

NEWSLETTER

Volume: 40, Issue: 1, May 2024

Nepal Physical Society

President's Message



Dear Esteemed Members of the Nepal Physical Society,

With great pride and gratitude, I address you on the occasion of our 40th Nepal Physical Society (NPS) convention, a moment that signifies our collective dedication and passion for advancing the frontiers of physics in Nepal and beyond.

Throughout my tenure from 2022 to 2024, we have pursued excellence and innovation, marking numerous significant milestones and accomplishments:

- **Journal Publications:** Under our careful stewardship, the Nepal Physical Society has overseen the publication of six notable journals, including the esteemed Journal of Nepal Physical Society (JNPS).
- **IPhO 2023, Japan:** Our participation in the International Physics Olympiad (IPhO) from July 10-17, 2023, in Japan, earned recognition, with Nepal receiving an honorable mention award. This recognition underscores the talent and dedication of our young physicists on the global stage.
- **ICPSE-2023:** The International Conference on Physics for Sustainable Energy (ICPSE-2023), held on September 22-23, was celebrated as a remarkable international gathering, attended by approximately 100 individuals, including 14 distinguished speakers from 8 different countries. This conference, jointly organized by the Nepal Physical Society (NPS), Tribhuvan University (TU), and the International Union of Pure and Applied Physics (IUPAP), received invaluable support and collaboration from the University Grants Commission (UGC), the Ministry of Education, Science, and Technology (MoEST), and the Nepal Academy of Science and Technology (NAST), thereby reaffirming Nepal's commitment to sustainable energy research.
- **Partnerships and Memberships:** Strengthening our international collaborations, we have forged a Memorandum of Understanding (MOU) between the International Union of Pure and Applied Physics (IUPAP) and the Nepal Physical Society (NPS). Additionally, achieving IUPAP Associate Territory Membership (ATM) further solidifies our position within the global physics community.
- **AAPPS-WIP Nov-December 2023:** As active members of AAPPS and Women in Physics, we participated in numerous virtual meetings to enhance the activities of WGWiP through engaging discussions among working group members and AAPPS associates.
- **APS March Meeting and Asia Pacific Leaders Summit 2024:** Despite challenges, we successfully

hosted the American Physical Society (APS) March Meeting virtually on March 4th, 2024, showcasing our adaptability and resilience. Furthermore, I had the honor of representing the Nepal Physical Society at the Asia Pacific Leaders Summit in Minneapolis from March 2-8, 2024, fostering scientific cooperation and exchange.

- **Research Principles Statement 2024:** I am delighted to announce that the Nepal Physical Society has become a signatory to the Research Principles Statement, reaffirming our steadfast commitment to ethical and rigorous scientific inquiry (Principles & Policies for International Scientific Collaboration).
- **ISWI 2024:** Looking ahead, our upcoming program, NPS, will be hosting the International School of Space Science and Weather Initiatives (ISWI-2024) in Kathmandu. It brings me immense joy to share that the Nepal Physical Society has been honored as the recipient of the esteemed SCOSTEP/ISWI Award valued at \$3000, with an additional \$1000 designated for hosting the SCOSTEP/ISWI in Nepal from September 15-21, 2024. This recognition truly reflects our unwavering dedication to promoting international collaboration and excellence in space science research."
- Additionally, we are pleased to inform you that NPS has also organized an exciting entertainment program during our picnic on February 24, 2024. It was a day filled with fun activities, delicious food, and great company!

During my tenure, our collective efforts enabled us to raise nearly 1,489,000 NPR for ICPSE-2023 and 200,000 NPR for the virtual APS March Meeting.

I extend my deepest gratitude to each and every one of you for your unwavering support, dedication, and invaluable contributions to the Nepal Physical Society. Together, we have achieved remarkable milestones and laid the groundwork for a future filled with even greater accomplishments.

As my term draws to a close, I am filled with pride and optimism for the future of our society. Let us continue to work hand in hand, inspiring and empowering the next generation of physicists and scientists, and striving for excellence in all our endeavors.

With warm regards,

Prof. Nilam Shrestha Pradhan, PhD
President, Nepal Physical Society

From the Editorial



We are delighted to present the 40th issue of the NPS newsletter. This newsletter provides a summary of the NPS's scientific activities, including news, seminars, talks/scientific visits, physics-related events, meetings, and conferences. On June 17th, 2023 the 39th annual general meeting (AGM) of the NPS was conducted at the Central Department of Physics, TU, Kirtipur. Prof. Dr. Nilam Shrestha, president of Nepal Physical Society and Dr. Hari Shankar Mallik, secretary of the society led a group of participants to the 53rd International Physics Olympiad, held in Tokyo Japan from 10th July-17th July, 2023.

NePhO-2023/2024 pre-selection (province level) test was conducted by Nepal Physical Society on 3rd February, 2024. The test was given at various exam centers across Nepal, and the shortlist of preselected students based on the merit was published after a careful evaluation and scrutiny. The society is very much indebted to its members for their hard work who made the timely publication of pre-selection results possible. We would like to thank all professors/faculties and NPS members for encouraging students to participate in NePhO. We highly appreciate the contribution of professors and faculties for their constant involvement and guidance in the selection procedure of the first round of IPhO. Nepal Physical Society organized a special talk program at the Central Department of Physics, TU on 28th June 2023. Dr. Hari Khanal, an AI/ML Scientist delivered a talk titled "Future careers for the young generation".

The NPS executive committee has organized a one-day orientation program for physics teachers was organized at Tri-Chandra Multiple Campus,

Ghantaghar, Kathmandu on 20th January, 2024. The program aimed at providing valuable information and ideas to the participants who would benefit their students in the selection process and preparations for the Nepal Physics Olympiad and the International Physics Olympiad.

Moreover, NPS publishes a peer review research journal, 'The Journal of Nepal Physical Society'. The published manuscripts span a wide range of topics, including but not limited to quantum computing, space and atmospheric physics, plasma, atomic molecular optics, material science, condensed matter physics, high-energy, and nuclear physics. The manuscripts have gone through a rigorous peer-review process. We would like to thank the reviewers for their contribution.

Finally, I would like to request greater efforts in promoting collaborative excellence in physics research and education from national and international organizations. I urge all NPS chapters to play active roles and work together on scientific and public outreach activities in the local community. I am sure that the activities of NPS will flourish further with support from all valued members. I look forward to your constructive suggestions, comments, queries, and correspondence.

Sincerely,

Hom Bahadur Baniya, M.Phil., Ph. D.

Editor in Chief,

Nepal Physical Society

Associate Professor in Physics,

Amrit Campus, Tribhuvan University

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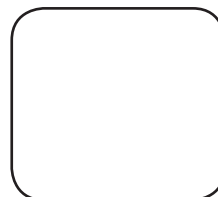
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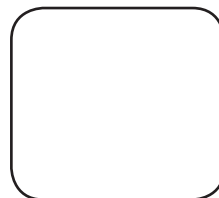
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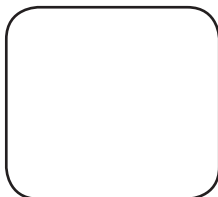
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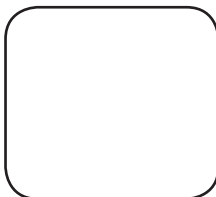
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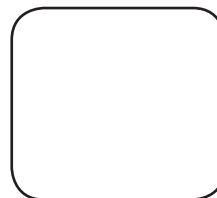
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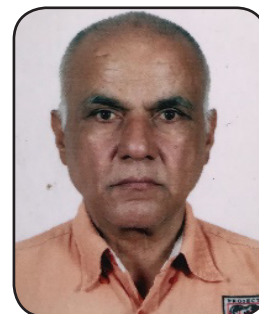
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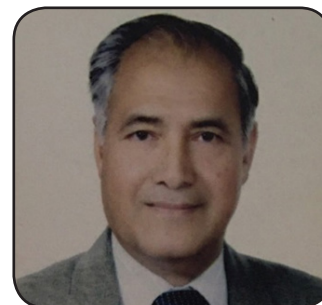
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(1986-1988)



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(1988-1990)



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(1990-1993)



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(1993-1997)



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(1997-2001)



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(2001-2005 and 2009-2013)



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(2005-2007)



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(2007-2009)



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Prof. Dr. Pradeep K. Bhattarai
(2016-2019)



Prof. Dr. Narayan P. Chapagain
(2019-2022)



Prof. Dr. Nilam Shrestha Pradhan
(2022-2024)

NPS Division

NPS executive committee has formed the NPS division based on research field of interest to promote the collaborative research work in the physics community.

Division of Astrophysics (DAP)

Chair: Prof. Dr. Binil Aryal, Dean, IoST

Members:

- Prof. Dr. Saroj Nepal, MMC
- Dr. Ajay Kumar Jha, CDP
- Dr. Shiv Narayan Yadav, PMC
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Division of Plasma Physics (DPP)

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- Dr. Lekhanath Mishra
- Dr. Ujwal Man Joshi
- Dr. Raju Bhai Tyata
- Dr. Rajendra Shrestha
- Dr. Ganashyam Thakur
- Dr. Hom Bahadur Baniya
- Dr. Suresh Basnet
- Dr. Gobinda Prasad Panta
- Dr. Rajesh Prakash Guragain

Division of Condensed Matter Physics (DCMP)

Chair: Prof. Dr. Narayan Prasad Adhikari

Members:

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- Dr. Gopi Chandra Kafle
- Prof. Dr. Bhawani Dutta Joshi

- Dr. Khemanand Neupane
- Dr. Shashit Kumar Yadav
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- Dr. Shyam Prakash Khanal
- Dr. Hari Krishna Neupane
- Dr. Manoj Kumar Chaudhary
- Dr. Jhulan Powrel

Division of Bio-Medical Physics (DBMP)

Chair: Dr. Hari Prasad Lamichhane

Members:

- Dr. Kanchan Prasad Adhikari
- Dr. Tika Ram Lamichhane
- Dr. Sagar Regmi
- Dr. Rajendra Prasad Koirala

Division of Geophysics (DGP)

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Member: Prof. Dr. Anant Panthi

Division of Material Science (DMS)

Chair: Prof. Dr. Leela Pradhan Joshi

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Publication of Journal of Nepal Physical Society (JNPS)

The Nepal Physical Society (NPS) has released the first, second and third issue of the ninth volume of the Journal of Nepal Physical Society (JNPS), 2023. The primary objective of this journal is to contribute to the process of knowledge-building on experimental, theoretical, and simulation works by providing a platform for scholarly discussion on the roles of researchers and reviewers.

The JNPS contains original and relevant manuscripts from various fields of research in physics. NPS

encourages everyone to support its endeavor to promote and disseminate knowledge derived from research activities in physics. NPS acknowledges and expresses gratitude to all the contributors who have made this issue a success. In particular, the reviewers are recognized for their valuable suggestions and feedback. The NPS editorial board welcomes comments, queries, suggestions, and correspondence to improve the quality of JNPS.

Collaboration between NPS and ANPA

Nepal Physical Society (NPS) and Association of Nepali Physicists in America (ANPA) have signed on MoU (Memorandum of understanding) with purpose of creating a framework for collaboration and cooperation between the two organizations via mutual sharing of scientific and technological ideas and expertise to better serve Nepali scientific diaspora.

A public talk was co-organized by Nepal Physical Society and Association of Nepali Physicists in America (ANPA) on 14th October, 2023 (27th Asoj, 2080). Dr. Sambhu Ghimire, lead scientist at SLAC National Accelerator Laboratory, Stanford University delivered a talk titled “Nobel Prize in Physics 2023: What is it and why should we care?”

Nepal Physics Olympiad (NePhO) Activity

Prof. Dr. Nilam Shrestha, president of Nepal Physical Society and Dr. Hari Shankar Mallik, secretary of the society led a group of participants to the 53rd International Physics Olympiad, held in Tokyo Japan from 10th July, 2023 – 17th July, 2023. Aayan Shah from the Nepalese team received an honorable mention in the competition.

A one-day orientation program for physics teachers was organized at Tri-Chandra Multiple Campus, Ghantaghar, Kathmandu on 20th January, 2024 (6th Magh, 2080). The program aimed at providing valuable information and ideas to the participants which would benefit their students in the selection process and preparations for the Nepal Physics Olympiad and the International Physics Olympiad.

NePhO – 2023/2024 pre-selection (province level)

NePhO-2023/24 Pre-Selection Test: Result					
SN.	Symbol No.	Marks	Name	Affiliation	Center
1	39	76	Anurag Gupta	Kathmandu Model Secondary School, Bagbazar	Kathmandu
2	2	68	Aayush Pandey	Valmiki Shiksha Sadan, Bharatpur-4, Chitwan	Bharatpur
3	91	65	Agraj Chapagain	St. Xavier's College, Maitighar, Kathmandu	Kathmandu
4	87	61	Rajendra Dhami	St. Xavier's College, Maitighar, Kathmandu	Kathmandu
5	10	60	Saksham Adhikari	Aroma English Secondary School, Bharatpur-10, Chitwan	Bharatpur
6	11	58	Yogendra Sharma Upadhyaya	Aroma English Secondary School, Bharatpur-10, Chitwan	Bharatpur
7	64	58	Yunish Thapaliya	SOS Hermann Gmeiner School, Sanathimi Bhaktapur	Kathmandu
8	45	58	Apurba Subedi	Budhanikantha School, Kathmandu	Kathmandu
9	108	57	Sankalpa Acharya	Trinity International SS/College Dillibazar Kathmandu	Kathmandu
10	508	56	Aayush Rauniar		Kathmandu
11	60	55	Amit Kumar Yadav	St. Xavier's College Maitighar, Kathmandu	Kathmandu
12	505	55	Niyam Uprety	St. Xavier's College Maitighar, Kathmandu	Kathmandu
13	47	54	Anup Kumar Ayadi	Budhanikantha School, Kathmandu	Kathmandu
14	77	54	Nitesh Kumar Jayaswal	Capital Secondary School (CCS) Koteswar, Kathmandu	Kathmandu
15	88	54	Janak Bhatta	Takshasila Academy, Samakhusi-Kathmandu	Kathmandu
16	119	54	Atith Adhikari	St. Xavier's College, Maitighar, Kathmandu	Nepalgunj
17	BH15	53	Ujjwal Sunar	Orchid Science College, Bharatpur	Bharatpur
18	78	52	Koshal Kumar Mandal	SOS Herman Gmeiner School, Sanathimi Bhaktapur	Kathmandu
19	507	51	Sumit Kumar Sah		Kathmandu
20	49	49	Sakar Bhandari	Trinity International SS/College Dillibazar Kathmandu	Kathmandu
21	54	49	Deepak Kumar Thakur	Xavier International College, Kathmandu	Kathmandu
22	90	49	Sushant Paudel	Budhanikantha School, Kathmandu	Kathmandu
23	P002	49	Abhinav Pradhan	New Galaxy English School, Pokhara	Pokhara

test was conducted by Nepal Physical Society on 3rd February, 2024 (20th Magh, 2080). The test was given at various exam centers across Nepal, and the shortlist of preselected students based on the merit was published after a careful evaluation and scrutiny. The society is very much indebted to its members for their hard work who made the timely publication of pre-selection

results possible.

Nepal Physical Society (NPS) has formed its sister organization Nepal Physics Olympiad (NePhO) committee and entrusted it with organizing a national level Physics Olympiad for secondary level (+2) science students. The committee prepares a team for the participation in International/Asian Physics Olympiad (IPhO/APhO) events to be held every year. The top five students selected from NePhO are eligible to participate in IPhO/APhO.

The NePhO participants should be below 20 years of age and should not be enrolled in any Bachelors level program. The competition is designed to test the understanding of physical principles and to apply them in practical situations. The best pre-selected students will be given tutorials and training before

NePhO-2023/24 Procedure

	Subject	Date	Remarks
Preselection Test			
	Registration	Poush 15 – Magh 15, 2080	
	Exam	Magh 20, 2080	
	Result	Within last week of Falgun, 2080	Top 20 will be selected for final selection
Final Selection			
	Class	Jesth 6-10, 2081	Jesth 6 – Jesth 13, 2081 (Top 10 will be awarded by Ministry of Education, Science and Technology. Among them top 5 will be selected for IPhO-2024)
	Exam (Theory)	Jesth 12, 2081	
	Exam (Experiment)	Jesth 13, 2081	
	Result	Before Jesth 26, 2081	
For IPhO 2024: Isfahan Iran			
	Closed Camp	2 weeks	Date and others will be decided later
	Departure	Leaders: 2 Students: 5 Observers: optional Guests: optional	

the final selection of the participants for IPhO/APhO events. The best five students from the final selection will be given an intensive tutorial and training for the participation in IPhO/APhO events.

39th General Convention of Nepal Physical Society

39th General Convention of Nepal Physical Society is going to organize on Ashad 2, 2080 at the Central Department of Physics, TU, Kirtipur, Kathmandu.

Title of Thematic Talk:

- "Weather Hazards and Safe Flights Over the Himalayan Complex Terrain" Prof. Dr. Ram Prasad Regmi (Central Department of Physics, TU)

Nepal Physical Society-Picnic



Nepal Physical Society organized a picnic on 17th February, 2024 (5th Falgun, 2080) at Chobhar, Kathmandu. The program provided an opportunity

to interact among the society's members and share experiences.

40th General Convention of Nepal Physical Society

40th General Convention of Nepal Physical Society is going to organize on Baishak 28-29th, 2081 at the Central Department of Physics, TU, Kirtipur, Kathmandu.

Title of Thematic Talk:

1. Cosmic Creation: Rigveda and Physics - Asso. Prof. Basanta Kumar Gautam
2. AI and Physics - Prof. Dr. Narayan Prasad Adhikari



APS March Meeting (Virtual Program)

NPS hosted a virtual edition of APS March Meeting on 4th March, 2024 (21st Falgun, 2080) in Kathmandu. The meeting was a great opportunity for participants unable to physically attend the program. Participants

could learn the current frontiers of research in various disciplines of physics and raise their questions and queries to the speakers via online platform.

Festivals Greetings Exchange Program 2080

NPS organized an online Festival Greetings Exchange Program on 12th October, 2023 (25th Asoj, 2080). Members of the society exchanged the greetings and

their best wishes on the upcoming festivals Dashain, Tihar, Nepal New Year and Chhath.

New Year 2081 Greetings Exchange Program

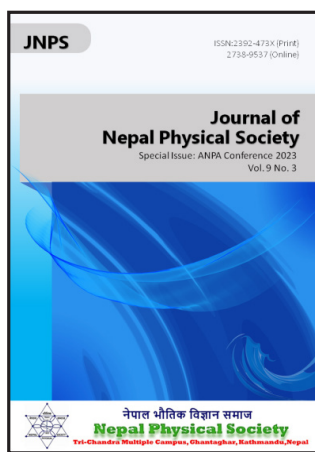
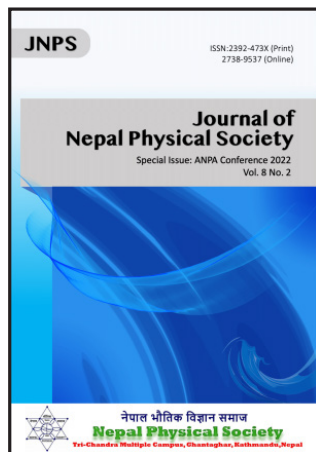
Nepal Physical Society organized an online greetings exchange program on 11th April, 2024 (29th Chaitra, 2080) marking the start of new year 2081 B.S.

Participants of the program expressed their best wishes to all members of the society.

NPS Special talk

Nepal Physical Society organized a special talk program at the Central Department of Physics, TU on 28th June 2023 (13th Ashar, 2080). Dr. Hari Khanal, an AI/ML

Scientist delivered a talk titled “Future careers for the young generation”.



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Dr. Sanju Shrestha



Dr. Niraj Dhital



Dr. Shashit Kumar Yadav



Dr. Dinesh Acharya



Dr. Rajesh Prakash Guragain

International Conference on Physics for Sustainable Energy (ICPSE-2023)

Nepal Physical Society (NPS) in collaboration with the International Union of Pure and Applied Physics (IUPAP) organized “International Conference on Physics for Sustainable Energy (ICPSE 2023)” during September 22–23, 2023, in Kathmandu, Nepal. The conference was a global event with participants and speakers from various countries and focused on the presentation and discussion of technological advances and recent developments in the field of energy in physics.



Scientific Visits

- **Prof. Lok Narayan Jha** visited USA (July 13 - Nov. 26, 2023). It remains as a good memory of online participation in ANPA conference 2023 USA. He availed an opportunity to deliver a talk in the conference participated mainly by Nepalese physicists. He also had interactions with some of his students of CDP TU. He wish to thank NPS, ANPA and his family members in Chicago (USA) in providing possible assistances without which he could not has such a great experience to see several of his past students engaged in their academic research activities and engagements in the USA.
- **Prof. Raju Khanal**, accompanied by his 11 research students, participated in the 3rd International Conference on Plasma Theory and Simulations hosted at the School of Physical Sciences, Jawaharlal Nehru University, New Delhi, India, during 21-23 September 2023. Prof. Khanal delivered an invited talk titled “Kinetic simulation of plasma-wall interaction and wave instability for multi-component plasma” and other Nepali participants contributed through various talks and poster presentations. Notably, Mr. Amrit Yadav was honored with the Best Poster Award at the conference.
- **Prof. Dr. Narayan Prasad Chapagain** from Department of Physics, Amrit Campus visited



Japan. He has been participated and delivered an invited talk in 7th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP), Nov. 12-17, 2023, Port-Messe, Nagoya, Japan.

- **Asso. Prof. Dr. Hom Bahadur Baniya** visited Japan. He participated in 7th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP), Nov. 12-17, 2023, Port-Messe, Nagoya, Japan. He delivered an invited talk on Generation and Characterization of Cold Atmospheric Pressure Plasma Jet and Its Applications.
- **Asst. Prof. Daya Nidhi Chhatkuli** visited India for participating in XV ICFA School on In-

strumentation in Elementary Particle Physics. This program was held in TIFR, Mumbai, India on February 12-25, 2023.

- **Asst. Prof. Dr. Daya Nidhi Chhatkuli** participated in '7th International Symposium on the System of Radiological Protection (ICRP 2023)' This program was held in Tokyo, Japan on November 6-9, 2023. His title of contribution was 'In-situ radiometric assessment of Ruru region in Gulmi, Nepal'.
- **Mr. Devendra Upadhyaya** visited Republic of

Korea. He participated in 'International Atomic Energy Agency (IAEA)/Regional Cooperative Agreement for Research, Development and Training' related to Nuclear Science and Technology on 16 October to 08 November 2023, Daejeon.

- **Mr. Devendra Upadhyaya** visited Malaysia. He participated in 'IAEA/RCA Regional Training Course' on Train the Trainers Course on Radiographic Testing – Digital (RT-D) Level 2 on 15 May to 1 June 2023, Kajang.

Conference and Workshop

- **Prof. Narayan Prasad Adhikari** delivered many lectures about "mathematica" to physics teachers in "Winter School on Mathemtica" program organized by NPS Western chapter on Poush 26-28, 2080.
- **Prof. Narayan Prasad Adhikari** delivered a lecture "Error Analysis: A prerequisite for lab work" to Faculties of Tribhuvan University in the program organized by Principal office TU on 18 March 2024.
- **Prof. Raju Khanal** delivered an invited talk titled "Nuclear Fusion Power: The Journey towards Sustainable Energy" in the International Conference on Technologies for Computer, Electrical, Electronics & Communication, hosted at the Khwopa Engineering College, Bhaktapur, Nepal during 11-13 October 2023.
- **Prof. Dr. Deepak Prasad Subedi** from the Department of Physics at Kathmandu University actively participated in several conferences. He delivered an invited talk on "Surface Modification of Polymers by Low Temperature Plasma" in Advances in Sustainable Polymers 2023 (ASP-23) April 11-13, 2023, Kathmandu, Nepal. He delivered an invited talk on "Synthesis and characterization of protective layer for moisture stability of perovskite based solar cell" International Conference on Lightning Electromagnetics and Applications of Semi-conducting Materials, Oct. 04-06, 2023, Kathmandu, Nepal.
- **Prof. Dr. Deepak Prasad Subedi** from the Department of Physics at Kathmandu University

actively participated in several conferences. He delivered an invited talk on "Surface Treatment of Handwoven Fabrics by Atmospheric Pressure Dielectric Barrier Discharge" in 5th International e-Conference on Frontiers in Materials Engineering and nanoTechnology [ICFMET] during May 05 - 06, 2023. He delivered an invited talk on "Dielectric Barrier Discharge and Its Application for Surface Modification of Polymers" in International Conference on Technologies for Computer, Electrical, Electronics and Communication (ICT-CEEL 2023), Oct. 11-13, 2023. He delivered talked on "An introduction to Quantum Physics" in Workshop on "Quantum Computing and Post-Quantum Cryptography" organized by Dept. of Mathematics, School of Science, Kathmandu University, during March 26-27, 2024.

- **Asso. Prof. Dr. Hom Bahadur Baniya** participated in International Conference on Lightning Electromagnetics and Applications of Semi-conducting Materials, Oct. 04-06, 2023, Kathmandu, Nepal.
- **Asso. Prof. Dr. Niraj Dhital** participated in BCVSPIN 2023: Particle Physics and Cosmology in the Himalayas (May 15, 2023 - May 25, 2023). He contributed in the organization of the BCVSPIN school organized at Dhulikhel as a member of local organizing committee, and delivered scientific lectures in Particle Astrophysics including hands-on exercises on the simulation of extensive air showers using CORSIKA.

- **Asso. Prof. Dr. Niraj Dhital** participated in International Workshop on Multi-Messenger Astronomy 2024 (Jan 7 - Jan 9, 2024). He delivered lectures on the Linux tools and features useful in scientific computing in the workshop organized at the Department of Physics, Amrit Campus, Tribhuvan University.
- **Dr. Sanju Shrestha and Dr. Hari Shankar Mallik** participated in the Electron Devices Society (EDS) South Asia Chapter Meeting for Asia (India, Nepal, Sri-Lanka and Bangladesh) held in Bangaluru, India on March 2, 2024. Institute of Electrical and Electronics Engineers (IEEE) EDS Nepal Chapter along with the Central Department of Physics, Tribhuvan University organized a Summer School on Materials Science and Computational Physics-2023 (SSMSCP-2023) from Jesth 25-29, 20280 (June 8-12, 2023). The three days of the school was held in the department and the 4th and the 5th day were taken place at Birendra Multiple Campus, Bharatpur, TU and Lumbini Engineering Management and Science College (LEMSC), Bhalwari, Pokhara University respectively. More than 150 participant got opportunities to interact with national and international level subject and computational experts. NPS is happy to be one of the supporters along with UGC Nepal, Nepalese Society of Women in Physics (NSWIP) of the school.
- **Mr. Karan Giri** delivered oral presentation entitled “Highly improved thermoelectric performance in periodically ablated BiSbTe: WSe₂ nanostructured films” in the 2024 MRS Spring Meeting and Exhibit on Apr 22- 26, 2024, Seattle, Washington, USA.
- **Mr. Karan Giri** delivered oral presentation entitled “Enhanced thermoelectric transport characteristics of a novel BiSbTe-WSe₂ composite film” in the 2023 MRS Spring Meeting and Exhibit on Nov 26-Dec 1, 2023, Boston, USA.
- **Mr. Karan Giri** presented poster entitled “Challenges and Novel Strategies in High-Performance Thermoelectric Material Engineering” in the Annual Meeting of the Physical Society of Taiwan on Jan. 16-18, 2023, Tainan, Taiwan.
- **Dr. Drabindra Pandit and Mr. Madhu Sudan Paudel** two life member of the Nepal Physical

Society participated in the training program on “Global Navigation Satellite System (GNSS) workshop” was held in Pulchok Campus, from 12-16 February, 2024. This program was jointly organized by Center of Spatial Information Science (CSIS) and University of Tokyo and the International Committee on Global Navigation Satellite System (ICG). In Nepal, this program was hosted by Center for Space Science and Geometrics Studies (CSSGS) and Institute of Engineering (IOE), T.U. The international participants from various countries including Egypt, India, Bangladesh, Sri-Lanka, Indonesia, and Thailand were participated around 40 participants in the program. The program was focused to work on GNSS data collected from the different types of the GNSS receiver. There is a parallel session of workshop focus on the application of the GNSS in the different sectors for public concern, in which the participants were from Nepal Army, Nepal police, Telecom and other government agencies. Dinesh Manandhar, Project Associate Professor from University of Tokyo was the main facilitator of the program.

- **Mr. Devendra Upadhyaya** presented poster entitled “Shielding Properties of Lead-Free Tellurite Glasses against Photons, Neutrons, and Ions” organized jointly by Jefferson Laboratory and American Nuclear Society and supported by Office of Radiological Security, US Department of Energy, Pacific Northwestern National Laboratory, International Atomic Energy, 17th - 21st March 2024 Norfolk, Virginia
- **Mr. Devendra Upadhyaya** presented poster entitled “Radiation Shielding Properties of Lead free Glass System: 75TeO₂-15ZnO-(10-x)Nb₂O₅-xGd₂O₃” at 10th International Conference on FRONTIERS OF PLASMA PHYSICS AND TECHNOLOGY (FPPT-10) 13th -17th, March 2023, Kathmandu, Nepal
- **Mr. Devendra Upadhyaya** participated in “PUFFIn (Penelope User Friendly Fast Interface) Dose Simulation Training Workshop” organized by Jefferson Laboratory, Norfolk, Virginia 16th - 17th March, 2024.

- **Mr. Devendra Upadhyaya** participated in “National Workshop on Establishment of National Regulatory Infrastructure for Radiation Safety” organized by Ministry of Education Science and Technology with the coordination of International Atomic Energy Agency 11th - 15th December, 2023.
- **Mr. Devendra Upadhyaya** participated on Advanced course of Particle and Heavy Ion Transport Code System (PHITS), organized by Japan Atomic Energy Agency 9th-13th October, 2023.
- **Mr. Keshab Pandey** from the Energy storage material laboratory, Department of Physics, Daegu

University, Gyeongsan 38453, South Korea has delivered talk on title 'Modification of Tungsten Disulfide for Electrochemical Energy Storage and Conversion' in 6th ANPA Confer-ence held on July 14-16, 2023.

- **Mr. Tek Prasad Adhikari** participated in Multi Messenger Astronomy, 2024. This program was held at department of physics, Amrit Campus, Tribhuvan University, Kathmandu. Title of contribution are Introduction to X-ray Astronomy Need of space observatory and Xmm-Newton data analysis techniques : from observation data files (ODFs) to pipeline processed science ready data.

Prize, Award and Congratulation

Physicist Late Pushkar Basnet Memorial Award (2024)

Late Pushkar Basnet, Life Member and one of the ideal physicist and a motivator, has completed his M.Sc. degree in physics in 2008. This award has been established with the financial support of his M.Sc. Batch (2006-2008) friends. For this award, they have donated a total sum of Rs. 2,00,000 (Two lakhs only), which has been deposited at Nepal Bank Limited, Kirtipur branch as AkshyaKosh (Fixed Deposit) “Nepal Physical Society Award (Physicist Late Pushkar Basnet Memorial Award (2024)”. The goal of this award is to encourage and motivate young M.Sc. graduate in the field of physics from Nepal.

- The award will be managed with an annual interest payment of the principal amount.
- Every year, an award goes to M.Sc. second topper from Nepalese Universities having Nepalese citizenship working in the field of Physics.
- The award comprises a certificate, token of love, and cash.
- The award will be worth Rs. 10,151.

To be considered for a M.Sc. second topper, an applicant must be registered for the M.Sc. degree in physics in a Nepalese universities.

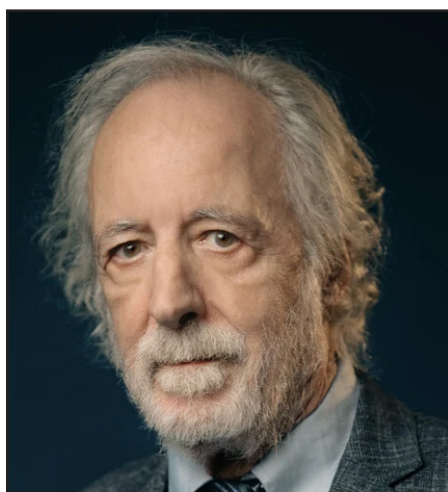
Congratulations

- NPS would like to express a wholeheartedly congratulation and extend best wishes to recently PhD graduates in Physics from Nepal.
 1. Dr. Narayan Panthi
 2. Dr. Jeevan Regmi

3. Dr. Dinesh Kumar Chaudhary
4. Dr. Indra Bahadur Bhandari
5. Dr. Usha Joshi
6. Dr. Ram Krishna Tiwari
7. Dr. Tarun Chaudhary

8. Dr. Raj Kumar Rai
 9. Dr. Vijay Kumar Jha
- Nepal Physical Society congratulates for receiving Prof. Dr. Shankar Prasad and Sudakshina Pradhan Memorial Award (2024). This award is honored to Ms. Kashmira Malla (MSc girl topper in physics from Tribhuvan University) and Mr. Roshan Chalise (a PhD research scholar) working in the field of physics in universities from Nepal.
 - Nepal Physical Society congratulates Dr. Tarun Chaudhary for receiving Prof. Dr. Kedar Lal Shrestha Memorial Award (2024). This award is honored to Ph.D. graduate from Nepalese Universities having Nepalese citizenship working in the field of Physics.
 - Nepal Physical Society congratulates Mr. Dipendra Raj Ojha for receiving Prof. Kedarnath Khanal Memorial Physical Science Award (2024). This award is honored to MSc Topper Student in Physics from the Tribhuvan University.

The Nobel Prize in Physics 2023



Pierre Agostini



Ferenc Krausz



Anne L'Huillier

The Nobel Prize in Physics 2023 was awarded to Pierre Agostini, Ferenc Krausz and Anne L'Huillier "for

experimental methods that generate attosecond pulses of light for the study of electron dynamics in matter".

Obituary

Obituary of Asso. Prof. Dr. Bhanu Bhakta Sapkota

Nepal Physical Society suffered an irreparable loss due to the untimely demise of Associate Prof. Dr. Bhanu Bhakta Sapkota, a life member of our society. On the seventh memorial day of his demise, a condolence program was held at Tri-Chandra Campus, Ghantaghar, Kathmandu on 9th February, 2024 (26th Magh, 2080).



Obituary of Prof. Dr. Bhadra Prasad Pokharel

Nepal Physical Society suffered yet another irreparable loss by untimely demise of Prof. Dr. Bhadra Prasad Pokharel, a life member and former secretary of the society on 2nd April, 2024 (20th Chaitra, 2080). On the 7th day of his demise, NPS held a condolence program at Patan Multiple Campus, Lalitpur on 8th April, 2024 (26th Chaitra, 2024). Various distinguished

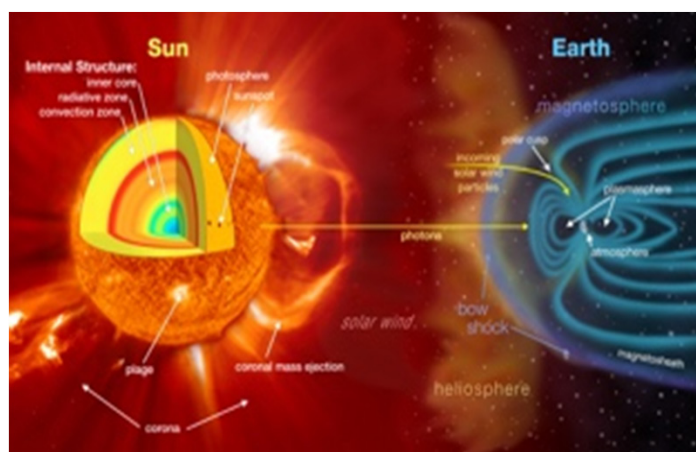


personalities paid tribute to Late Prof. Pokharel elaborating contributions he made in academia and physics research.

Conference and Webinar

Announcement- International School on Space and Weather Initiatives (ISWI)-2024, Nepal

The Nepal Physical Society has been honored as the recipient of the esteemed PRESTO grant Award valued at \$3000, with an additional \$1000 is designated for hosting the ISWI Space Weather School in Nepal. This recognition truly reflects our unwavering dedication to promoting international collaboration and excellence in space science research. The ISWI School will be an excellent platform for students to get exposed to cutting-edge research in a broad range of solar physics topics from accomplished faculty using a defined curriculum. OR/AND (depending on space). Selected students will be partially funded to attend the school.



NPS DoSC Organized 'Winter School of Python-2024'

The "Winter School on Python-2024" was held by the Nepal Physical Society, Division of the School of Computing, from February 12 to March 23, 2024. Basic Python courses lasted 23 hours over 15 days for B.Sc. students in the Physics Department at Tri-Chandra Multiple Campus. The program was offered both physical mode and online through Zoom. Thirty students were present. The main instructor and focal

person of this program was Madhu Sudan Paudel, joint secretary and member of division of school of computing (DoSC) of NPS. The other instructors of the program were Anil Katuwal from University of Southern Mississippi, USA, Raj Kumar Pradhan from University of Alabama in Huntsville, USA and Ukesh Karki from Florida International University, USA.

Gallery



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