



International Conference

September 12-13, 2024 (Hybrid mode)

Department of Criminology and Forensic Science &
Department of Commerce

Doctor Harisingh Gour Vishwavidyalaya, Sagar, M.P. &

Indian Accounting Association, Sagar Branch

Organizes

**“Environmental Sustainability, Green Technologies,
Innovations and Start-up Ventures on and beyond Earth”**

Chief Patron



Prof. Neelima Gupta,
Vice Chancellor

**Technical Session Dedicated To
Start-Up Ventures: Innovations & Sustainability**

Date 13th September, 2024

Time: 10:00 A.M.



Director

Prof. J.K. Jain
Head,
Department of Commerce
Joint secretary IAA

Discounted Registration Fee for Participants from Social Sciences

	Offline	Online
Faculty Members	₹900	₹500
Research Scholars	₹600	₹300
Students	₹500	₹250
Foreign Delegates	\$50	\$30

For Registration: [Click Here](#) or Scan



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Register

Website: [//esgris2024.sciencesconf.org/](http://esgris2024.sciencesconf.org/)

Accommodation if required may be arranged on payment basis for the registered participant subject to availability at early come basis. For accommodation participant may contact at:

com.dhgsu@gmail.com; 9827324900, 7974495695



Convenor and Organising Secretary

Dr. Vandana Vinayak
Assistant Professor

Department of Criminology and Forensic Science
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CEFIPRA



Co-Convenor
Dr. Rupali Saini
Assistant Professor
Department of Commerce
School of Commerce and
Management



Co-Convenor
Dr. Harish
Assistant Professor
Department of Botany
Mohan Lal Sukhadia University
Udaipur, Rajasthan, India

REPORT
On
International Conference
On
**"Environmental Sustainability, Green Technologies,
Innovations and Start-up Ventures on and beyond
Earth"**

Technical Session
Dedicated To
Start-Up Ventures: Innovations & Sustainability

Organised By
**Department of Criminology and Forensic Science &
Department of Commerce**
Doctor Harisingh Gour Vishwavidyalaya, Sagar, M.P.
(A CENTRAL UNIVERSITY)

In Association With
Indian Accounting Association, Sagar Branch
September 12-13, 2024 (Hybrid mode)
VENUE: Abhimanch Auditorium

Chief Patron: Prof. Neelima Gupta, Hon'ble Vice Chancellor, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.

Director: Prof. J.K. Jain, Head of Department of Commerce, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh. **Joint secretary IAA**

Convenor and Organising Secretary: Dr. Vandana Vinayak, Assistant Professor Department of Criminology and Forensic Science

Co-Convenor: Dr. Rupali Saini, Assistant Professor, Department of Commerce, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.

Co-Convenor: Dr. Harish Assistant Professor Department of Botany, Mohan Lal Sukhadia University Udaipur, Rajasthan, India

Day 1

The International Conference on Environmental Sustainability, Green Technologies, Innovation & Start-Up Ventures on and Beyond Earth brought together experts, innovators, and thought leaders from across the globe to discuss crucial topics related to sustainability. The event highlighted the importance of collaborative research, innovative technologies, and sustainable ventures for addressing pressing environmental challenges. This report provides an overview of the key remarks delivered by the distinguished participants during each session of the conference.

Date	Session	Name
	Inaugural Session	Time-10 AM-11:30AM
12 September 2024	Sarasvati Vandana Gour Charan Vandana	All delegates
	Chairperson	Hon'ble Vice Chancellor Col. (Prof.) Neelima Gupta
	Distinguished Chair	Prof. Ashok Pandey , Executive Director, Centre for Energy and Environmental Sustainability-India, Lucknow.
	Chief Guest	Prof. Benoit Schoefs , Director Natural Sciences University Le Mans, France
	Guest of Honor	Prof. P.R Agarwal , Former Vice Chancellor Veer Bahadur Singh Purvanchal University
	Other Dignitaries on Dias	HOD Commerce Prof JK Jain (Director ESGRIS 2024) HOD Criminology and Forensic Science Prof. Mamta Patel (Director ESGRIS 2024)

The conference commenced with the **Sarasvati Vandana**, a traditional invocation performed by all delegates, honoring Goddess Saraswati, the deity of knowledge, wisdom, and learning. This moment of collective reverence fostered a spirit of unity and purpose among participants, setting a positive tone for the discussions ahead. By seeking divine blessings for enlightenment and creativity, the delegates emphasized the critical role of knowledge in addressing the pressing environmental issues facing our world today.

The inaugural session set the stage for the conference, welcoming delegates from various fields to engage in discussions on environmental sustainability and innovation. Esteemed speakers shared their insights on the significance of collaborative efforts in addressing global challenges related to sustainability. The session featured notable dignitaries who emphasized the urgency of integrating green technologies into our developmental frameworks.

Hon'ble Vice Chancellor Col. (Prof.) Neelima Gupta emphasized the importance of innovative thinking and collaboration to address environmental sustainability both on Earth and beyond. She highlighted that "the future is in our hands, and it is up to us to take action for a sustainable planet."

Prof. Ashok Pandey spoke about the key role of green technologies in shaping a resilient future. He stated, "We must ensure that our innovations respect the delicate balance of our ecosystems while addressing energy needs effectively."

Prof. Benoit Schoefs underlined the necessity of green technologies and sustainable ventures. "The development of green technologies is not just an option; it's a necessity," he said, urging everyone to work towards creating a lasting impact.

Prof. P.R. Agarwal addressed the need for sustainable growth and innovation. He stated, "As researchers and innovators, we have the responsibility to guide humanity toward a more sustainable future."

	Plenary Session-I	Time- 12 PM-1:15 PM (OFFLINE)
12 September, 2024	Distinguished Speaker & Chairperson	Prof. Benoit Schoefs University Le Mans, France
	Invited Speaker & Co-Chairperson	Prof. Felix Bast , Central University of Punjab,Bhatinda
	Invited Speaker	Dr. Mona Sharma , Central University of Haryana
	Floral welcome of Dignitaries	Prof. Mamta Patel ,

The first plenary session focused on the role of academic and research institutions in advancing sustainability initiatives. Distinguished speakers shared their perspectives on the international collaboration required to tackle environmental challenges. This session aimed to inspire participants to explore new avenues for innovation and cooperation in the field of green technologies, highlighting the importance of a unified approach to sustainable development.

Prof. Benoit Schoefs emphasized the international nature of environmental sustainability, stating, "It's an endeavor that requires contributions from every corner of the world, whether scientific, technological, or social."

Prof. Felix Bast discussed the urgency of climate change and the need for rapid innovation. "We must invest in sustainable initiatives and work on solutions that benefit not just us, but future generations," he stated.

Dr. Mona Sharma stressed the importance of interdisciplinary collaboration. "Through this conference, we have the opportunity to explore different perspectives and forge new paths for green technologies," she said.

	Technical Session-I	Time- 1:15 PM-2:30 PM (ONLINE)
12 September 2024	Distinguished Speaker & Chairperson	Prof. K. Mohanty , IIT Guwahati
	Invited Speaker & Co-Chairperson	Dr Justine Marchand online, University Le Mans, France

Technical Session-I delved into the latest advancements in green technologies and their practical applications. The session featured experts discussing innovative solutions to reduce environmental impact and enhance sustainability in various sectors. Participants engaged in meaningful discussions on the challenges and opportunities presented by emerging technologies, emphasizing the need for ongoing research and development in this crucial area. **Prof. K. Mohanty** spoke on the significance of green technology innovation in reducing our environmental footprint. He asserted, "The time is now to push for advancements in renewable energy and sustainable practices."

Dr. Justine Marchand highlighted the complex nature of environmental challenges and the need for collaborative research. "Only through innovative technologies can we address these global issues," she said.

	Technical Session-II	Time- 3:30 PM-4:45 PM (OFFLINE)
12 September, 2024	Invited Speaker & Chairperson	Dr Sovik Das, IIT Delhi
	Invited Speaker & co-Chairperson	Dr Ashok Nadda, JUIT, Solan
	Invited Speaker	Prof Archana Tiwari Amity University Noida

In Technical Session-II, speakers addressed specific challenges and solutions related to environmental sustainability in various domains. The session showcased interdisciplinary approaches that incorporate technological advancements to address real-world problems. Experts shared their insights on the importance of fostering innovation in sustainable practices and the collaborative efforts needed to implement these solutions effectively.

Dr. Sovik Das pointed out that technological advancements must align with sustainability goals. "By innovating responsibly, we can ensure that our development efforts do not compromise the environment for future generations," he remarked.

Dr. Ashok Nadda emphasized the role of green technologies in reducing the carbon footprint. He said, "We must foster an ecosystem of innovation that supports sustainable ventures."

Prof. Archana Tiwari stressed the need for sustainability and innovation to go hand-in-hand. "The key lies in developing technologies that promote resource efficiency and environmental preservation," she stated.

	Technical Session-II	Time- 4:35 PM-6:00 PM Online
12 September, 2024	Invited Speaker	Dr Alok Patel , Luleå University of Technology Sweden
	Invited Speaker	Prof Chris Bowler, IBENS – ENS, Paris
	Distinguished Speaker	Prof Richard Gordon Retired from university of Manitoba, Canada

The afternoon session featured a series of invited speakers who presented their research and insights on environmental sustainability and innovation. This session highlighted diverse perspectives from academia and industry, exploring cutting-edge technologies and their potential impact on sustainability. The discussions underscored the significance of global collaboration and the need for innovative approaches to overcome environmental challenges.

Dr. Alok Patel highlighted the importance of global collaboration for sustainability. He stated, "By working together across disciplines and borders, we can create solutions that are practical, scalable, and impactful."

Prof. Chris Bowler discussed the dual focus of research on both technological advancement and environmental impact. "Our innovations must leave a positive imprint on the planet," he emphasized.

Prof. Richard Gordon spoke about extending the scope of sustainability beyond Earth. He said, "By looking toward other planets and exploring space, we may find new approaches and solutions to the environmental problems we face today."

The conference program included a series of oral talks and poster presentations by researchers and practitioners. The oral talks provided an opportunity for participants to share their latest research findings, technological advancements, and innovative solutions for sustainability. The poster presentations showcased a diverse range of topics, including green technologies, environmental protection strategies, and start-up ventures focused on sustainable development. These interactive sessions fostered discussions among attendees, encouraging knowledge exchange and collaboration on projects aimed at addressing environmental challenges and promoting green innovation both on Earth and beyond.

The session ended with a thoughtful discussion on how public policy, science, and community involvement can collectively drive impactful change towards a sustainable future.

Day 2

Inaugural Session

The inaugural session began at 10.00 A.M

- **Chairperson & Chief Patron:** Professor Neelima Gupta, honourable Vice Chancellor.
- **Chief Guest:** Prof Benoit Schoefs, Director Natural Sciences University Le Mans, France
- **Guest of Honor:** Prof P.R Agarwal, Former Vice Chancellor Veer Bahadur Singh Purvanchal University
- **Keynote Speaker:** Prof. Ranjan Kumar Bal, Vice Chancellor, ASBN University

The report highlights the International Conference on **Environmental Sustainability, Green Technologies, Innovation & Start-Up Ventures on and Beyond Earth** brought together experts, researchers, and entrepreneurs to discuss the future of sustainable innovation both on Earth and in space. It aimed to focus on economic transitions across various eras, from the

agricultural age to the current digital and knowledge economies and also discussed the National Education Policy (NEP) 2020 in India, highlighting its potential to boost entrepreneurial development and innovation in education. It explored the evolving startup ecosystem in India, emphasizing the importance of green technologies and sustainable solutions in addressing global environmental challenges.

The session commenced with the ceremonial lighting of a lamp before Goddess Saraswati and Doctor Harisingh Gour. Prof. J.K. Jain, the director and Head of the Department of Commerce, heartily welcomed all the attendees and introduced the esteemed chief guest Prof Benoit Schoefs, Guest of Honor Prof P.R Agarwal, Keynote Speaker Prof. R. K. Bal, and all the members of the organising committee.

A significant milestone was achieved during the two-day International Seminar with the inaugural of the much-anticipated book *"Sustainable Accounting and Finance,"* edited by Prof. J.K. Jain, Co-edited by Dr. Sushama Yadav, Dr. Rupali Saini and Mr. Mohit Agrawal. Prof. Jain's book delves into the critical role of accounting and finance in fostering sustainable business practices, emphasizing the need for green investments and eco-friendly financial strategies. The book aims to inspire industry leaders to integrate sustainability into the core of financial decision-making.

After the inaugural session, Prof. R.K. Bal delivered a keynote speech titled *"Start-Up Ventures: Innovation & Sustainability,"* where he mentioned the projection of a \$15 Trillion economy for India by 2047, driven by emerging startups. He discussed several key challenges faced by startups, including securing venture capital funding, talent acquisition and retention, maintaining positive cash flow amidst funds mismanagement, navigating complex regulations and compliance, and ensuring infrastructure through an enabling ecosystem like industrial parks. He also emphasized risk management and the need for robust market research. On the other hand, he highlighted the abundant opportunities for startups, such as leveraging disruptive innovations, accessing vast rural and global markets, utilizing technology, and fostering collaboration through backward and forward linkages.

Additionally, he noted that niche market segmentation, scalability, and the personal fulfilment of entrepreneurs, particularly from top institutions like IITs and IIMs, were key drivers of startup success. Noteworthy case studies such as Tesla in the electric vehicle industry, Patagonia's recycled outdoor clothing, and Impossible Foods' plant-based meat alternatives were used to exemplify how startups can innovate in ways that promote sustainability. Companies like PhonePe, Paytm, and Byju's demonstrated the massive potential of payment solutions and online education in transforming industries.

Prof. Bal also stressed the importance of focusing on sustainability, pointing out that 80-90% of startups fail within five years due to a lack of sustainable practices. He urged startups to consider their environmental and social impact, implement circular economy principles, and invest in research and development (R&D) to foster a greener future. In his recommendations, he called for government investments in ecosystem development, resilience, adaptability in business models, and following best practices to ensure long-term success.

In conclusion, Prof. Bal underscored the need to embed sustainability into the very core of business models, incorporating frameworks such as Triple Bottom Line Reporting (TBLR), Environmental, Social, and Governance (ESG) standards, and integrated reporting. Startups should actively seek greener alternatives and solutions, positioning themselves as distinct or risk becoming extinct. He further emphasized the importance of adaptability, resilience, and innovation, as the future demands that businesses either "perform or perish." Prof. Bal's rallying call— "*Ab India ka Bari Hai, Ab Startup ka Bari Hai*"—urges India's entrepreneurs to seize the moment and work towards achieving the dream of *Viksit Bharat@2047*, a developed and sustainable India by 2047. By embedding sustainable practices, leveraging innovative technologies, and pursuing scalable, market-driven solutions, startups can significantly contribute to shaping a thriving and environmentally conscious economy.

Guest of Honor, Prof. P.R. Agrawal's insightful presentation focused on the evolution of start-up ventures in India, particularly in relation to sustainability management. He divided the history of India's economy into two distinct eras: *1947-1991* and *1992-present*. The first era, from India's independence to economic liberalization, was characterized by protectionist policies and limited industrial growth. The period after 1992 marked the country's embrace of economic reforms, which opened the doors to foreign investment, privatization, and the rise of the startup ecosystem. He highlighted how these two phases have shaped India's entrepreneurial landscape.

One of the key areas Prof. Agrawal discussed was the *National Education Policy (NEP) 2020*. He emphasized its 22 foundational elements, which play a critical role in fostering entrepreneurship and innovation in India. These elements include promoting capability building, foundational literacy, critical thinking, flexibility, and multidisciplinary education. He underlined the importance of conceptual understanding, multilingualism, life skills, and inclusion as vital aspects of education reform. Moreover, he discussed how NEP 2020 aims to revitalize India's education system by focusing on assessment, diversity, research, and regulation, ensuring the education system is vibrant and connected to the public good.

Prof. Agrawal also explored the profound impact of the *COVID-19 pandemic*, particularly its effects on India's demographic and employment structures. The pandemic brought about a demographic shift, significantly impacting sectors such as agriculture, hospitality, construction, and transportation, which employ large portions of the informal workforce. These sectors, which remain mostly informal, faced job losses, disruptions in the supply chain, and a cascading effect on the economy. The informal economy was hit hardest, experiencing a chain of events that included high costs, reduced production, job losses, decreased incomes, and a drop in tax collections.

Moving to the topic of entrepreneurial development, Prof. Agrawal spoke about the transformation of the start-up landscape in India. He cited the *Flipkart-Walmart merger* as a prime example of how Indian startups can form beneficial partnerships with global corporations. He also highlighted the growing role of *Walmart's sourcing from India*, which has fostered a two-way economic exchange, benefiting both Indian MSMEs and the U.S. economy. This has enabled India's micro, small, and medium enterprises to scale up, contributing to export capacity and economic growth.

Additionally, Prof. Agrawal discussed the role of *IT and infrastructure* in supporting startups. He noted that the *Digital India* initiative has been instrumental in increasing network penetration and digitization, facilitating the growth of industries like fintech. He cited *Oxyzo Financial Services Ltd.*, a Gurgaon-based company that became India's 13th unicorn in 2022, as an example of how fintech startups are driving innovation by providing working capital solutions for SMEs.

The pandemic also caused a significant shift toward a *hybrid work culture*, where employees balance time between the office and working from home. This has become a lasting trend, particularly in sectors that employ informal workers. Prof. Agrawal compared this shift to previous revolutions in agriculture, such as the *White Revolution* and *Green Revolution*, which helped formalize previously informal sectors of the economy.

In conclusion, Prof. Agrawal presented the "Ten Commandments for Start-Ups," emphasizing the importance of sustainable growth, robust corporate governance, and mindful expansion. He advised startups to focus on Indian innovation, protect intellectual property, and prioritize long-term value creation over rapid scale. He also emphasized the importance of prudent mergers and acquisitions, regulatory compliance, and maintaining quality in products and services. This insightful talk provided a comprehensive understanding of the current and future challenges in India's startup ecosystem, offering valuable guidance for entrepreneurs navigating the complexities of a post-pandemic economy.

“After this session, all the guests and participants were informed about Technical Session 3, where participants delivered presentations covering a range of topics related to the overarching theme of 'Start-Up Ventures: Innovations & Sustainability.'”

Technical Session 3 began at 10.00 A.M.

Chairperson-Prof. Manvinder Singh Pahwa

Keynote Speaker- Prof. R.K. Bal, Hon'ble Vice Chancellor, ASBN University

- Ms. Asmita Khanna, Faculty Member, presented "Green Startups: Pioneering Sustainable Business Models in Emerging Markets." The study emphasizes how green startups in emerging markets innovate sustainable business models, address environmental issues, and drive change.
- Dr. Nidhi Srivastava, Faculty Member, discussed "Management of E-waste For Environmental Sustainability." Her research focused on effective e-waste management as a critical strategy for ensuring long-term environmental health.
- Vinay Kumar, Research Scholar, presented "The Role of Green Technologies in Startup Ventures: A Pathway to Environmental Sustainability." His study highlights how adopting green technologies in startups contributes to environmental sustainability efforts.
- Dr. Gagan Deep Chadhe, Faculty Member, explored "Technological Innovations by Startups for Circular Economy Implementation." The research examines how startups are leveraging technology to support circular economy practices by minimizing waste and enhancing resource efficiency.
- Dr. Ruma Pal, Faculty Member, discussed "Sustainable Marketing Practices for Start-Ups: Innovations Driving Eco-Friendly Consumer Choices." Her study reveals how startups use innovative marketing techniques to promote environmentally friendly consumer behavior.
- Dr. Chandni Sharma, Faculty Member, presented "Development of Agripreneurship as A Tool for Sustainable Food Security: A Study of Chhattisgarh." Her research explores how agripreneurship can enhance sustainable food security, especially in regions like Chhattisgarh.
- Cs. Surti Sharma, Research Scholar, presented "Biodiversity in Present Era: An Overview and Strategies for Environmental Sustainability." The study emphasizes biodiversity conservation as key to ensuring long-term environmental health.

- Shweta Chauhan, Research Scholar, discussed "Climate Changes and Its Impact on Financial Development." The research links climate change to disruptions in financial systems, showing how environmental changes hinder economic growth.
- Himanshu Maurya, Research Scholar, explored "A Study of Challenges Posed by Greenwashing to Environmental Sustainability." His findings highlight that greenwashing erodes consumer trust, hindering genuine sustainability efforts in businesses.
- Swetta Mohanty, Research Scholar, presented "Leveraging the Gig Economy for Innovation and Sustainable Development in India: Insights and Opportunities." The study reveals that the gig economy offers innovation opportunities that can drive sustainable development, particularly in India's context.
- Ritika Sharma, Faculty Member, discussed "Reassessing the Idea of Sustainable Consumption among Indian Consumers." Her research shows growing awareness of sustainable practices among consumers, though practical adoption remains uneven.
- Anuja Dhyani, Research Scholar, presented "Inclusive Protection: A Study on Digital Micro insurance And Financial Inclusion." Her research illustrates the importance of digital micro insurance in fostering financial inclusion, especially among low-income groups.
- Garima Sirohi, Faculty Member, presented "Assessing Women Empowerment in India: Findings from the National Family Health Survey (2022)." The study evaluates progress in women's empowerment, identifying significant advances, but also challenges in rural empowerment.

Valedictory Session began with the lighting of a lamp and Saraswati Vandana, including a tribute to Sir Dr. Harisingh Gour.

Chairperson: Prof. J.K. Jain Head, Dept. of Commerce, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.

Chairperson: Prof. Debashish Bose Head, Dept. of CFS, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.

Chief Guest: Prof. Benoit Schoefs Director, Natural Science University Le Mans, France

Guest of Honor: Prof. Chanda Ben, Proctor, Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.

Special Guest: Prof. P.R. Agrawal Former Vice Chancellor VBS Purvanchal University

The conference reporting was presented by Dr. Vandana Vinayak Assistant Professor
Department of Criminology and Forensic Science

And as came to the close of our valedictory ceremony, the best paper awards for academic
excellence and certificate distribution were done and all the cheerful moments were captured.

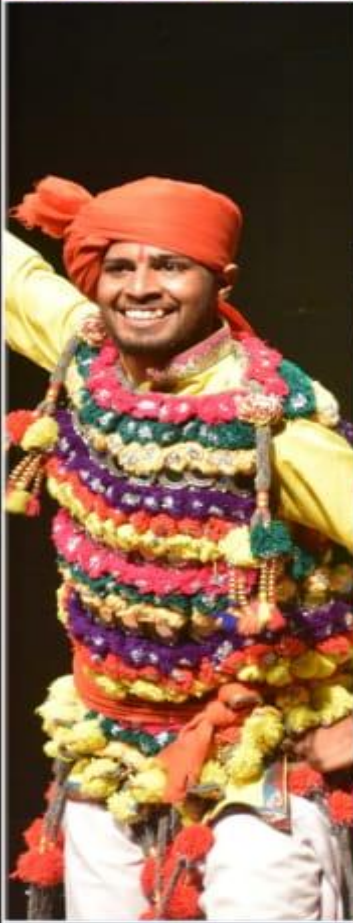
At the end Prof. J.K. Jain extended his heartfelt gratitude to all those who contributed to the
success of this two-day International Conference. First and foremost, he thanked our
esteemed speakers and panelists for sharing their invaluable insights and knowledge. Your
expertise has truly enriched our discussions. A big thank to the organizing committee, whose
dedication and meticulous planning ensured the seamless execution of this event. And at last
but not least expressed gratitude to all the delegates and participants for their active
engagement and thought-provoking contributions, making this seminar a platform for
learning and collaboration.

This conference has been a vital platform for addressing the challenge of balancing
innovation with sustainability. The active participation of students, researchers, and
entrepreneurs enriched discussions, offering innovative solutions and highlighting emerging
trends. It fostered collaboration among academia, industry, and policymakers. As we bring
this conference to a close, it is clear that the ideas and strategies discussed here will extend
far beyond this event, shaping future research, policies, and innovations. Together, we move
forward with a shared commitment to creating a sustainable and innovative future for both
our planet and the ventures that aspire to explore new horizons.

GLIMPS







IAA Secretariat: Sagar Branch

Prof. A.C. Jain, President

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Prof. J.K. Jain, Secretary

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Dr. Rupali Saini, Treasurer

Dr. Girbal Singh Lodhi, Joint Treasurer

Rapporteur: Ms. Tanul Jain and Mr. Subhash Gupta, Research Scholar, Department of Commerce,
Dr. Harisingh Gour Vishwavidyalaya, Sagar, Madhya Pradesh.