

Report on Student Attributes Facilitated by AKS University



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Director
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AKS University

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Report on the Student Attributes Facilitated By

AKS University

1. Introduction

AKS University is a forward-thinking institution with a strong tradition of providing high-quality, multidisciplinary education. It offers an excellent academic environment that fosters technical skills, alongside state-of-the-art sports and cultural facilities for the holistic development of students. The University also has a well-established outreach system aimed at shaping responsible citizens. In line with the NEP-2020 recommendations, the University is implementing various strategies such as skill development, multidisciplinary learning, improved pedagogy, and active stakeholder engagement to meet the aspirations of India's youth.

AKS University continuously strives to develop new and innovative mechanisms for the comprehensive growth of its students, many of whom come from rural backgrounds with limited exposure to global resources, opportunities, and technologies.

The University provides numerous platforms to help students explore and refine their potential in areas like sports, public speaking, creative writing, cultural activities, and painting. Participation in these activities fosters social interaction and the formation of new relationships, contributing to students' overall development. To support this, the University offers various opportunities for students to engage in these activities at different levels.

The academic programs at AKS University incorporate key themes such as professional ethics, gender equality, human values, and environmental sustainability into their curricula. This integration helps students develop essential attributes like ethics, social responsibility, and environmental awareness.

The University is also working to nurture the following key attributes in its students:

- Communication skills
- Academic character
- Research capabilities
- Innovation
- Sports
- Cultural
- Ethics
- Human Values
- National Values
- Social Responsibilities
- Environment sustainability
- Connection with Cultural Heritage
- Leadership



- Competitive and team spirit

2. Communication Skills and Academic Personality

- The University hosts the Technical Fest (SIGMA) each year, which takes place in three stages: departmental, faculty, and university levels. Students are evaluated by various committees, including faculty and peers. The Vice-Chancellor awards prizes to the winners at a dedicated ceremony. This event offers students an excellent opportunity to enhance their communication skills and overall academic persona while fostering a spirit of healthy competition.
- Students' presentations and seminars help build their academic abilities and boost their confidence. Numerous participants have benefited from these initiatives, which focus on skill development, entrepreneurship, corporate resources, continuing education, and sports.
- The University also offers career counseling and preparation for competitive exams to further enhance students' academic profiles.
- In addition, the University has organized various workshops and seminars focused on entrepreneurship, skill development, and capacity building to support students' academic growth.
- Furthermore, the University arranges educational and cultural tours to historically and educationally significant sites. These excursions help cultivate leadership skills, encourage teamwork, and foster a spirit of cooperation among students while also providing academic benefits.

3. Research Aptitude

In alignment with its VISION and MISSION statements, the University prioritizes research in both emerging and traditional fields while promoting scientific inquiry. To foster research aptitude among students, the University implements the following measures:

- Research aptitude is a key Programme Outcome (PO) for many of the University's programs.
- Professional programs include a semester-long project, training, or dissertation component. During this period, students work independently on a specific, well-defined problem, allowing them to tackle issues with guidance from faculty members.
- Upon completing the project, students submit a detailed report and present their findings in an open seminar, which helps enhance their communication skills.
- Certain programs also incorporate field training, where students gather and analyze data themselves, igniting their interest in research.
- Ph.D. progressive seminars and open defence are accessible to all students and research scholars within their respective departments, helping to cultivate research aptitude.



- Advanced learners are encouraged to participate in conferences and seminars, with recommendations made for financial support. Engaging in these events provides students with broader exposure, enhancing their research skills.
- Many students, especially in professional programs, undertake summer or winter training with CSIR labs, institutes, or other organizations to gain research experience in their fields.
- Departments also host guest lectures and interdisciplinary sessions with outside experts to broaden students' perspectives.
- During the assessment period, the University organized workshops and seminars on "Research Methodology" for its students.
- An Honorary Professor specializing in Intellectual Property Rights (IPR) and Technology Transfer has been appointed to assist Ph.D. students and faculty in filing, publishing, and securing patents.
- The University has developed an research Centre i.e.
 - Centre of Excellence in Biotechnology Research & Training (CEBRT)
 - Mushroom Research Lab
 - Algal Biotechnology Lab
- The University has formulated and adopted a comprehensive "Policy for Promotion of Research" to create a supportive environment conducive to quality research conducted by Ph.D. students and faculty members.
- The University Library holds a membership with Shodhganga and subscribes to various databases, including DELNET, J-Gate.

4. Innovations

- AKS University places a high priority on fostering an ecosystem for innovation and knowledge transfer to nurture students' innovative ideas.
- The University aligns with the United Nations Sustainable Development Goals (UNSDG) 2030 and Startup India by implementing an SDG plan and establishing an Incubation Centre.
- Registration has been completed for Startup India, and the AKS University Business Incubator (AKSUBI).

5. Sports:

- Sports play a vital role in developing personal and social values that are crucial in the educational process. It serves as a training ground where athletes learn values such as commitment, discipline, perseverance, self-confidence, teamwork, and how to manage both success and failure.
- Recognizing the significance of sports, AKS University has incorporated athletics into its educational framework since its establishment in 2011.
- The University boasts excellent sports infrastructure. The Directorate of Sports has adopted a professional approach to develop university athletics effectively.
- It provides ample opportunities and pathways for emerging athletes from the campus to compete at national and international levels.



- Prior to inter-university championships, training camps of at least 30 days are organized for the University teams.
- The sports facilities include well maintained Sports facilities, fully equipped Gymnasium Hall, Basket Ball court, Hand Ball court, Badminton court, Volley Ball court, Cricket & Football playgrounds.

6. Cultural

- To foster cultural development among students, the University has established a Centre for cultural studies that coordinates various cultural activities on campus.
- The University features three auditoria with different seating capacities, including a 500 - seat Central Hall Auditorium, 500 seat Kisan Hall and 200 seat Vivekanand Hall.
- Each year, the University hosts the annual fest Spandan which showcases the diverse aspects of diverse culture, allowing students from both the campus and affiliated colleges to demonstrate their talents in various cultural performances.

7. Research and Ethics

- A course titled "Research and Publication Ethics" has been added to the Pre-Ph.D. coursework across all Ph.D. programs at the University.
- One of the Program Outcomes (POs) common to many programs focuses on "Ethics" which emphasizes the ability to recognize and address ethical issues in one's work, avoid unethical practices such as data fabrication and plagiarism, and maintain honesty and integrity in all professional activities.
- To foster professional ethics, the University has developed and implemented Rules and Regulations aimed at preventing plagiarism.
- The University has established the "Shrimad Bhagavad Gita Subject and Holy Q'uran" to instill ethical principles and moral values in students.
- Programs such as the in M.Sc. in Yogic Science and, PG Diploma in Yoga directly promote the understanding of ethics and moral and lifelong values among students.
- The University organizes special induction programs for all new students, which include sessions led by experts focusing on codes of conduct, ethics, and human values.

8. National Values

To instill constitutional values, rights, duties, and responsibilities in students, the University conducts various activities, including the annual observance of significant national events such as Constitution Day (November 26), National Voters' Day (January 25), and National Unity Day (October 31). During these events, students take formal pledges to uphold their constitutional duties.

- As part of the Government of India's "Azadi Ka Amrit Mahotsav" initiative, the University organized numerous events to commemorate 75 years of independence, celebrating the country's rich history, culture, and accomplishments.



- The Centre of Cultural Studies arranges floral tributes on the campus to national leaders like Mahatma Gandhi, Babasaheb Ambedkar, Pt. Jawaharlal Nehru, Dr. Rajendra Prasad, and Shaheed Bhagat Singh on their birthdays.
- The Centre of Cultural Studies also organizes cultural and patriotic events such as the Ratnawali festival and the “Ek Shaam Shaheedon Ke Naam” evening.
- The University celebrates major regional and national festivals, including Teej, Holi, Lohri, Baisakhi, Deepawali, Christmas, Independence Day, Republic Day, National Integration Day, and International Yoga Day, emphasizing national unity through the philosophy of “Vasudhaiva Kutumbakam.”
- On National Unity Day, “run-for-unity” rallies promote national cohesion.
- Anti-Terrorism Day (May 21) is observed, with students and staff pledging to combat terrorism and violence and uphold peace and harmony.

9. Social Responsibilities

AKS University engages in various extension activities to promote social responsibility, often led by the National Service Scheme (NSS), Youth Red Cross (YRC), the Women’s Study Research Centre, and faculties of Social Sciences and Law.

- The University has adopted nearby villages to implement extension activities.
- During the COVID’ 19 pandemic, masks and sanitizers were distributed to villagers, and student and faculty participated in the Swachh Bharat Abhiyan.
- NSS volunteers planted trees during Van Mahotsav and organized fitness activities through yoga, blood donation camps, road safety awareness programs, and nutrition-related events such as Poshan Pakhwada.
- We follow plantation drive with theme on '**Ek Ped Maa Ke Naam**'.
- The University also organized vaccination camps in 2021-22.
- The Women’s Study Research Centre conducts workshops, lectures, and training programs in wellness, crime against women, tailoring, and embroidery in nearby villages.
- Initiatives such as the Beti Bachao Beti Padhao campaign and gender sensitization programs aim to raise awareness about women’s empowerment and rural health issues.
- Workshops on financial education and water conservation, as well as socio-economic household surveys, have been organized.
- Skill development programs for rural women, tree planting campaigns, legal literacy camps, and blood donation awareness initiatives are held regularly.
- The University’s Legal Literacy Club raises awareness about the benefits of Lok Adalats, and students promote schemes like Sukanya Samriddhi Yojana.
- Other activities include para-legal volunteer training and environmental sustainability programs.



10. Environmental Sustainability

Several science programs at the University focus on environmental sustainability. For instance, courses such as M.Sc. (Environmental Science) and Ph.D. (Environmental Management) are devoted to sustainability issues.

- The University's mission statement emphasizes using knowledge for societal advancement, incorporating values of environmental responsibility.
- The Horticulture Department maintains the Campus's green areas. About 50 acres of land is devoted to growing medicinal plants and trees to promote ecological balance and a pollution-free atmosphere.

11. Leadership

The University encourages leadership development by involving students in various committees and decision-making bodies.

- Ten students are part of the Students Grievance Redressal Committee, and others are involved in the Internal Complaints Committee Against Sexual Harassment (ICCASH), National Service Scheme (NSS), and Youth Red Cross committees.
- Students participate in anti-ragging committees and other university bodies, including the IQAC and the Board of Residence, Health, and Discipline.
- The AKS University Student Council (AKSUSC) fosters leadership by allowing students to elect representatives responsible for addressing student concerns.
- Students are also active in various cultural bodies and societies, participating as judges in competitions.



12. Evidence of Student attribute

Research Scholar Charu Vyas, under the supervision of Prof. Dr. Ashwini A. Wao in the Department of Biotechnology of AKS University, Satna, (M.P.), India, presented an Oral Paper Presentation on **“Extraction and Identification of Chromium and Lead Tolerant Bacteria Cement Contaminated Soil for Bioremediation Purposes ”**, 2nd International Conference on *“Advances and Innovations in Biotechnology for Sustainable Bioresources and Bioeconomy (AI-BSBB2023)”*, Department of Biotechnology, Faculty of Life Science and Technology, AKS University, Satna, (M.P.), India.



- Research Scholar Charu Vyas, under the supervision of Prof. Dr. Ashwini A. Wao in the Department of Biotechnology of AKS University, Satna, (M.P.), India, has been awarded with the **DST AWSAR award (Research Story Writing Competition)** for securing a position among the top 100 popular research science stories under the Ph.D. category on National Science Day, 28th Feb. 2023.





चारु एकेएस स्कॉलर को डीएसटी अवसर अवार्ड 2022

सतना. डॉ अश्विनी ए वाऊ एकेएस यूनिवर्सिटी के मार्गदर्शन में चारु व्यास की शोध कहानी को डीएसटी अवसर अवार्ड 2022 के तहत सर्वश्रेष्ठ लोकप्रिय विज्ञान कहानियों में से एक के रूप में चुना गया है वह पीएचडी कर रही हैं एमपी के सतना में एकेएस यूनिवर्सिटी के बायोटेक्नोलॉजी विभाग में ऑगमेंटिंग राइटिंग स्किल्स फॉर आर्टिकुलेटिंग रिसर्च भारत सरकार के विज्ञान और प्रौद्योगिकी विभाग की एक पहल है यह समारोह राष्ट्रीय विज्ञान दिवस के अवसर पर आयोजित किया गया था पीएचडी के तहत सर्वश्रेष्ठ लोकप्रिय विज्ञान कहानियों के लिए श्रेणी में उन्हें प्रशंसा प्रमाणपत्र और 10000 रुपये के नकद पुरस्कार के लिए नामित किया गया है यह गौरव की बात है कि सभी आईआईटी और प्रतिष्ठित संस्थानों के साथ एकेएस यूनिवर्सिटी सतना मप्र को यह अवार्ड मिला है प्रो कमलेश चौरे बायोटेक्नोलॉजी के प्रमुख और प्रो जीपी रिछारिया डीन एफएलएसटी सलाहकार प्रो बीए चौपड़े कुलपति डॉ आरएस त्रिपाठी और प्रोचांसलर अनंत कुमार सोनी ने उन्हें और डॉ अश्विनी वाऊ को इस उपलब्धि पर बधाई दी.

Research Scholar Charu Vyas, under the supervision of Prof. Dr. Ashwini A. Wao in the Department of Biotechnology of AKS University, Satna, (M.P.), India, presented an Oral Paper Presentation on “**Microbial Consortium Mediated Approach for Restoration of Heavy Metal Contaminated Soil**”, 8th International Conference on “*Agriculture, Animal Sciences and Rural Development (ISPEC)*”, under theme Bioremediation, December, 24-25, 2021, BINGOL University, Turkey, www.ispeco.org.



इंटरनेशनल
कान्फ्रेंस में
एकेएस वि.वि.
की रिसर्च
स्कॉलर्स का
पेपर प्रजेन्टेशन

चारु व्यास और शिवांगी अग्निहोत्री ने किया डॉ.अश्विनी के मार्गदर्शन में कार्य



दिल्ले कावर्ड | सतना एकेएस वि.वि. सतना के बायोटेक्नॉलॉजी विभाग में कार्यरत एसिस्टेंट प्रोफेसर डॉ. अश्विनी ए. वारु के मार्गदर्शन में वि.वि. की रिसर्च स्कॉलर्स चारु व्यास और शिवांगी अग्निहोत्री ने बिंगोल यूनिवर्सिटी, टर्की में संपन्न इस्पेक के आठवें इंटरनेशनल कान्फ्रेंस में वचुअल पेपर प्रजेन्ट किया। कान्फ्रेंस का विषय एग्रीकल्चर, एनीमल साइंसेस और रुरल डेव्हलपमेंट रहा। रिसर्च स्कॉलर चारु व्यास का विषय माइक्रोबियल कंसोर्टियम मेडिकेटेड एपरोच फॉर रिस्टोरेशन ऑफ हैवी मेटल कंटैमिनेटेड सॉइल रहा जबकि शिवांगी अग्निहोत्री का विषय बायोइनोक्युलेन्ट्स फॉर एलीविएटिंग सैलिनिटी स्ट्रेस इन प्लांट्स रहा दोनों के पेपर काफी सराहे गए क्योंकि विषयवस्तु के आधार पर दोनों रिसर्च स्कॉलर्स के पेपर प्रजेन्टेशन तथ्यात्मक और भविष्यात्मक रहे। उनके प्रयास पर बायोटेक विभाग के डीन प्रो.जी.पी.रिछारिया और विभागाध्यक्ष डॉ.कमलेश चौरे ने भविष्य के शानदार रिसर्च वर्क और उन्नति के लिए शुभकामनाएं प्रदान की हैं।



10/22/2024

इंटरनेशनल कान्फ्रेंस में एकेएस वि.वि. की रिसर्च स्कॉलर्स का पेपर प्रजेन्टेशन

सतना। एकेएस वि.वि. सतना के बायोटेक्नॉलॉजी विभाग में कार्यरत एसिस्टेंट प्रोफेसर डॉ.अश्विनी ए. वारु के मार्गदर्शन में वि.वि. की रिसर्च स्कॉलर्स चारु व्यास और शिवांगी अग्निहोत्री ने बिंगोल यूनिवर्सिटी, टर्की में संपन्न इस्पेक के आठवें इंटरनेशनल कान्फ्रेंस में वचुअल पेपर प्रजेन्ट किया। कान्फ्रेंस का विषय एग्रीकल्चर, एनीमल साइंसेस और रुरल डेव्हलपमेंट रहा। रिसर्च स्कॉलर चारु व्यास का विषय माइक्रोबियल कंसोर्टियम मेडिकेटेड एपरोच फॉर रिस्टोरेशन ऑफ हैवी मेटल कंटैमिनेटेड सॉइल रहा जबकि शिवांगी अग्निहोत्री का विषय बायोइनोक्युलेन्ट्स फॉर एलीविएटिंग सैलिनिटी स्ट्रेस इन प्लांट्स रहा दोनों के पेपर काफी सराहे गए क्योंकि विषयवस्तु के आधार पर दोनों रिसर्च स्कॉलर्स के पेपर प्रजेन्टेशन तथ्यात्मक और भविष्यात्मक रहे। उनके प्रयास पर बायोटेक विभाग के डीन प्रो.जी.पी.रिछारिया और विभागाध्यक्ष डॉ.कमलेश चौरे ने भविष्य के शानदार रिसर्च वर्क और उन्नति के लिए शुभकामनाएं प्रदान की हैं।





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चारु व्यास और शिवांगी अग्निहोत्री ने किया डॉ. अश्विनी के मार्गदर्शन में कार्य
चिन्मय किरण सतना

एकेएस वि.वि. सतना के बायोटेक्नॉलॉजी विभाग में कार्यरत एसिस्टेंट प्रोफेसर डॉ. अश्विनी ए. वाऊ के मार्गदर्शन में वि.वि. की रिसर्च स्कॉलर्स चारु व्यास और शिवांगी अग्निहोत्री ने विंगोल यूनिवर्सिटी, टर्की में संपन्न इस्मेक के आठवें इंटरनेशनल कान्फ्रेंस में वर्चुअल पेपर प्रजेन्ट किया। कान्फ्रेंस का विषय एग्रीकल्चर, एनीमल साइंसेस और रूरल डेवेलपमेंट रहा। रिसर्च स्कॉलर चारु व्यास का विषय माइक्रोबियल कंसोर्टियम मेडिकेटेड एपरोच फॉर रिस्टोरेशन



ऑफ हैवी मेटल कंटैमिनेटेड सॉइल रहा जबकि शिवांगी अग्निहोत्री का विषय बायोइनोक्युलेन्ट्स फॉर एलीविएटिंग सैलिनिटी स्ट्रेस इन प्लांट्स रहा दोनों के पेपर काफी सराहे गए क्योंकि विषयवस्तु के आधार पर दोनों रिसर्च स्कॉलर्स



के पेपर प्रजेन्टेशन तथ्यात्मक और भविष्यात्मक रहे। उनके प्रयास पर बायोटेक विभाग के डीन प्रो. जी. पी. रिछारिया और विभागाध्यक्ष डॉ. कमलेश चैरे ने भविष्य के शानदार रिसर्च वर्क और उन्नति के लिए शुभकामनाएं प्रदान की हैं।

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सतना। एकेएस वि.वि. सतना के बायोटेक्नॉलॉजी विभाग में कार्यरत एसिस्टेंट प्रोफेसर डॉ. अश्विनी ए. वाऊ के मार्गदर्शन में वि.वि. की रिसर्च स्कॉलर्स चारु व्यास और शिवांगी अग्निहोत्री ने विंगोल यूनिवर्सिटी, टर्की में संपन्न इस्मेक के आठवें इंटरनेशनल कान्फ्रेंस में वर्चुअल पेपर प्रजेन्ट किया। कान्फ्रेंस का विषय एग्रीकल्चर, एनीमल साइंसेस और रूरल डेवेलपमेंट रहा। रिसर्च स्कॉलर



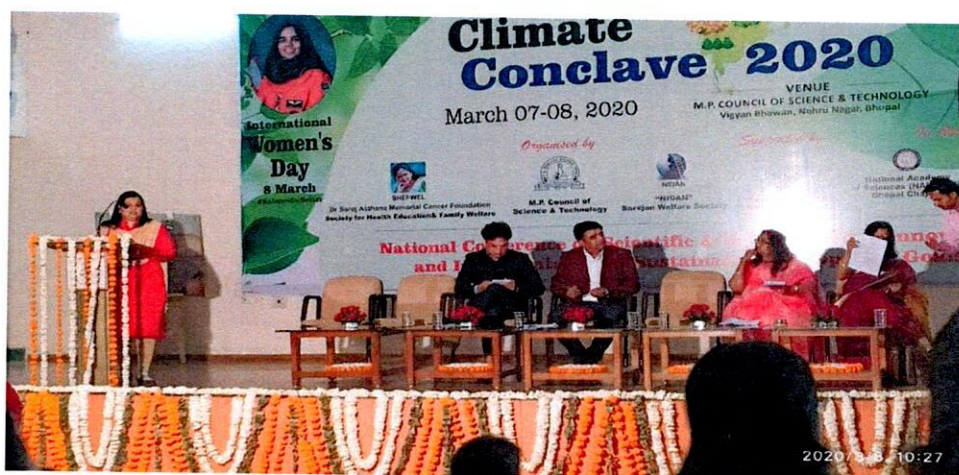
चारु व्यास का विषय माइक्रोबियल कंसोर्टियम मेडिकेटेड एपरोच फॉर रिस्टोरेशन ऑफ हैवी मेटल कंटैमिनेटेड सॉइल रहा जबकि शिवांगी अग्निहोत्री का विषय बायोइनोक्युलेन्ट्स फॉर



एलीविएटिंग सैलिनिटी स्ट्रेस इन प्लांट्स रहा दोनों के पेपर काफी सराहे गए, क्योंकि विषयवस्तु के आधार पर दोनों रिसर्च स्कॉलर्स के पेपर प्रजेन्टेशन तथ्यात्मक और भविष्यात्मक रहे। उनके प्रयास पर बायोटेक विभाग के डीन प्रो. जी. पी. रिछारिया और विभागाध्यक्ष डॉ. कमलेश चैरे ने भविष्य के शानदार रिसर्च वर्क और उन्नति के लिए शुभकामनाएं प्रदान की हैं।



- Research Scholar Charu Vyas, under the supervision of Prof. Dr. Ashwini A. Wao in the Department of Biotechnology of AKS University, Satna, (M.P.), India, presented an Oral Paper Presentation on **“Biomonitoring and Remediation of Heavy Metals for Conservation of Natural Ecosystem”**, 5th International Conference on *“Bio energy, Environment and Sustainable Technologies (BEST2021)”*, under theme Bioremediation, January, 29-30, 2021, Arunai Engineering College, Tiruvannamalai, Tamil nadu, India.
- Research Scholar Charu Vyas, under the supervision of Prof. Dr. Ashwini A. Wao in the Department of Biotechnology of AKS University, Satna, (M.P.), India, presented an Oral Paper Presentation on **“Global Crisis of Biodiversity Loss and COVID-19 Pandemic”**, International E-Conference on *“Bio prospecting (ICONBIO)”*, under theme Biodiversity, January, 29-30, 2021, sponsored by AICTE, New Delhi, Arunai Engineering College, Tiruvannamalai, Tamil nadu, India.
- Research Scholar Charu Vyas, under the supervision of Prof. Dr. Ashwini A. Wao in the Department of Biotechnology of AKS University, Satna, (M.P.), India, presented an Oral Paper Presentation on **“Bio augmentation Strategies for Reclamation of Heavy Metal Contaminated Soil”**, National Conference on *“CLIMATE CONCLAVE 2020: Scientific & Environmental Innovation and Implementation of Sustainable Development Goals”*, under theme Science and Technology, March, 7-8, 2020, jointly organized by SHEFWEL Society and M.P. Council of Science and Technology (MPCST), NIDAN Sarvajan Welfare Society, Bhopal, India.





- Research Scholar Charu Vyas, under the supervision of Prof. Dr. Ashwini A. Wao in the Department of Biotechnology of AKS University, Satna, (M.P.), India presented an Oral Presentation on **“Bioremediation: An Innovative Approach for Reclamation of Agricultural Land to Sustain Farmers’ Income”**, *"Proceedings of BSADFI2022"* at National Conference on *"Biotechnology and Sustainable Agriculture for Doubling of farmers' Income by 2022"*, 5-7 Sept., 2019, AKS University, Satna, (M.P), India.
- Research Scholar Charu Vyas, under the supervision of Prof. Dr. Ashwini A. Wao in the Department of Biotechnology of AKS University, Satna, (M.P.), India, presented a Poster Presentation on **“Eco-Friendly approach of remediating industrially contaminated environment through bioremediation”**, International Conference on *“Advances and Innovations in Biotechnology for Sustainable Development (AIBioSD)”*, 5-7 April, 2019, AKS University, Satna, (M.P.), India.
- International conference on advances and innovation in biotechnology for sustainable development, 5-7 april, 2029, AKS University, satna (M.P.) india.
- Title - Micro propagation of Momordica dioicaby standardizing the media formulations Presented by- Priya Dwivedi under the supervision of prof. Ashwini A. Wao Department of Biotechnology, AKS University, Satna, Madhya Pradesh.



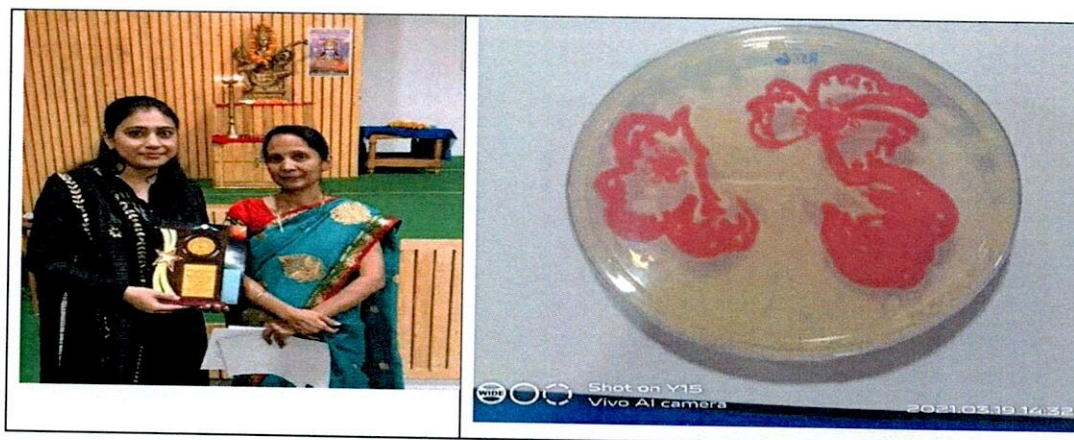


- “National Science Festival Biocreation” organized by Department of Biotechnology, AKS University, Satna on 8-20 March 2021.

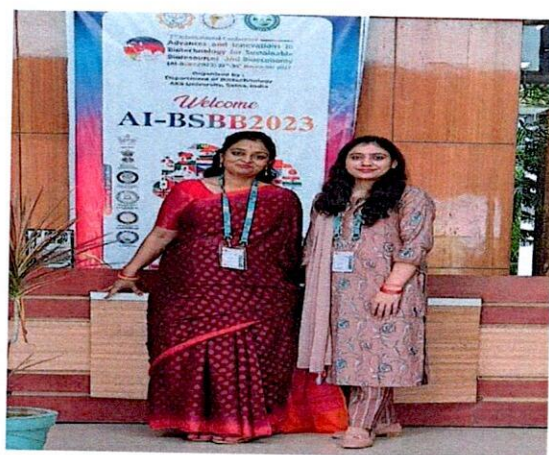
Participant – Priya Dwivedi

Participation on- “Micro tunes”

Secured – Second position



- Advance And innovation In Biotechnology For Sustainable Bioresources And Bioeconomy
Title- In Vitro Tissue Culture and Micro Propagation Study of Momordica dioica Presented by- Priya Dwivedi under the supervision of prof. Ashwini A. Wao, Department of Biotechnology, AKS University, Satna, Madhya Pradesh.



1. International Conference On Advances in Science and Technology organized by the Institute of Innovations, Tiruvannamalai, Tamilnadu, India



Title: Production of a Novel Biofertilizer for a Salinity Stress in Plants By Shivangi Agnihotri
Under the supervision of Prof. Ashwini A. Wao

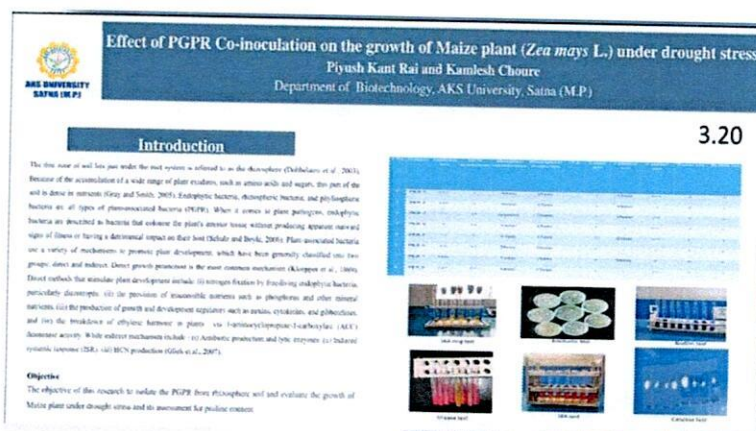
2. Gail Abha: A initiative of Gail India Ltd organized by IIT Madras

Title: Production of Ecofriendly Biofertilizer By Shivangi Agnihotri Under the supervision of Prof. Ashwini A. Wao



3. ISPEC 7th INTERNATIONAL CONFERENCE ON AGRICULTURE, ANIMAL SCIENCES and RURAL DEVELOPMENT, Mus Alparslan University, Mus, Turkey
December 24-25, 2021

Title: BIOINOCULANTS FOR ALLEVIATING SALINITY STRESS IN PLANTS Presented By Shivangi Agnihotri Under the supervision of Prof. Ashwini A. Wao





- Rai, P. K. and Kamlesh choure (2023, January). *Rhizobacteria response Zea Maize L. growth under drought to reduce the impact of climate change for sustainable agriculture*. Poster presented at the Young Scientist Conference, IISF 2022, Maulana Azad National Institute of Technology, Bhopal.



- Rai, P. K. (2023) and Kamlesh choure. Transcriptomics investigation of Acids producing genes and their contribution to drought stress mitigation in maize. Presented at AI-BSBB2023, AKS University, Satna
- Vivek Agnihotri under the supervision of Prof Kamlesh Choure presented a paper in International Conference On Bioengineering Solutions For Healthcare, Food, Energy, And Environment (BSHFEE-2021)
 - Entitled - "Utilization or Eradication of Water Hyacinth" What could be the best strategy?
 - Date - 09-10 April 2021
 - Organized By
 - IIT, Jodhpur and BRSI, India



INTERNATIONAL CONFERENCE ON BIOENGINEERING SOLUTIONS FOR
HEALTHCARE, FOOD, ENERGY, AND ENVIRONMENT (BSHFEE-2021)

CERTIFICATE

THIS IS TO CERTIFY THAT

Vivek Kumar Agnihotri

AKS University – Satna
HAS WON

Best Oral Presentation Award
(Bioengineering Solutions for Environment)

for the paper entitled Utilization or Eradication of Water Hyacinth" What could be the best strategy? authored by Vivek Kumar Agnihotri, Kamlesh Choure & Sourabh Singh Gour in the International Conference on Bioengineering Solutions for Healthcare, Food, Energy, and Environment, jointly organized by INDIAN INSTITUTE OF TECHNOLOGY, JODHPUR and THE BIOTECH RESEARCH SOCIETY, INDIA at Jodhpur, India during April 09-10, 2021.

Central Office Executive
BRSI

Convener, BSHFEE-2021
Place - Jodhpur, India
10th April 2021

Conference Chair, BSHFEE-2021

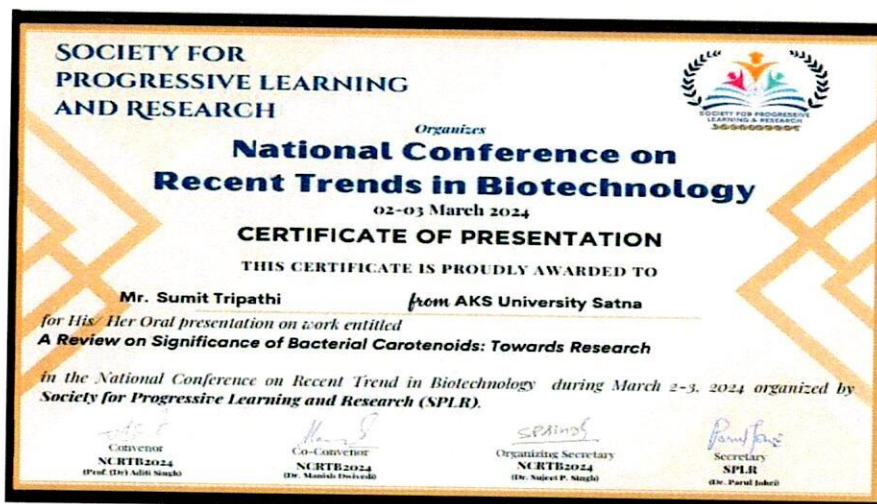
Vivek Agnihotri under the supervision of Prof Kamlesh Choure presented a paper in A Conference on "Agricultural, Agritech, Biodiversity, Conservation and Traditional Knowledge" under Madhya Pradesh Vigyan Sammelan & Expo (MPVS -2021) Organized by IIT Indore, MPCST and Vigyan Bharati, Date - 22nd-25th December, 2021

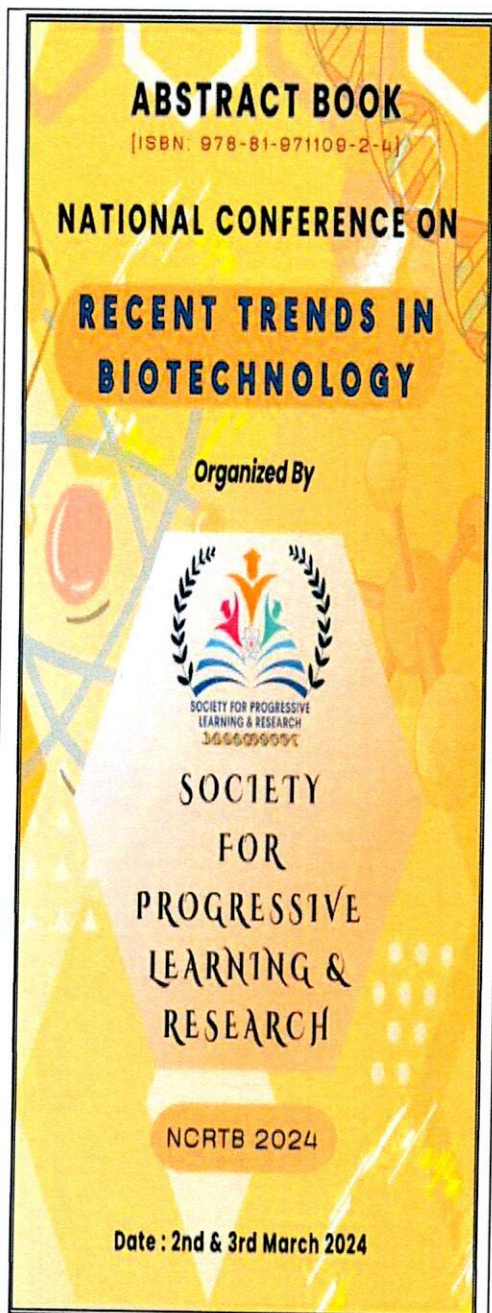
Paper on "Utilization and eradication of water hyacinth. What could be the best strategy?"

Student's Participation in National Conference

Department of Biotechnology students had participated in "National Conference on Recent Trends in Biotechnology" organized from 2nd to 3rd of March 2024 by Society for Progressive Learning and Research (SPLR, Lucknow). Total 24 students had participated in this conference from Department of Biotechnology. **Mr. Sumit Tripathi** from M.Sc. Biotechnology (B2232R10811006) had received "BEST REVIEW AWARD" as 1st Position.

Out of 24 Students 7 students had also submitted the abstract on various titles as mentioned in below figures. The abstracts were published in NCRTB 2024 Souvenir (ISBN No.: 978-81-971109-2-4)





ORAL PRESENTATIONS			
OP NO.	ABSTRACT TITLE	AUTHORS	PAGE NO.
1.	Advanced Microbial Approaches for Bioremediation of Xenobiotics	Dr. Garima Awasthi	11
2.	Impact of Magnesium Levels on Insulin Resistance and its Association with Glycaemic Control in Type-2 Diabetes	Dr. Mimoh Sharma, Nivedita Singh, Vidyasagar Ram	12
3.	Current Trends in Artificial Intelligence versus Treatment against Blood Cancer	Ms. Shruti Tyagi, Nisha Bisht*, Divyansh Bajpai, Tukshiti Shukla, Sejal Singh, Pooja Jha, Pankaj Gupta and Sanjay Mishra	13
4.	Identification and analysis of Polyester Hydrolase Leipzig 7 (PHL7) homologs for plastic degradation: An in-silico approach	Ms. Swara Singh, Shubham Kumar, Barkha Singhal	14
5.	Imbalanced Homeostasis of Essential Metals and Vitamin D3 Linked to Higher Pediatric Asthma Risk and Severity	Ms. Shivani Singh, Vandana Tiwari, Aditi Singh, Manish Raj Kulshrestha, Shetanshu Srivastava	15
6.	Mass Clonal Propagation of Mucuna Pruriens (Fabaceae) and Assessment of Its Phytochemical Properties.	Ms. Neha Saini, Naveen Gaurav	16
7.	Effect of Pesticides in Chronic Kidney Disease and their Association with Glomerular Filtration Rate in North Indian Population	Ms. Juhi Verma, Manish Raj Kulshrestha, Manisha T Sharma, Vandana Tiwari, Namrata Rao	17
8.	Antibacterial Efficacy of Guava Leaf Extract Against Enterococcus faecalis	Ms. Ayushi Keshri, Abhishek Nandy, Aditi Singh	18
9.	A Review on Role of Algae in Creating Sustainable Biofuels for the Future	Ms. Satyam Singh	19
10.	Wearable Technology in Healthcare	Ms. Akankshi Priya, Shivani Tiwari	20
11.	Stem Cells as The Novel Therapy for	Ms. Milli Vats & Preeti Singh	21



Shivani Mishra (B1932R10111053) & Shrishti Soni (B1932R10111003) of B. Tech. Biotechnology from 2019 batch had participated in International Conference on “BioTrendz” - Advancement and Challenges in Science and Technology from 24th to 25th of March organized by Department of Biotechnology, NIET Greater Noida – Uttar Pradesh. In this conference, Ms. Shivani Mishra had received the first prize in Oral Presentation Category” for presenting title on “Screening and Molecular Docking of Antiviral Drugs against D13 Protein and Thymidylate Kinase of Monkey Pox Virus Using Computational Approach”. Ms. Shivan Mishra had also received an amount of Cash Prize of Rs. 3000/- for securing first position.





NIET
Greater Noida
AN INTERNATIONAL INSTITUTE

INSTITUTION'S INNOVATION COUNCIL
Noida, Uttar Pradesh

INTERNATIONAL CONFERENCE (VIRTUAL)
BioTrendz
Advancement & Challenges in Science and Technology
24-25 March, 2023
Conference Proceeding

Organized by
Department of Biotechnology
Noida Institute of Engineering & Technology

In Association with
Swadeshi Science Movement of India, Delhi (Vigyan Bharti)

Noida Institute of Engineering & Technology, Greater Noida
19- Knowledge Park-II, Institutional Area, Greater Noida, 201306 (UP) P: 0120-2328132

Screening and Molecular Docking of Antiviral Drugs against D13 Protein and Thymidylate Kinase of Monkeypox Virus using Computational Approach

Shivani Mishra, Arpit Srivastava*

Department of Biotechnology, AKS University, Satna M.P. 485001

Monkeypox (MPXV) is a viral zoonotic disease that mainly occurs in tropical rainforest areas of central and western Africa but is rarely reported to other parts of the world. Monkeypox is typically a self-limiting disease, with symptoms lasting 2 to 4 weeks. Severe cases are possible. Recently, the case fatality ratio has hovered around 3-6%. As per WHO reports, multiple cases of monkeypox were discovered in several non-endemic countries in May 2022. Monkeypox has been declared a global public health emergency by the World Health Organization. A public health emergency of international concern is the rarely used top alert offered to WHO for implementing a worldwide disease outbreak. There are currently studies being conducted to better understand the epidemiology, sources of infection, and transmission patterns. The present study provides a potential insight over screening of antiviral drug compounds against two major proteins (PDB ID: 6BED D13 protein, 2V54 Thymidylate Kinase) of monkeypox virus using computational approaches. The promising 6 antiviral drugs namely Osetimovir, Foscarnet, Bricicovir, Sorivudine, Didanosine, Zalcitabine were taken from Drugbank database under consideration on various descriptors properties like log(P_{OW}), Water Solubility, Pharmacokinetics, Drug likeness score, Bioavailability and Rule of Five which has been screened by using computational approach. Against 6BED of MPXV, drug DB11799 (Bicicovir) has the docking binding energy -7.68 kcal/mol and DB00900 (Didanosine) has a docking binding energy -7.45 kcal/mol. In further study of 2V54 of MPXV, drug DB11799 (Bicicovir) has a docking binding energy -7.80 kcal/mol and Drug DB00900 (Didanosine) has a docking binding energy -8.25 kcal/mol is obtained as per molecular docking studies has been done using DOCKServer (www.dockingserver.com/web). The study requires futuristic steps in 3DMPBSA GBSA study so to get in more deeper assets to find most promising antiviral drug as per above studies and assumptions. Our computer analysis will inspire additional research for in vitro and in vivo clinical trials.

Keywords: Monkeypox Virus, Antiviral drugs, Docking, Binding, Bicicovir, Didanosine

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WGS Analysis of Bacteria causing Foodborne Diseases for Antibiotic Resistance Gene Identification and Annotational revelation of Prophages within Genome using Computational Approach

Shrishti Soni, Arpit Srivastava*

Department of Biotechnology, AKS University, Satna M.P. 485001

Antibiotic resistance develops when bacteria develop the ability to survive antibiotics that were intended to kill them or halt their development. Even when exposed to antibiotics, antibiotic-resistant bacteria are allowed to develop, multiply, and infect the host. Antibiotic resistance is a significant barrier to treating infectious illnesses caused by bacteria. As a consequence, certain antibiotics can no longer be used to treat certain infections. Consequently, bacteriophages, are viruses that only destroy and target bacteria. They are the most prevalent biological entities in nature, and they have been shown to combat and destroy multi-drug resistant bacteria. In the given study bio-computational approach is used for the analysis of the resistance of that bacterial strain to the particular antibiotics/multiple drugs whereas the same strains WGS were considered to identify the different numbers of prophage binding sites. The CARD-RGI and the PHASTER are the two different computational methods used for the comparable study on the Whole Genome Sequences (WGS) of bacteria. Total 10 food borne bacterial WGS data have been retrieved using GenBank database of NCBI and CARD RGI includes molecular sequence analysis tools such as BLAST and the Resistant Gene Identifier (RGI) software for resistance prediction based on homology and SNP models. Further using PHASTER prophage binding site is predicted to understand that how these pathogenic species can be resisted through bacteriophages. The study concludes that *Pseudomonas aeruginosa* (NC_032516) strains 67 ARGs (Antibiotic Resistance Gene) sites where as in PHASTER the most prominent regions of prophages have been identified in *Shigella flexneri* (NC_004337). The entire research is based on the assumption that an infecting bacterial pathogen that has developed antibiotic resistance must be capable of being treated with phages. The current study is based on computational techniques; however, wet lab studies in the future could be beneficial to the given data.

Keywords: Bacteria, Food Borne, Antibiotic Resistance Gene, Bacteriophage, NCBI RGI-CARD, PHASTER, Whole Genome Sequence

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Certificate of Participation

This is to certify that

VIVEK KUMAR AGNIHOTRI

presented a Oral Presentation in the Conclave / Conference on 'Agricultural, Agritech, Biodiversity, Conservation and Traditional Knowledge' under Madhya Pradesh Vigyan Sammelan & Expo (MPVS -2021) jointly organized by IIT Indore, MPCST and Vigyan Bharati during 22nd-25th December, 2021.

Santosh Kumar

Dr. Santosh Kumar
Vishvakarma
General Organising secretary
MPVS 2021

Anil Kothari

Dr. Anil Kothari
Director General
MPCST

Pramod Verma

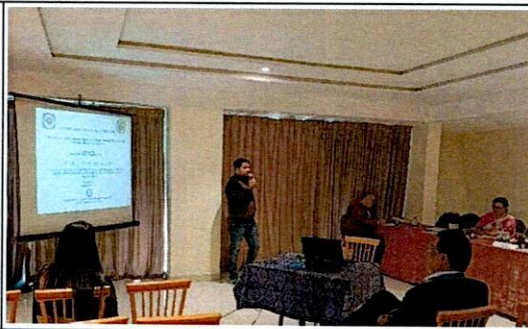

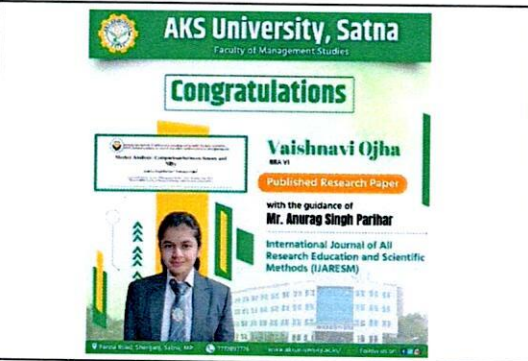
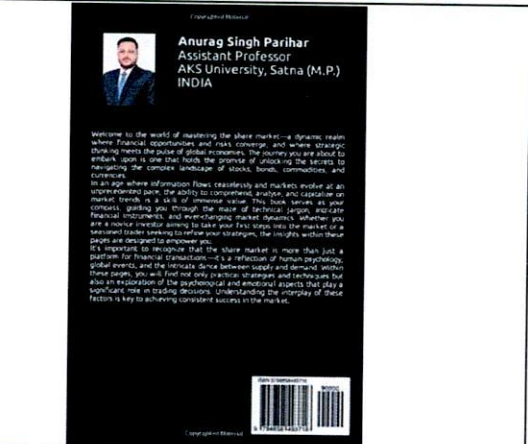
Prof. Pramod Verma
President
Vigyan Bharati Malwa Prant.





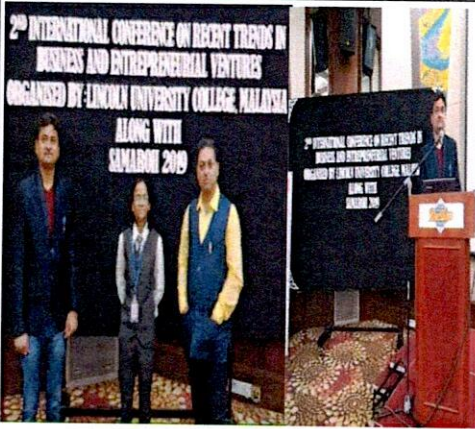
7.1.10 STUDENTS ATTRIBUTES OF AKS UNIVERSITY SATNA (M.P.)

S.NO	Name of students and Department	MENTOR	EVIDENCES
1	Sonal Gupta Research Scholar AKSU Department of Bio Technology Presented Research Paper in Vietnam	Dr. Ashwini A. Wao	
2	Pankaj Gautam, Research Scholar AKSU Presented Research Paper in Indian Engineering Congress 2023 Conference Computer Science "FRONTIERS OF PROGRESS AND DEVELOPMENTS IN TECHNOLOGY MANAGEMENT IN THE MODERN ERA"- Sentiment Analysis IMDb Movie Reviews	Dr. Akhilesh A. Wao	



3	Ashutosh Mohite Department of Computer Science, AKSU "Machine Learning and Deep Learning Techniques for Human Gesture Recognition"	Dr. Akhilesh A. Wao	
4	Satyam Bharti, Sameeksha Bharti Role of Money Related Showcase in Development of Indian Economy Student (BBA), Faculty of Management Studies,	Anurag Singh Parihar	
5	Vaishnavi Ojha Student (BBA), Faculty of Market Analysis: Comparison between Sensex and Nifty Management Studies, AKS University, Satna (M.P.)	Anurag Singh Parihar	
6	Vaishnavi Ojha Student (BBA), Mastering the Share Market: A Comprehensive Guide to Successful Investing Management Studies, AKS University, Satna (M.P.)	Anurag Singh Parihar	



7	Mrs. Shubhra Mishra A STUDY ON THE THEORETICAL CONCEPT OF JOB SATISFACTION Management Studies, AKS University, Satna (M.P.)	Dr. Pradeep Chaurasiya	
8	Mrs. Shubhra Mishra Management Studies, AKS University, Satna (M.P.)	Dr. Pradeep Chaurasiya	
9	ROHIT AGRAWAL AND SHILPI NEMA MBA STUDENTS PRESENTED RESEARCH PAPERS IN INTERNATIONAL CONFERENCE IN MALAYSIA "ANALYSING THE HR FUNCTIONS IN MSMEs"	MENTORED BY DR KAUSIK MUKHERJEE YEAR 2019	



10	<p>AWARD WON</p> <p>SUJIT TIWRI MBA 2024 , START UP BOMBOO WORLD, TAKING AWARD FROM CM MP Won First Prize in Startup Competition</p>	Dr. Kausik Mukherjee	
11	<p>Mr. L.N. Soni Research Scholar from the department of Computer science Presented Research Paper</p>	Dr. Akhilesh A. Wao	
12	<p>Shraddha Singh From the Faculty of Commerce and Financial Studies Presented Research Paper</p>	Dr. Dharendra Ojha	



13	Shivani Mishra Department of Biotechnology Poster Presentation	Dr. Kamlesh Choure	
14	Ms. Rinki Chawla Student of M. Pharma (Pharmaceutical Chemistry) Founder Batch - 2022 Presented Research Paper	Dr. Surya Prakash Gupta	
15	MS. Pooja Singh Student of Agri-Business Management Presented Research Paper	Dr. Bipin Beohar	



16	Mr. Ashwani Agnihotri Student of Bio Technology Presented Research Paper	Dr. Kamlesh Choure and Dr. Deepak Mishra	
17	Students (AKSU) secured "position" of Civil Engineering in "IIT Kharagpur, and again brought laurels to AKS University by securing second rank in "Annual Technical Fest – 2019 (Megalith organized recently in IIT, Kharagpur." Civil Engineering	Er. Vishutosh Bajpai	
18	Mr. Vivek Agnihotri International conference on Bioengineering Solutions For Healthcare, Food, Energy and Environment Department of Biotechnology, Oral Presentation	Dr. Kamlesh Choure	



19	Mr. Sourabh Singh Gour Research Scholar, Department of Biotechnology Presented Research Paper	Dr. Kamlesh Choure	 <p>AKS University, Satna Department of Biotechnology</p> 
20.	Mr. S.K. Reddy (Research Scholar) Department of Chemistry Published Research Paper	Dr. Dinesh Mishra	 <p>AKS University, Satna</p> 