts with leading technical institutions like IITs & SGSITS.
16. **Celebrations of national and international Scientific events for the promotion of scientific attitude into scientific altitude** with global perspective such as **International Year of Artisanal Fisheries and Aquaculture, International Year of Family, Global Women’s Breakfast** by IUPAC, etc.
17. **Outreach activities for fulfilling social responsibility are also propagated through a scientific perspective.** Blood donation camps, Health check-up camps, cleanliness, discussing nutritional challenges and women-centric well-being, COVID-19 protective

activities, and heritage awareness activities are organized for infusing scientific temperament into day-to-day social existence and interaction.

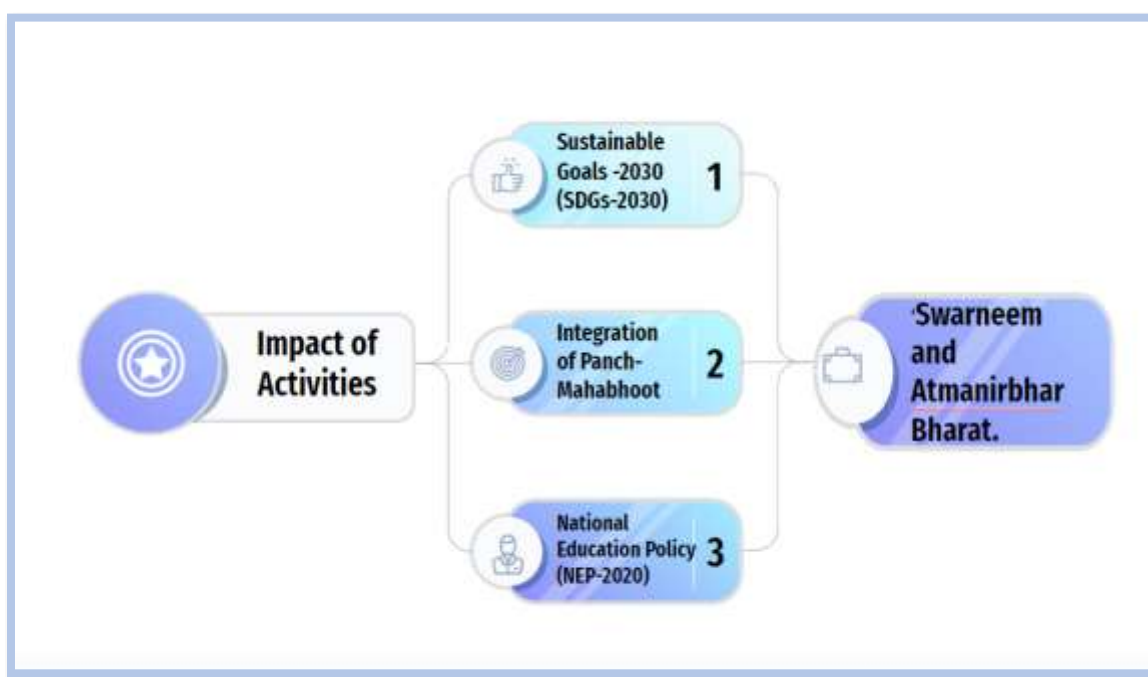
18. Through departmental seminars, **educational/field/industrial visits** and other associated activities, it not only infuse curiosity among students but also **demonstrate the importance linkage of Basic Sciences with the Technology**.
19. Institution being **associated with national portals** like **Indian Science, Technology and Engineering facilities Map (I-STEM)**, **Institution Innovation Council (IIC)**, **Atal Ranking of Institutions on Innovation Achievements (ARIIA)**, is a step to enable better application of research and incubation of innovations.
20. Activities like **“Bhuvismvad”** Academic Interactive Programme are conducted regularly.
21. **Role plays** are regularly organized to have better **understanding of the scientific concepts**.
22. Students learn about "waste to wealth" through webinars and practical sessions, grasping the importance of waste management and understand **“When you refuse to reuse, it’s the Earth you abuse”**.
23. **Value-added courses are designed** in such a way so as to give the students **latest knowledge regarding science and technology**.
24. Setting up of a **live-open Laboratory** to educate students and nature lovers. It is also acting as research field station for researchers working on animal-plant diversity, environment impact on life forms, pollution etc.
25. Creation of **Documentary films** such as Struggle for Survival, Ants, and A Women like me are made by the faculties, popular articles, and creations of students in the form of books that showcases the scientific perspective of the problem.
26. Participating in **Energy literacy drives** through **USHA App. of M.P. Urja Vikas Nigam Ltd**, and organizing **assembly workshops on Solar Energy based products** through the kits provided by **Energy Swaraj Foundation**, **assembling LED Diyas**, Programmes are organized by **Urja Club** exists under the aegis of **Lifestyle for the Environment (LIFE)** not

only creates awareness about conservation and sustainability of energy, but ensures their participation in the process.

27. Preparing various articles such as manure from waste, ornamental plants, phenyl, surf, alovera gel, LED diya. for 'Udyamita Shivir', mushrooms etc., packaging and selling them provides a **scientific outlook to the procedural inputs from production to marketing.**

### Impact:

*Nurturing Scientific Temperament has lead to the nurturing of Pancha-mahabhuta for Sustainable Development at institutional level.*



As a dedicated Science Education Institution, **redefining and relocating the pride of our ancient scientific principles and learning system and reconnect it with modern education system** and integrating them into modern education is vital. Connecting with SDGs-2030 and NEP-2020, multidisciplinary research explores the **interdependence of Panch-Mahabhoot (five elements) – [Akash (Space), Vayu (Air), Agni (Fire/Energy), Jal (Water), Prithvi (Earth)]** – for balance and sustainable development. The institution consistently fosters experiential, research-oriented

learning to create a **scientifically empowered community**, contributing to an **Swarneem and Atmanirbhar Bharat'** and fulfilling our **collective vision of progress**.

