

International Society of Muslim Women in Science

”INTERNATIONAL SOCIETY OF MUSLIM WOMEN IN SCIENCE (ISMWS)”

Founder & President:

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Established: April 2010

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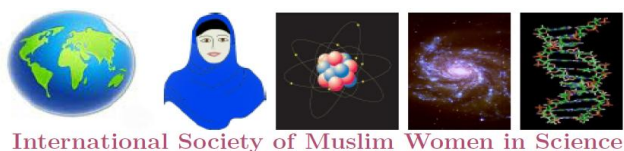


ISMWS Newsletter, December 31, 2023



Mirage at Sun set

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”INTERNATIONAL SOCIETY OF MUSLIM WOMEN IN SCIENCE (ISMWS)”

Motto: ”Stay in Science (Basic or Applied)”

Practice: ”Keep some hours for our intellectual nourishment everyday.”

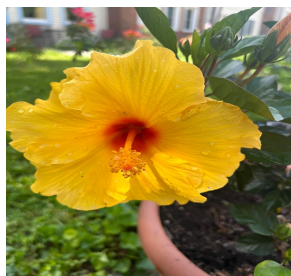
We believe: ”The more we use our brain and mind, the more beautiful we look.”

- **Members: over 400 from 32 countries, December 2023**

ISMWS Newsletter, December 31, 2023

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1. PRESIDENT’S GREETINGS :

Dear ISMWS Members,

Assalamu alaikum and a very Happy New Year!

May Allah bless all of us with more successes in achieving our STEM objectives and bringing peace to the earth.

In the e-magazine, An-Nisa 2023, published under the Indo-US APJ Abdul Kalam STEM Education and Research Center of the Ohio State University and Aligarh Muslim University, and International Society of Muslim Women in Science, you will find that my article, item 24 "STEM: Integral part of our lives" on p.57, presents seven STEM issues that our lives are currently in and many of us are engaged in studying them in various capacity. They are:


1. COVID-19 Pandemic,
2. Industrial age impact: Global warming and long lasting waste,
3. Earthquakes:;
4. Artificial Intelligence (AI);
5. Impact of an asteroid to our earth,
6. Lifetime of our Sun and Searching for a home,
7. Multidisciplinary research: astronomy and medical treatment

There are more that can be listed. Each item is real and very much related to our lives. We are experiencing huge impacts of some of them. For example, July 2023 was the hottest month on record - and was thought to be Earth's hottest in 120,000 years, according to the World Meteorological Organization. We had unrelenting storms, heatwaves, wildfires, droughts, floods.

We can not predict where the history will place us, but we are part of advances in STEM. It is part of our, members of ISMWS, duty to be engaged in these issues and carry out research towards inventing methods or information that will make progress, narrow down problems. Whenever you achieve anything, please write up a short paragraph with complete bibliography and email it for the newsletter or An-Nisa for other members to know.

Please always make sure you are safe and taking care of yourself.

Pray all the best always,



Prof. Sultana N. Nahar

President of ISMWS

Astronomy, The Ohio State University, Columbus, OH 43210, USA



2. ANNOUNCEMENTS & CONTACTS:

Submission of contributions for An-Nisa: An-Nisa is the e-magazine that we introduced during celebration of International Women's Day (IWD) 2022 and included real stories of amazing Muslim women who are making history. You can submit your success stories, articles, poems, arts any time. They will be published in An-Nisa 2024. Send them with a picture of you and complete information of your current subject area, position and affiliation address, location to be included in the magazine. Please make the story/ies concise.

Nomination for Recognition: We recognize members at IWD celebration. Please submit nomination for recognition for yourself or someone else with i) a tentative citation,

ii) paragraph for reason of recognition, and iii) CV to Dr. Hala at hala.noman@gmail.com and me at nahar.1@osu.edu our celebration of IWD in March so we can announce.

Share your news: • Your updates and good news to ISMWS Editors.

The following ISMWS members are offering volunteer service for the newsletter. ISMWS Editors:

1. Dr. Nasreen Haque. President of Intalage Inc., USA, email: nasreen@intalage.com
2. Prof Faiza Shujat. Mathematics, Taibah University, Saudi Arabia, Email: faiza.shujat@gmail.com
3. Prof. Sultana N. Nahar, Astronomy, The Ohio State University, USA, Email: nahar.1@osu.edu

NOTICES:

• We are not active in social media. However, following ISMWS members are willing to maintain social media networks:

- **facebook:** Dr. Rubiya Samad, Physics, Central University of Kashmir
- **Instagram:** Dr. Rubiya Samad, Physics, Central University of Kashmir
- **twitter:** i) Prof. Fatma Azmy, Dept of Mathematics, Al Azhar University
ii) Dr. Dana Saif Akil, Dept of Physics, American University in Cairo
- **linked:** i) Prof. Fatma Azmy, Dept of Mathematics, Al Azhar University
- **WEBSITE:** Prof. Sultana N. Nahar, The Ohio State University

NOTES:

- Visit ISMWS website for news & various job & fellowship opportunities
- Invite any female, student/professional, in science to ISMWS membership
- Anyone in Physics and related to Physics, please become a member of American Physical Society (APS). It has many benefits. Free membership (not from US, Canada, Europe) form and instruction are available at <http://www.astronomy.ohio-state.edu/~nahar/fip.html>
- Inform ISMWS whenever you change your email address
- Create an ISMWS chapter at your institute/university
- Newsletters are posted at the ISMWS website



3. ISMWS ACTIVITIES & EXPOSURES

Celebration of IWD on March 29, 2023: We celebrated IWD through a half day symposium organized by the Indo-US APJAK STEM Education and Research Center and International Society of Muslim Women in Science. It was held on a hybrid platform, but largely in-person where female students competed on STEM topics and posters. Dr. Swaleha Naseem and Prof. Farukh Arjmand oversaw and administered the program.

It started with Quran telawat followed by lectures. and speeches by STEM Center directors and co-directors, and guest faculty members. AMU Abdullah Women's College principal Prof. Naima was the Chief guest, and there 3 other Guests of Honor.

Participating high school and undergraduate students presented and competed with their STEM topics and posters - 4 high school students competing perspectives of STEM, 4 undergraduate students for posters. They were recognized. Among othes who were recognized for their

contributions to science are 5 Ph.D. scholars and 5 faculty members as given below

Recognitions (Faculty)

1. Prof. Saba Beg, Women's college, AMU
2. Dr. Orus Ilyas, Department of Wildlife Sciences, AMU
3. Dr. Saleha Jamal, Department of Geography, AMU
4. Dr. Huma Haider, Women's college, AMU
5. Dr. Swaleha Naseem, Interdisciplinary Nanotechnology Centre, AMU

Recognitions (Research scholars)

1. Ms. Mehroosh Fatema, Department of Physics, AMU
2. Ms. Nargis Bano, Department of Zoology, AMU
3. Ms. Suffora Akhter, Department of Chemistry, AMU
4. Ms. Narjis Fatima, Department of Biochemistry, AMU
5. Ms. Deepika Vashishtha, Department of Geography, AMU

The news on it was published in AMU news.

December 15, 2023: Author Prof. Jorg Matthias Determann sent his book Book "Diversity, Equity, and Inclusion in Astronomy - A Modern History" (Springer 2023)

- Author Prof. Jorg Mathias Determann of Virginia Commonwealth University of Qatar has published his book which gives real stories of many in astronomy and space physics.

- He interviews included 3 ISMWS members - Prof. Somaya Saad of National Research Institute of Astronomy and Geophysics of Egypt, Prof. Shahinaz Yousef of Astronomy of Cairo University, Egypt, and Prof. Sultana N. Nahar of the Ohio State University for the book. The book introduces ISMWS and discusses some activities of Somaya Saad and Sultana Nahar.

He has requested to send information of the to ISMWS members.

November 18, 2023: Physics Camp for Girls: ISMWS Chapter at University of Karachi, along with two other groups, organized the 3rd "Physics Camp for Girls", University of Karach, Karachi, Pakistan, on November 18, 2023.

- ISMWS Chapter President Bushra Gul of University of Karachi led the program. She wrote details of the event. Founder Prof. Sultana N. Nahar delivered a recorded keynote presentation.

- The prizes included gift, certificate, cash prize for all participants, art supplies with cash prize. ISMWS sponsored the prizes (gift, certificate, cash prize) for all participants

September 19, 2023: ISMWS inaugurated its new chapter, "ISMWS-Egypt" A special session was organized for the inauguration of the new chapter "ISMWS Egypt" of ISMWS in Egypt at the 5th International Conference on Molecular Modeling and Spectroscopy (ICMMS-5), held at National Research Centre, Cairo, Egypt during Sep 17-19, 2023. The session included i) Sultana's keynote presentation on ISMWS, ii) Acceptance of the founding president by Prof. Hanan Gouda of Ain Shams University (female section) and iii) speeches by Prof. Medhat Ibrahim and others for the inauguration

On September 20, 2022 a new chapter "ISMWS Kashmir" was inaugurated at a session at NIT- Srinagar when participants from various colleges and universities in Kashmir with ISMWS member and past Chair of the Physics Department, Prof. Seemim Rubab. was appointed as the founding President of the chapter. OSU Middle East Studies Center published the news: "New Chapter of International Society of Muslim Women in Science Inaugurated" on November 7, 2022

• **ISMWS Celebration of the International Women's Day, March 20, 2022:** A virtual symposium was held to celebrated the day jointly by the Indo-US APJAK STEM Education and Research Center of OSU-AMU and ISMWS. It was highly inspirational and successful event with ISMWS speakers, - Dr. Hashima Hasan (Chief Guest) of NASA, Prof. Somaya Saad of National Research Institute of Astronomy and Geophysics (NRIAG) in Egypt, Prof.

Farukh Arjmand of Chemistry and Prof. Subuhi Khan of Mathematics and Alvia Fahreen of Zoology of Aligarh Muslim University, Dr. Usra Zeidi of Augusta University in the USA, Prof. Fatma Azmi of Al Azhar University of Egypt, and Prof. Sultana N. Nahar of the Ohio State University which was followed by introduction by the participants. We introduced the e-magazine An-Nisa. Number of women in science were recognized:

- Dr. Hashima Hasan, NASA, Deputy Program Scientist of JWST telescope, Headquarter, Washington DC, USA
- Prof. Somaya Saa, Director, Kottamia Observatory, NRIAG, Helwan, Egypt
- Dr. Farukh Arjman, Chemistry, AMU, AMU Co-director: Indo-US STEM Education and Research Center of OSU and AMU, India
- Dr. Bushra Ateeq, Biotechnology, IIT-Kanpur, India
- Dr. Hala, Atomic Physics and Quantum Information Lab, NIST, USA
- Prof. Khadije Y. Bazzi, Electric Car batteries, General Motors and Central Michigan University, USA
- Prof. Jahanara Monim, Osmania Degree College, Kurnool, India
- Dr. Yusra Zaidi, Georgia Augusta University, Georgia, USA
- Sultana N. Nahar, Astronomy, The Ohio State University, ,USA

Special recognition: Alvia Fahreen, Zoology (undergrad), Aligarh Muslim University, India

• **ISMWS chapters** were also opened at NED University of Engineering and Technology in Karachi, and University of Karachi, Pakistan in 2022

• **Prof. Sultana N. Nahar, The Ohio State University, USA:** She received Leadership Award from the Ohio State University for her contributions an Advisor to the ISMWS at Ohio student chapter, 2022.

• **Two ISMWS members, Dr. Nida Rehmani and Prof. Sultana N. Nahar, The Ohio State University, USA along with another female in Science:** were featured in the "Islamic Horizon" magazine of the Islamic Society of North America (ISNA, the oldest and the largest Islamic society in the USA and Canada combined), 2022.

• **Arabic speaking ISMWS members** have contributed to Ph.D. research study at Grand Canyon University, Phoenix, USA, 2023



4. HIGHLIGHTS & SUCCESSES OF OUR MEMBERS

Our hearty congratulations and prayers for the continued success of ISMWS members:

ACHIEVEMENTS:

• **Alvia Fareen, Dept of Zoology, Aligarh Muslim University, India;** Alvia wrote on Oct 20, 2023: ”

”Dear Sultana ma’am, Assalamualaikum. Hope you are doing well.

With the grace of Allah the Almighty,

I’m so glad to share this news with you that I have received 2nd prize (certificate of honor, momento and cash prize worth INR 3000/- INR)in the Health Science category on the occasion of Sir Syed Day in an IN-HOUSE STUDENT’S RESEARCH CONVENTION organized by INNOVATION COUNCIL AND UNIVERSITY INCUBATION CENTRE.

I presented my idea on Cartilage Regeneration under the heading ”Assisted Cartilage regeneration using Lipid Nanoparticle-based Drug Delivery System: A potent treatment for Osteoarthritis”. The convention took place on 12th of October, 2023 at Physics Department, AMU where I got to present my idea of this injectable drug and received 2nd position in University.

Looking forward to future collaborations. Kindly remember me in your prayers.”

• **Dr. Safa Abdo, Cairo University, Egypt:** On Nov 26, 2023 she wrote ”My dear Professor Sultana, Asalamu Alaikum, I hope you are doing well.

I want to share recent events with you. I was privileged to participate in the 30th WIN Global Annual Conference in Aswan, Nov 12-16, 2023 ”Women for sustainable development of nuclear and radiation application” in the beautiful city, the land of gold ”Aswan”, Egypt. It provided me a valuable opportunity to present my research, connect with scientists from around the world and establish new relationships, engage in scientific discussions, and attend vital workshops on nuclear science. I became a member of ”Women in nuclear”- Africa and WIN- Egypt society. I hope it will open new horizons for me.

Also I am applying for a UAE visa to travel to Dubai to attend COP28. I hope I can manage to attend this event as well. Are you going to attend the summit cop28 ? Kind regards, Safa,”

• **Dr. Hashima Hasan, NASA Head quarter, Washington DC:** She wrote in September 2023 being selected in the ”Rising Beyond The Ceiling (RBTC), a global initiative to shine a spotlight on achievements and contributions of Muslim women of India, both in the country and in countries around the world. The United States RBTC 100 Global Inspirations List seeks to spotlight Muslim women from India who have made their mark in different professions in the USA. The 100 stories capture the resilience, challenges and their immigrant experience in building a career in a new environment and country.”

• **Samira Shire, The Ohio State University, USA:** Samira is back to OSU and to medical school. She shared the good news on April 5, 2022 ” Dear Dr. Nahar, I hope this email finds you well! I wanted to reach out to update & let you know that I have been accepted and will be committing to The Ohio State University College of Medicine! OSUCOM has always been my top choice medical school, so I am very excited to be a part of the new class, in the community I grew up in and hope to serve. I am thrilled to be back at Ohio State and start this next journey in my path to become a physician and I want to thank you for your mentorship and also kindly providing me a letter of recommendation in support of my application. I really appreciate your help and hope to see you on campus in the Fall! Best, Samira”

• **Noshin Yesmin, Miami Univeriy, Ohio, USA:** Moshin wrote on April 12, 2022: ”Dr. Nahar, Assalamu alaikum. I am happy to share with you that I received an admission offer for

the Astronomy PhD program at the University of Virginia yesterday. I ask for your blessing while embarking a new journey, and am looking forward to attending future events organized by ISMWS. Thank you so much for your support. Ramadan Mubarak!

Sincerely, Noshin Yesmin”

• **Dr. Hashima Hasan, Deputy Program Scientist of JSWT, NASA:** She presented ”The STEM Gap: Building the Pathways for Women of Color in STEM Careers” at the Capital Hill on September 20, 2022. She wrote ”There were several hundred viewers online as well as a small in-person audience in the Rayburn Building, with appearances by four Congresswomen supportive of this event highlighting challenges for women of color in STEM, Reps. Haley Stevens (D-MI), Madeleine Dean (D-PA), Chrissy Houlahan (D-PA) and Jenniffer González-Colón (R-PR),”

• **Prof Swaleha Naseem, graduation under joint research at Aligarh Muslim University, India and Ohio State University, USA. Got tenured position at Aligarh Muslim University:** She wrote on January 22, 2023 ”Greetings of the day Dear Anil and Sultana Assalamualaikum

I have received my appointment letter and joined my duties as assistant professor at Interdisciplinary nanotechnology centre yesterday Alhamdulillah. Thank you and best regards. Dr Swaleha Naseem”

• **Dr. Sabiha Parveen, graduation under joint research at Aligarh Muslim University, India and Ohio State University, USA:** She wrote on June 11, 2022 ”Dear Anil Sir and Sultana Ma’am, Greetings! Hope you both are doing well.

I am glad to share with you that I have joined Rocky Mountain Labs, NIH at Hamilton, Montana as a post-doctoral fellow. I am so grateful to you both for all the help, efforts, and generous support extended so far. Thank you.”

• **Prof. F. Arjmand, Chemistry, Aligarh Muslim University, India:** She wrote ”Alhamdulillah, I got three recognition in recent times 2022-2023 and those are; 1. Sir Syed innovative Best researcher Award-22 a citation, cash prize of Rs 50000 and a certificate 2. ZHF APJ Abdul Kalam Memorial Award 2023 from ZHF foundation Aligarh(to be given on 12th March) 3. FRSC from Royal Society of Chemistry 2023 Apart from these awards , I have published very good research articles with high impact factor and reviews in 2022-2023 including , personal account in The chemical Recordref Chem. Rec. 2023, e202200247 (1 of 21) @ 2023 The Chemical Society of Japan and Wiley-VCH] and Pharmacology and Therapeutics 2022(impact factor 13.4). Please remember in Dua. Allah Hafiz Farukh”

• **Mahbuba Aktary (M.S. student), King Fahd University of Petroleum and Minerals, Saudi Arabia.** She wrote ”I am glad to shear the happiness and joys of my first research publication on reputed journal ”Royal Society of Chemistry Advances (RSC Advances) ” I expect your guidance and Du’a for my future journey. May Allah bless you all in worldly and afterlife. Ameen.” Another news:

”I would like to share another good news with you that recently my second paper has been published in a Q1 journal. I am sharing the link if you are interested to read this paper.

<https://www.sciencedirect.com/science/article/pii/S2352214323000059>”

• **Bushra Gul, University of Karachi, Pakistan:** She wrote on April 14, 2022 ”My paper has been accepted for poster presentation at COSPAR 2022, which is a tremendous honour for me. I’m currently pursuing an MPhil at Karachi University. The programme allows for both virtual and physical presence; my request is for a virtual presentation with a fee of 250 euros. Please let me know if you or any of the institutes with which you are affiliated fund young women. My acceptance letter for the scientific assembly is attached.” Bushra Gul

• **Dr. Tajalli Ilm Chandel, Aligarh Muslim University, India:** She has a new position.

She wrote "I am delighted to share with you that I have joined as a Research Associate at Interdisciplinary Biotechnology Unit, Aligarh Muslim University, Aligarh."

• **Salika Ramazan, University of Kashmir, India:** She became ISMWS member some years ago when she had entered the university as a postgraduate student. She has made remarkable achievements since then - Oct 12, 2021 status: "Salika Ramazan received her MSc in Botany from University of Kashmir, Hazratbal Srinagar, in 2015. The author has qualified several state and national level competitive exams including J&K SET (16-11-16), CSIR-JRF (31-11-2017) and ICAR-ASRB NET (23-05-2018) and is currently pursuing her Ph.D. at Plant Molecular Biology Research Lab, Department of Botany, University of Kashmir Srinagar."

• **Dr. Safa Yousef, Cairo University Alumna, Cairo, Egypt:** She wrote "I would like to share with you the happy news I have just received. Thank God my 3rd manuscript taken from my Ph.D. thesis titled "Status of the coastal marine environment in the Southern Red Sea, Yemen as reflected by elements accumulated in the skeletons of scleractinian (stony) corals" has been accepted for publication in Archives of Environmental Contamination and Toxicology journal, IF=2.8.

The most important thing about this paper is that it's considered the 1st study for the pollution of the Yemeni Red Sea ever and it will be a base line for further studies Insha'a Allah. I was very keen to make my home country "Yemen" a first priority during my research and study, as it is a poor and neglected country, and I was also keen to study aquatic ecosystem pollution before and after the war.". She also reported on December 21, 2021, "Russia trip We came back to Cairo three weeks ago. But I got sick soon after I landed in Cairo. Thank God I am getting well now. The day before our traveling we surprised by the news that the reactor faces some technical issues and it will be shut down for at least a year! When I went there I found that maybe it will extend for more than two years! They tried to find alternative analysis ways but they will take time! The good thing that they accepted my request to be affiliated to JINR Institute and in this regards I want to apologize for you that I overwhelmed you by this request."

• **Alvia Farheen, Aligarh Muslim University, India:** Alvia informed on Feb 9, 2022 "I'm so pleased to share a good news with you that I have been provided incubation at Frank and Debbie Islam Incubation centre in the Faculty of Management Studies and Research, Aligarh Muslim University. This has been provided for my idea on which I have been working since a year now. The idea is based on researching and developing non-invasive technique for cartilage regeneration for the prevention of osteoarthritis using hydrogel technology. In sha Allah I will start my research soon once I find a suitable laboratory space. Please keep me in your prayers." She reported on March 30, 2023 "Assalamualaikum, Wish everyone a very fruitful Ramadan. I'm very grateful to Allah the Almighty that he bestowed me with this society which is like a family where I can share my happiness with all of and receive blessings. I'm glad to share two of my achievements this year so far;

1. I received Bayer Fellowship - MEDHA which is a national level fellowship for Master's students in India. The fellowship sums to 20,000 INR per month for two years (entire duration of my master's program). I have received the first tranche of 120k INR Alhamdulillah. 2. I have been nominated by the Vice Chancellor of Aligarh Muslim University, India as a member of Internal Complaints Committee (ICC) at AMU itself."

• **Prof. Rahla Nagma, Regional Institute of Education, NCERT, India:** On Feb 23, 2022, She has become an Assistant Professor of Physics at the Department of Education Science and Mathematics, Institute of Education, NCERT in Bhopal

• **Prof. Hanan Gouda, Ain Shams University, Egypt:** Led the scientific organizing committee for the 2022 International conference on "Molecular modeling and spectroscopy" of

National Research Center in Egypt in September 2022

• **Dr. Safa Yousef, Graduate of Cairo University, Egypt** Safa Abdo Cairo, wrote in 2023: "I would like to share with you my new news. Alhamdulillah I received the Egyptian nationality today, Uh finally :) and on the scientific level, two weeks ago I participated in ISINN-29 conference at Frank laboratory in Joint institute for nuclear research. I present my last research in 2023 and I was a chairman for a session, which was my first experience! after the conference we made a sightseeing trip in Moscow and Kazan. Kazan is the capital of the Islamic civilization there. We visited Sharif Kul Mosque and the Tataristan Islamic Museum, the funny and happy thing in the same time was that a lot of Muslim women asked to take photos with me after knowing that I'm a Muslim woman in hijab and just wearing hijab makes each Muslim come to you and say Asalamu alykum and offers his services.

Here I am sending you some photos of the trips,

Warm regards, – Safa Abdo"

• **Prof. Sultana N. Nahar, The Ohio State University, USA** organized along with 4 other German astronomers the workshop "Investigating the roots: How our perception of the Milky Way System is shaped by our knowledge of atomic data products", Heidelberg, Germany, Oct 3 - 7, 2022

- It was also participated by ISMWS member Dr. Maria Bergemann of Max Planck Institute of Germany.



5. MEMBERS EARNING DEGREES:

Hearty congratulations for the graduates and pray for the successes of the next phase!

• **Yeshfeen Sherwani, Jami Millia Islamia, India:** She graduated with her Master's degree and wrote on Nov 9, 2023: "Hello ma'am, I hope you are in good health, I am pleased to tell you that I have joined Jamia Hamdard University as a JRF (India Trust Alliance Project) and doing Ph.D. in Jamia Hamdard as well. Please do let me know how can I add other people from Jamia Hamdard in our organisation"

• **Moizzah Ahmed, The Ohio State University, USA:** She graduated with a Bachelor in Science from OSU and is preparing for medical entrance exam.

• **Dr. Aashna Zainab, Aligarh Muslim University 2022:** She received her Ph.D. in Physics in late 2022.

• **Dr Zahra Sogand Karimzadeh, Earth Science, Shiraz University, Iran:** She wrote on April 30, 2022, "I am pleased to inform you that I have completed my Ph.D. in the field of Economic geology and geological remote sensing, and I had great defense on 20 September 2021, of my thesis, entitled "Prospecting the rare earth elements in Iron Oxide-Apatite deposits of Bafgh area by spectrometry and remote sensing". That was for the first time in the world that rare earth elements in Iron deposits were studied using remote sensing techniques. From that day till now I've been working as a Teacher assistant (a part time job) in Shiraz University, Department of Earth science, and doing my research and manuscripts. Moreover, I would like to inform you that my research paper, a part of my Ph.D. thesis, has been accepted in The Egyptian Journal of Remote Sensing and Space Science. The paper is now available

online in below link: <https://doi.org/10.1016/j.ejrs.2022.04.001>

Best regards, Sogand Karimzadeh, Member ID: ISMWS002ZK”

• **Syeda Lammim Ahad, Leiden Observatory, 2333 CA Leiden NL:** She graduated with her Ph.D. degree and has joined Waterloo University in Canada. She sent a copy to her Ph.D. thesis to Sultana Nahar



6. INTRODUCTION BY NEW MEMBERS:

We welcome warmly and congratulate on the achievements of our new members!

• **Afifa Jamal, Aligarh Muslim University, India :** She wrote on Aug 17, 2023

”Greetings, I am Afifa Jamal, a second-year physics major at Aligarh Muslim University. I attended your recent talk, which was genuinely enlightening as an aspiring astrophysicist. I am particularly interested in the gravitational -wave experiment like pulsar timing arrays. The InPTA working with uGMRT in India holds an excellent database and is currently one of the best in its field. I recently got an opportunity to work with the GMRT which further increased my interest in this field.

Attached below are the details required to join ISMWS, which again seems like a spectacular initiative that is commendable. I am looking forward to being a part of this initiative and learning from amazing women who are a part of it.

Warm Regards Afifa Jamal • **Sumaira Ghafoor, University of Karachi, Pakistan:** She wrote ”Assalam o Eleikum, Hope you are doing well, Being a registered member of ISMWS with ID: ISMWS001SG, I want to share some of my recent achievements in the Field of Physics and youth empowerment as under:

In October 2021, I had organized a space week in my college with theme ”Women in space”. (4th to 10th October) In July. 2022, I had done a course on ”Radiation protection officer” From Pakistan Nuclear Regulatory Authority (PNRA). (4th to 7th July) In July, 2022 I had participated in Joint International school “Basics & applications of the Rietveld method & Pair distribution functional analysis in material science. (Jointly organized by national centre for physics(NCP), Islamabad and Max Planck institute for solid state research, Stuttgart Germany. (27th to 29th July) Recently, I have been in Bangkok to represent my country Pakistan as a Youth Ambassador of Global MAPS (Mentor Amiable Professional Society) on the topics of ”Climate change” and ”Human trafficking”. (27th to 30 September 2022)

• **Rimsha Shaikh, NED University of Engineering and Technology, Karach, Pakistan:** She wrote on Oct 29, 2021: ”I am Rimsha Shaikh, and I am enrolled as a MS student in NED University of Engineering and Technology, Karachi.

I am a founder of ”Hunarmamd Scholarship Program”. The aim of this scholarship program is to financially assist students who have been suffering from financial issues. Moreover, I, along with my some batchmates arranged ”Particle Physics Outreach event” in September 2021. Additionally, I am an organizer of ”Physics camp for girl”.

Being a socially active person, and eager to give my abilities to promote Muslim Women in Science. I decided to become a member of your prestigious program ISMWS. I am immensely excited that the founder belongs to Pakistan, and I am highly appreciating your this effort. I would be highly delighted if you accept you.”

She responded as she became a member

" I am excited to be a part of this Society, and I would give my best to stimulate this program. Moreover, I have shared the details of ISMWS in my circle. May be my juniors and seniors will be a part of it.

Many thanks for appreciating my leadership qualities. Beside my social work, I have splendid academic performance. During undergraduate, I have secured 86/100 marks and 97/100 marks in courses Optical Technique and LASER Physics respectively, and pursued my final year course in the relevant subject and secured 89/100 marks. Now, I decided to pursue my MS thesis in spectroscopy and searching relevant programs and supervisor accordingly. Moreover, I am planning to arrange an International program in Spectroscopy for undergraduate student. It would be my pleasure to represent myself as a member of ISMWS."

• **Juweiriya, Aligarh Muslim University, Aligarh, India:** She wrote on Feb 18, 2022: "Assalamualaikum to all the members of this community!

My name is Juweiriya and I am currently an undergraduate student at Aligarh Muslim University. My interest towards the field of medical science was due to my captivation with the intricacies involved in the working of human physiology ever since I was a child. This captivation transformed into a long-term goal of contributing to the sacred field of science. With an obstinate decision of pursuing a career in medicine and going as far as memorising the Hippocrates Oath at age 12 but as luck would have it I couldn't fulfill this goal. However, this experience strengthened my resolve to contribute to the medical field irrespective of the course I choose.

I learned about the usage of metals in medicinal chemistry as a result of my Chemistry background. The interaction of metals with biomolecules opens up an unlimited number of possibilities for influencing the speciation reactivity and ultimately the biological impact of metals in medicinal context. I intend to broaden my knowledge and perspective on metal based nanocarriers in cancer therapy through the prospect of mentorship and guidance. I look forward to hone my research skills and work collaboratively with some of India's brightest minds. Although medicinal chemistry is the branch of science that fascinates me the most, I am open to other similar research topics as well.

Looking forward to an enlightening experience ahead."



7. JOURNAL PUBLICATIONS BY ISMWS MEMBERS

• "Pressure-dependent comparative study of the mechanical, electronic, and optical properties of CsPbX₃ (X = Cl, Br, I): a DFT study for optoelectronic applications", †M. Aktary,*a.M. Kamruzzaman*and R. Afrose, Materials Advances, © 2023 The Author(s). Published by the Royal Society of Chemistry

• **M. Aktary, Begum Rokeya University, Bangladesh:** "A comparative study of the mechanical stability, electronic, optical and photocatalytic properties of CsPbX₃ (X_{1/4}Cl, Br, I) by DFT calculations for optoelectronic applications" M. Aktary,*M. Kamruzzaman and R. Afrose, RSC Advances of Royal Society of Chemistry, 23704—RSC Adv., 2022,12,23704–2371

• **ISMWS members Dr. S. Parveen, Prof. F. Arjmand, Chemistry, Aligarh Muslim University, India:**

"Metal complexes of NSAIDs as potent anti-tumor chemotherapeutics: Mechanistic insights into cytotoxic activity via multiple pathways primarily by inhibition of COX-1 and COX-2 enzymes", Huzaifa Yasir Khan, Sabiha Parveen, Imtiyaz Yousuf, Sartaj Tabassum, Farukh Arjmand, Coordination Chemistry Reviews Volume 453, 15 February 2022, 214316

• **ISMWS member, Alvia Farhee, Zoology, Aligarh Muslim University, India:** "SARS COV 2 AND THE ECOLOGICAL CHALLENGES -A RESULT OF IMPRUDENT ANTHROPOGENIC ACTIVITIES", Alvia Farheen, Samreen Jawed, International Research Journal of Modernization in Engineering Technology and Science, Vol 04, Issue:01 (2022), p.233

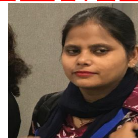
• **Dr. Sogand Karimzadeh, Earth Sciences, Shiraz University, Iran** "Potential of Sentinel-2 MSI data in targeting rare earth element (Nd³⁺) bearing minerals in Esfordi phosphate deposit, Iran", Sogand Karimzade, Majid. Tangestani, The Egyptian Journal of Remote Sensing and Space Science, <https://doi.org/10.1016/j.ejrs.2022.04.001>

• **Aktary,*M. Kamruzzaman and R. Afrose, Begum Rokeya University, Bangladesh** "A comparative study of the mechanical stability, electronic, optical and photocatalytic properties of CsPbX₃ (X_{1/4}Cl, Br, I) by DFT calculations for optoelectronic applications M. Aktary,*M. Kamruzzaman and R. Afrose, RSC Adv. (Royal Society of Chemistry Advances), 2022,12,23704

• **Dr. M. Jahanara, Abdul Haq Urdu University:** . Dr. M. Jahanara, Anwarullah,. Sultan Basha, 4M. Kashifa Farnaz, 5K. Fathima, 6M. Anees Fathima, Dr. Abdul Haq Urdu University, Kurnool, India "A Study of Severity and outcome of COVID-19 Second Wave", © 2022 JETIR August 2022, Volume 9, Issue 8



8. PROFILES OF ISMWS MEMBERS



Quiet and determined Dr. Rahla Nagma

A Ph.D. holder from one of the best institutes in India IIT-ISM, The only Muslim female in her college, Postdoc in the USA, two kids, husband - Mathematics Prof at IIT-Indor, wrote:

”Dr Rahla Nagma is born and brought up in Dhanbad, Jharkhand State of India. She obtained her undergraduate and postgraduate degrees in Physics from Vinoba Bhave University, Hazaribag situated in Jharkhand. Thereafter she pursued M.Phil in applied physics from IIT(ISM) Dhanbad. She earned her PhD degree in Physics from IIT(ISM) Dhanbad in 2014 with the help of fellowship awarded by MHRD (Ministry of Human Resource Development) Govt. Of India (2010-2014). Her Thesis work is concerned with the “Scattering Studies of Molecules relevant to Atmospheric Application”. During her PhD she worked on electron scattering Problem. She has done calculations to derive various scattering cross sections viz., elastic, inelastic, ionization, electronic excitation, rotational excitation, momentum transfer and total cross sections for a great variety of atomic and molecular targets. She extensively studied resonance features in the cross section curve and determined the resonance parameters like position and width.. Resonance is the phenomenon of formation of transient negative ion state when a low energy electron gets temporarily trapped inside the molecule. These atomic parameters are required in the modeling of various environments. She has eight first author publications out of her PhD work in journals of international repute. During her tenure of PhD she also published a book “Electron Impact Collision Cross Section for Atmospheric Molecules ” with Lambert Academic Publishing (19 October 2011).

After completing her doctorate she joined as a Postdoctoral Research Associate at IIT(ISM) Dhanbad. There she worked on positron (anti-particle of electron) scattering problem with atoms and molecules. She was an integral part of the team developing computational procedure for positron scattering with atoms and molecules based on the scheme developed for electron scattering and found interesting results. However, she left this position and moved to Indore where her husband is working in IIT Indore. Few months later she started to work as visiting faculty in a college in Indore. Thereafter she got National Postdoctoral Fellowship of DST, Govt of India and joined RRCAT (Raja Rammana Center of Advanced technology), Indore as a postdoctoral Fellow and continued her work on positron scattering. She is a recipient of prestigious SERB Indo US Postdoctoral Fellowship awarded jointly by SERB, New Delhi and IUSSTF. She has the privileged to work with Prof Sultana Nahar and Prof Anil Pradhan as visiting scholar in the Department of Astronomy, The Ohio State University, USA for 1 year under the aegis of Indo US postdoctoral fellowship. During her course of work at The Ohio State State University, she carried out calculations for collision strength and line emissivity ratios for P III (P+2) ion, an ion of biosignature significance.

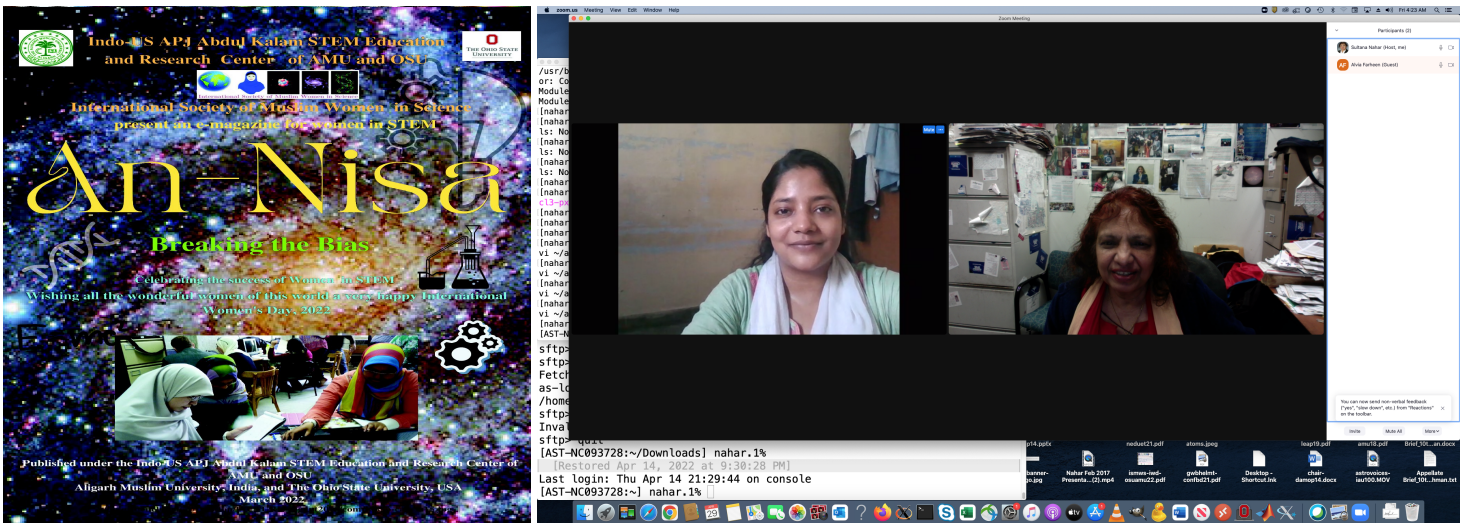
Being mother of two little kids below 5 years old and the outbreak of pandemic has put her career on hold for 3 years. However she is now very optimistic and looking forward for opportunities so that she can resume and broaden her research on photoionization of ions for the diagnostic of astrophysical plasma.

She is a member of both APS and ISMWS. She has 28 research publications in leading peer reviewed journals.”

8. ISMWS PICTURES: 2022 - 23



L: Dr. Hashima Hasan giving presentation at Capital Hill, Sep 2022, R: A group picture of ISMWS-Kashmir, NIT-Srinagar, 2022



L: Our e-magazine An-Nisa released at the IWD 2022 event, R: Alvia Fahreen and I, the editors of An-Nisa, in a late night zoom session of editing An-Nisa



INTERNATIONAL WOMEN'S DAY 2022

By Indo-US APJ Abdul Kalam STEM Education & Research Center (APJAKSTEMERC) of OSU & AMU
and International Society of Muslim Women in Science (ISMWS)

March 26, 2022; Time: 7:00 PM (India)/9:30 AM (EDT USA)

Zoom : <https://osu.zoom.us/j/snnahar?pwd=TkjNnpTtRQSEZ43RWnZBDV2pSZ209> (Zoom ID – 6656647991 & Pwd – 330775)

Organizing Committee – Sultana N Nahar, Farukh Arjmand, Hala, Alvia Farheen, and ISMWS team

Invited Speakers



Program

- 7:00-7:02 Introduction by Sultana N. Nahar (OSU, ISMWS, Co-Director of APJAKSTEMERC)
- 7:02-7:05 Telawat-e Quran by Dr. Bazigha Dhuru and Ayesha Syed
- 7:05-7:15 Welcome by APJAKSTEMERC Directors
- 7:15-7:20 Release of e-magazine by Dr. Farukh and Dr. Sultana
- 7:20-7:35 Chief Guest, Dr. Hashima Hassan (NASA, USA)
- 7:35-7:45 Prof. Somaya Saad (NRIAG, Egypt)
- 7:45-7:52 Prof. Farukh Arjmand (AMU, India)
- 7:52-8:00 Prof. Subuhi Khan (AMU, India)
- 8:00-8:05 Dr. Usra Zaidi (Angusta University, USA)
- 8:05-8:10 Prof. Fatma Azmi (Al-Azhar Univ., Egypt)
- 8:10-8:15 Alvia Farheen (AMU, India)
- 8:10-8:20 Prof. Sultana N. Nahar (OSU, USA)
- 8:20-8:30 Recognition By ISMWS (Dr. Hala)
- 8:30-9:30 Introduction by Participants (limited to ONE minute)