



ANNUAL REPORT

YEAR
2023



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Pakistan Nuclear Society

<https://pns.org.pk>

Executive Summary

During the year 2023 PNS conducted scientific activities, public awareness programmes, outreach and social activities. During the year nine special events were arranged, Fiteen scientific activities, twenty student activities under public awareness programmes, thirteen outreach and linkages and seven social and recreational activities were carried out. PNS membership programme was on full swing. One hundred and forty (140) lifetime memberships were awarded in 2023. Associate membership was started for the students of professional colleges and universities. During 2023 more than 1300 students from 70 universities were awarded associate membership. Lectures, online courses and competitions were carried for associate members for awareness of peaceful applications of nuclear technology for socioeconomic development of a country. Tributes to three eminent nuclear scientists were arranged during the year on their death anniversary. PNS Lifetime achievement awards were awarded to two eminent nuclear scientists. In social activities hiking cum family picnic were arranged. Annual diner was arranged in Faisalabad. PNS Annual meeting was arranged in December 2023. Monthly meetings were conducted on first Saturday of every month. Quarterly newsletters were published regularly. PNS website was maintained.

PNS Activities in 2023

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Part-1
PNS Special Events

Event – 1: *The Oath Taking of the Newly Elected PNS Council, 2023-24*

9th January 2023 at Local Hotel, Islamabad



The oath taking of the newly elected Council of the Pakistan Nuclear Society (PNS) for the term 2023-24 was held on 9th January 2023 at IFQ Hotel and Resort, Club Road, Islamabad. A large number of PNS members and their families witnessed the ceremony. Dr. Raja Ali Raza Anwar, *HI, SI*, Chairman Pakistan Atomic Energy Commission (PAEC) took oath from the Council Members. The new team is a blend of young and experienced office bearers who are determined to take up the Society to a level of an international forum for the promotion of peaceful uses of nuclear technology. Those who took oath were Dr. Muhammad Tahir Khaleeq, President, Mr. Waqar Ahmad Butt, Vice President, Dr. Mohammad Mohsin, General Secretary, Mr. Ghulam Sarwar, Finance Secretary and five Executive Members; Prof. Dr. Javed Iqbal Saggi, Mr. Muhammad Abbas Qamar, Ms. Huma Qamar, Ms. Nazia Kashif and Syed Zahid Hussain.



After the formal oath taking, Dr. M. Mohsin presented the Progress Report of the Society and Dr. M. Tahir Khaleeq elaborated about the future initiatives and programmes. The Chief Guest, Dr. Raja Ali Raza Anwar in his speech lauded the enhanced activities of PNS for the peaceful uses of nuclear technology. The outreach to other S&T organizations/universities and to focus on students was well appreciated. He especially mentioned about the quality and contents of PNS quarterly Newsletter. He ensured to provide all possible support for the activities of PNS.

Event- 2:

2nd Meeting of the PNS Administrative Advisory Board (AB)

26th January 2023 at PAEC Rest House, Islamabad



Dr. Ansar Parvez
Advisor NCA / Former
Chairman PAEC
(Chairman)



Maj. Gen. (R) Ahmad Bilal
Advisor NCA / Former
Chairman SUPARCO
(Member)



**Senator Nauman
Wazir Khattak**
Senator 2015-2021 /
Chairman FF Steels
(Member)



Mr. Ahmer Bilal Soofi
Lawyer / Former Caretaker
Federal Minister
(Member)



Mr. Kamran Akhtar
DG ACDIS, MOFA
(Member)



**Air Commodore
Khalid Banuri (R)**
Ex-DG ACDA
(Member)



**Prof. Dr. Muhammad
Mujahid**
Rector PAF-IAST
(Member)



**Prof. Dr. Robina
Farooq**
VC GCWU
Faisalabad
(Member)



**Prof. Dr. Zafar
Nawaz Jaspal**
QAU
(Member)



Mr. Nusrat Mirza
Journalist, Author
and TV Personality
(Member)



Dr. M. Tahir Khaleeq
President PNS
(Member/Secretary)

PNS Administrative Advisory Board (PNS-AAB)

The second meeting of the Administrative Advisory Board (AAB) of Pakistan Nuclear Society (PNS) was held on January 26, 2023 at PAEC Rest House, G-8/3, Islamabad. The members of the Board, Dr. Ansar Parvez, Major General (R) Ahmed Bilal, Mr. Nusrat Mirza, Prof. Dr. Muhammad Mujahid, Prof. Dr. Rubina Farooq, Prof. Dr. Zafar Nawaz Jaspal and Dr. Muhammad Tahir Khaleeq attended the meeting. PNS Council Members participated as observers. Dr. Ansar Parvez, Chairman AAB, in his opening remarks appreciated the efforts of the council and showed satisfaction that PNS established a group comprising of highly senior professionals with decades of technical expertise in various sectors. Dr. Tahir Khaleeq, President PNS formally welcomed the board members and gave a presentation on PNS activities conducted in the light of suggestions given by the AAB members during the first Board meeting held in July, 2022. He reiterated that PNS has the mandate to promote peaceful applications of nuclear science and technology and allied disciplines for the socio-economic development of the country. He recalled that one of the main objectives of this Board is to enhance the scope from scientists and engineers to personalities in other fields like industry, media, lawyers' community, universities, strategic organizations and foreign affairs for visibility of PNS in these sectors.

Dr. Ansar Parvez stressed upon the need to increase communication with not only scientific organizations, but also other public and private sectors. He advised to create a strong connectivity between people from industry, educational institutions and experts working in government organizations. He suggested that the website of PNS should be made more attractive covering the new initiatives by PNS i.e. Women in Nuclear (WiN), Youth in Nuclear (YiN), Associate Membership etc. He admired the efforts of PNS council particularly for conducting seminars, conferences, symposia etc. and declared that the meeting was quite productive.

Gen. Ahmad Bilal emphasized on the dissemination of knowledge about nuclear sciences in the education sector particularly at secondary school level so that the young generation would be attracted to adopt careers in nuclear sciences. He expressed his concern that mathematics which is a key to development of all sciences is being ignored in our education system and urged PNS to highlight its importance at various forums. He strongly supported and asked for more activities of PNS regarding creation of awareness about nuclear sciences and technology through conferences/seminars/symposia etc. He also supported the idea of close connectivity between educational institutes, scientific organizations and industrial sector to promote R&D activities and familiarize with the latest technological advancement in the world.

Mr. Nusrat Mirza urged PNS to establish a closer collaboration with private sector organizations by providing technical and scientific expertise in nuclear and other fields. He emphasized that PNS may play a pivotal role in successful implementation of these efforts for making it beneficial for the general public, industries and the agriculture sector. He highlighted that PAEC and other R&D organizations have performed significant research and development work but unfortunately the benefits are not visible to general public. He also mentioned that the activities of PNS regarding utilizing experienced nuclear scientists and engineers (particularly retired persons) would be very beneficial in various industries. Their expertise may be used in private sector organizations as advisors/consultants etc. In his capacity, as a media person, he offered his help for facilitation of connectivity between PNS and other organizations.

Dr. Rubina Farooq mentioned that Govt. College Women University Faisalabad (GCWUF) has already created a forum of all the women universities in Pakistan and meetings are held from time to time for discussions/resolution of various issues related to women. PNS forum can be best utilized for broadening the base and sharing the activities of Women in Nuclear (WiN). She promised to extend her full support in the activities of PNS, particularly, for WiN Pakistan chapter. In addition, she mentioned that the facilities available at GCWUF can be utilized for PNS-WiN activities at Faisalabad.

Dr. Muhammad Mujahid presented his viewpoint regarding inclusion of applied subjects in various fields of Science and Engineering with a special emphasis on industrial applications. He mentioned that the experts working in industries can be best utilized to share their experience with university students. He added that Pak-Austria University near Haripur is already utilizing their expertise in the form of courses in the degree programs. This scheme has proved very beneficial results for students and has provided a good connectivity between industry and education sector. He offered his help to PNS regarding provisions of industrial experts and premises for holding seminars, symposia etc. He also mentioned that the research of nuclear scientists in the area of materials can be useful for the persons working in the business of materials.

Dr. Zafar Iqbal Jaspal mentioned that the PNS programmes should be made more visible to general public by using the media (print, electronic and social) by inviting more people from other sectors in the events organized by PNS. He also suggested that in the programmes of PNS at agriculture centers, farmers and agriculturists should also be invited and the information regarding new advancement in the field of nuclear agriculture may be provided to them in order to attain full benefits of the latest techniques and research in this area. Such efforts will contribute to boost the economy of the country.

At the end, on behalf of the PNS council, Dr. M. Tahir Khaleeq thanked the honorable members of AAB for their valuable suggestions and guidance and assured that all possible efforts would be made to implement the suggestion of the Board Members in true letter and spirit. It was also added that PNS council is looking forward for the continued valuable guidance & support of AAB.



Participants of the 2nd Meeting of PNS Administrative Advisory Board

**Event – 3: *Students’ Convention Interaction with
Renowned Scientists***

18th April 2023 at The International Islamic University,
Islamabad



Ever since Pakistan Nuclear Society (PNS) has initiated the process of Associate Membership scheme for the students of universities and professional colleges related to science, engineering and medicine, more than 1200 students have become its members in a few months. The main objective is the awareness about the benefits and peaceful uses of nuclear technology in electricity generation, hi-tech industry, agriculture, environment and human health. For this purpose, PNS organizes various seminars,

symposia, conferences and workshops in different cities. The focus is to dilute the fear of the word Nuclear and clear up their minds about the uses of this power technology. A few sessions have been held at various universities and institutions. Some attractions have also been created for the youngsters in the form of cash prizes on essay writing, poster competitions, video clips to promote peaceful applications of nuclear techniques in different areas for the socio-economic development of the country. It will definitely open up new opportunities for young graduates to adopt careers in nuclear sciences and strengthen the process of national policy of indigenization in this field. The present symposium at the Allama Iqbal Auditorium of the International Islamic University Islamabad (IIUI) is a part of this process.

Ms. Ayesha Baig, a student at the Preston University Islamabad



performed the responsibility as the stage secretary. On behalf of the Chairman Physics Department, IIUI, Dr. Tamoor Khurshid gave the welcome address. Dr. M. Tahir Khaleeq, President PNS formally introduced PNS and elaborated the importance of Associate Membership. He shared numerous benefits of joining this fruitful scheme including assistance in selecting and initiating projects, guidance about selecting professional careers and counseling in pursuing higher studies. He further added that PNS provides free access to nuclear-related webinars, online courses, and discussions, allowing members to stay up-to-date with the latest developments and advancements in the field of nuclear technology and allied sciences.



In the technical session, eminent scientists and engineers, Dr. Ansar Parvez, HI, Former Chairman PAEC, Mr. Muhammad Naeem, NI,HI,SI, Former Chairman PAEC, Dr. N.M. Butt, SI, Former DG PINSTECH/ Chairman PINSAT, Dr. Shaukat Hameed Khan, Former DG Optics Lab/Rector GIKI, Engr. Syed Ziauddin, Former Member Engineering PAEC, Dr.

Qamar Mahboob, Former Member Materials PAEC and Dr. Naseem Irfan, Rector PIEAS were the panelists. They motivated the students by telling about their lifelong struggle to achieve such a status in the community of nuclear science and technology in the country. They mentioned many big achievements they made in spite of limited resources and without any foreign assistance.

It was followed by a questions/answer session. This session was moderated by Mr. Waqar A. Butt, Vice President PNS. Students asked thought provoking and intelligent questions which were well addressed by the panelists. After that Prof. Dr. Farida Tahir, Tenure Professor at COMSATS gave details about the big initiative of International Young Physicists Tournament (IYPT) commonly known as 'Physics World Cup'.

On behalf of Associative Members, three students, Ms. Madhia Bibi from Hazara University, Mr. Hamza Khan from Air University and Mr. Tahir Taj from IIUI expressed their views about PNS initiatives and gave some fruitful suggestion emphasizing on what the



students expect from PNS. Prizes and certificates were given to the top three videos of PNS speech competition on "Global Warming and its Effects". The winners were 1st, Ms Aresha Yasin from IIUI, Islamabad, 2nd, Ms. Ishrat Fatima from Punjab Univ. Lahore and 3rd. Mr. Faraz Ahmad Mahar from University of



Sindh, Jamshoro. Another prize was awarded to Mr. Muhammad Haroon Farooqi from QAU, Islamabad in essay writing competition on the "Benefits of Nuclear Technology" among the Associate Members. It is worth mentioning that 49 students participated in the essay writing and 25 in video competition. The closing remarks were given by Dr. Muhammad Irfan Khan, Dean Sciences, IIUI and finally, Dr. Mohammad Mohsin, General Secretary PNS presented vote of thanks.

Event - 4: *Tribute to Engr. Munir Ahmad Khan*
 25th May 2023 at NORI, Islamabad



PNS is continuing to remember the heroes who dedicatedly and selflessly played crucial role to make Pakistan a Nuclear State. One such hero is Mr. Munir Ahmad Khan, former Chairman PAEC. A memorial reference was held to pay tribute to him on 25th May, 2023 at NORI Hospital Auditorium, G-8/3, Islamabad. A large number of young and senior scientists, engineers, technologists and people from different walks of life gathered to listen about the initiatives taken by the legendary leader. It encompasses the unbelievable achievements that PAEC made during his longest tenure as Chairman. Worth mentioning is the cold test performed in 1983.



The programme started with recitation from The Holy Quran. Dr. Muhammad Tahir Khaleeq, President



PNS briefly introduced the Pakistan Nuclear Society (PNS) and described various activities being performed by PNS all around the country focusing on the peaceful uses of nuclear technology. Mr. Waqar Ahmad Butt, Vice President PNS presented a historical introduction of Mr. Munir A. Khan briefly covering his academic and professional life and highlighted the

significant achievements that led the country to become 7th Nuclear Power of the world. *Fatiha* was offered not only for Mr. Khan but also for those PNS Members who left this world during 2022-23.

Elite personalities who shared their views and recalled memorable events while working with Mr. Munir A. Khan as a colleague or as his subordinate include Dr. Raja Ali Raza Anwar, *HI,SI*, Chairman PAEC; Engr. Parvez Butt, *NI,HI,SI*, Former Chairman PAEC; Dr. Samar Mubarakmand, *NI,HI,SI*, Former Chairman NESCOM; Dr. Inam ur Rahman, *HI,SI,AK*, DG CNS (now PIEAS); Mr. Muhammad Naeem, *NI,HI,SI*, Former Chairman PAEC; Engr. Sultan Bashir ud Din Mahmud, *SI*, Former DG (NP); Dr. N.M. Butt, *SI*, Former DG PINSTECH/ Chairman PINSAT; Mr. Ghulam Nabi, *NI,HI,SI*, Former Member Technical PAEC; Dr. Shaukat Hameed Khan, Former DG Optic Labs/ Rector GIKI; Engr. Muhammad Mansoor, *SI*, Former DG AEMC, Lahore; Dr. Sher Muhammad, Former Director IRNUM, Peshawar; Dr. N.A. Kizilbash, *SI*, Former Director NORI Hospital; and Engr. Waqar Murtaza Butt, Former Member Engineering PAEC. Senator Farhat Ullah Babar was also present at the occasion and presented his views on Khan's accomplishments.

A video message from Mr. Omer Khan, son of Mr. Munir A. Khan was played; Two more messages, one from Dr. Shamim Ahmad Chaudhri, 1st President of PNS, was read by Ms. Huma Qamar, Executive Member, PNS and the other from Mr. Muhammad Afzal, Former Secretary PAEC was read by Mr. M. Abbas Qamar, Executive Member PNS. More than 200 persons were present on that occasion which was quite motivating for the younger generation. Ms. Nazia Kashif, Executive Member PNS performed as Stage Secretary of the event.

The programme was concluded with the vote of thanks by Dr. Muhammad Mohsin, General Secretary PNS followed by refreshments in the premises.

Event – 5: *Reconstitution of WiN-Pakistan Chapter*
30th August 2023 at PAEC Rest House, Islamabad



In order to reconstitute WiN Pakistan Chapter, elections for the posts of a President, a Secretary, a Treasurer and two Council members were held on 3rd July 2023 by electronic (online) voting. These elections were conducted by Pakistan Nuclear Society. Resultantly, the following office bearers have been elected.

President: **Dr. Shazia Fatima**, Director KIRAN Hospital, Karachi
Secretary: **Dr. Samreen Shahzadi**, Principal Scientist, PINSTECH
Treasurer: **Ms. Benazir Zainab Dar**, Principal Scientist, PAEC HQ
Executive Member: **Ms. Noureen Akhtar**, Principal Scientist, DNPER, PAEC
Executive Member: **Ms. Hina Younis**, Senior Scientific Officer, PNRA

The Oath Taking of the newly elected Council of WiN-Pakistan Chapter occurred on August 30, 2023, at the PAEC Rest House in G-8/3, Islamabad. The ceremony commenced with recitation of the Holy Quran. Dr. Raja Ali Raza Anwar, Chairman PAEC, presided over the simple yet elegant ceremony where the elected WiN-P Council Members stood before the audience, pledging their sincere commitment to work for a greater national cause. Their promise was a compelling testament to their dedication to women rights and welfare.

The ceremony was graced by the presence of esteemed individuals including Members of the Commission and their spouses. Distinguished guest speakers, particularly notable experienced women scientists and engineers were invited to provide inspiration and



motivation. Their speeches underscored the pivotal role of women leadership and illuminated the challenges and opportunities that lie ahead.

Dr. Rakshanda Bilal, in her welcoming address, shared the history of the WiN-P chapter and its initial working. She emphasized and commended the role of PNS in revitalization of this chapter. Dr. M. Tahir Khaleeq, President PNS, elaborated PNS role in re-establishing WiN chapter and elucidated the responsibilities of the Council. He delineated the scope of their work and their mission to address issues pertaining to women. The Chief Guest, Dr. Raja Ali Raza Anwar, in his inaugural speech, congratulated the elected council and lauded the commendable efforts of PNS Council in WiN-P revival. He emphasized PAEC enduring support for PNS activities and the recognition of the significant role of Pakistani women in advancing the country. Gender equality and gender parity policies were highlighted. He urged to engage senior female scientists, doctors, and engineers for guidance in emerging scientific fields.

The ceremony concluded with expressions of gratitude and a vote of thanks delivered by Dr. Shazia Fatima, the newly elected President of WiN-P. She shared her vision for leading the WiN-P Council and outlined a roadmap for the future. Acknowledgments were extended to



the PNS Council for reviving WiN-P and organizing the investiture ceremony. Additionally, the Chief Guest was thanked for his unwavering support and his presence during the oath-taking.



Newly Elected Council WiN-Pakistan Chapter with Chairman PAEC

Event – 6: *Tribute to Dr. A. Q. Khan*

10th October 2023 at Pakistan Academy of Sciences (PAS), Islamabad



Pakistan Nuclear Society (PNS) takes it as a pride to keep the memories alive of those who rendered valuable services for the development of nuclear science and technology both for

peaceful applications as well as strategic needs of the country. Previously, such memorial references have been organized for late Dr. Ishfaq Ahmad, Dr. I.H. Usmani, Prof. Abdus Salam and Mr. Munir Ahmad Khan. Accordingly, PNS organized a 'Tribute to Dr. Abdul Qadeer Khan, *N.I & BAR, H.I*' on his 2nd death anniversary held at Pakistan Academy of Sciences (PAS), Islamabad on 10th October, 2023 to pay homage to the most popular person in the nuclear history of Pakistan. The main objective of holding the reference was to highlight the contributions made by Dr. Khan in Pakistan's nuclear programme that led his nation to become the 1st Muslim and 7th Nuclear Power in the world. Elite senior scientists and academicians especially those who worked with him joined this memorable reference to express their views during the half day discourse.

After recitation from the Holy Quran, a welcome address was delivered by Prof. Dr. Tasawar Hayat, *H.I, S.I, T.I*, Secretary General PAS. A formal introduction to Dr. Khan covering different stages of his life from the childhood to the professional career and achievements was presented by Mr. Waqar A. Butt, Vice President PNS. All the participants offered *Fatiha* for the departed soul. The invited speakers who shared their memories include Dr. Inam ur Rahman, *H.I, S.I, AK*, Former DG Centre for Nuclear Studies (now PIEAS), Dr. N. M. Butt, *S.I*, Chairman PINSAT/ Former DG PINSTECH, Mr. Ejaz Ahmad Mukhtar, *H.I, S.I*, Former Chairman KRL, Dr. Khalid Mahmood Khan, *S.I*, President PAS, Dr. Syed Wilayat Husain, *S.I*, Former Member Science KRL and Dr. Touqeer Anjam, *H.I, S.I*, Former Member Science KRL. The ceremony concluded with a vote of thanks by Dr. Mohammad Mohsin, General Secretary PNS. A young student from the International Islamic University, Miss Ayesha Yasin, Associate Member of PNS performed the duty as stage secretary very elegantly.



Participant of the Tribute to Dr. A. Q. Khan

Event – 7:

Tribute to Dr. Rafi Muhammad Chaudhry

4th December 2023 at Government College University (GCU), Lahore



Pakistan Nuclear Society (PNS) in collaboration with the Government College University (GCU) Lahore and Pakistan Physical Society (PPS) organized a memorial reference to “The Father of Experimental Nuclear Physics in Pakistan”; Professor Dr. Rafi Muhammad Chaudhry, *H.I, S.I, S.K* at his death anniversary. After doing M.Sc. in Physics from Aligarh Muslim University in 1929, Dr. Rafi proceeded to Cambridge (UK) for Ph.D. at Cavendish Laboratory under the supervision of Nobel Laureate Prof. Rutherford. He completed his doctorate in 1932 and returned to India. There he taught modern physics at Islamia College Lahore and then moved to Aligarh University as full Professor and later become Chairman of that Department. In 1948 he joined Government College Lahore where he laid foundations of the famous “High Tension Laboratory” in 1952 equipped with 1.2 MeV Cockcroft-Walton Generator.

This laboratory has a major contribution to the experimental Physics where many top physicists like Dr. Ishfaq Ahmad, Dr. Samar Mubarikmand, Dr. N.M. Butt, Dr. Inam-ur-Rahman, Prof. Tahir Hussain, Dr. G.D. Alam, Dr. Ahsan Mubarak and Dr. Hameed Ahmad Khan were trained. He is remembered by his colleagues and students as an excellent teacher and a man of strong discipline. In recognition of his



untiring services to development of S&T in Pakistan, the Government of Pakistan decorated him with the Civil Awards of *Hilal-i-Imtiaz*, *Sitara-i-Imtiaz* and *Sitara-i-Khidmat*.

On 4th December 2023, the Bokhari Auditorium of GCU was full of distinguished guests, faculty staff, family members of Prof. Chaudhry and a large number of students. The first session commenced with recitation from the Holy Quran. After *Naat e Rasool e Maqbool* (SAW) and National Anthem, a short documentary: Physics is everywhere was played. Prof. Dr. Shazia Bashir, Director Institute of Physics (IoP)/ Dean of Physical and Mathematical Sciences, GCU gave the seminar introduction. Prof. Dr. Hassan Amir Shah, former Vice Chancellor GCU / currently the President PPS delivered the welcome address. Another documentary about the facilities and research work being carried out at IoP which was prepared by students of the institute was also shown. Mr. Waqar A. Butt presented a formal introduction to Prof. Chaudhry on his life from the childhood to the professional career. A short reference was also made in remembrance of late Prof. Dr. Faizan-ul-Haq, a student of Prof. R.M. Chaudhry who dedicated his 60 years to Physics at the HT Lab renamed as Centre for Advanced Studies in Physics (CASP). It was followed by the address of the Chief Guest, Prof. Dr. Ahmad Adnan, Vice Chancellor GCU who appreciated PNS, PPS and IoP for holding such a memorable event for remembrance and motivation of students.

The second session started with a documentary on the life and work of Prof. Chaudhry. A video message by Dr. Samar Mubarakmand, *N.I, H.I, S.I*, former Chairman NESCOM was played. Dr. N.M. Butt, *S.I*, Chairman PINSAT/ Former DG PINSTECH and Dr. Inam ur Rahman, *H.I, S.I, AK*, Former DG Centre for Nuclear Studies (now PIEAS) who have been students of Prof. Chaudhry shared their memories with historical photos and narrating interesting incidences that amused the students.



Dr. Shoaib Ahmad, former Rafi Chair/ Member Science PAEC also sent a video message bearing research work carried out in High-tension Lab. Mr. Usman Rafi, the grandson of Prof. Chaudhry, also expressed his views on behalf of his family. The ceremony lasted for about 3 hours and all the participants and students, around 200, remained in the hall till the end. Shields were presented to all the speakers. Dr. Shazia gave the vote of thanks. At the end, the participants offered *Fatiha* for DR. R.M. Chaudhry as well as other deceased persons.

Event – 8: *PNS Life Achievement Awards 2023*
30th December 2023 at PAEC Rest House, Islamabad



Pakistan Nuclear Society (PNS) feels pride to pay homage to those dignitaries who have rendered their valuable services for the development of nuclear science and technology, and grant them prestigious awards for their accomplishments both for peaceful applications as well as strategic needs of the country. The Lifetime Achievement Award is one of the most distinct honor, which PNS gives to its highly distinguished members. For the year 2023, this award was given to Dr. Inam-ur-Rehman, *H.I, S.I, AK* and Engr. Sultan Bashiruddin Mahmud, *S.I*. These scientists and engineers are legends in their respective fields, and have made exceptional contributions and recognizable achievements.

The award giving ceremony was held on 30th December, 2023 at the PAEC Rest House, G-8/3, Islamabad. The event was graced by a remarkable turnout of guests, family members, and colleagues who applauded and honored the extraordinary services to the nation of Dr. Inam and Engr. Bashiruddin. The programme commenced with a recitation from the Holy Quran. Dr. Muhammad Tahir Khaleeq, President PNS warmly welcomed the participants and provided overview of the Lifetime Achievement Awards. Dr. Mohammad

Mohsin, General Secretary PNS highlighted the significant achievements of Dr. Inam-ur Rehman. Before joining the Pakistan Atomic Energy Commission (PAEC) in 1959, he did his M.Sc (Physics) from Government College, Lahore. He obtained his MS in Nuclear Engineering from MIT, USA in 1962, and Ph.D from North Carolina State University, USA in 1969. Upon his return, he initiated a training programme for young scientists and engineers in a small room within the Commission and played a key role in the establishment of 'Reactor School' which was renamed as Center for Nuclear Studies (CNS) in 1976. The School expanded with time and upgraded as a university named Pakistan Institute of Engineering and Applied Sciences (PIEAS), which obtained the degree-awarding charter in 2000. Although, Dr. Inam stepped down from his administrative responsibilities in 1997 upon his retirement, however, he remained dedicated to the institution he had built from a single room to Pakistan's top engineering university and nurturing the country's scientists and engineers in nuclear science and technology. In recognition of his exceptional services, the Government of Pakistan bestowed upon him distinguished civil awards, including Hilal-i-Imtiaz, Sitara-i-Imtiaz, and Aizaz-i-Kamal. Keeping these credentials in view, PNS had the honor to credit him with Lifetime Achievement Award.

Mr. M. Abbas Qamar, Executive Member PNS presented the formal introduction of Engr. Sultan Bashiruddin Mahmud and highlighted various significant milestones from his career. Engr. Bashiruddin obtained Electrical Engineering degree from the Engineering University, Lahore, securing the first position. He then joined PAEC and proceeded to England to pursue higher education. He earned MS degree in Nuclear Reactors Control Engineering from



Manchester University College of Science and Technology and gained valuable experience while working on diverse nuclear reactors. In November 1974, when he was only 33 years of age, he assumed the charge as the founding director of Pakistan's uranium enrichment programme which is recognized as the Kahuta Plant. Under his leadership, the project made significant progress. Additionally, he was the main person behind the design, construction, and operation of an indigenous research reactor, utilizing domestic resources that played a pivotal role in making Pakistan a nuclear power. For his significant contributions to the field of science and engineering, the Pakistan Academy of Sciences (PAS) awarded him a Gold Medal in 1991, and then President of Pakistan bestowed upon him Sitara-i-Imtiaz. In recognition of his remarkable services, PNS honored him with the Lifetime Achievement Award.

The Chief Guest, Dr. Samar Mubarkmand, N.I, H.I, S.I, Former Chairman NESCOM, presented these awards (memento shields), while the Guest of Honor, Engr. Pervaz Butt, N.I, H.I, S.I, Former Chairman PAEC, presented the certificates. Following the receipt of the awards and certificates, Dr. Inam and Engr. Bashiruddin expressed their gratitude to PNS for bestowing the awards and shared their thoughts with the audience. The ceremony continued with thought provoking and emotional speeches from Dr. Samar Mubarak, Engr. Pervaz Butt and Dr. Raja Ali Raza Anwar, Chairman PAEC, acknowledging the occasion as a remarkable one. Ms. Nazia Kashif, Executive Member PNS, diligently fulfilled the role of stage secretary for the event, ensuring its smooth proceedings.



Event- 9: *PNS Annual General-body Meeting (AGM), 2023*
30th December 2023 at PAEC Rest House, Islamabad

The Annual General-body Meeting (AGM) of the Pakistan Nuclear Society was held on 30th December, 2023 at the PAEC Rest House in Islamabad. About 80 PNS members were present on the occasion. The meeting was commenced with a recitation from the Holy Quran by Mr. Waqar A. Butt. President PNS provided an overview of current activities, new initiatives and future programmes. General Secretary PNS gave facts and figures about the activities undertaken by the Society during 2023. He highlighted the growth of PNS membership including associate and student memberships. He also elaborated on public awareness programmes, knowledge sharing sessions and support provided to a large number of students.

Mr. Ghulam Sarwar, Finance Secretary PNS, presented the summary of financial report for 2023. He gave an overview of society's income and expenditure, financial statement and prudent management. The financial reserves maintained by PNS ensured sustainability and enabled the implementation of successful programmes.



Mr. Sarwar expressed gratitude towards various organizations and stakeholders for their contributions, emphasizing the society's commitment to transparency and accountability through meticulous record-keeping and audits procedure. During the meeting, a resolution was presented proposing the establishment of a forum for previous presidents of PNS. It was discussed in detail, and couple of members showed a bit of reservation in its adoption. Therefore, the resolution could not be passed. Overall, the AGM provided valuable insights into the society's achievements in the previous year. The reports presented by the General Secretary and Finance Secretary showcased the society's dedication to advancing nuclear science and technology while ensuring responsible financial management. Discussion was

also held on finding ways and means of funds generation. The members appreciated the idea of holding PNS elections by electronic voting. Vice President PNS concluded the meeting by clarifying certain issues raised by the members and also by delivering a vote of thanks.

Part-2
Scientific Activities

Activity – 1: Seminar on Nuclear Techniques in Agriculture

27th February 2023 at Nuclear Institute of Agriculture (NIA), Tando Jam



It is encouraging that PNS has been continuously organizing seminars/symposiums/workshops on current trends/ recent advances in the areas of nuclear applications in agriculture, health, environment, industry, and power generation throughout the country with the aim to play its part in national development. Consequently, PNS organized a one-day seminar on ‘Nuclear Techniques in Agriculture’ at the Nuclear Institute of Agriculture (NIA), Tando Jam in Sindh province on 27th February 2023. Mr. Waqar Ahmad Butt, Vice President PNS, Mr. Ghulam Sarwar, Finance Secretary and two Executive Members, Mr. Muhammad Abbas Qamar and Syed Zahid Hussain travelled to Tando Jam. Dr. Syed Sarwar Alam also accompanied the group as a speaker. In the opening session, Dr. Mahboob Ali Sial, Director NIA welcomed PNS delegates from Islamabad as well as the guests from various relevant organizations and universities.

Dr. Saima Mir, who is the Focal Person of both PNS as well as Women in Nuclear (WiN) in NIA, performing as Seminar Secretary, elaborated the programme of the day long activity. On behalf of the President PNS, Mr. Waqar A. Butt gave an introduction to PNS and informed about the various programmes and initiatives of the Society. It was followed by the speech of the Chief Guest, Prof. Dr. Fateh Muhammad Marri, Vice Chancellor, Sind Agriculture University, Tando Jam. He appreciated the usefulness of the event and asked for arranging another programme in-collaboration with his university. More than 90 persons attended this seminar.

Three lectures were delivered in the technical session: *Dr. Mahboob Ali Sial* gave details on the ‘Peaceful uses of nuclear techniques in the development of improved crop varieties’. Recalling the history of the establishment of this first ever nuclear agriculture centre in the

country, he gave an overview of the crops developed in that centre. *Dr. Syed Sarwar Alam* presented the ‘Development of improved varieties in crop for disease resistance and yield using radiation and other techniques’ in which he elaborated his 30 years of experience at NIAB. And *Mr. M. Abbas Qamar* explained in detail the ‘International nuclear safety standards and their application to agriculture’ in the light of his experience while working as the Director of Safety at PAEC HQ and at Chashma Site of PAEC. These presentations will be uploaded at PNS website (<https://pns.org.pk>). At the end, Mr. Hafeez ur Rehman Bughio, DCS, Head Plant Breeding and Genetics Division, NIA presented concluding remarks and extended thanks to PNS for holding the important seminar. PAEC provided the logistic support and Pakistan Science Foundation (PSF) provided financial assistance for this event.



Participants and Speakers of the Seminar at NIA

Activity – 2: *Seminar on Recent Advances in the Management of Differentiated Thyroid Cancer*
28th February 2023 at LINAR, Larkana

Pakistan Nuclear Society (PNS) with the collaboration of Larkana Institute of Nuclear Medicine and Radiotherapy (LINAR) organized a one day seminar on “Recent Advances in the Management of Differentiated Thyroid Cancer”. Representatives of PNS, consultant surgeons from Chandka Medical College Teaching Hospital and retired renowned consultant surgeons graced the event as guests. Before start of the seminar, a visit of PNS delegation was conducted to various sections of the hospital. About 70 persons attended the seminar.

The seminar was divided into two sessions (Introductory session & Academic session). In the first session, Dr. Abdul Samad Shaikh, Director LINAR gave the welcome address. He warmly

welcomed, PNS Council members from Islamabad, guests and all the participants. He presented glimpse of LINAR facilities and all the services provided by hospital in the region. Mr. Waqar Ahmed Butt briefly introduced PNS and its activities being performed in the country. He emphasized upon the peaceful uses of nuclear technology for the I of mankind. Dr. Asma 25 lain, Consultant Nuclear Physician LINAR, talked about the objectives, vision and mission of women in nuclear. Dr. Abdul Khaliq Tunio, Head of Nuclear Medicine and Allied Division LINAR, gave an introductory talk on Sonological assessment of thyroid nodule. He explained the characteristics features of benign and malignant nodules and recommended guidelines.

During the academic session, Dr. Qurat 25 lain Bugti, Consultant General Surgeon talked about the “Surgical management of thyroid goiter and various procedures recommended internationally for thyroid surgeries”. Dr. Murk Laghari, Consultant Nuclear Physician, presented “The role of radioactive iodine (I-131) in differentiated thyroid cancer”. Dr. Hafeezullah Soomro, Consultant Clinical Oncologist talked about “The role of tyrosine kinase inhibitors in the refractory differentiated thyroid cancer”. Dr. K. DAS, renowned Consultant Surgeon and former Principle of Chandka Medical College, Larkana, was the Chief Guest of the event. In his speech, he appreciated the organizers of the event and briefly talked about differentiated thyroid cancer and elaborated the role of radiations in the management of DTC. Mr. Waqar A. Butt in his concluding remarks appreciated Dr. Abdul Samad Shaikh, Director LINAR, Dr. Aatif Hussain Memon, Incharge Nuclear Medicine Department, Dr. Riffat Wadho, PNS Focal Person / Consultant Nuclear Physician and LINAR faculty for organizing a well-managed seminar and extended thanks to LINAR management for the nice hospitality. He thanked all the speakers and guests for their active participation. Dr. Irum Naz, Head of Radiotherapy Department, LINAR presented vote of thanks in very attractive words.



Activity – 3: 1st National Workshop of ISO-19443 to Train the Trainers

8th & 9th March 2023 at PAEC Rest House, Islamabad



This workshop was organized by PNS. It was the result of initiative of prestigious national organizations like Pakistan Atomic Energy Commission (PAEC), Pakistan Nuclear Regulatory Authority (PNRA), Pakistan National Accreditation Council (PNAC) and Certification Services Pakistan (pvt.) Limited (CeSP). The main aim of the workshop was to brainstorm and plan for strengthening Quality Management System (QMS) of Local Industries and Facilities to provide a sustainable technical support especially for Nuclear Power Programmes. In the opening session, after brief introduction of the speakers, Dr. Anjum elaborated the aims and objectives of the course and future directions. He informed that a series of training programmes will be arranged in which the participants from relevant organizations and industries throughout the country will be invited. The Chief Guest of Inaugural Session, Dr. Abdul Ghani Akram, *SI*, Member Technical, PAEC acknowledged that such fruitful programme is essentially not only required for the nuclear power industry but also for other industrial sectors of Pakistan as well. He reiterated all possible support in the series of these endeavors in future.

In the technical session conducted by Dr. Rizwana Mehboob, Head (CM) PAEC, nine lectures were delivered by experts: “Need of Sustainable Technical Support for National Nuclear Power Programs/ Plants (NPPs)” by Mr. Muhammad Farooq Awan, Director (QAD) PINSTECH, “Introduction and Need of ISO-19443 based QMS for NPP Technical Support Organizations” by Mr. Zahid Salman, Head (QAC) PAEC, “Audit and Certification Process of ISO-9001/19443 based Quality Management System (QMS)” by Mr. Rashid Hanif Bhutta, Lead Auditor, CeSP, Culture for Safety by Mr. Shahbaz Ali Nasir Bhatti, Director (NSD) PNRA,

“Safety Culture Self-Assessment by Mr. Muhammad Sadiq” by SPE (NISAS) PNRA, “Graded Approach and Important to Nuclear Safety (ITNS) Items” by Mr. Atif Javed, PE (NSD) PNRA, “International Perspective of Accreditation” by Mr. Azhar Iqbal Director (IL) PNAC, “Supply Chain Management & Provision for Counterfeit, Fraudulent or Suspect (CFS) Items by Mr. Ahsan Qadeer, PE (NSD) PNRA, Measurement, Assessment and Improvement” by Mr. Muhammad Ilyas, PE (MED) PNRA. Interactive question answer sessions and round-table discussions were also held to develop National Training Programs for ISO-19443 based QMS. The workshop concluded by preparing a communiqué and nominating focal person from relevant organizations.

The focal group will prepare and present a viable work-plan to achieve the objectives. Syed Ziauddin, former Member Engineering PAEC, was the Chief Guest in concluding ceremony. Certificates of participation were awarded to all the attendees and mementos (shields) were presented to the chief Guests.



Participants and Speakers with the Chief Guest in the National Workshop

Activity – 4: Seminar on Operational Safety Management at NPPs

3rd May 2023 at CHASCENT, Chashma,



A one-day seminar on ‘Operational Safety Management at NPPs’ was organized by PNS at CHASNUPP Centre of Nuclear Training (CHASCENT), Chashma, Kundian on 3rd May 2023. Seminar was divided into two sessions; Introductory session & Academic session. The seminar commenced with the welcome address of Mr. Shamshad Ahmad, Director CHASCENT. He admired the efforts of PNS for conducting seminar at CHASCENT.

Afterwards, Introduction to Pakistan Nuclear Society was presented by Dr. Muhammad Tahir Khaleeq, President PNS. He briefly presented the introduction of PNS and all the activities it is performing all around the country emphasizing upon the peaceful uses of nuclear technology. The second session was started after the tea break. In this academic session, three lectures were delivered on various topics.

First lecture was by Mr. M. Anwar Habib, Former Chairman PNRA on “Genesis of Nuclear Safety”. Then Mr. Muhammad Ayub, CE(R), Former DG, PNRA made his presentation on “Future Challenges in Technical Support for Operational Safety”. Third lecture was delivered by Mr. M. Abbas Qamar, CS(R), Former Director DOS. His presentation was on the “Importance of Leadership and Safety Culture in Operational Safety of NPPs”. More than 60 persons attended this seminar and the lectures were very well taken by the participants. After the lectures, the participants asked their questions in the question/answer session. The seminar was concluded with the vote of thanks by Mr. Waqar A. Butt, Vice President, PNS.



Participants and Speakers with Director CHASCENT

Activity – 5: Seminar on Cancer Diagnostic and Therapy
29th May 2023 at CENAR, Quetta



A one-day seminar on Advances in Cancer Diagnostic and Therapy at the Center for Nuclear Medicine and Radiotherapy (CENAR), Quetta, was organized by the Pakistan Nuclear Society (PNS) with the cooperation of Pakistan Science Foundation (PSF) and Pakistan Atomic Energy Commission (PAEC) on Monday, 29th May 2023. Before start of the seminar, a visit of PNS delegation was conducted to various sections and laboratories of the hospital having state of the art equipments in the province. In the opening session, about 40 persons were present. Dr. Abdul Malik Tareen, Vice Chancellor, University of Makran was the Chief Guest in that event. The seminar was divided into two sessions (Introductory session & Academic session).

In the first session, Dr. Hafiz Khush Naseeb Ahmad, Director CENAR gave the welcome address. He warmly welcomed PNS Council members from Islamabad, the guests from various hospitals and all the attendees. Afterwards, Introduction to CENAR was given by Dr. Shehla Iftikhar. She also presented glimpse of CENAR and all the facilities provided by

hospital. Dr. Muhammad Tahir Khaleeq, President of PNS, briefly gave the introduction of PNS and the activities it is performing all around the country emphasizing upon the peaceful uses of nuclear technology. Dr. Abdul Malik Tareen, presented his point of view about the seminar. He appreciated the initiative to organizing such a useful event in Baluchistan and desired that PNS organize similar programme in future for which he offered his support.

In the academic session, Dr. Muhammad Sadiq, PMO, Head Nuclear Medicine, CENAR delivered presentation on the Role of Theranostics in CA Prostate. The second presentation was given by Mr. Abdul Basit, Sr. Scientist (Medical Physicist), CENAR on New Trends of Radiotherapy in CENAR. The last presentation was delivered by Dr. Shahwali Kakar, Assistant Professor, E.N.T. BMC, Quetta. The topic of his talk was “Perioperative RLM identification to prevent nerves case discussion”. Dr. Shugufta Kanwal from CENAR took up the responsibility as Stage Secretary and coordinated the session in a very efficient manner. The seminar was concluded with the vote of thanks by Mr. Waqar A. Butt, Vice President, PNS.



Participants, Speakers with Director CENAR and Chief Guest

Activity – 6: Seminar on Update on Nuclear Medicine and Radiotherapy

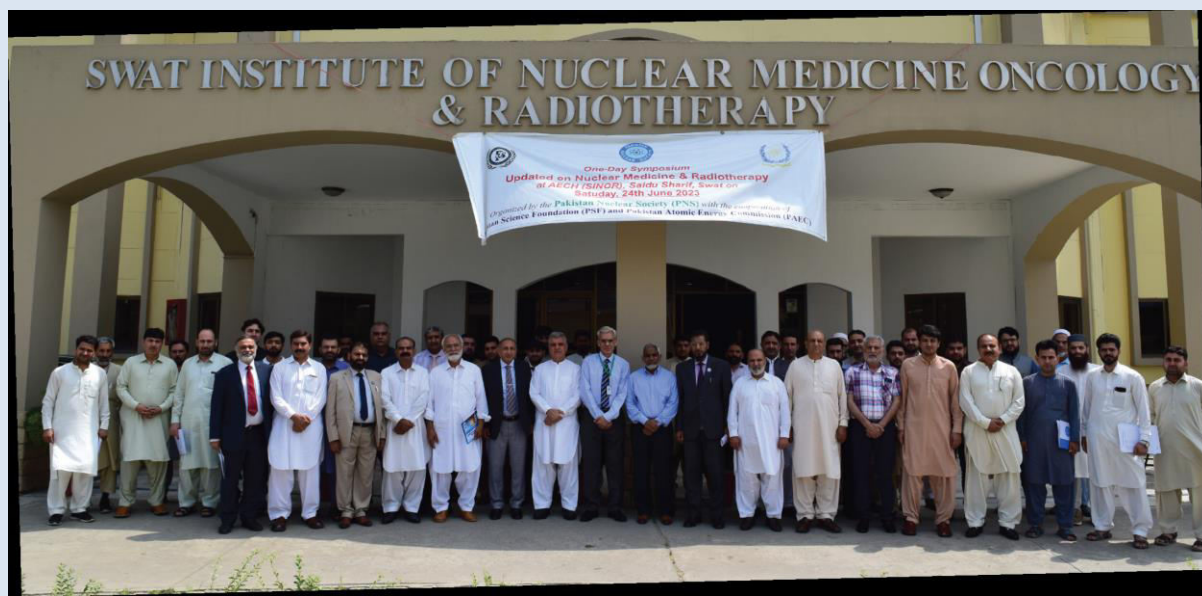
24th June 2023 at SINOR, Swat



Pakistan Nuclear Society (PNS) organized a one-day seminar titled “Update on Nuclear Medicine and Radiotherapy” on Monday, 24th June 2023 at the Atomic Energy Cancer Hospital known as Swat Institute of Nuclear Oncology and Radiotherapy (SINOR) situated at Saidu Sharif, Swat. This event was organized with the cooperation of Pakistan Science Foundation (PSF) and Pakistan Atomic Energy Commission (PAEC). Dr. Israr-ul-Haq, Chief Executive Saidu Group of Teaching Hospitals and Principal of Swat Medical College was the Chief Guest in this event. The seminar was divided into two sessions; Introductory & Academic. In the first session, Dr. Shoaib Shah, Director SINOR gave the welcome address. He warmly welcomed the guests, PNS Council members from Islamabad, and all the attendees. Dr. Muhammad Tahir Khaleeq, President of PNS, briefly presented the introduction of PNS and all the activities it is performing all around the country emphasizing upon the peaceful uses of nuclear technology. Dr. Israr-ul-Haq expressed his views about the seminar. After the introductory session, a visit of PNS delegation was conducted to various sections of the hospital.

In the academic session, there were five presentations, first of which was delivered by Dr. Shahzad Qasim, SMO, SINOR, on “Nuclear Medicine Procedures: Myths & Reality”. Then Dr. Nazia Neelam Shehzadi, PS, NORI, gave presentation on “Medical Physics: Conventional to Advanced Machines; Modalities and Techniques”. Third presentation was delivered by Mr. Ashfaq Zaman, SS, SINOR on “An Overview of Radiation Therapy for Health Care Professionals”. Then Dr. Ahsan Nawaz Qureshi, SS, O-Labs gave a very dynamic lecture on “Artificial Intelligence Based Blood Cell-Imaging for Disease Diagnostics and Therapeutics”. Last presentation was delivered by Mr. M. Abbas Qamar, Executive Member PNS,

CS(R)/Former Director DOS, PAEC on “Safety Requirements for Medical Exposure at Nuclear Medical Centers”. Dr. Shauket Ali, SMO, SINOR took up the responsibility as Stage Secretary and coordinated the session in a very efficient manner. The seminar was concluded with the vote of thanks by Dr. Mohammad Mohsin, General Secretary PNS/ Director HRD, PAEC.



Participants of the Seminar with the Chief Guest in SINOR

Activity – 7: Seminar on Sharing Experience in Nuclear Science & Technology by Women Scientists, Engineers and Doctors
3rd July 2023 at PAEC Rest House, Islamabad



After the Oath Taking session, a seminar was conducted on Sharing Experience in Nuclear Science & Technology by women scientists, engineers and doctors who have made substantial contributions for 25-30 years in various fields of national importance. The seminar served as a platform for individuals and experts from diverse sectors to convene and share their valuable insights and experiences with a primary goal of fostering collaboration, innovation, and the dissemination of knowledge within the realm of S&T.

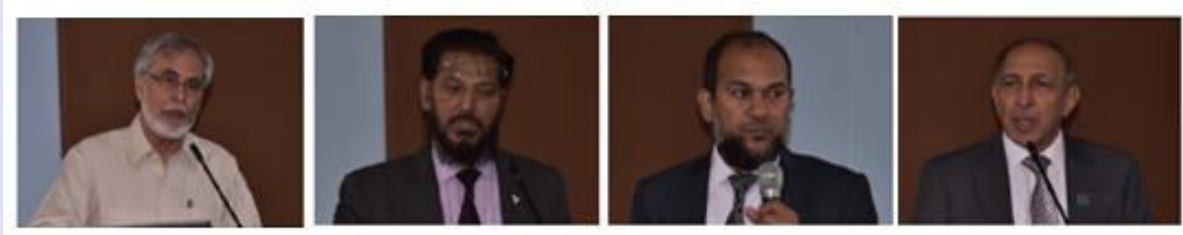
Mrs. Fehmeen Raza Anwar presided over the seminar. The notable speakers shared their success stories include Dr. Rakshanda Bilal, former Director General (Technical) PAEC-HQ, Dr. Ismat Fatima, former Director at Research, Dr. Shafqat Farooq, Chief Scientist® and Mrs. Shabana Waseem, Chief Scientist®. Ms. Abida Khatoon, Former Director PNRA who served at IAEA for a long time shared her experience from US in a voice note. Miss Andleeb Tariq, a representative of the Young Women Forum (YWF) of WiN-Global, travelled from Lahore to express her views. These sessions provided a unique opportunity for the audience to engage with these experts, pose questions, and gain profound insights. The seminar also facilitated numerous networking opportunities, allowing participants to connect with like-minded professionals and explore potential collaborations. These networking sessions encouraged the exchange of ideas and the formation of valuable partnerships.

In her keynote address, the chief guest underscored the paramount importance of science and technology in addressing global challenges. She emphasized the continuous need for investment in research and innovation. Furthermore, she commended the speakers for their unwavering dedication and enthusiasm in serving PAEC. Her words of encouragement were directed towards younger participants, urging them to draw knowledge and inspiration from the dedication, hard work, and extensive experiences of all the speakers.

In conclusion, the Seminar served as a dynamic platform for the exchange of knowledge, collaboration, and inspiration. It united experts and enthusiasts from various sectors of Nuclear S&T, fostering a sense of community and shared commitment to advancing human knowledge and addressing pressing global issues. Beyond being a learning opportunity from seasoned professionals, this event celebrated the transformative potential of nuclear science and technology in shaping our world. It left attendees motivated and equipped with fresh insights to contribute to the ever-evolving landscape of nuclear technology.

Activity – 8: PNS-KNPGS Joint Seminar on Sea Water Desalination by Nuclear Techniques

16th August 2023 at KIRAN, Karachi



This seminar was organized by the Pakistan Nuclear Society (PNS) with the collaboration of KNPGS and with the efforts of Mr. Waqar Murtaza Butt, Former Member (Engg.) PAEC/ Advisor to SPD. The seminar was held on Wednesday, 16th August at Karachi Institute of Radiotherapy and Nuclear Oncology (KIRAN). After recitation from holy Quran, the welcome address was delivered by Mr. Waqar Murtaza Butt. He praised the efforts of PNS for conducting this seminar at Karachi. The introduction to Pakistan Nuclear Society was presented by Dr. Muhammad Tahir Khaleeq, President PNS. He briefed about the activities of PNS all over the country emphasizing upon the peaceful uses of nuclear technology. The Chief Guest of the event, Mr. Jamshed Azim Hashmi, Former Chairman PNRA admired the efforts of PNS for conducting the seminar at KNPGS on a very important topic. Some senior official including Engr. Javed Iqleem and Engr. Azfar Baig also graced the occasion as guests of honor.



After the formal opening session, four lectures were delivered by the speakers. First lecture was by Mr. Saad Ullah Khan, Sr. Director NEW-II on “RO Plant and NDDP of KANUPP-1 (KDP)”. Then Mr. Nadeem Ahmad, Former GM, KNPGS gave a presentation on “Sea Water desalination Plant Process and Contribution in Construction of K2 and K3 Plants”. Third lecture was by Mr. Ahsan Ullah Khan, DCS, KNPGS on “Global Perspective of Nuclear Desalination Plants”. Last lecture was delivered by Engr. Waqar Murtaza Butt on “Future Requirements and Challenges”. More than 80 persons attended this seminar and the lectures were very well taken by the participants. The question/answer session was

conducted by Mr. M. Abbas Qamar, Executive Member, PNS. The responsibility of coordinating the session as Stage Secretary was taken up by Syed Imran Shah, CE/ Director (C&O), KNP GS in a very efficient manner. The seminar was concluded with the vote of thanks by Mr. Waqar Ahmad Butt, Vice President, PNS.

**Activity – 9: *PNS-KNP GS Joint Seminar on Role of Environmental Management is Safety of NPPs,*
17th August 2023 at KINPOE, KNP GS**



A one-day seminar on the “Role of Environmental Management is Safety of NPPs” was organized by the Pakistan Nuclear Society (PNS) with the collaboration of KNP GS and PNRA on Thursday, 17th August at Karachi Institute of Nuclear Power Engineering. Chief Guest of that event was Mr. M. Anwar Habib, Former Chairman PNRA. Seminar was divided into two sessions (Introductory & Academic). The seminar commenced with the recitation from the Holy Quran after which the welcome address was delivered by Mr. Nadeem Arshad, GM, KNP GS. He welcomed the PNS team and praised the efforts of PNS for conducting seminar at KNP GS. Afterwards, Dr. Muhammad Tahir Khaleeq, President PNS briefly presented the introduction of PNS and the activities it is performing at various places in the country emphasizing upon the peaceful uses of nuclear technology. Chief Guest of this event Mr. M. Anwar Habib addressed the audience. He also admired the efforts of PNS for conducting the seminar at KNP GS on a very important topic.

The second session was started after the tea break. In this academic session, four lectures were delivered on various topics. First lecture was by Mr. M. Anwar Habib on “Genesis of Nuclear Safety”. Then Mr. M. Abbas Qamar, CS(R), Former Director DOS gave a presentation on “Environmental Monitoring for Safety of NPPs”. Third lecture was delivered by Mr. Javed Hussain, Head (EM), EPP, KNP GS on “Environmental Monitoring at KNP GS”. Last lecture was by Ms. Kausar Praveen, SSO, RNSD-III, PNRA, on “Role of PNRA in Environmental Monitoring in Pakistan”. More than 40 persons attended this seminar and the lectures were very well taken by the participants. After the lectures, the participants

asked meaningful questions in the panel discussion session conducted by Mr. M. Abbas Qamar. Syed Imran Shah, Director (C&O), KNPGS took up the responsibility as Stage Secretary. The seminar was concluded with the vote of thanks by Mr. Abdul Rehman Sajid, DPM, K2, KNPGS.

Activity – 10: *Two-Days International Workshop on Advances in Nuclear Medicine and its Applications*

19th – 20th September 2023 at COMSTECH, Islamabad



With the collaboration of Pakistan Nuclear Society (PNS) and Pakistan Society of Nuclear Medicine (PSNM), COMSTECH organized a two-days International Workshop of Advances in Nuclear Medicine and its Applications at its Secretariat in Islamabad on 19-20 September 2023. Dr. Naseem Irfan, Rector, Pakistan Institute of Engineering and Applied Sciences (PIEAS) was the Chief Guest. Two very learned and highly experienced foreign speakers, Prof. Dr. Abdel hamid H. Elgazzar from Kuwait and Prof. Dr. Raihan Hussain, Senior Consultant from Bangladesh came to deliver lectures. Prof. Dr. S. Khurshid Hasanain, the Coordinator of the Workshop gave the introductory remarks. Prof. Dr. M. Iqbal Choudhary, Coordinator General COMSTECH gave the welcome address via Zoom link from Italy.

In the technical session, there were 15 presentations. Prof. Dr. Abdelhamid delivered two lectures on Diagnosis of Infection – Role of PET-CT. Prof. Dr. Raihan gave a talk on Multiple Primary malignancies PET-CT Perspective. Dr. Shazia Fatima, President Pakistan Society of Nuclear Medicine (PSNM) gave an overview of the Status of Nuclear Medicine in Pakistan. Prof. Ismet Sarikaya, Chair & Professor of Nuclear Medicine, Kirklareli University, Turkiye talked via Zoom link on Biology of Development and Metastatic Spread of Cancer with PET Images. Dr. Arzoo Fatima, Head, Nuclear Medicine and Molecular Imaging, Institute of Nuclear Medicine and Oncology Lahore (INMOL), Lahore talked on PSMA Theragnostic - what

we have at hand. Dr. Shazia Fatima gave another talk on PSMA Imaging - A Never Ending Success Story. Dr. Muhammad Adnan Saeed, Head, Nuclear Medicine Oncology and Radiotherapy Institute (NORI) gave a talk on PRRT – in Neuroendocrine tumors.

Dr. Muhammad Babar Imran, Director, Punjab Institute of Nuclear Medicine (PINUM), Faisalabad spoke on SPECT-CT – Need of the hour via Zoom link. Brig. Mahdi Raza - AFIC Rawalpindi, talked on Ischemic heart Disease and management of chest pain. Dr. Zaheer Chiragh, Joint Secretary, PSNM/Consultant Nuclear Physician at MoH Saudi Arabia presented the work on Artificial Intelligence in Nuclear Medicine; current status & future perspective. Dr. Ahmed Ahsan Nawaz from the Optics Lab gave a very fascinating talk on Artificial Intelligence (AI) in blood cancer patients' management. Ms. Noreen Marwat, Medical Physicist at NORI made a presentation on Personalized Nuclear Medicine – Dosimetry. Dr Nadim Lodhi from PINSTECH covered the useful topic Theranostic: from bench to bedside. The third talk of Prof. Dr. Abdelhamid on Under recognized bone diseases – role and pattern of scintigraphy.

In the last session on the 2nd day, Dr. Arzoo Fatima presented the summary of desertions in the Workshop. Dr. Muhammd Tahir Khaleeq, President PNS gave the concluding remarks elaborating the activities of PNS and future collaboration with COMSTECH. Vote of thanks was given by Prof. Khurshid Hasanain which was followed by presenting shields to the speakers from abroad and certificates to all the participants.



Participants, Speakers with the Foreign Delegates in the International Workshop

Activity – 11: National Symposium on Fostering Safety & Quality for Sustainable Technical Support of NPPs

31st October 2023 at PNRA, Islamabad



PNS Focus Group for Quality Management and National Institute of Safety & Security (NISAS), PNRA jointly organized National Symposium on ISO-19443 and Regulations PAK/921 (GSR Part 2) on 31st October, 2023 at PNRA Auditorium, Islamabad. The objective of the symposium was 'Quality of indigenous products & services is one of the main solutions for socio-economic development of Pakistan'. The theme was fostering safety & quality for sustainable technical support to nuclear power plants. Speakers from Pakistan National Accreditation Council (PNAC), Pakistan Standard and Quality Control Authority (PSQCA), Pakistan Atomic Energy Commission (PAEC), Certification Services of Pakistan (CeSP) and Pakistan Nuclear Regulatory Authority (PNRA) delivered lectures. The participants were from CNPGS, ICCC, DOS, DQM, WASO, NPO and PNRA. The ceremony was honored by Engr. Parvez Butt, *N.I, H.I and S.I*, former Chairman PAEC as Chief Guest. Resource persons were from PNAC, PSQCA, EDB and Ministry of Industries.



Welcome Address was given by Mr. Muhammad Sadiq, SPE PNRA, while the Introduction to Symposium was presented by Dr. Anjum Iqbal, Coordinator PNS. There were four presentations in the symposium. Mr. Zahid Salman, DCS, PAEC gave a talk on “Introduction to ISO-19443”. Mr. R. H. Bhutta, GM/HoD CeSP spoke on “ISO-19443 Certification Process”. Mr. Azhar Iqbal, Director PNAC elaborated on “Accreditation Process for ISO-19443 Certification”. Ms. Samia Javed, Assistant Director, PSQCA gave online presentation on the “Process of Adopting ISO-19443 as a National Standard”.

In the afternoon session, four more presentations were delivered by officials from PNRA. “Introduction to PAK/921 (GSR Part 2)” by Mr. M. Sadiq, “Introduction to Safety Culture” by Mr. Shahbaz Ahmad Bhatti, “Process to Conduct Safety Culture Self-Assessment” by Mr. M. Usman and “Supply Chain for Items Important to Nuclear Safety” by Mr. Ahsan Qadeer. Mr. Muhammad Rahman, Member Executive PNRA was the Chief Guest in the closing ceremony. He uploaded the efforts of PNS for holding such useful sessions which are essential for indigenization process in the country. Memento shields prepared by PNS were presented to all the speakers. The symposium was also attended virtually by PNRA regional offices at Karachi and Chashma and by many others via zoom link. The seminar was concluded with the closing notes by Dr. Anjum Iqbal.



Participants, Speakers and PNS Council with the Chief Guest in the National Symposium

Activity – 12: A Session in an International Conference on Climate Change and Global Warming

5th December 2023 at CEES, University of the Punjab, Lahore



College of Earth and Environmental Sciences (CEES) at University of the Punjab Lahore, organized its 4th International Conference on Emerging Trends in Earth and Environmental Sciences from 4-6 Dec.2023. In this conference about 140 papers were presented in four parallel sessions attended by more than 500 participants Since PNS has already inked MoU with CEES for organizing such joint ventures, therefore, a half-day session on GLOBAL WARMING & CLIMATE CHANGE (GWCC) was sponsored by PNS. This session was chaired by Prof. Dr. Kausar Jamal Cheema, former Dean Faculty of Natural Sciences, LCWU and Co-Chaired by Mr. Waqar A. Butt, Vice President PNS. In this session the following presentations were made.

1. Man and the Environment by Dr. Imtiaz Ahmad, Chief Scientist (R)/ DG-IA PAEC
2. The Muslim Bagh Ophiolite: A Potential Site For Climate Change Mitigation by Dr. Arshad Ali, Researcher, Sultan Qaboos University, Qatar
3. Adapting to Global Warming: Innovating Resilient Solutions for Water Security in Changing Climates and the Cryosphere by Dr. Amjad Masood, Scientific Officer, GCISC, Islamabad
4. Utilization of Fe/Co-doped TiO₂ Nanoparticles for Photocatalytic Hydrogen Production by Ms Iqra Anwar, Centre of Excellence in Solid-State Physics, PU, Lahore
5. Evaluation of the Effect of Indigenous Landfill Covers on the Emission of Greenhouse Gases from Waste by Tayyaba Younas, Univ. of Gujrat
6. Assessment of Greenhouse Gases Emission Potential from Solid Waste Dumps using Static Chamber Method by Dua Nouman Rana, Univ.of Gujrat

Prof. Dr. Sajid Rashid Ahmad, Principal CEES gave the concluding remarks and presented shield to all the speakers and organizers of the session. Certificates of participation to the students will be sent in due course.

Activity – 13: One Day Seminar on The Role of Women in Nuclear Science

7th December 2023 at PINSTECH, Islamabad

WiN-Pakistan organized a one-day Seminar on "The Role of Women in Nuclear Science" on December 7, 2023 at PINSTECH. More than 50 women scientists and engineers from PINSTECH complex, PAEC HQ, and PNRA attended the seminar. Four ladies from the Syria Atomic Energy Commission who were on training through IAEA also participated. Dr. Samreen Shehzadi, PS, PINSTECH/ Secretary WiN-Pak delivered a talk on "The Role of women in the nuclear field, WiN Global and WiN Pakistan chapter". Ms. Warda Rana from Syria presented "The Role of Women in Atomic Energy Commission of Syria". Ms. Mousa Nisreen, Ms. Alasalhy Safaa & Ms. Alhabbal Raghada spoke about their experiences in the nuclear field and IAEA Fellowship at PINSTECH. Dr. M. Tahir Khaleeq, President PNS gave introductory Remarks regarding the seminar and the activities of PNS and WiN- Pakistan. Dr. Khalida Gill, Former President WiN- Pak was the Guest of Honor. She shared her lifelong experiences in various positions in PAEC, PNS, and especially WiN Global programmes where she represented Pakistan in many countries. It is worth mentioning that she had the longest tenure as In-Charge WiN-Pak Chapter and remained PNS Council Member for many years. Dr. Anila Usman from PIEAS presented a memento to Dr. Khalida Gill. Dr. Muhammad Waseem, Director Technology, PINSTECH, who was the Chief Guest of the seminar, appreciated the efforts of PNS and WiN-Pak chapter for strengthening and promoting the role of women in the nuclear field. Dr. Saira Butt, Head Isotope Application Division, PINSTECH presented the vote of thanks. Shields were given to the foreign participants.

WiN-Pak Council members had a meeting with Dr. Nouzha ben Rais from Morocco, Representative of WiN Global Imaging Committee on October 21, 2023 at PC Hotel Rawalpindi and discussed with her current programmes and future collaboration with WiN Morocco as well as WiN Global. She lauded the efforts and seriousness of WiN-Pak for strengthening the role of women working in the field of nuclear science & technology. She assured all possible help in organizing some international events in Pakistan.

Dr. Samreen Shehzadi had an online meeting with Dr. Janette Donner, President WiN-IAEA on November 26, 2023. In the meeting, Dr. Samreen informed about the activities of WiN-Pakistan chapter and collaboration with WiN Global. She clarified that presently WiN-Pak is working under the umbrella of the Pakistan Nuclear Society (PNS). Dr. Donner appreciated these efforts for promoting the role of women in nuclear field. She also showed her interest in the collaboration of WiN-IAEA with WiN-Pak and may extend invitations to relevant ladies from Pakistan to participate in future events in Vienna. Dr. Samreen, the Secretary WiN-Pak Chapter, spoke on the Role of Women in Nuclear Science' showing photos of some prominent women scientists and their achievements during the students session at the Preston University, Islamabad. She urged the female students to become WiN-Pak members and make the role of women visible for socio-economic development in the country.



Activity – 14: PNS-NIAB Joint Seminar on National Food Security

26th December 2023 at NIAB, Faisalabad



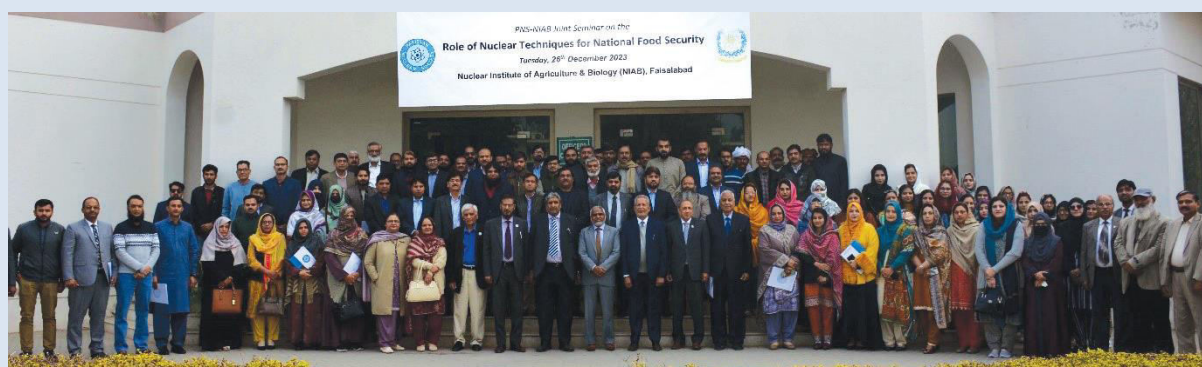
A one-day national seminar on the “Role of Nuclear Techniques in National Food Security” was held on 26th December 2023 at Nuclear Institute for Agriculture and Biology (NIAB), Faisalabad. The Seminar was jointly organized by PNS and NIAB. Before start of the seminar, a visit of PNS delegation was conducted to various sections of the Institute. About 150 persons were present in the main hall of NIAB. Due to space limitations, about 50 students attended the seminar in the adjoining hall through Zoom link. Additional 40 students witnessed the deliberation online in NIBGE Auditorium. Dr. Iqbal Shahid, Director General (Ext.), Livestock Punjab was the Chief Guest for this event. The seminar started with the recitation from the Holy Quran followed by welcome address and seminar introduction by Dr. M. Yussouf Saleem, CS/Director NIAB. He warmly welcomed the guests, delegates from Islamabad, and all the attendees. Afterwards, Dr. Muhammad Tahir Khaleeq, President PNS, briefly gave the introduction of PNS and its activities performing all around the country emphasizing upon the peaceful uses of nuclear technology.



In the technical sessions, various presentations were given by the scientists and researchers of NIAB, NIBGE and other relevant organizations which are as follows; Dr. M. Yussouf Saleem, Director NIAB, “Role of Nuclear Techniques for National Food Security”, Dr. Tariq Mehmood Bhatti, Technical Consultant, SML Quetta, “The Dead Sea: A Partner in Food Security”, Dr. Muhammad Rashid, DCS, NIAB, “Enhancing Rice Crop Resilience through the Application of Nuclear Techniques”, Dr. Muhammad Arif, DCS, NIBGE, “Induced Mutagenesis and Biotechnology for Crop Improvement”, Dr. Mehboob-Ur- Rehman, DCS, NIBGE, “Induced mutations as useful genetic resource for understanding pathways to develop new wheat lines”, Dr. Kashif Riaz Khan, DCS, NIAB, “Mutation breeding for crop improvements (Cotton)”, Dr. Mahmood-u-Hassan, PS, NIAB, “Role of induced mutation on development of sesame and castor bean varieties and its impact on national food security”, Dr. Amjad

Hameed, PS, NIAB, "TILLING: A powerful reverse genetic tool in Molecular Mutation Breeding", Dr. M. Jawad Asghar, PS, NIAB, "Improvement of Pulses at NIAB using Nuclear Techniques". Dr. Mian Abdur Rehman Arif, SS, "Prospects and challenges in wheat improvement through induced mutations", Ms. Mariyah Aslam, JS, PBGD, "Development of New Chickpea Varieties through Induced Mutation", Dr. Ghulam Raza, PS, NIBGE, "Nuclear Technique; a useful strategy to develop improved soybean cultivars", Dr. Humera Razzaq, Prof. UAF, "Role of nuclear technologies in the Oilseeds", Ms. Javeria Asghar, PhD Scholar NIAB, "Role of Nuclear Techniques in Agriculture", Dr. Uzma Maqbool, DCS, ASD, NIAB, "Role of Nuclear Techniques in Animal Production, Health and Food Safety", Dr. Muhammad Akhter, DCS, HOD SESD, NIAB, "Efficient Fertilizer Technology for better nutrient utilization and crop productivity on alkaline calcareous soil", Dr. Sajid Nadeem, DCS, HOD PPD, NIAB, "Role of plant protection in pest and disease management of crops", Dr. Rashid A. Khan, DCS, PPD NIAB, "Sustainable insect pests management in major field crops", Dr. Nazia Suleman, DCS, PPD, NIAB, "Use of ecofriendly techniques for integrated pest management", Dr. Rehana Kausar, PS, ASD, NIAB, "Nuclear and assisted reproductive techniques in animal production", Dr. Sumaira Yousaf, PS, PPD, NIAB, "Nanomaterials as antimicrobials and fungicides for the control of plant diseases under the changing climate scenarios, Dr. Syed Wajih ul Hassan, PS, PBG, NIAB, "Success of Gamma Irradiation", Dr. M. Salahuddin Shah, PS, ASD, NIAB, "Irradiated technologies for vaccine development", Mr. Ismail Chughtai, PS and Ms. Mehwish Mumtaz, PS, ASD, NIAB, "Application of nuclear techniques in food safety analysis".

In the end, the concluding remarks were given by Dr. Yussouf Saleem in which he thanked PNS for holding such a seminar of national importance at NIAB. Certificates were given to all the speakers, organizers and participants of the seminar. The seminar was concluded with the vote of thanks by Mr. Waqar A. Butt, Vice President, PNS appreciating all those who devoted their time and efforts for the successful full day programme.



Activity – 15: Seminar on Exploring Nuclear Science and Technology

27th December 2023 at NIBGE, Faisalabad



A seminar about awareness of PNS Programmes and activities was conducted on 27th December, 2023 at National Institute for Biotechnology and Genetic Engineering (NIBGE), Faisalabad. The seminar was organized by PNS with the collaboration of NIBGE. After recitation from the Holy Quran, Dr. Kalsoom Akhtar, Director NIBGE gave the welcome address. She warmly welcomed the guests, PNS Council members from Islamabad, and all the participants.

The programme was coordinated and organized by Mr. Abdul Malik Paracha whereas Dr. Rubab Zahra Naqvi performed the duty as stage secretary. Dr. Muhammad Tahir Khaleeq, President PNS gave the introduction to Pakistan Nuclear Society emphasizing upon activities related to Women in Nuclear (WiN) and graduate students. Mr. M. Abbas Qamar, CS(R)/Former Director DOS, Executive Member PNS delivered a lecture on “Nuclear Radiation and its Effects on Human Health”. Dr. Samreen Shahzadi, PS, PINSTECH, Secretary WiN-Pakistan Chapter talked on “The Role of Women in Nuclear S&T”. In the end, a thought provoking lecture was delivered by Mr. Waqar A. Butt on “Golden Principles and attitude of people” with specific examples from rich and poor countries. In the end, a useful question/answer session was also conducted.



Participants and Speakers with Director NIBGE and PNS Council in NIBGE Seminar

Part-3
Students Activities

Activity – 1: Students' Session on Applications of Nuclear Technologies

13th February 2023 at Fatima Jinnah Women University (FJWU), Rawalpindi



A large number of students from universities and professional colleges became associate members throughout the country. Consequently, a student session was organized at the Fatima Jinnah Women University (FJWU), Rawalpindi on 13th February 2023. Prof. Dr. Azra Yasmin, Chairperson, Department of Biotechnology chaired the session. After recitation from the Holy Quran, Dr. Azra in her opening speech, welcomed the delegates of PNS and thanked for organizing the session at the university. Mr. Waqar Ahmad Butt, Vice President PNS gave a presentation of the Applications of Nuclear Techniques in Pakistan elaborating their peaceful and beneficial uses in the field of power generation, industry, health and agriculture. Dr. Muhammad Tahir Khaleeq, President PNS introduced the Society emphasizing on the new initiatives of Associate Membership and Student Membership which is free as long as they remain student in professional colleges and universities. Similarly, the faculty persons can become Lifetime Members by paying a nominal fee. He counted many benefits of becoming members of PNS.

Dr. Rakshanda Bilal, former DG Technical PAEC who is also the Member of PNS Scientific Advisory Board made a motivational speech by telling her life long experience of working in different areas of nuclear fields. She introduced Women in Nuclear (WiN) activities in Pakistan. Students were urged to adopt challenging careers in nuclear science and technology to take up the nation at par with other advanced countries. Very fruitful question/answer session was held at the end of the session which was concluded with closing remarks and a vote of thanks by Prof. Dr. Shazia Iftikhar from the Department of Environmental Sciences. The session was moderated by Dr. Naila Safdar who is the Coordinator of PNS in FJWU.



PNS Delegation with the Faculty Members of Fatima Jinnah Women University (FJWU)

Activity – 2: *Seminar on Current Trends in Nuclear Research & Technology*
1st March 2023 at The Islamia University of Bahawalpur



The seminar 'Introduction to Current Trends in Nuclear Research & Technology' was jointly organized by PNS and the Institute of Physics (IOP) at the main auditorium of the Faculty of Sciences on 1st March 2023. The session was attended by about 300 students from various science departments. The main purpose of the seminar was to create awareness about the peaceful use of nuclear energy and its applications in various fields. Dr. Faisal Mukhtar from IOP coordinated the programme. Aylah Khan took up the responsibility as Stage Secretary. After recitation from the Holy Quran by Masroor Khan and Naat sharif by Aleeza Shaukat, Mr. Ghulam Sarwar, Finance Secretary presented the introduction of the Society on behalf of the President PNS. He also counted the potential benefits of becoming Associate Members. Mr. Waqar Ahmad Butt, Vice President PNS, gave an elaborated talk on the peaceful uses of Nuclear Technology in Pakistan and shared his lifelong experience and knowledge from nuclear power to industry, health, agriculture, hi-tech research and human resource development. He lauded the efforts of scientists and engineers who made Pakistan the 7th nuclear power in the world. Mr. Muhammad Abbas Qamar, Executive Members

PNS, in his talk provided information about nuclear radiation and its effects on human health.

Prof. Dr. Saeed Ahmed Buzdar, Dean Faculty of Physical and Mathematical Sciences thanked the organizers for hosting such an informative seminar at the university. He



highlighted the importance of nuclear research and technology in the current global scenario and how it can benefit society in various fields. In his closing remarks, Amjad Rasheed expressed his views that the attendees enjoyed the opportunity to connect with like-minded individuals and the Society has provided a platform for students to learn from professionals and experts. As a gesture of goodwill, PNS Souvenir (a keychain) was given to all the students and a memento to the Director of IOP.

The dedicated efforts of Prof. Dr. Faisal Iqbal, Coordinator of PNS at the Islamia University of Bahawalpur (IUB) and two students Muhammad Amjad Rashid and Khadjia Manzoor, Focal Persons of PNS have resulted into the maximum number of Associate Members.

Activity – 3: Awareness Session with the Students

2nd March 2023 at Bahauddin Zakria University, Multan



PNS Delegation visited Bahauddin Zakria University (BZU), Multan on 2nd March 2023 to conduct a general session with students of various science and engineering disciplines. This fascinating programme was arranged and coordinated by Dr. Aamir Bashir, Professor at the

Institute of Physics. Just before start of the formal presentations, Prof. Dr. Javed Ahmad, Director, Institute of Physics (IOP) and his colleagues welcomed PNS delegation and held an introductory meeting with the faculty of IOP. Mr. Ghulam Sarwar, Finance Secretary introduced the Society on behalf of the President PNS. Mr. Waqar Ahmad Butt, in his talk showed historical photos of some milestones in the history of atomic energy. A presentation was delivered on the applications of Nuclear Technology in Pakistan covering many areas in which nuclear techniques are playing pivotal role for the socio-economic development of the country with emphasis on nuclear power production. The students showed keen interest in the awareness session and asked meaningful questions which were properly addressed. They were excited to become Associate Members of PNS. After the student session, a meeting was arranged with the faculty members of IOP in which various activities of PNS were discussed in detail. Dr. Javed and his colleagues showed their interest to become part of PNS community and asked for a full day seminar at BZU.



Activity – 4: Meeting with Students’ Focal Persons to Set Future Activities

11th March 2023 at PAEC Rest House, Islamabad



Initiating the process of Associate Membership for students of universities and professional colleges related to science, engineering, and Medical disciplines is a major milestones in the

history of PNS. It is a matter of great satisfaction that within a few weeks, more than 900 students from 45 universities enrolled themselves. Focal persons (FPs), one male and one female student have been designated in the institutions having a sizable number of members. A meeting of FPs from the universities in and around Islamabad was held at PNS Secretariat on 11th March 2023 which was attended by 16 FPs and 6 Council Members.

Dr. M. Tahir Khaleeq, President formally introduced PNS and elaborated the importance of Associate Membership. He shared numerous benefits of joining this fruitful scheme including assistance in selecting and initiating projects, guidance about adopting professional careers and counseling in pursuing higher studies. He further added that, PNS provided free access to nuclear-related webinars, online courses, and discussions, allowing members to stay up-to-date with the latest developments and advancements in the field of nuclear technology and allied sciences. Additionally, he informed that PNS organizes various competitions, such as article writing, poster presentations and making video clips, to encourage participation and foster creativity among members. It was followed by thought provoking questions by the students which were well taken by the Council Members. Some future activities were also discussed.

Activity – 5: *Online Meeting with Students of Outside Islamabad and Rawalpindi on Zoom Link*
18th March 2023 at PNS Office, Islamabad

Another meeting with FPs from other cities was arranged on 18th March through zoom link. Very encouragingly, 70 students and 4 PNS Council Members joined that meeting which lasted for more than an hour. The students gave good suggestions and proposed some future programmes. Some clarifications and queries were addressed by the Council Members.

Activity – 6: Students’ Session at Namal University

4th May 2023 at Namal University Mianwali



One day seminar was conducted at NAMAL University, Mianwali on 4th May, 2023. The PNS team was warmly welcomed by NAMAL management and a meeting was held with Dr. Najam ul Islam, Rector of the University. The seminar started with the welcome address by Dr. Ehsan Ullah Khan, Controller of Examinations. He lauded the efforts of PNS for conducting such a motivating seminar at NAMAL.

Afterwards, an introduction to Pakistan Nuclear Society was given by Dr. Muhammad Tahir Khaleeq, President PNS. He briefly presented the main objectives of PNS and all the activities it is performing all over the country emphasizing upon the peaceful uses of nuclear technology. A lecture was delivered by Mr. Waqar A. Butt, Vice President PNS on the “Applications of Nuclear Technologies in Pakistan” for its beneficial uses in power production, medicine, agriculture and industry. Mr. Muhammad Abbas Qamar, Executive Member PNS talked about Nuclear Radiations and there Effects on Human Health as well as protection from Ionizing Radiation. In the end, a brief description of Pakistan Nuclear



Regulatory Authority was presented by Muhammad Ayub, Former DG, PNRA. The session

concluded with a question/ answer session. After the seminar, a visit of PNS delegation was also conducted to various department/ Labs of NAMAL University.

Activity – 7: *Students’ Session on Introduction to Nuclear Technology and Radiation Effects on Human Beings*

23rd May 2023 at Post Graduate Jahanzeb College, Swat



A seminar on “Introduction to Nuclear Technology and Radiation Effects on Human Beings” was conducted on 23rd May 2023 at one of the pioneer institute of higher education in Swat; the Post Graduate Jahanzeb College (PGJC), Saidu Sharif. It was established in 1952 by Miangul Abdul Haq Jahanzeb, the former ruler of Swat state. This seminar was jointly organized by PNS and the aforesaid college. The Program Coordinator was Dr. Nisar Ali Swati, Head of Physics Department whereas the stage secretary of the seminar was Prof. Hamid Iqbal from the same Department. The Chief Guest of the seminar was Prof. Muhammad Saleem, Principal of the College. In this seminar, about 150 students and faculty staff of various departments participated. The main purpose of the seminar was to create awareness about the peaceful use of nuclear energy and its applications in various fields as well as some basics of nuclear radiations.

The Welcome Address was given by Dr. Nisar Ali, from PGJC. Afterwards, Introduction to Pakistan Nuclear Society was presented by Dr. Muhammad Tahir Khaleeq, President PNS. He elaborated the programmes and activities of PNS which are being performed all around the country especially for students. He mentioned many privileges and benefits that students can have to become Associate Members of PNS. A lecture was delivered by Mr. Waqar A. Butt, Vice President of PNS on “Applications of Nuclear Technologies in Pakistan”. Mr. M. Abbas Qamar, Executive Member PNS gave a talk on “Nuclear Radiation and its Effects on Human Health”. In the end, the closing remarks were given by the Principal, Prof. Muhammad Saleem. In his address, he praised the efforts of PNS for conducting this seminar at PGJC and requested for more such type of seminars in future.

Activity – 8: Current trends in Nuclear Research & Technology

30th May, 2023 at Government Girls Postgraduate College, Quetta



A seminar on ‘Introduction to Current Trends in Nuclear Research & Technology’ was held at Government Girls Postgraduate College (GGPCQ), Quetta Cantt. on 30th May 2023. This seminar was jointly organized by PNS and the aforesaid college. Seminar was coordinated by Ms. Riffat Khaleeq, Associate Professor, Department of Physics as she is also PNS coordinator of Baluchistan. The Chief Guest of the seminar was Dr. Munaza Qayyum, Principal GGPCQ. Student from various universities of Quetta participated in addition to science and engineering students of local Colleges. The seminar was attended by more than 300 students and faculty members. The main purpose of the seminar was to create awareness about the peaceful use of nuclear energy and its applications in different fields.

Ms. Sadaf Ashraf, Associate Professor and Head Department of Chemistry, took up the responsibility as Stage Secretary and coordinated the session in a very efficient manner. The opening remarks were presented by Ms. Riffat Khaleeq. Afterwards, the introduction to Pakistan Nuclear Society was presented by Dr. Muhammad Tahir Khaleeq, President PNS. He elaborated the activities and programmes that the Society is performing in different cities emphasizing upon the peaceful uses and benefits of using nuclear techniques.



A lecture was delivered by Mr. Waqar A. Butt on “Applications of Nuclear Technologies in Pakistan”. Mr. Muhammad Abbas Qamar, Executive Member PNS presented the

introduction of Nuclear Radiation and its Effects on Human Health. In the end, a very effective Question/Answer was held in which students and teachers asked very sensible and realistic questions. The closing remarks were given by Dr. Munaza Qayyum. In her address, she praised the efforts of PNS for conducting this seminar in her college and presented her viewpoint about the situation of education in Quetta. She also mentioned some grievances about the lack of facilities for research and development in the Province.



Activity – 9: Seminar on Current trends in Nuclear Science & Technology

15th August 2023 at NED University, Karachi



A seminar on the 'Current Trends in Nuclear Science & Technology' was jointly organized by PNS and NED University of Engineering & Technology, Karachi on 15th August 2023. The seminar was coordinated by Dr. Fakhar Alam, Lecturer, Department of Physics, University of Karachi and Mr. Ahsan Khalid, Focal person of PNS for NED UET. The seminar was attended by more than 100 students and faculty members. The main purpose of the seminar was to

create awareness about the peaceful use of nuclear energy and its applications in various fields. Dr. Irfan Ahmad Siddiqui, Head Department of Physics, NED UET welcomed the audience. Afterwards, Dr. M. Tahir Khaleeq, introduced the Pakistan Nuclear Society to the audience and explained its activities being carried out for the peaceful uses of nuclear technology. Mr. Waqar Ahmad Butt, delivered a lecture on 'Applications of Nuclear Technologies in Pakistan'. Mr. M. Abbas Qamar, gave a lecture on the 'Introduction of Nuclear Radiation and its Effects on Human Health'. Dr. Fakhar took up the responsibility as Stage Secretary and conducted the session in a very efficient manner while Mr. Ahsan arranged the live coverage of seminar at social media. Seminar concluded with a very effective questions & answers session.

Activity – 10: Seminar on Nuclear Techniques and Radiation Effects

28th September 2023 at Kohsar University, Murree



PNS organized a students' session at the Kohsar University, a newly established Public Sector university in Murree on 28th September 2023 with the curtesy of Pro Vice Chancellor, Prof. Dr. Muhammad Sultan Satti. Students from Physics, Chemistry and Bio-sciences along with their faculty members participated in the seminar. PNS delegation comprised of seven members. After recitation from the Holy Quran, Dr. Sultan gave the welcome address appreciating PNS for holding the seminar at Murree. Dr. M. Tahir Khaleeq informed about the aims and objectives of PNS with emphasis upon various initiatives for students.

Mr. Waqar A. Butt presented an overview on the 'Applications of Nuclear Techniques' covering many areas of peaceful and beneficial uses of nuclear technology. Mr. M. Abbas Qamar explained 'Radiations and their Effects' with colorful slides. He cleared some

perceptions about the danger of nuclear radiations and mentioned various safety measures. A special guest, Dr. Anis Rashid, a young professor from Massachusetts Institute of Technology (MIT), USA motivated the students with his life long struggle and hard work that earned him lots of distinctions in a short span of time. He gave important tips to the students to excel in their academics leading to a bright career.

Ms. Hina Younis, Executive Member of Women in Nuclear (WiN-Pak) Council elaborated how she struggled from a modest background to get into a successful life. Ms. Huma Qamar, Executive Member PNS, mentioned about the activities and importance of Pakistan Nuclear Regulatory Authority (PNRA) and its role in safety and security of the nuclear facilities in the country. Ms. Nazia Kashif, Executive Member PNS, also impressed the audience with her life story and practical experience in the nuclear field. These talks were followed by a thought provoking questions & answers session. In the end, Dr. Sultan thanked the PNS Council Members, guests and participants for joining the fruitful session and hoped that the students would have gained much out of this activity.

The delegation also met Prof. Dr. Syed Habib Ali Bokhari, Vice Chancellor of the university in his office and discussed many possibilities for future cooperation and collaboration.



PNS Delegation with Vice Chancellor Kohsar University

Activity – 11: Students’ Session at Govt. Graduate College Tahliawala Jhelum

3rd November 2023



Pakistan Nuclear Society (PNS) invites the youth of Pakistan in various knowledge sharing sessions for fostering peaceful uses of nuclear science and technology, capacity building of educational institute, bridging academia and industry, etc. PNS is extending these initiatives to small cities and planning for a conference at Govt. Graduate College Thalianwala, Jhelum in January 2024. The aim is to enhance the knowledge and creativity of local students about applications of nuclear techniques in various sectors. There would be various activities including poster competition, quiz, entertainments, stalls, etc. The principals, teachers and students of Govt. Graduate College for Women and Govt. Graduate College GT Road, Jhelum are also showing keen interest in this event.

An introductory session of the conference was conducted at Govt. Graduate College Tahlianwala, Jhelum on 3rd November 2023 in



which Dr. Anjum Iqbal, Coordinator PNS briefed about the forthcoming conference. Mr. Waqar Ahmad Butt, Vice President PNS enlightened the students on peaceful uses of nuclear technology. Due to large number of students from three colleges, this activity was performed in two sessions. In each session about 200 students participated. The principal of the college, Dr. Shahid Saeed Qureshi led the organized event very professionally and thanked PNS Officials to travel from Islamabad for the fruitful sessions.

As a follow up to that interaction and future collaboration, the Principal of the College, Dr. Shahid Qureshi invited Dr. M. Tahir



Khaleeq and Dr. Anjum Iqbal as Guests of Honor in the Convocation of the College. Mr. Bilal Azhar Kayani, former Coordinator to the Prime Minister on Economy and Energy was the Chief Guest on that occasion. Such ventures may create greater visibility of PNS at national level.

Activity – 12: Students’ Session on Benefits of Nuclear Technology

23rd November 2023 at Preston University, Islamabad



Pakistan Nuclear Society (PNS) upon invitation from the Preston University arranged a seminar on Exploring Nuclear Science & Technology for the benefits of mankind. The students’ session was held at the main hall of their Islamabad Campus on November 23, 2023 in which about 150 students and faculty members participated. Dr. Nisar Ali Swati, was Program Coordinator whereas the stage secretary was Ms. Madiha, an Associate Member of PNS. The main purpose of the seminar was to create awareness about the peaceful uses of nuclear energy and its applications in various fields.

Dr. M. Tahir Khaleeq gave a brief introduction of PNS and its various initiatives for the students. He urged them to become PNS Associate Members for grooming of their future career. Mr. Waqar A. Butt gave a presentation on ‘Nuclear Technology in Pakistan’ elaborating beneficial uses of nuclear techniques in various fields emphasizing on the importance and need of electricity generation by nuclear power plants. Mr. M. Abbas Qamar’s talk was on ‘Introduction of Nuclear Radiation and its Effects on Human Health’

clarifying some misconceptions about the danger of radiations and fear of nuclear. Dr. Samreen Shahzadi, being the Secretary WiN-Pak Chapter, spoke on the 'Role of Women in Nuclear Science' showing the photos of some prominent women scientists and their achievements. In the end, Prof. Dr. Mohammad Daud Awan, Vice Chancellor, Preston University, thanked PNS for holding the seminars at their campus and desired that PNS would also hold seminar on specific topics in science subjects. He assured his full support for collaboration with PNS in future programmes at the university campus.

Activity – 13: Symposium on Nuclear Technology

4th December 2023 at University of the Punjab, Lahore



Upon the desire of former Chairman PAEC, Mr. Muhammad Naeem, *N.I, H.I, S.I*, to have a students' session at the Chemistry Department of University of the Punjab, Lahore from where he obtained master's degree long ago, PNS organized a symposium at the same department which has now expanded to School of Chemistry. Thanks to Prof. Dr. Abdul Qadir, Chairman Chemistry Department full logistic support was provided and the event was arranged at Khorana Hall in which more than 200 students, faculty staff and guests gathered. After recitation from the Holy Quran by a student of the same Department in his melodious voice, Prof. Dr. Sadia Atta presented the welcome address. Prof. Qadir elaborated the programmes and activities of the Department. Then, Mr. Waqar A. Butt, Vice President PNS

gave an introduction of PNS and its various initiatives especially for the students. Prof. Dr. Khalid Mahmood, Vice Chancellor, PU Lahore, the Chief Guest of the event, in his address applauded the efforts of PNS for organizing such useful seminars at various universities and thanked the delegates who travelled from Islamabad to Lahore for this purpose.



The technical session started after a short break in which Mr. Waqar A. Butt gave 'An Overview of Nuclear Technology' in a historical prospect. After that, the Guest of Honor, Mr. Muhammad Naeem made a detailed presentation in which he unfolded his lifelong struggle from a modest family background to the top most position in the most reputed organization (PAEC) in the country and decorated with the highest civil awards. Then he gave a detailed account of work done at different nuclear centres from exploration of uranium to the fuel fabrication for Pakistan's first nuclear power plant (KANUPP) with indigenous efforts. In his pictorial presentation he also covered applications of nuclear techniques in the areas of agriculture, industry, environment, human health and electricity generation. Finally, he gave some fruitful advices to students for their future planning to have a successful life. The symposium ended with vote of thanks by Dr. Mohammad Mohsin, General Secretary PNS.



Activity – 14: Lecture on Inner Peace and Happiness in Times of Turbulence by Dr. Inam ur Rahman

11th December 2023 at Quaid-i-Azam University,
Islamabad



PNS, with the cooperation of the Department of Physics, Quaid-i-Azam University (QAU), Islamabad arranged a lecture by Dr. Inam ur Rahman, *H.I, S.I, AK* on 'Inner Peace and Happiness in Times of Turbulence' on December 11, 2023. Dr. Inam sahib is regarded as an Institutional Builder that is now PIEAS and a Model Teacher of many scientists and engineers who are at top positions not only in PAEC but also in other strategic organizations. More than 100 persons, mostly science students gathered in the Razmi Auditorium. Dr. Mohammad Mohsin, General Secretary PNS performed the duty as anchor person. Prof. Kashif Sabeeh, Head Physics Dept. gave the welcome address. Dr. M. Tahir Khaleeq talked about PNS programmes and activities emphasizing upon the initiatives related to young graduates. Mr. Waqar A. Butt gave a brief introduction of the speaker.

One hour long lecture of Dr. Inam ur Rahman was a blend of historical evolution of nuclear technology in Pakistan and then to the topic of the day related to human values to achieve peace of mind. He quoted many *Quranic* verses as well as *Ahadees* relevant to the subject. During the discussion session after the lecture, students asked meaningful questions. In the end, Dr. Imtinan Elahi Qureshi, former President PNS gave the concluding remarks and presented vote of thanks. He gifted a calligraphy painting to Dr. Inam ur Rahman that he made by himself. Dr. Tahir Khaleeq also presented PNS Shield to him.



Dr. Inam – ur – Rahman with the Participants of the Lecture at Quaid-i-Azam University

Activity – 15: Article Writing Competition



An article writing competition was held among PNS Associate Members on the ‘Use of Nuclear Techniques for Betterment of Mankind’ in which 49 students from various universities/ professional colleges throughout the country submitted their articles. An evaluation committee comprising of three relevant experts declared the article



Pakistan Nuclear Society

Article Writing Competition

TOPIC

Use of Nuclear Techniques for Betterment of Mankind

Article should not be more than 600 words
Prize: Rs. 5,000 and certificate for the best article. The best article will be published in PNS Newsletter
Last Date of Submission: 10 March 2023
Email for Submission: mtkhaleeq@hotmail.com

produced by Muhammad Haroon Farooqi, M.Phil. (Physics) Student from Quaid-i-Azam University as the best article. A certificate and cash award was given to the winner during the Students Convention held at International Islamic University, Islamabad.

Activity – 16: Speech Competition on 6th – 5th May 2023



A speech competition among PNS Associate Members was held on the 'Effects of Climate Change and Global Warming' in which 25 students submitted their short videos (4-5 minutes). The evaluations committee selected top three videos which are available at PNS Website. Cash prizes were distributed to the winners. The first prize amounting to Rs.10,000/- was awarded to Miss Aresha Yasin from IIUI, Islamabad. The second prize of Rs. 8,000/- was given to Miss Ishrat Fatima, PU, Lahore and the third prize of Rs. 6,000/- was granted to Mr. Faraz Ahmed Mahr, from the University of Sindh, Jamshoro. Certificates were also awarded to the winners during the Students convention.

Pakistan Nuclear Society
Speech Competition
TOPIC
Global warming and its effects

1. The video clip should not be more than 5 mins.
2. Prizes: First: Rs. 10,000, Second: Rs. 8,000, Third: Rs. 6,000 (with certificates)
3. The first three video clips will be uploaded on the PNS YouTube Channel
4. Certificates will be given to all participants
5. Last date of submission: 30 April 2023
6. Submit To: WhtsApp No. 0321 5017845 or Email: mtkhaleeq@hotmail.com.

Activity – 17: Innovative Ideas Competition

In order to keep the Associate Member (students) busy in useful and fruitful activities, PNS organizes various competitions to polish their abilities. Previously, an essay writing and a speech (short videos) competitions were held. Cash prizes were given to the winners to encourage them to take part in such ventures. The third competition was conducted to brainstorm and think about some implementable innovative ideas in science and technology.

Twenty-one (21) students in four categories (1- Graduate students in Science, 2. Graduate students in Engineering, 3. Undergrad students in Science and 4. Undergrad in Engineering) submitted their projects. According to the experts of the fields, almost all submitted ideas were ordinary (no innovations) except the one submitted by Mr. Mujahid Zareen, an undergrad student of Engineering from the Mirpur University of Science and Technology (MUST), AJK. It was about 'Software Requirements and Specifications for Medicine and Diagnostic Treatment System'. A cash prize of Rs. 10,000/- and a merit certificate was awarded to him in a ceremony held at PAEC Rest House, Islamabad in which Mr. Anwar Habib, former Chairman PNRA was the Chief Guest. Certificates were also issued to all participants of the competition.



COMPETITION

Innovative Ideas in Science and Technology

- Rs. 10,000 will be awarded in follow four categories each.
 1. Science categories (for science students):
 - a. One for undergraduate (BS/BE) students
 - b. One for graduate (MS/M. Phil) students
 2. Technology categories (for engineering students):
 - a. One for undergraduate (BS/BE) students
 - b. One for graduate (MS/M. Phil) students
- Participation certificates will be issued to all participants
- The innovative idea should be original.
- PNS will help to promote the selected ideas
- Last date for submission: 15th June 2023
- Submit ideas in report form online using following link
<https://pns.org.pk/form-student-contest/>

Activity – 18: Writing Review Papers Competition



To commemorate 76 years of Independence, PNS conducted a review papers competition on '76 Years of Science & Technology in Pakistan'. Resultantly, 19 articles were received.

Cash prizes of Rs. 5,000 each were given to authors of the best five articles. Prize winners were:

1st - Kamran Khattak, UET, Taxila

2nd - Ali Hamza, University of the Punjab, Lahore

3rd - Alishah Anjum, International Islamic University, Islamabad

4th - Ahtisham ul Haq, Hazara University, Mansehra

5th - Mujhid Zareen, Mirpur University of Science & Technology (MUST), AJK

Cash prizes and certificates were awarded by Mr. Anwar Habib, former Chairman. Certificates were sent by email to all the contestants of the competition.



REVIEW ARTICLE WRITING COMPETITION

76 YEARS OF SCIENCE AND TECHNOLOGY IN PAKISTAN

Competition Rules :

1. Participants of the competition should be undergraduate or graduate students.
2. Only PNS associate members and children of PNS lifetime members can participate.
3. The article should be in English or Urdu.
4. The cover page should contain article title, full name, university name, class of studies, PNS number and date of submission.
5. The review article must be submitted by 10th August 2023.
6. Only online submission will be accepted using the following link: <https://pns.org.pk/review-article-submission-form>

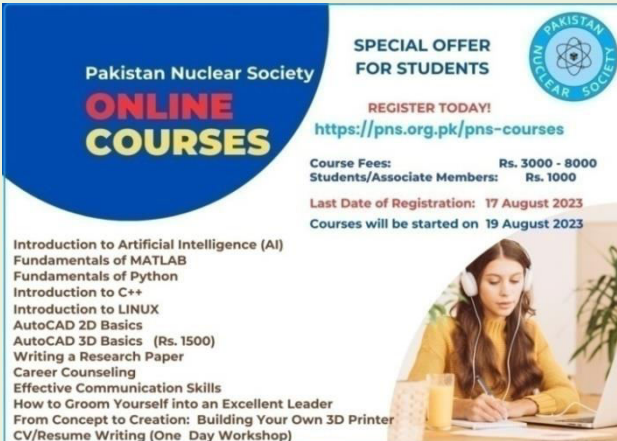
Prizes
5 Best Articles:
Rs. 3000 each & Certificates

Contact Us
+92 51 321 5017845
council@pns.org.pk

Pakistan Nuclear Society

Activity – 19: Professional Online Courses for Students

PNS arranged some online courses for students with the support of its experts in relevant fields. It is understood that the students have to pay higher fees if they want to attend such specialized courses from professional institutions in the market. Since, PNS has experts in almost all S&T fields as its lifetime



Pakistan Nuclear Society

ONLINE COURSES

SPECIAL OFFER FOR STUDENTS

REGISTER TODAY!
<https://pns.org.pk/pns-courses>

Course Fees: Rs. 3000 - 8000
Students/Associate Members: Rs. 1000

Last Date of Registration: 17 August 2023
Courses will be started on 19 August 2023

Introduction to Artificial Intelligence (AI)
Fundamentals of MATLAB
Fundamentals of Python
Introduction to C++
Introduction to LINUX
AutoCAD 2D Basics
AutoCAD 3D Basics (Rs. 1500)
Writing a Research Paper
Career Counseling
Effective Communication Skills
How to Groom Yourself into an Excellent Leader
From Concept to Creation: Building Your Own 3D Printer
CV/Resume Writing (One Day Workshop)

members, therefore, it was decided to utilize their expertise and skills and facilitate the students to their best. So far, following courses have been conducted successfully.

1. Introduction to Artificial Intelligence

(Dr. Ahmad Ahsan Nawaz)

2. Exploring limitless possibilities of higher education (Dr. Ahmad Ahsan Nawaz)

3. Writing a research paper (Dr. Ahmad Ahsan Nawaz)

4. Fundamentals of MatLab (Dr. Zaka Ullah Sheikh)

5. Fundamentals of Python (Dr. Zaka Ullah Sheikh)

6. LINUX Basics (Mr. Abdul Malik Paracha)
7. AutoCad 3D Basics (Mr. Muhammad Rafi)

Activity – 20: Students Counseling for Higher Studies



Ms. Ruqiyah Shahid Altaf, a Lifetime Member of PNS who is a Certified Career Counsellor, conducted a free session of about 3 hours for students interested in higher studies.

PNS arranged this interactive physical activity at PAEC Rest House on Saturday, 18th November 2023 in which more than 40 students participated and gained valuable knowledge on end to end guidance, cost and scholarships, document completion, visa insights, post study opportunities etc. In that interactive session, students asked many questions to choose the right pathway and destination. Another career counselor, Mr. Khizar Shahid also helped the students in the similar way.



Part-4
Out-Reach and Linkages

1. Meeting with the Coordinator General COMSTECH

17th January 2023 at COMSTECH Secretariat, Islamabad

To enhance the international linkages of PNS with other similar societies in the Muslim World, Dr. Muhammad Tahir Khaleeq and Mr. Waqar A.



Butt made a courtesy call on Prof. Dr. Muhammad Iqbal Choudhary, *H.I, S.I, T.I*, Coordinator General of COMSTECH in his office on 17th January 2023. Dr. Choudhary appreciated the initiatives and activities of PNS. He proposed to organize 3-4 seminars/ workshops for OIC countries on capacity building in the fields of agriculture, health, industry and power production as a joint venture. He suggested forming a consortium of Nuclear Societies in other Muslim countries and to plan S&T activities at various places. Prof. Khurshid Hasnain, Advisor COMSTECH has been nominated to coordinate these activities. To begin with it has been proposed to organize a two-day workshop on capacity building in the field of nuclear medicine and oncology in OIC members states during the month of May 2023 in Islamabad.

2. Meeting with Senator Mushahid Hussain Syed

12th February 2023, Islamabad

PNS delegation comprising of Dr. M. Tahir Khaleeq, Mr. Waqar A. Butt and Mr. Ghulam Sarwar met Senator Mushahid Hussain Syed in his residence on 12th February 2023 as a follow up to his participation as Chief Guest in the opening session of PNS International Conference on the Applications of Nuclear Techniques for Sustainable Development held He lauded PNS programmes.

3. Meeting with Federal Minister for Energy

13th February 2023 at Pak Secretariat, Islamabad

PNS delegation comprising of Dr. M. Tahir Khaleeq, Mr. Waqar A. Butt and Kh. Zahid Shakeel met Engr. Khurram Dastgir Khan, Federal Minister for Energy (Power) in his office on 13th February 2023 as a follow up to his



participation as Chief Guest in the closing session of PNS International Conference on the Applications of Nuclear Techniques for Sustainable Development held during October 2022 in Islamabad. Fruitful discussions were held in an hour long meeting. Various options of producing affordable, reliable and clean energy were considered. Merits and demerits of renewables like solar, wind, hydro etc. were put on the table. Convincing arguments for electricity generation by nuclear power plants were made. Apart from bigger plants of GW range, 4th generation Small Modular Reactors (SMR) and Micro Modular Reactors (MMR) were also considered to cater for energy security of the country.

The Minister informed about various initiatives and schemes of the present government for producing low cost electricity. However, he emphasized upon indigenization in nuclear power production as Pakistan has more than 50 years of experience in this field. He appreciated various activities of PNS for public awareness and knowledge sharing through seminars and conferences. He also lauded PNS programmes of Industrial Support Initiative (ISI) and a Forum for students of professional colleges and universities. He ensured to take up the voice of PNS to higher circles and its representation in relevant committees which are formed by the government for specific purposes as and when needed.

4. Collaboration with PSQCA for International Standards

16th February 2023 at PAEC Rest House, Islamabad



Pakistan Standards & Quality Control Authority (PSQCA) and PNS opened a new avenue of collaboration to enhance the contributions of national experts for International Standards. On receiving invitation from PSQCA, PNS Focus Group for Quality Management (FGQM) has arranged eleven experts for the Technical Committees and Sub-Committees of four International Standards ISO & IEC. The experts would contribute to develop, improve, adopt and implement the International Standards. The PNS-FGQM would coordinate for the participation and contribution. The collaboration of PNS and PSQCA would further extend to enhance the quality of local products and services leading to the socio-economic development of Pakistan.

5. Meeting with Member Executive of Islamabad Chamber of Commerce (ICCI)

18th February 2023 at ICCI, Islamabad



Since the establishment of linkages with Engineering Development Board (EDB) of the Ministry of Industries, efforts are being made at all possible forums to utilize the expertise of scientists, engineers and technologists having lifelong experiences in various S&T fields. Consequently, a meeting was arranged with Mr. Maqsood Tabish, Member Executive, ICCI at the Islamabad Chamber of Commerce. Dr. M. Tahir Khaleeq, Mr. Waqar A. Butt and Kh. Zahid Shakeel from PNS participated in the meeting. Various proposals for making benefits from the experienced professionals were discussed seeking viable solutions. The envisioned project of PNS for value addition in gemstones by nuclear techniques gathered the attraction of the host who ensured to establish contact with the relevant persons involved in export of such precious stones.

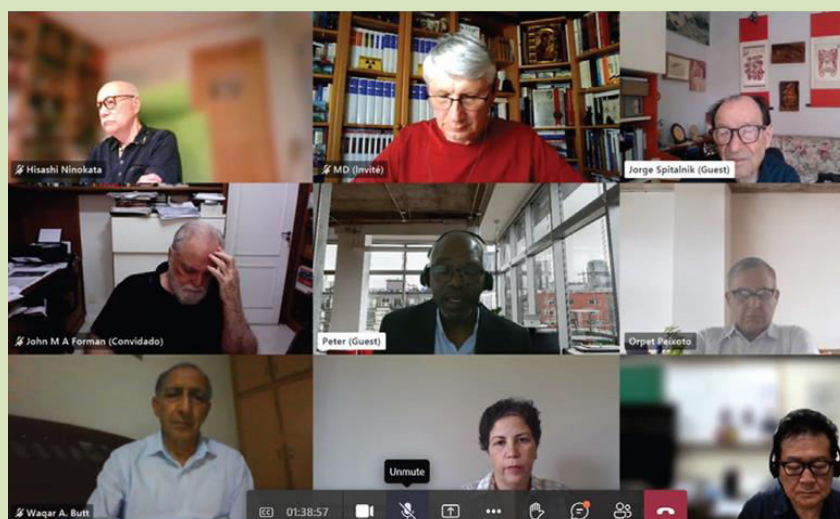
6. Meeting with Chairman KRL

28th March 2023 at KRL Secretariat, Islamabad

Dr. M. Tahir Khaleeq, Mr. Waqar A. Butt and Kh. Zahid Shakeel of PNS visited the office of chairman KRL and held a meeting with him on 28th March 2023. Dr. M. Tahir Khaleeq briefly described about the PNS and its programmes. The Chairman appreciated the PNS activities related to creating public awareness regarding peaceful uses of nuclear technology for medical diagnoses and its treatment using nuclear technology and its industrial uses in economic development of a country. He was informed about the PNS lifetime members from KRL, specially previous chairmen and senior officers. Chairman KRL had shown his interest to increase PNS membership from KRL.

7. Participation in the Online Meeting of International Nuclear Societies Council

23rd June 2023, Attended Online from Islamabad



PNS is a member of the International Nuclear Societies Council (INSC) since 1991. The 1st Meeting of the year 2023 took place on 23rd June 2023. This on-line meeting was opened by the Chair, Mr. Peter Ozemoyah. He also introduced the new Secretary, Ms. Khadija Bendam from Morocco who participated in PNS International Conference during October 2022 and deeply involved in WiN Global affairs. As per agenda, the items under discussions were the publication of 'Nuclear Report' that has been finalized, INSC Workshop held last year (in which a presentation was made by PNS for the first time), financial report, INSC Global Awards and announcement of the next meeting (hybrid) which will take place in Vienna during the General Conference of IAEA in September 2023. The details can be found at INSC Website. Mr. Waqar A. Butt, Vice President participated in the meeting via Zoom link.

8. PNAC Initiative for Collaboration with PNS

2nd August 2023 at PNAC, Islamabad

Pakistan National Accreditation Council (PNAC) is an accreditation/certifying body in Pakistan. It works under the leadership of Mrs. Ismat Gul Khattak, Director General PNAC, which independently assess the competence



of certification bodies in order to accredit them. To broaden its scope, PNAC has invited PNS to provide experts and assessors to strengthen impartial accreditation process in the nuclear related fields. Dr. Anjum Iqbal, the focal person of PNS Focus Group for Quality Management who is also a Member of PNAC Impartiality Committee, is designated to establish and implement the mutual framework. The collaboration and cooperation of PNS and PNAC would enhance the quality of local products and services to achieve the common objective of sustainable socioeconomic development in the country.

9. Visit to Kohsar University, Murree

18th September 2023

Mr. Waqar A. Butt visited Kohsar University in Murree on 18th September 2023 and met Prof. Dr. Muhammad Sultan Satti, Pro-Vice Chancellor and discussed matters of mutual interest particularly about the involvement of students in S&T



affairs. It was decided that PNS will hold a session on the peaceful uses of nuclear technology and effects of radiations on human beings at the main campus of the university inviting students from all science subjects. Mr. Waqar was also accompanied by Dr. Rehan Hussain, a Senior Consultant/ former Member Bio-Science at the Bangladesh Atomic Energy Commission, Dhaka who was invited by COMSTECH as an invited speaker in the International Workshop on Nuclear Medicine in Islamabad.

10. Participation in International Events

26th September 2023, Vienna, Austria

PNS is a member of International Nuclear Societies Council (INSC) since its inception. Usually, INSC holds a meeting in any one of its Member States once in a year and an Annual meeting during the IAEA General Conference.



Consequently, the Annual Meeting was held on 26th September, 2023 in Vienna, Austria. Due to limited financial resources of PNS, it was not possible to attend the meeting in Vienna, therefore, on behalf of PNS, Ms Arooj Nawaz who is working in IAEA, physically attended the meeting. PNS Council appreciates and thanks Ms Nawaz to represent Pakistan.

11. *Interaction with WiN Global*

21st October 2023



WiN-Pak Council members had a meeting with Dr. Nouzha ben Rais from Morocco, Representative of WiN Global Imaging Committee on October 21, 2023 at PC Hotel Rawalpindi and discussed with her current programmes and future collaboration with WiN Morocco as well as WiN Global. She appreciated the efforts and seriousness of WiN-Pak for strengthening the role of women working in the field of nuclear science & technology. She assured all possible help in organizing some international events in Pakistan.

Dr. Samreen Shehzadi had an online meeting with Dr. Janette Donner, President WiN-IAEA on November 26, 2023. In the meeting, Dr. Samreen informed about the activities of WiN-Pakistan chapter and collaboration with WiN Global. She clarified that presently WiN-Pak is working under the umbrella of the Pakistan Nuclear Society (PNS). Dr. Donner appreciated these efforts for promoting the role of women in nuclear field. She also showed her interest in the collaboration of WiN-IAEA with WiN-Pak and may extend invitations to relevant ladies from Pakistan to participate in future events in Vienna.

12. Meeting with CEO, EDB

27th November 2023 at EDB Office, Islamabad



PNS delegation comprising of Engr. Parvez Butt, *N.I.H.I.S.I*, former Chairman PAEC who is also the Head of PNS Scientific Advisory Board (SAB), Dr. M. Tahir Khaleeq, President PNS and Mr. Waqar A. Butt, Vice President PNS visited Engineering Development Board (EDB) on Wednesday, 27th November 2023 and met Mr. Raza Abbas Shah, CEO, EDB. Mr. Muhammad Shahzad, GM (HR and Finance) was also present in the meeting. One of the main purposes of the meeting was the utilization of Experts in the list of PNS Members who have 30-40 years of experience in various technical fields. As per practice in vogue, most of the experts for solving problems faced by the local industry are hired from abroad. It was agreed that if experts of relevant fields were available within the country, they would be preferred. An MoU may also be signed between PNS and EDB after identifying some specific areas of interest. Regarding the power sector initiatives, it was proposed to consider indigenous manufacturing of Small Modular Reactors (SMR) to support the national grid. Relevant experts in PNS Pool can play a major part in the feasibility studies.

13. Meeting with Federal Minister for National Food Security and Research

1st December 2023, Pak Secretariat, Islamabad



Six members of PNS Council made a courtesy call on Dr. Kausar Abdullah Malik, *H.I,S.I,T.I*, Federal Minister National Food Security and Research who is a Lifetime Members of PNS. Dr. Malik was Member Bio-Science and Member Administration in PAEC. He also served as Chairman Pakistan Agriculture Research Council (PARC). Many issues of National Interest and academic programme being carried out by PNS remained under discussion for about an hour. Dr. Malik appreciated new initiatives and expending activities of PNS especially the interesting material that appears in PNS Newsletter. Dr. Yusuf Zafar, Advisor to the Federal Minister who ia also a Member of PNS Scientific Advisory Board (SAB) was also present in the meeting.

Part - 5

***Miscellaneous Activities and
Facts***

1. Invited Lecture at SASSI University

24th July 2023 at SASSI University, Islamabad

Dr. Muhammad Tahir Khaleeq delivered an invited lecture on Role of PNS in Creating Public awareness of Nuclear Technology on 24th July 2023 at South Asian Strategic Stability Institute (SASSI) University, Islamabad. The lecture was delivered during a short course on Capacity Building in Nuclear Issues for Air Force Officers in SASSI University, Islamabad.

2. Appearance on Social Media for Peaceful Uses of Nuclear Technology

16th August 2023, RFI Media Center, Karachi



Mr. Nusrat Mirza, a well-known journalist and a television personality who is famous for his interactive shows and conducting interviews of renowned persons on Such TV is now doing similar programmes on Rabita Forum International (RFI). He invited PNS Council in RFI studio, Karachi for a program on the Role of Pakistan Nuclear Society for peaceful uses of atomic energy in the country. Accordingly, Dr. M. Tahir Khaleeq and Mr. Waqar A. Butt gave an exclusive interview which lasted for about an hour. Various aspects of beneficial application in the fields of power generation, environment control, human health, agriculture and industry were covered. It is worth mentioning that RFI releases news and other programmes in different provincial languages. Video recording of the programme is available at PNS Website.

3. Lecture about PNS Programmes at SOMC

22nd August 2023 at PIEAS

Dr. Muhammad Tahir Khaleeq delivered a lecture about PNS programmes, objectives, activities and new initiatives at the Senior Officers Management Course (SOMC) to about 120 participants from different strategic organizations at the Pakistan Institute of Engineering and Applied Sciences (PIEAS) on 22nd August 2023. He also gave another lecture to the officers from different organizations on the same subject at South Asian Strategic Stability Institute (SASSI) University, Islamabad.

4. PNS Stall at Pearl Continental Hotel. Rawalpindi

20th – 22nd October 2023



Pakistan Society of Nuclear Medicine (PSNM) held its 8th Annual Conference from 20-22 October 2023 at the Pearl Continental Hotel, Rawalpindi. Learned speakers from USA, UK, Germany, France, Italy, Morocco, Kuwait and Oman as well as from various local cancer hospitals throughout the country gave very useful and informative talks which were attended by more than 200 participants. PSNM offered a free stall to PNS for public awareness about its activities related to peaceful uses and benefits of nuclear technology in health sector. Handouts and brochures were distributed to the visitors. Discussions were also held with various organizations and companies for collaborations and joint ventures in relevant areas. The main figure behind this very successful conference was the President PSNM, Dr. Shazia Fatima, Director KIRAN Hospital. She is also the President of Women in

Nuclear (WiN) Pakistan Chapter. Therefore, introductory leaflets of WiN were also distributed among the participants.

5. Condolence Reference

27th October 2023



Pakistan Nuclear Society, in collaboration with the Applied Systems Analysis Division (ASAD), PAEC HQ and GCISC, organized a Condolence Reference for Dr. Arshad M. Khan on October 27, 2023 at the PAEC Rest House, Islamabad. The Reference was attended by several of his former colleagues, some via ZOOM, in-service personals and his family members. Mr. Waqar A. Butt, VP PNS gave the welcome note. Dr. Farzana Naqvi presented the formal introduction covering various aspects of Dr. Khan's life. Ms. Hina Qazi read out the message sent by Mr. Jamshed A. Hashmi from Karachi. The audio message of Dr. M. Jameel was played. Then, Dr. N.M. Butt, Dr. N.M Qazi, Mr. Ahmad Mumtaz, Mr. G.R. Athar and Dr. Arif Goher, Director GCISC recalled their memories and good time spent with Dr. Khan. In the end, dua-e-mughrfat was offered by Mr. M. Latif, former Director ASAD. May Allah Kareem reward Arshad Muhammad Khan for all his personal virtues and contributions for the betterment of Pakistan.

6. PNS Council Invited Previous Presidents of PNS

28th October 2023 at PAEC Rest House, Islamabad



In response to the invitation extended by PNS Council to the previous PNS Presidents, a meeting was held at PAEC Rest House on 28-10-2023. Dr. Mustansar Jahangir, Dr. Javed Hanif, Dr. Syed Javaid Khurshid and Dr. Imtinan Elahi Qureshi graced the occasion.

All of them appreciated the initiatives and enhanced activities by the present Council. However, the discussions were mainly on the sustained financial support to PNS and the medical issues like the newly circulated proforma for reimbursement of medical expenditures, 20% medical allowance, and special care for senior officers, particularly, the retired ones at PAEC General Hospital.

Detailed deliberations were made on the difficulties faced by senior officers in the hospital. Participants shared their personal experiences, underscoring the problems in accessing timely healthcare, especially in areas located far from the hospital. There was a consensus that the facilities should be easily available to senior officers at the hospital. Suggestions put forth during the meeting involved streamlining the reimbursement process, better support to retirees' healthcare need, and increasing awareness about available assistance programs. Regarding proforma for medical reimbursement, it was informed by General Secretary PNS that there is no restriction for monthly claims of reimbursement and one can apply within 6 months. Dr. N. M. Butt, could not participate in the meeting due to personal issues,

however, he sent a suggestion that PAEC hospital management should be approached for discussion on these issues.

Mr. Waqar A. Butt took up the responsibility to interact with the PAEC hospital management to address the aforementioned issues. In this regard, he had a meeting with Dr. Abdul Majeed, Director PAEC hospital and discussed the aforementioned issues. The director informed him that the Management of PAEC hospital fully realizes the difficulties faced by senior officials, especially the aged ones. It is happening due to overwhelming rush of patients and space limitations. He further said that the new building near the entrance gate is almost ready at which the OPD will be shifted in 4-6 months. In that building there is sufficient space to have a decent waiting room, separate counter for seniors and a separate doctor's room. He further informed that the monthly reimbursement proforma was issued by PAEC HQ. The hospital and some other establishments have not adopted it, and the previous procedure is continuing. The issued raised by Dr. N. M. Butt, was also discussed and the hospital management informed that collection of samples from homes would not be possible due to long distances of residents from the hospital. However, it can be done when the proposed 3-4 Samples Collection Centers at various places in Rawalpindi and Islamabad will be set up. The proposal is with PAEC Foundation for implementation.

The discussions during the meeting were quite productive, fostering an atmosphere of collaboration with a constructive dialogue among the seniors and the juniors. The presidents extended their full support and guidance for the Council to keep up doing the best of its activities. In the end, Dr. M. Tahir Khaleeq thanks the presidents for sparing their valuable time for fruitful exchange of ideas.

7. PNS Focus Group for Quality Management (PNS-FGQM) and its Remarkable Achievement

Quality Management is essential for socio-economic development of Pakistan and sustainable technical support of national nuclear power program (TS-NPP). The new International Standard ISO-19443 is applicable to TS-NPP. On April 27, 2023, PNS-FGQM obtained approval from the Technical Committee of Pakistan Standards & Quality Control Authority (PSQCA) to adopt ISO-19443 & allied standards as Pakistan National Standards. PNS-FGQM aims excellence of the people & products. The credit of this achievement goes to Dr. Anjam Iqbal and his team who dedicatedly and very efficiently struggled for this fruitful achievement.



8. Creation of PNS Faculty

PAKISTAN NUCLEAR SOCIETY



PNS Faculty



From Left to Right: Ms. Nabia Khalid (Object Oriented Programming & Explainable AI), Dr. Ahmad Ahsan Nawaz (AI, Writing a Research Paper, Groom Yourself), Ms. Ruqiyah Shahid Altaf (Career Counselor), Dr. Zaka Ullah (MATLAB & Python), Mr. Abbas Qamar (Communication Skill), Mr. Muhammad Nadeem Khan (DCS & PLC), Mr. Abdul Malik (LINUX), Mr. Muhammad Rafi (AutoCAD)

9. Creation of PNS Experts Pool for Services to Local Industries

Following experts' pool has been created for their services to industries when required. The names are included in the list on their willingness.

| # | Name | Qualification | Expertise |
|----------|--------------------------------|--|--|
| 1 | Mr. Mohammad Tahir Mian | MS Civil Engineering | Hazard Analysis |
| 2 | Mr. Muhammad Tanvir Falak Khan | B. Sc. Chemical Engineering | Operation of Chemical Plants |
| 3 | Mr. Habib ur Rehman | M. Sc. Engineering Energy Technology, Mechanical Engineering | Design and Manufacturing of Equipment related to Power Plants like Pressurizer, Steam Generator, Valves etc. |
| 4 | Dr. Latif Ullah Khan | PhD Electronic Spectroscopy | X-ray Absorption (XAS) and X-ray Fluorescence (XRF) Spectroscopy |
| 5 | Dr. Muhammad Shahid | PhD Physics | Nuclear Date, Internal Dosimetry, Radioisotope Production |
| 6 | Mr. Waseem Uddin Farooqi | B. E Electronics | Instrumentation and Control |
| 7 | Mr. Abdul Hamid Akbar | B. Sc. Engineering | Chemical Engineering |
| 8 | Dr. Muhammad Ashraf | PhD Microbiology and Molecular Genetics | Environmental , Food and Water Microbiology. |
| 9 | Dr. Nazar Hussain | PhD Engineering | Metallurgy and Corrosion Engineering |
| 10 | Mr. Jawed Altaf | MSc Nuclear Engineering | Chemical Engineering with Specialization in Petroleum & Gas |
| 11 | Dr. Mushtaq Ahmed | PhD Atomic & Molecular Physics, Laser Physics | Research & Development of Lasers and Lasers-based Diagnostic and Treatment Techniques |

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|----|-----------------------------------|--|---|
| 12 | Syed Mohammad Anwar Habib, HI | BE Electronics Engineering, MSc Nuclear Engineering | Safety Review of Nuclear Power Plants, Research Reactors and Various Radiation Facilities |
| 13 | Mr. Munir Ahmad, SI | BSc Chemical Engineering | Installation. Commissioning & Operation of Chemical Plants |
| 14 | Dr. Ammad Hussain Qureshi | PhD Materials Science | Electroceramics |
| 15 | Prof. Dr. Javed Iqbal Iqbal Saggu | PhD Energy Storage, Conversion and Efficient Devices | Energy Management and Devices |
| 16 | Mr. Muhammad Aslam Zahid | M. Sc. Electronics | D&D Laser, Analog and Digital Electronics |
| 17 | Mr. Shahzad Ali | ME Nuclear Energy and Electric Power Technology | Solar Photo-Voltaic Power System and Nuclear Power Engineering |
| 18 | Mr. Waqar Ahmad | MSc Physics | Nuclear Physics/Material Science |
| 19 | Dr. Muhammad Tahir Khaleeq | PhD Industrial Automation | Electronics, Instrumentation & Automation |
| 20 | Khawaja Zahid Shakeel, PoP | MSc Mechanical (Power) Engineering | Development of Power Plants and Related Industries |

10. PNS Membership Initiative and Drive

PNS council took initiative to increase PNS lifetime members in the result of efforts of PNS council members 140 persons got PNS lifetime memberships during 2023. PNS Associate Membership scheme was initiated on 13th January 2023. During 2023 about 1320 students of 70 professional colleges and universities became PNS associate.

11. PNS Internship Programme

PNS offered student internships of 2-4 months duration to three students, PNS council is also trying to start student internship programs with the help of EDB for PNS Associate members and dependent of PNS life time members

12. PNS and Social Media

PNS Council initiated to use social media including YouTube, Instagram, Twitter, Facebook, WhatsApp Group, etc. for PNS news and public awareness programmes. Different teams of associate members were formed to manage the PNS social media.

13. Regular Activities

1. Monthly meetings of PNS council were conducted every first Saturday of the month
2. Four quarterly newsletters were published during 2023
3. Maintenance of PNS Website
4. Arrangements of expenses for PNS activities and financial managements

14. Arranged Deals and Discounts Offers for PNS Members and Their Dependents

PNS Council got following discounts/deals for PNS members from Hotels, Restaurants, Medical Labs, etc during 2023.

1. Excel Las (throughout the country)
2. Bar B Q Tonight, Blue Area, Islamabad
3. Jahangir Restaurant, Blue Area, Islamabad
4. Rumba Cafe and Rumba Meat Factory, Bharia Town/ F6 Markaz, Islamabad
5. Tanweer Optical, Melody, G-6/2, Islamabad
6. Fitdiction Gym, F-8 & Body Fit Gym, G-11, Islamabad
7. Memories Resort, Kalam
8. Indus Lodges, Gilgit
9. Park Hotel, Gilgit
10. Mulberry Hotel, Hunza
11. Baltistan Continental Hotel & Continental Family Guest House, Skardu

Part - 6
***Social and Recreational
Activities***

Activity – 1: Entertainment and Dinner for PNS families on 9th January 2023 in Islamabad



After the oath taking ceremony of PNS Council 2023-24 on 9th January and subsequent speeches of General Secretary PNS, President PNS and Chairman PAEC who was the Chief Guest on that occasion, PNS members and their families enjoyed a social event comprised of poetry, jokes and songs. Mr. Aamir Hashmi, a well-known anchor person of TV shows and the senior most newscaster of PTV was especially invited for compering. He opened the programme with nice jokes and a splendid piece of poetry. As the event was supported by

live music, Mr. Hashmi introduced the group who played *Rubab, Tabla and Harmonium*. The first performance was by a school girl, Arfa Zainab, daughter of Dr. M. Aamir Hafeez, a Lifetime Member of PNS. She presented *Kalam-e-Iqbal* in a very thrilling and energetic voice for which she was very much praised by the audience. After that Dr. Hamid Saleem, an eminent physicist and an authentic poet was invited to entertain the audience with his unique poetry. Another poet, Mr. Ahmad Raza Hanjra, who especially came from Lahore to participate in the event, recited *nazams* and *ghazals* that were much applauded by the participants. Engr. Farrukh Abbas, a Member of PNS presented a national song and then on the request of the audience, he presented another song in a melodious voice. The audiences contented and admired him with big hands. Dr. Shaukat Hameed Khan, a very senior scientist also recalled some interesting incidences of his student life.

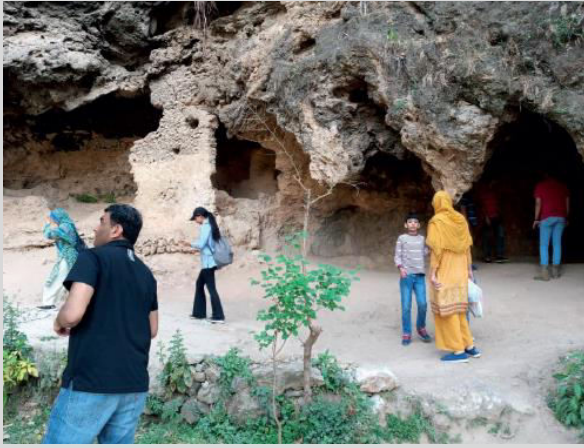
In the end, Mr. Aamir Hashmi concluded the event with some interesting jokes and appreciated the audience for their support and encouragement of the presenters. Finally, Mr. Waqar A. Butt, Vice President PNS, thanked the organizers, presenters, musical group and the audience for participation in such a colorful and wonderful gathering. Annual dinner was served at the end of the show.

Activity – 2: *A Short Hike/Picnic of PNS Family & Friends on 12th March 2023*



The 1st hike cum picnic of 2023 for the families and friends of PNS members, was arranged on Sunday, March 12, 2023. A new sopt was sorted instead of the traditional to and fro on Trail-5 in Margalla hills. This time it was on Trail-7.

A private coach was hired for this purpose that took the participants from PNS Office to the starting point of the hike. Keeping in view of the relative tough and long distance, the hike started from Shah Allah Ditta top after a short visit to the old caves of Budaha’s era on the way. The track terminated at Ghram Thoan covering a distance of 6-7 km. The participants then travelled to Khanpur Dam where they enjoys delicious lunch in a resturant on the other side of the lake. As per usual practice, all arrangements of transport, resturant booking and meals/special tea were made by Syed Zahid Hussain, Executive Member PNS who happily takes up the whole responsibility voluntarily.



Activity – 3: EID Milan on 6th May 2023

As per routine practice, an *Eid Milan* party of PNS Members and their families was arranged at PAEC Rest House on 6th May 2023 in which about 120 persons along with their children gathered to celebrate Eid Greetings. Many senior retired officials graced the occasion. Some of them got extremely delighted to meet their colleagues after long times. They enjoyed hi-tea with Eid specialty of *Sheer Khurma*.

As usual, the credit of this colorful and memorable gathering goes to Syed Zahid Hussain, Executive Member and Mr Ghulam Sarwar, Finance Secretary, PNS who put lot of efforts in making this programme successful. The cooperation and well managed arrangements of the staff of PAEC Rest House was appreciable.



4. 4-days Recreational Family Trip to Kashmir Valley



For the entertainments of its Members and their families, PNS organizes trips to scenic areas of Pakistan once in a year. Last year, a 3-days trip to Sharan Hill Resort in Kaghan Valley and Naran was arranged and this year a 4-days trip to Kashmir valley was conducted. Two coaches accommodating about 50 persons travelled through the curved roads surrounded by tall pine trees and lush green hills with heart alluring views of vast meadows. The first night stay was near the charming Banjosa Lake in Rawalakot. Next day, almost all participants hiked up to Toli Pir that is about 9000 feet high. On the top, there is a 400 years old grave of some saint. The night stay was at Sudan Gali in Poonch District. The third day, a tiring day, was a tough hike up to the highest peak in the region, Ganga Choti. Only half of the participants made up to the end point. The next venture was another short hike up to Kopra Choti having vast green carpet like plains on the top. The enjoyable trip ended with a stopover at the waterfall near Muzaffarabad.



5. EID Milan of Women in Nuclear (WiN) on 15th July 2023



Eid Milan party of WiN-Pakistan Chapter took place at PAEC Rest House on 15th July 2023 in which about 40 women along with their children gathered to celebrate EID Greetings. Many senior retired ladies graced the occasion. Some of them got extremely delighted to meet their colleagues after long times. They enjoyed hi-tea with Eid specialty of *Sheer Khurma*. This event was organized by PNS as per commitment to facilitate its members to support such social events on subsidized rates. The services of the Rest House staff were appreciated for serving delicious dishes in a well-mannered way.

6. Hike Cum Get To Gather on 26th November 2023



The 2nd hike of the year for families of PNS members was arranged on Sunday, 26th November 2023 at the traditional attractive track of Trail-5 in Margalla Hills. About 80

persons including young children moved through lushgreen pathway up to the 1st spring which is only 2km from the parking site. A new spot on the grassy lawn was selected for get to gather after the walk. The participants briefly introduced themselves as a usual practice to establish linkages and friendships. Thanks to Syed Zahid Hussain, Executive Member PNS who made all arrangements of tea at the spot and refreshments boxes which were served to all the participants.

7. PNS Gala Dinner at Faisalabad on 26th December 2023

With the cooperation of NIAB, NIBGE and PINUM, PNS organized a family get-to-gather in Faisalabad. It was the first ever social event for PNS Members held outside Islamabad. The gala dinner was arranged at the Chiniot Palace in which more than 120 persons including children participated. The directors of all the three centres, Dr. M. Yussouf Saleem, Dr. Kalsoom Akhtar and Dr. M. Babar Imran, former directors and retired officials along with their family members graced the occasion. Mr. Waqar A. Butt, opened the programme with a few jokes. Two children performed on the stage and some other members entertained the participants by telling amusing incidents. Dr. Tahir Khaleeq briefed about PNS programmes and its social and cultural activities. Dr. Yussouf Saleem expressed his views on this colorful initiative and thanked PNS for opening a way of families' interaction as well as opportunities to meet old friends. Delicious dinner was served at the end of the show with half of the contribution from PNS Members.

