

Pacif Educational and Welfare Trust

Progress Report from June 1, 2023 to present

We are delighted to share the remarkable achievements and milestones of the **Pacif Educational and Welfare Trust** since its inception on 31 May 2023. Under the visionary leadership of Prof. Shibesh Kumar Jas Pacif, the trust came to exist at Sagara, Sambalpur, Odisha, India. Since then, there are significant growth are seen. Here, we are documenting the details as follows.

1. Inception and Leadership:

The **Pacif Educational and Welfare Trust** was founded in 2023 and officially registered on May 31, 2023, as a public charitable trust under Section 60 of The Indian Trusts Act, 1882, Government of India. The registration took place at the office of the Sub-Registrar in Kuchinda, Odisha and the trust was assigned registration number 41632300356.

This establishment was carried out under the visionary guidance of Prof. Shibesh Kumar Jas Pacif who defined the trust's objectives and strategies for the growth and development of the region.

2. Geographical Location:

The trust is headquartered in Sagara, Sambalpur, Odisha, India, strategically chosen for its accessibility and community impact and a branch office at Gyan Khand-1, Indirapuram, Ghaziabad, Uttar Pradesh, India.

3. Significant Growth:

Since its establishment, the trust has witnessed substantial growth in various aspects, reflecting its commitment to educational and welfare initiatives.

4. Government Registration and Certifications:

The trust has successfully registered under the guidelines of the Indian government, ensuring compliance with necessary regulations and obtaining relevant certifications. So far, the trust have got the PAN, 12A, 80G, NGO Darpan from Niti Ayog, e-Anudaan, ISO 9001:2015, MSME certifications.

5. Educational Programs and Certifications:

The trust has implemented various educational programs, obtaining necessary certifications to enhance the quality and credibility of its initiatives.

6. Establishment of Pacif Institute of Cosmology and Selfology (PICS):

In a significant stride, the first unit of the trust **Pacif Institute of Cosmology and Selfology (PICS)** is established to further its commitment to advanced scientific exploration and self-understanding.

7. Trademark Registration:

“Selfology” as a scientific discipline has been officially registered as a trademark, **Trade Marks Journal No: 2127, 23/10/2023 in Class 41**, Ministry of Commerce and Industry, Govt. of India.

8. Website Launch:

- The trust launched official websites for both the Pacif Educational and Welfare Trust (www.trust.pacif-ics.com) and the Pacif Institute of Cosmology and Selfology (PICS)

(www.pacif-ics.com), providing a digital platform to disseminate information and engage with the community.

- A dedicated website for “Selfology” (www.selfology.co.in) as a scientific discipline was also launched, highlighting its importance and contributions.

During the period from June 1, 2023, to the present has been marked by remarkable achievements and milestones, showcasing the trust’s dedication and impact. In this report, we aim to document the key details of the trust’s journey, providing a transparent and comprehensive overview of its activities and progress.

Details of works done and accomplishments achieved by Pacif Institute of Cosmology and Selfology (PICS)

1. Inception of PICS:

The journey began with the conceptualization of PICS in June 2023, driven by the vision of right education. The institute aimed to foster groundbreaking research in cosmology and Selfology™, pushing the boundaries of scientific exploration. The idea is to reach science to the common people through the knowledge of the Universe and the Self for the betterment of lives of all through hardcore cosmology research, science popularization & science communication

2. Official Announcement (August 2023):

PICS officially came into existence in August 11, 2023, marking a significant step forward in the pursuit of knowledge and excellence. The announcement garnered widespread attention and support from the scientific community and beyond.

3. Research Papers Published:

PICS researchers have contributed significantly to the academic landscape with a series of impactful research papers in science journals of repute. These publications span a diverse range of topics related to cosmology and allied areas, showcasing the institute’s commitment to advancing knowledge.

4. Publication of Books:

PICS has added to the intellectual discourse by publishing noteworthy books authored by its researchers. These publications delve into cutting-edge theories and perspectives, enriching the global scientific community.

5. New Collaborations:

In this short span of time, PICS established impactful national and international collaborations, expanding its research network. These partnerships exemplify the institute’s commitment to fostering a global exchange of ideas and expertise in the realms of cosmology and Selfology.

6. Science Popularization Programs:

Committed to promoting scientific literacy, PICS initiated science popularization programs to engage with the wider public. Outreach activities have been organized to share knowledge and inspire curiosity.

7. Researcher Recruitment:

The institute attracted some excellent researchers, further enhancing the academic prowess of PICS. Renowned scholars and emerging talents have joined the ranks, contributing to the vibrant and collaborative research environment.

8. **Infrastructure Development:**

PICS invested in its basic infrastructure to provide researchers with cutting-edge facilities. The institute's first building and office space is being set up in full swing.

9. **Procurement of Equipment:**

To facilitate groundbreaking research, PICS prioritized the procurement of Telescope, audio-visual systems, Projection system, and a few others. The procurement of a mobile planetarium is in process.

10. **Collaborations and Partnerships:**

PICS has actively forged collaborations and partnerships with other leading institutions, organizations, and companies. These collaborations aim to create synergies, share resources, and collectively advance the frontiers of knowledge.

11. **Community Engagement and Events:**

Members of PICS have visited to some leading institutes, delivered Talks, and engaged in some academic activities.

As we reflect on the achievements of 2023-24, PICS is poised to continue its journey of exploration and discovery, contributing significantly to the ever-evolving landscape of cosmology and Selfology. Stay tuned for more groundbreaking developments from the Pacif Institute of Cosmology and Selfology.

Research Paper Publications

1. Exact Solution of Field Equation with Constant Ricci Curvature in Finslerian Black Hole
Z. Nekouee, S. K. Narasimhamurthy, **S. K. J. Pacif**
e-Print: arXiv:2311.01209 [pdf, other], 2023
DOI: <https://doi.org/10.48550/arXiv.2311.01209>
2. Black hole formation in gravitational collapse and their astrophysical implications
Annu Jaiswal, **Rajesh Kumar**, Sudhir Kumar Srivastava, Megandhren Govender, **Shibesh Kumar Jas Pacif**
e-Print: arXiv:2310.17647 [pdf, ps, other], 2023
DOI: <https://doi.org/10.48550/arXiv.2310.17647>
3. Cosmic evolution in $f(Q, T)$ gravity: Exploring a higher-order time-dependent function of deceleration parameter with observational constraints
Madhur Khurana, **Himanshu Chaudhary**, Saadia Mumtaz, **S. K. J. Pacif**, and G. Mustafa
Published in: Physics of the Dark Universe, 43, 101408, 2023
DOI: <https://doi.org/10.1016/j.dark.2023.101408>
4. A New Cosmological Model: Exploring the Evolution of the Universe and Unveiling Super-Accelerated Expansion
Himanshu Chaudhary, **Dhruv Arora**, Ujjal Debnath, G. Mustafa, and S. K. Maurya
e-Print: arXiv:2308.07354v1 [gr-qc], 2023
DOI: <https://doi.org/10.48550/arXiv.2308.07354>
5. Constraints on the Parameters of Modified Chaplygin-Jacobi and Modified Chaplygin-Abel Gases in $f(T)$ Gravity Model
Himanshu Chaudhary, Ujjal Debnath, Tanusree Roy, Sayani Maity, and G. Mustafa
e-Print: arXiv:2307.14691v1 [gr-qc], 2023

- DOI: <https://doi.org/10.48550/arXiv.2307.14691>
6. Diagnostic and Comparative Analysis of Dark Energy Models with $q(z)$ Parametrizations **Dhruv Arora, Himanshu Chaudhary, and Shibesh Kumar Jas Pacif**
e-Print: arXiv:2304.09749v2 [gr-qc], 2023
DOI: <https://doi.org/10.48550/arXiv.2304.09749>
 7. Development of an Automated Steerable Radio Telescope
Pritam Dutta and Rushil Saraswat
Published: Global Scientific Journal, Vol. 11, Issue 6, 2023, Online: ISSN 2320-9186
 8. Eternal homogeneous gravitational collapse: A comprehensive analysis from Θ parametrization
Annu Jaiswal, **Rajesh Kumar**, Sudhir Kumar Srivastava, and **S. K. J. Pacif**
e-Print: arXiv:2303.06343 [gr-qc], 2023
DOI: <https://doi.org/10.48550/arXiv.2303.06343>
 9. Astrophysical implications of an eternal homogeneous gravitational collapse model with a parametrization of expansion scalar
A. Jaiswal, **R. Kumar**, S. K. Srivastava, **S. K. J. Pacif**
Published in: The European Physical Journal C, 83(6), 490, 2023
DOI: <https://doi.org/10.1140/epjc/s10052-023-11672-y>
 10. Constraints on the parameterized deceleration parameter in FRW universe
Himanshu Chaudhary, Amine Bouali, Ujjal Debnath, Tanusree Roy, and G. Mustafa
Published in: Physica Scripta, 98, no. 9, 095006, 2023
DOI: <https://iopscience.iop.org/article/10.1088/1402-4896/acea02>
 11. Model-Independent Study for a Quintessence Model of Dark Energy: Analysis and Observational Constraints
Amine Bouali, **Himanshu Chaudhary**, **Amritansh Mehrotra**, and **S. K. J. Pacif**
Published in: Fortschritte der Physik, 71, no. 12, 2300086, 2023
DOI: <https://doi.org/10.1002/prop.202300086>
 12. Data analysis of three parameter models of deceleration parameter in FLRW universe
A. Bouali, **H. Chaudhary**, U. Debnath, et al.
Published in: Eur. Phys. J. Plus, 138, 816, 2023
DOI: <https://doi.org/10.1140/epjp/s13360-023-04442-y>
 13. Cosmological tests of $f(R, G, T)$ dark energy model in FRW universe
Himanshu Chaudhary, Amine Bouali, Niyaz Uddin Molla, Ujjal Debnath, and G. Mustafa
Published in: The European Physical Journal C, 83, no. 10, 918, 2023
DOI: <https://doi.org/10.1140/epjc/s10052-023-12094-6>
 14. Exploring tidal force effects and shadow constraints for Schwarzschild-like black hole in Starobinsky–Bel–Robinson gravity
Dhruv Arora, Niyaz Uddin Molla, **Himanshu Chaudhary**, Ujjal Debnath, Farruh Atamurotov, and G. Mustafa
Published in: The European Physical Journal C, 83, no. 11, 995, 2023
DOI: <https://doi.org/10.1140/epjc/s10052-023-12185-4>
 15. Observational constraints and cosmological implications of scalar–tensor $f(R, T)$ gravity
Amine Bouali, **Himanshu Chaudhary**, Tiberiu Harko, Francisco SN Lobo, Taoufik Ouali, and Miguel AS Pinto
Published in: Monthly Notices of the Royal Astronomical Society, 526, no. 3, 4192, 2023
DOI: <https://doi.org/10.1093/mnras/stad2998>
 16. Parametrization of the deceleration parameter in a flat FLRW universe: constraints and comparative analysis with the Λ CDM paradigm
Himanshu Chaudhary, Saadia Mumtaz, Amine Bouali, Ujjal Debnath, and G. Mustafa
Published in: General Relativity and Gravitation, 55, no. 11, 133, 2023
DOI: <https://doi.org/10.1007/s10714-023-03181-w>

Books Publications

1. **Developing Scientific Temper: Unleashing the Curiosity Within**
Author: Shibesh Kumar Jas Pacif
First edition: 2023
ISBN: 978-93-5747-354-5
Iterative International Publishers, Karnataka
2. **Selfology: Knowing Thyself – a scientific enquiry**
Author: Shibesh Kumar Jas Pacif
First edition: 2023
ISBN: 978-93-5747-808-3
E-ISBN: 978-93-5747-480-1
Iterative International Publishers, Karnataka
3. **Cosmology for All**
Author: Shibesh Kumar Jas Pacif
First edition: 2023
ISBN: 978-81-19288-56-4
Perfect Writer Publishing, New Delhi
4. **Cosmic Primer: A Beginner's Guide to Cosmology**
Authors: Pritam Dutta and Shibesh Kumar Jas Pacif
First edition: 2023
ISBN: 978-93-5747-846-5
E-ISBN: 978-93-5747-990-5
Iterative International Publishers, Karnataka

Invited Talks Delivered

1. *“Knowing the Universe from diverge Perspectives”*
Invited Talk delivered by **Shibesh Kumar Jas Pacif** as a **distinguish speaker and chief guest** at P. G. Department of Mathematics, Fakir Mohan University, Balasore, Odisha during the Seminar on Mathematical Sciences and it's Applications commemorating the National Mathematics Day, **22 December 2023**.
2. *“The Mathematical Universe”*
Expert Talk delivered by **Shibesh Kumar Jas Pacif** as a **resource person** at the 8th refresher course in mathematics from 08 Dec – 21 Dec, 2023, organized by Department of Mathematics and Statistics, DDU Gorakhpur University, Gorakhpur, **09 December 2023**.

Science Popularization Talks Delivered

1. *“Knowing the Universe and Developing Scientific Temper”*
By **Shibesh Kumar Jas Pacif** at Adhyayan Academy, Garposh, Odisha, **09 January 2024**.
2. *“Meet the young Astronomer Achievers”*
By **Pritam Dutta** as an **invited speaker** at the National Astronomy Challenge, **27 December 2023**.
3. *“Knowing the Universe from diverge Perspectives”*
By **Shibesh Kumar Jas Pacif** as an **invited speaker** at Guest lecture Series by Faculty of Mathematical & Statistical Sciences, Institute of Natural Sciences & Humanities, Shri Ramswaroop Memorial University, Lucknow, **07 November 2023**.
4. *“Knowing the Universe through Various Perspectives”*
By **Shibesh Kumar Jas Pacif** as an **invited speaker** at the Monthly talks of Nehru Planetarium, New Delhi **28 Sep 2023**.
5. *“Knowing the Universe and developing Scientific Temper”*

By **Shibesh Kumar Jas Pacif** at Gandhamardan Academy of Science, Padampur, Odisha, **07 July 2023**.

6. “*Knowing the Universe and developing Scientific Temper*”
By **Shibesh Kumar Jas Pacif** at Adarsh Vidyalay, Bandupali, Padampur, Odisha, **07 July 2023**.
7. *Knowing the Universe and developing Scientific Temper*
By **Shibesh Kumar Jas Pacif** at Jawahar Navoday Vidyalay, Paikmal, Bargarh, Odisha, **07 July 2023**.

Programs attended

1. “75th Republic Day” at Adhyayan Academy
By **Shibesh Kumar Jas Pacif** as the **chief guest** at Adhyayan Academy, Garposh, Odisha **26 January 2024**.
2. “Sahitya Shrujani” – Mo Katha Mo Kahani, organized by Sagara P. J. High School
By **Shibesh Kumar Jas Pacif** as a **guest of Honour** at Sagara P. J. High School, Sagara, Odisha, **19 January 2024**.
3. “IUCAA Visit”
Visited Inter University Centre for Astronomy and Astrophysics (IUCAA) as the **IUCAA Associate** under its visitor program, **21 November – 10 December 2023**.
4. “Vana Mahotsava”, organized by Sagara P. J. High School
By **Shibesh Kumar Jas Pacif** as a **guest** at Sagara P. J. High School, Sagara, Odisha, **07 July 2023**.

Programs Organized

1. Sky-Watch Program
A Stargazing program organized at Adhyayan Academy, Garposh for the students, guardians and public, **27 January 2024**. The 5-hour program was a huge success with Sun, Sunspots, Earth’s Moon, and Jupiter with its moons observed by a huge crowd together with 1.5-hour lecture session on basic astronomy for the students and a counselling session for the guardians.
2. Sky-Watch Program
A Stargazing program organized at Pacif Institute of Cosmology and Selfology (PICS) for local public and school students, **14 January 2024**.

Recognition/Achievements of PICS & PEWT

1. **Prof. Shibesh Kumar Jas Pacif** received the **IOP Trusted Reviewer** status by Institute of Physics (IOP) publishing for a high level of peer review competence in various SCI Journals of IOP for his contributions in peer reviews of scientific papers of various IOP Journals in 2023.

Media Link of Programs and other Important Links

<https://www.youtube.com/watch?v=eHkzoUKDu8Q>

In addition to the considerable investments of time and financial resources, substantial efforts have been dedicated to advancing the infrastructure development of both the Pacif Educational and Welfare Trust (PEWT) and the Pacif Institute of Contemporary Studies (PICS). This comprehensive approach encompassed various aspects, including procuring state-of-the-art equipment, generating funds, advertising, securing land allocations, seeking government support, and diligently identifying suitable individuals and candidates. Under the adept guidance of President Prof. Shibesh Kumar Jas Pacif, the trust has been actively engaged in establishing meaningful collaborations with other

organizations. This multifaceted approach reflects a holistic commitment to fostering the growth and success of PEWT and PICS, ensuring a robust foundation for their endeavours.

Glimpses and Snapshots



Sahitya Shrujani – Mo Katha Mo Kahani, organized by Sagara P. J. High School, Sagara, Odisha on **19 January 2024**. Prof. Shibesh Kumar Jas Pacif was invited as a **guest of Honour**, addressed the children, and facilitated the students for their achievements.



Stargazing program organized by Pacif Institute of Cosmology and Selfology at Adhyayan Academy, Garposh for the students, guardians and public on **27 January 2024**. Students observed the Sun, Sunspots, Earth’s Moon, and Jupiter with its moons. A lecture session on basic astronomy and a counselling session for the guardians was parts of the program.



Science Popularization Talk was delivered at Adhyayan Academy, Garposh, Odisha on **09 January 2024** by **Prof. Shibesh Kumar Jas Pacif** on the topic *Knowing the Universe and Developing Scientific Temper.*



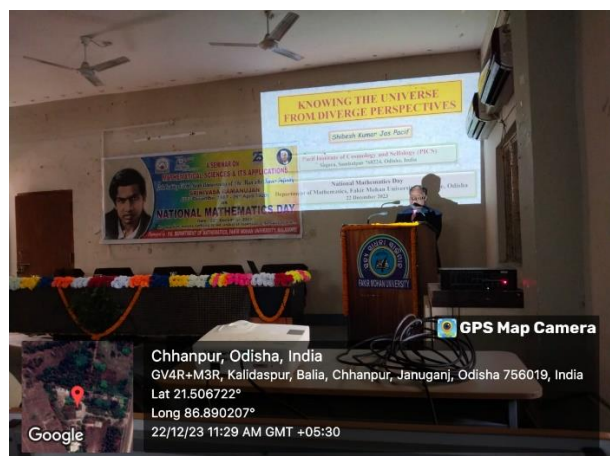
An Interactive session on Science Education and Science Demonstration at Jawahar Navodaya Vidyalay, Paikmal, Bargarh, Odisha on **7 July 2023** by **Prof. Shibesh Kumar Jas Pacif**.



Science Popularization Talk was delivered at Gandhamardan Academy of Science, Padampur, Odisha on **07 July 2023** by **Prof. Shibesh Kumar Jas Pacif** on the topic *Knowing the Universe and Developing Scientific Temper.*



Stargazing program organized by Pacif Institute of Cosmology and Selfology at Adhyayan Academy, Garposh for the students, guardians and public on **27 January 2024**. Students observed the Sun, Sunspots, Earth's Moon, and Jupiter with its moons. A lecture session on basic astronomy and a counselling session for the guardians was parts of the program.





समाचार सार

सगरा पंचायत हाई स्कूल में मनाया गया 74वां वन महोत्सव

3 January at 11:48

छात्र-छात्रा और अतिथि पौधा रोपण करते हुए ● जगद्गण संसु. चर्मिष्ठः शर्मिष्ठः यादवः कला इफ डिं वजन गरपोष बीट अर्गत समारा पंचायत जनता हाई स्कूल परिसर में वन विभाग और स्कूल परिचालन समिति द्वारा 74वां वन महोत्सव का आयोजन किया गया। प्राचार्य अमित्र विरसकृष्ण शर्मिष्ठता में आयोजित महोत्सव में समारा सरपंच गोलापी बाघ, समिति मेंबर हाविल एक्का, पणरेस्टर तुलाराम बरिहा, दिल्ली विश्व विद्यालय के प्रोफेसर तथा युवा वैज्ञानिक सीवेश राम प्रजापति, गरपीषा नागरिक मंच के सचिव सरोज कुमार सिन्हा, साहित्यकार तुलसी मंजरी बोहिवार, पंडित अलेख कुमार पति, रविंद्र कुमार दास, सुवास नायक आदि विशेष अतिथि के तौर पर मौजूद थे और पौधारोपण किया।





डा. शिवेश राम प्रजापति के पुस्तक का हुआ विमोचन
 डॉ. शिवेश राम प्रजापति के पुस्तक का विमोचन कार्यक्रम का आयोजन जयपुर विश्वविद्यालय के कक्षा कक्ष में हुआ। कार्यक्रम का उद्देश्य डॉ. शिवेश राम प्रजापति के पुस्तक का विमोचन करना है। कार्यक्रम में डॉ. शिवेश राम प्रजापति के पुस्तक का विमोचन किया गया। कार्यक्रम में डॉ. शिवेश राम प्रजापति के पुस्तक का विमोचन किया गया। कार्यक्रम में डॉ. शिवेश राम प्रजापति के पुस्तक का विमोचन किया गया।

