



Fellow of APS, BPS, BAS, TWAS-UNESCO; APS Woman Physicist of the Month, WSU Distinguished Alumna

Dept of Astronomy, The Ohio State U. Columbus, OH 43210 Tel: (614)292-1888 (O), (380)867-4277, 614-456-7199 (H), Fax: (614)292-2928 Email: nahar.1@osu.edu, Web: http://www-astronomy.ohio-state.edu/nahar.1

PRESENT POSITIONS:

- $Research\ Professor$, Dept of Astronomy, The Ohio State University, Columbus, Ohio, 2015-present
- Co-Director (Research & Chief Liaison), Indo-US APJ Abdul Kalam Center for STEM Education and Research of AMU-OSU, 2013 present
- Adjunct Professor of UGS Scheme, Department of Physics, Aligarh Muslim University, India, 2017 present
- Adjunct Professor, Department of Physics, Cairo University, Egypt, 2018- present
- Associate Member to develop Atomic Astrophysics, Laboratory of Innovation in Science, Technology, Education, Modeling and Management (LISTM), University of Chouaib Doukkali, Morocco, 2018 present

EDUCATION:

- Ph.D. (Atomic Theory), 1987, Wayne State University (WSU), Detroit, Michigan Dissertation: "Electron and positron scattering from atoms"
- M.A. (Quantum Optics), 1982, Wayne State University (WSU), Detroit, Michigan Thesis: "Nematic Liquid Crystal and Optical Nonlinearity"
- <u>Honors at WSU:</u> i) Thomas Rumble Graduate Fellowship, ii) Knoller Physics Fellowship, iii) Gustafson Memorial Graduate teaching award, iii) Women of Wayne Alumni Headliner Award, iv) WSU Distinguished Alumni Award
- M.Sc. (Theoretical Physics), 1979, University of Dhaka (DU), Bangladesh, Rank: 1st Class 1st Thesis: "Compton Scattering on Nucleons at Low Energies"
- B.Sc.Hons. (Physics), 1977, University of Dhaka (DU), Bangladesh, Rank: 1st Class 1st Honors at DU: i) Salekunnesa Award for the Best B.Sc.Hons. Female Student of Dhaka University, ii) 1st Class 1st award, B.Sc.(Hons.), iii) 1st Class 1st award, M.Sc., iv) Merit Scholarship B.Sc.(Hons.), v) Merit Scholarship M.Sc., vi) DU Vice Chancellor recognition for contributions in STEM Education and Research in Bangladesh, vii) Recognition by DU Physics (Research based Lecture course with computational workshops)

RESEARCH GRANTS, PAST AND PRESENT: 16

- DOE: 2, NSF: 2,• HST-NASA: 1, NASA: 7, U.S. Department of State: 1, MHRD of Indian Government: 1 US-India Education Foundation: 1, OSU Diversity: 1
- 16. Coordinator: MHRD of Government of India: "Leadership for Academicians Programme" (LEAP), 2019, \$250 K (recipient OSU)
- 15. **PI: U.S. Department of State**: "Indo-US collaboration: STEM educational and research opportunities for women from minorities and disadvantaged groups" (Women in STEM Roadshow), Held nine workshops in Tier-1 and Tier-2 cities in New Delhi, Hyderabad and Kolkata

- consulate districts and 1 year follow-up, PI: S.N. Nahar, S-IN650-17-GR-0034, 9/30/2017 9/30/2018, \$74,871.80 (recipient OSU)
- 14. **PI: NSF:** "Solving the Nebular Abundances Anomaly: New Features in Photoionization and Recombination", PI: S.N. Nahar, NSF AST-1312441, 08/15/2013 07/31/2020, \$390,247 (recipient OSU)
- 13. **Co-PI: DOE:** "Testing theoretical stellar interior and HED plasma opacities at the Sandia Z", PI: A.K. Pradhan, Co-PIs: S.N. Nahar, M. Pinsonneault, DOE Office of Fusion Sciences, DE-SC0012331, 09/01/14-08/31/20, \$503K (recipient OSU)
- 12. **Co-I: STSCI-NASA:** "Improving UV Continuous Opacities and Model Spectra for Cool Stars", PI: J. Valenti, Co-Is: N Piskunov, B Edvardsson, A Pradhan, S. Nahar, N Lewis, S Horst, J Moses, Cycle 23 AR, 12/01/15 11/30/18, \$36K (total for OSU) r
- 11. **Co-PI: USIEF:** "The STEM -Faculty Project: Training the Next Generation of STEM faculty at Higher Eduction Institutes in India", PI: A.K. Pradhan, W. Haider (Co-I: S.N. Nahar with 7 others), Obama-Singh 21st Century Knowledge Initiative Award, US India Education Foundation, 07/01/13-07/17/2017, \$250,000 (recipient OSU)
- 10. **PI, NSF:** "Radiative Atomic Processes in Iron-Peak Elements For Non-LTE Astrophysical Models", PI: S.N. Nahar, AST-1109088, 9/1/11-08/31/2014, \$342,495 (recipient OSU)
- 9. **Co-I, DOE:** "Laboratory Tests of Stellar Interior Opacity Models", PI, J.E. Bailey, Sandia National Lab; Co-I/Consultants: A. Pradhan, M. Pinsonneault, C. Iglesias, R. Heeter, J. Abdallah, M. Sherrill, D. Arnett, C. Meakin, W. Eissner, S.N. Nahar, DE-FG52-09NA29580, 09/15/09-09/14/2012, \$396K (total for OSU)
- 8. **PI: NASA:** "Atomic Data for Multi-Wavelength Spectroscopy of Iron in Astrophysical Plasmas", PI: S.N. Nahar, Co-I: C.J. Zeippen, APRA, 07/01/06 06/30/08, \$165,000, (recipient OSU)
- 7. **Co-I, NASA:** "Theoretical X-Ray Atomic Astrophysics and Spectroscopy The RmaX Network", A.K. Pradhan, Co-I: S.N. Nahar, ATP, 04/15/02 04/14/04, \$150K (recipient OSU)
- 6. **Co-I, NASA:** "Atomic Data for Multi-Wavelength Spectral Formation", PI: A.K. Pradhan, Co-I's: S.N. Nahar, T.A.A. Sigut, Space Astrophysics and Research Analysis (SARA), 01/01/02 12/31/04, \$183,000 (recipient OSU)
- 5. **Co-I, NASA:** "Atomic Processes In X-ray Astrophysics", PI: A.K. Pradhan, Co-I: S.N. Nahar, T.W. Kallman, Astrophysical Theory Program (ATP), 05/01/99 04/30/02, \$193,000 (recipient OSU)
- 4. **Co-I, NASA:** "Radiative and Collisional Atomic Data for UV and Optical Astronomy", PI: A.K. Pradhan, Co-I: S. N. Nahar, NASA (Ultraviolet, Optical, Visible, & Gravitational Astrophysics), 10/01/98 09/30/01, \$161K (recipient OSU)
- 3. **Co-I, NASA:** "Atomic Database For Astrophysics From The Iron Project", PI: A.K. Pradhan, Co-I's: S.N.Nahar, C. Mendoza, T.W. Kallman, C.J.Zeippen, ADP, 01/01/98 12/31/00, \$138K (recipient OSU)

- 2. **Co-I, NASA:** "A comprehensive opacities/atomic database for the analysis of astrophysical spectra and modeling", PI: A.K. Pradhan, Co-PI's: S.N.Nahar, D.Mihalas, I.Hubeny, T.Lanz, S.Voels, M. Van Steenberg and S.Heap, ADP, 06/1/94 05/31/97, \$177K (recipient OSU)
- 1. **PI, DIVERSITY:** "Collaborative Project on Energy, Health, and Globalization with Egypt", S.N. Nahar, Diversity and Inclusion, OSU, April 2012, \$1000 (internal from OSU)
- Travel Grants: 15 (APS 4 times, Climate Change-UN, Conferences in Stellar Atmosphere-Germany, -Mexico, -Kentucky, ITAMP Harvard-CfA 2 times, IAU GA, Symp 2 times, Electron-Ion Collisions-Atlanta, ICPEAC, OSU-ODI, OSU Global Gateway-2 times)

PAST POSITIONS: LONG TERM: 16

- 16. Research Scientist, Astronomy, Ohio State U, Columbus, Ohio, 2003 2015
- 15. Senior Research Associate, Astronomy, Ohio State U, Columbus, Ohio, 1993 2003
- 14. University Postdoctoral Fellow of Mathematical and Physical Sciences, Ohio State U, Columbus, Ohio, 1990 1993
- 13. OSU Co-Coordinator, Leadership for Academicians Programme (LEAP) of India, 2019 2020
- 12. Director: Women in STEM Roadshow under US Department of state, OSU, 2017 2018
- 11. Associate Director (Research & Chief Liaison), Obama-Singh 21st Century Knowledge Initiative Award Project: "THE STEM-FACULTY PROJECT: Training the Next Generation of STEM Faculty at Higher Education Institutions in India", OSU, 2013-2017
- 10. Visiting Professor, Cairo University, under the MOA between OSU & Cairo University, Giza, Egypt, 2013 2018
- 9. Visiting Professor, Physics Department, Aligarh Muslim University under Obama-Singh STEM Education and Research Project, Aligarh, India, 2014 2017
- 8. Visiting Faculty, Physics Department, Rajshahi University, Bangladesh, 2008 2017
- 7. Visiting Faculty, Physics Department, Chittagong University, Bangladesh, 2008 2017
- 6. Visiting Faculty, Physics Department, Dhaka University, Bangladesh, 1995 2017
- 5. Postdoctoral Research Associate (includes teaching Modern Physics in Spring 1990), Physics and Astronomy, Georgia State U., Atlanta, Jan 1988 May 1990
- 4. Postdoctoral Research Associate, Wayne State U., Detroit, Michigan, May 1987 Dec 1987
- 3. Thomas Rumble Graduate Fellow, Physics & Astronomy, Wayne State U, 1984-1987
- 2. Graduate Research Assistant (AFOSR) Physics & Astronomy, Wayne State U, Summer, 1984-1984
- 1. Graduate Teaching Assistant, Physics and Astronomy, Wayne State U, 1979-1984

PAST POSITIONS: SHORT TERM: 21

- 21. Visiting Scientist, Weizmann Institute of Science, Rehovot, Israel, June 17 22, 2018
- 20. International Lecturer, International School of Young Astronomers (ISYA) of IAU, African region. Egypt, March Aoril, 2018
- 19. Visiting Professor, Physics Dept, University of Kashmir, India, 2014 2018
- 18. Visiting Scientist, NASA Goddard Space Flight Center, December 2017
- 17. Visiting Professor, Chittagong University, Bangladesh, 2008, 2011, 2014, 2017
- 16. Visiting Professor, Rajshahi University, Bangladesh, 2008, 2011, 2014, 2017
- 15. Visiting Professor, Sylhet University of Science and Technology, Bangladesh, 2017
- 14. Visiting Faculty, Physics Department, Delhi University, Delhi, India, Since 2013 latest

Feb-March 2016

- 13. Visiting Professor, National Research Institute of Astronomy and Geophysics, Helwan Observatory and Kottamia Telescope, (seminar, collaboration), Egypt, April 2015, October 2016
- 12. Visiting Professor, King Saud University (seminars, workshop), Riyadh, Saudi Arabia, 2014
- 11. Visiting Professor, Dammam University (seminars), Dammam, Saudi Arabia, 2014
- 10. Visiting Professor, Taibah University (seminars), Madina, Saudi Arabia, 2014
- 9. Visiting Professor, Indian Institute of Astrophysics (research, seminar), Bangalore, India, 2014
- 8. Visiting Professor, Jain University (seminar, higher education meeting), Bangalore, India, 2014
- 7. Visiting Scientist, NASA Goddard Space Flight Center, October 2012
- 6. Visiting Professor, United Arab Emirates University (seminars), Al Ain, UAE, 2011
- 5. Visiting Scientist, NASA Goddard Space Flight Center, October 2010
- 4. Visiting ITAMP-Scientist, CFA, Harvard University, August, 2006
- 3. Visiting ITAMP-Scientist, CFA, Harvard University, August, 2005
- 2. Consultant, Observatoire de Paris, Meudon, France, June 28-July 5, 2005 1. Visiting Scientist, Physics Department, Stuttgart University (research), Germany, 2002

RESEARCH AREAS:

- Atomic Astrophysics Iron Opacity. Exoplanetary spectroscopy
- Photoionization established characteristic features
- Electron-Ion Recombination (developed unified method with Pradhan)
- Photo-Excitations of ions
- Electron Impact Excitations of ions
- Dielectronic Satellite Lines Extended unified theory for DES lines
- Theoretical Spectroscopy (developed quantum defect based spectroscopy algorithm for R-matrix method)
- Member: International collaborations, "the Opacity Project" & "the Iron Project" develop theory to study characteristics & compute high accuracy large scale data for radiative and collisional atomic processes in astrophysical plasmas "Iron Lady" for work on iron ions
- Co-leader: Multi-disciplinary (Astronomy, Physics, Chemistry, Pathology, Radiation Oncology) Biomedical Nanoscience program "Resonant Nano-Plasma Theranostics" (RNPT) for cancer treatment using x-rays RNPT is one of the 4 high-impact contributions of astronomy along with GPS, wireless internet, laser eye surgery (Astronomy Magazine, May 2012)
- Research Projects in 2022:
- i) Exoplanetary spectroscopy:
- ii) Kilonova events of merging of neutron stars or black holes:
- iii) Solar Iron opacity most abundant ions are Fe XVII XIX
- iv) Stellar, planetary nebulae, supernova remnant spectroscopy and Benchmarking of photoionization:
- v) Photoionization and Electron ion recombination for x-ray spectroscopy PUBLICATIONS IN SCIENTIFIC RESEARCH: ~ 191
- Refereed Journals: ~ 136 ,
- Book Chapters 6
- Invited refereed reviews: 20,
- Proceedings: 20,
- Invited articles 4

- Technical Reports - 5

In Progress: several in preparation

Dedocations: 3

Featured in articles for scientific work: 31

Full Bibliography: http://www.astronomy.ohio-state.edu/~nahar/scires-publications.html

PUBLICATIONS IN STEM RESEARCH & EDUCATION, OUTREACH: 38

- Book chapter: 1
- Long report: 1 ("Women in STEM Roadshow", US Department of State)
- News articles in newsletters of APS, FIP, CSWP, OSU: 21
- Publications at Knowledge Bank for OSU Office of Outreach and Engagement: 10

Featured in articles for STEM Education and Research: 10

Full Bibliography: http://www.astronomy.ohio-state.edu/~nahar/stemer-publications.html

GRADUATE TEXTBOOK: "Atomic Astrophysics and Spectroscopy" By: A.K. Pradhan, S.N. Nahar (Cambridge Univ Press, 2011) (Bridging Physics & Astronomy)

On-line Database: NORAD-ATOMIC DATA (over 150 atomic species):

- Energies, - Oscillator Strengths, - Photoionization Cross Sections, - Electron-Ion Recombination rates, - Lifetimes, etc (by Nahar et al) - 154 atoms & ions https://norad.astronomy.osu.edu/

CO-SUPERVISION & GUIDANCE IN RESEARCH: STUDENTS/ POSTDOCS/ RESEARCHERS

- Global Research Training: R-matrix, SUPERSTRUCTURE: Several hundreds (15 countries: Bangladesh, Egypt, Ethiopia, India, Iran, Iraq, Jordan, Mexico, Morocco, Pakistan, Palestine, Saudi Arabia, Turkey, United Arab Emirates, USA)
- Co-supervision of research projects of graduate students, post-doctoral fellows, (1991 present)
- OSU Astronomy: Jonathan Begeny, Mitchell Button, Kevin Hoy, Bilal Shafique, Micheal Rothman, Dr. Rahla Naghma, Dr. Hala, Dr. Max Westphal, Dr. Lianshui Zhao, Dr. C. Sur, Ethan Palay, Dr. G.X. Chen, J. Peng, Luo Yi, Dr. M. Bautista, M. Dance, Dr. M. Montenegro, Dr. Sara Lim, Yasin Gokce,
- International: Dr. Akeel Hashem (Bashra U, Iraq), Dr. Betul Ataly (Turkey), Dr. Gultekin Celik (Selsuk U, Turkey), Mr. Mahmudul Hasan (Rajshahi U, Bangladesh), Dr. Ramadan Semida (Beni-Suef U, Egypt), Dr. Sule Ates (Selsuk U, Turkey), Dr. Tahmina Ferdous (Jahangirnagar U, Bangladesh), Vahid Reza Adineh (Azad Islamic U, Iran), Arun Goyal (Delhi U, India), Mayank Dimri (Delhi U, India), Habib Abdurahman Arebu (Addis Ababa U, Ethiopia)
- Overseeing Research Advisor under OSU Obama-Singh STEM Faculty Training Project, 2013 2017: 8

Asim Rizvi (Radiology), Malik Azeem (Molecular Genetics), Nida Rehman (Radiology), Pervez Alam (Nanotechnology), Swaleha Naseem (Physics), Taqseer Khan (Mathematics). Hala (Physics)

- "Outstanding Research Mentor Award", Ohio State University, 2012
- "Shield of Cairo University", Vice President of Research and Graduate Studies, Cairo University, Egypt, 2012
- "Shield of Dhaka University", VC on behalf of Physics Department, University of Dhaka, Bangladesh, 2017

Ph.D., MASTER'S, Undergraduate THESIS EXAMINER:

Ph.D. = 30 (2 in US, 15 in India: 7 in Egypt, 5 in Pakistan)

M.Sc. = 6 (6 Egypt)

B.Sc. = 4 (as an advisor, OSU)

SCIENTIFIC PRESENTATIONS

- i) Invited, National/International: 150
- Scientific: Keynote Speeches/Speaker, Honorary & Public Lectures: 48
- Invited Conference/Seminar presentations: 48
- Seminars: 54
- ii) Contributory (since 2007): 118

Details at: http://www.astronomy.ohio-state.edu/ nahar/scires-presentations.html STEM Education & Research Presentations (Invited, National/International): 84

- STEM Research & Education Keynote, Honorary & Public Lectures: 55
- Invited STEM ER Conference presentations: 29

Details at: http://www.astronomy.ohio-state.edu/ nahar/stemer-presentations.html

• Presentation Locations: APS, ASOS-Berkeley, Workshop-Harvard, NASA, APP-Nevada, Notre Dame, North Dakota, IAU in Australia, Bangladesh, Egypt, England, France, Germany, India, Israel, Italy, Mexico, Pakistan, Saudi Arabia, UAE etc

RESEARCH and STEM ER INTERVIEWS by TV & NEWSPAPER: 47

(On research: 27, on STEM Education and Research: 20)

Voice of America (VOA) Bangla, BBC Bangla, Pratham Alo, Nova Diganta (Bangladesh), Indian newspapers (Daily Jagran, Avadnama, India Times), 22. India Times Magazine, 21. OSU newspaper on Campus, 20. Wayne Alumni magazine, 19. APS on branding APS, 18. APS on awards, 17. Egyptian National TV NILE, 16. Astronomy Magazine, 15. CBS-SmartPlanet Fox news, 14. OSU Research News, 13. The Daily, 12. Columbus Dispatch, 11. Anandbazzar Patrika (India), 10., N-TV (Bangladesh), 9. S-TV (Bengali NY), 8. Thikana (Bengali, NY), 7. UAE University (Muslim Scientist), 6 on Cancer Discovery, Prathom Alo (Bangladesh), etc.

DEVELOPMENT OF STEM EDUCATION AND RESEARCH CURRICULUM:

- 5. Developed a research based atomic astrophysics course with lectures and computational workshops on atomic structure and R-matrix codes at Ohio Supercomputer Center (provides certificates) - being delivered since 2013 in various universities in Bangladesh, Egypt, Ethiopia, India, Iran, Iraq, Jordan, Mexico, Morocco, Pakistan, Palestine, Saudi Arabia, Turkey, United Arab Emirates, USA (in-person and virtual)
- 4. Developed new Curriculum at OSU for MEd in STEM degree for Indian graduate students under Obama-Singh Knowledge Initiative award (with A.K. Pradhan, K. Irving), 2013 (published as Chap 9: "World class STEM faculty: An international dual degree program", K.E. Irving, A.K. Pradhan, S.N. Nahar, in "Recruiting, preparing, and retaining STEM teachers for a global generation", p.217-238 (Editors: J. Leonard, A. Burrows, & R. Kitchen, Brill Sense, Boston, 2019)
- The first batch of Indian students graduated in 2016
- 3. Introduced, developed and sponsored a new STEM Research Program, Research Experience for Undergraduates (REU), for B.Sc. students, who do not have the scope for any experience under UGC curriculum in India, at the Indo-US STEM Education and Research Center of OSU-AMU at Aligarh Muslim University in 2018 and formalized in 2021 - the first batch graduated in September 2019

- 2. Developed a STEM course for undergraduate female students for choosing STEM fields and pursue higher education in the USA (under US Department of State grant for Women in STEM Roadshow), 9 workshops in India, 2018-2019
- 1. Developed teaching and research programs under a recognition program in many universities and institutions in developing countries

GLOBAL TEACHING, AND RESEARCH TRAINING COURSE "ATOMIC ASTROPHYSICS AND SPECTROSCOPY WITH COMPUTATIONAL WORKSHOPS ON SUPERSTRUCTURE AND THE R-MATRIX CODES" (with certificates) Countries: Bangladesh, Egypt, Ethiopia, India, Iraq, Jordan, Mexico, Morocco, Pakistan, Palestine, Saudi Arabia, Turkey, United Arab Emirates, USA:

- 29. **Global:** "Hands on session: Calculating your own atomic data with SUPERSTRUCTURE" by Sultana N. Nahar, International participants of "Investigating the roots: How our perception of the Milky Way system is shaped by our knowledge of atomic data products Atomic Data Workshop", University of Heidelberg, Oct 3-8, 2022
- 28. **India:** "Atomic Astrophysics and Spectroscopy with computational workshops on SUPERSTRUCTURE", S. N. Nahar, Physics Department, Aligarh Muslim University, India, Sep 13 25, 2022 (162 registered)
- 27. Global: "Atomic Astrophysics and Spectroscopy with computational workshops on the SUPERSTRUCTURE and R-matrix codes II", Global participation from various universities in 11 countries (Bangladesh, Egypt, India, Iraq, Mexico, Morocco, Pakistan, Palestine, Saudi Arabia, United Arab Emirates, USA) on zoom organized under the Indo-US STEM Education and Research Center of OSU-Aligarh Muslim University, Jun 18 Jul 11, 2022
- 26. IAU, Bangladesh: On "Stars", lecturer of Bibha All-Girls Astronomy Workshop 2022, held by Bangladesh Astronomical Society and Sponsored by IAU, Feb 20-22, 2022
- 25. Global: "Atomic Astrophysics and Spectroscopy with computational workshops on the SUPERSTRUCTURE and R-matrix codes", Global participation from various universities in 11 countries (Bangladesh, Egypt, Ethiopia, India, Mexico, Morocco, Pakistan, Palestine, Saudi Arabia, United Arab Emirates, USA) on zoom organized under the Indo-US STEM Education and Research Center of OSU-Aligarh Muslim University, October 16-31, 2021
- 24. **Global:** "Atomic Astrophysics and Spectroscopy and computational workshops on the SUPERSTRUCTURE and R-matrix codes", participants from OSU, Quaid-i-Azam University in Pakistan, Hashemite University in Jordan, and Jordan University in Amman, June 9 25, 2021
- 23. IAU, Bangladesh: On "Stars", lecturer of Bibha All-Girls Astronomy Workshop, held by Bangladesh Astronomical Society and Sponsored by IAU, Feb 11-13, 2021
- 22. Morocco: "Atomic Astrophysics and Spectroscopy and computational workshops on the SUPERSTRUCTURE and R-matrix codes", University of Chouaib Doukkali, El Jadida, Morocco, Dec 9 27, 2020
- 21. International: "Radiative processes in astrophysical plasmas", lectures and computational workshops, participants from OSU and Quaid-i-Azam University, Pakistan, June August, 2020 20. Egypt: "Atomic Astrophysics and Spectroscopy and computational workshops on the SUPERSTRUCTURE and R-matrix codes", Cairo University, Egypt, Apr 1 20, 2018 19. Global: International Lecturer on "SOLAR PLASMA, ATOMIC STRUCTURE, SPECTROSCOPY", 41st International School of Young Astronomers of IAU (participants from 9 countries), Egypt, Mar 28 Apr 11, 2018

- 18, **India:** "Atomic Astrophysics and Spectroscopy and computational workshops on the SUPERSTRUCTURE and R-matrix codes", Aligarh Muslim University, U.P., India, Feb 25 March 14, 2018
- 17. **Bangladesh:** "Atomic Astrophysics and Spectroscopy and computational workshops on the SUPERSTRUCTURE and R-matrix codes", Dhaka University, Bangladesh, Oct 20 Nov 4, 2017 16. **Bangladesh:** "ATOMIC STRUCTURE AND TRANSITIONS: THEORY & COMPUTATION USING SUPERSTRUCTURE PROGRAM", Jahangirnagar University, Bangladesh, Nov 8, 2017
- 15. **Bangladesh:** "Atomic Astrophysics and Spectroscopy and computational workshops on the SUPERSTRUCTURE and R-matrix codes", Rajshahi University, Bangladesh, Oct 30 Nov 1, 2017
- 14. **India:** "Atomic Astrophysics and Spectroscopy and computational workshops on the SUPERSTRUCTURE and R-matrix codes", Aligarh Muslim University, India, 2017
- 13. **Egypt:** "Astrophysical Atomic Processes, Opacity, & Cancer Treatment with X-rays" & Computational workshops with R-matrix Codes & SUPERSTRUCTURE", Cairo University, Oct 22 Nov 11, 2016
- 12. India: "ATOMIC STRUCTURE AND TRANSITIONS: THEORY & COMPUTATION USING SUPERSTRUCTURE PROGRAM", University of Kashmir, India, 2016
- 11. **India:** "Atomic Spectroscopy of Collisional and Radiative Processes in Astrophysical Plasmas with computational workshops on R-matrix codes and SUPERSTRUCTURE", Aligarh Muslim University, India, 2016
- 10. **Egypt:** "Atomic Spectroscopy and Collisional Excitations in Plasmas with Computational Workshops on the SUPERSTRUCTURE and R-matrix codes", Cairo University (participants from 7 institutions), Egypt, 2015
- 9. **Saudi Arabia:** "Atomic structure calculations", King Saud University, Riyadh, Saudi Arabia, April 2014
- 8. India: "Atomic and Molecular Radiation Physics with computational workshops on SUPERSTRUCTURE and R-matrix codes: From Astronomy to Biomedicine" (with Pradhan), Aligarh Muslim University, India, Feb-Mar 2014
- 7. 'India: 'Atomic and Molecular Radiation Physics: From Astronomy to Biomedicine with Computational Workshop on SUPERSTRUCTURE and R-matrix codes:, (with Pradhan), Delhi University (participants from 3 institutions), Feb-Mar 2014
- 6. **Egypt:** "Atomic Spectroscopy and Opacity with Computational Workshops on SUPERSTRUCTURE and R-matrix codes", Cairo University (participants from 7 institutions), Egypt, 2013
- 5. **India:** Graduate course "Atomic Astrophysics and Spectroscopy" (with Pradhan), Astronomy Dept, OSU, Fall 2006
- 4. **OSU**, **USA**: Graduate course "Atomic Astrophysics and Spectroscopy" (with Pradhan), Astronomy Dept, OSU, Fall 2004
- 3. **OSU, USA:** Research or Substitute lecturer, Atomic Radiative Processes, Astronomy Dept, OSU, 2000 2003, 2021-2022
- 2. OSU, USA: Undergraduate Modern Physics course, Georgia State University, 1989
- 1. Wayne State University: Graduate Teaching Assistant, Wayne State University, Detroit, 1979 1984
- 9. Recognition Certificate, VC of AMU & OIA Vice Provost of OSU, 2021

- 8. Recognition Certificate, Dean of Faculty of Science and Director of Innovation Center, University of Chouaib Doukkani, Morocco, 2020
- 7. Recognition Shield, Department of Physics, Dhaka University, Bangladesh, 2017
- 6. Recognition Certificate, Department of Physics, Rajshahi University, Bangladesh, 2017
- 5. "Indian Emblem Trophy", Vice Chancellor of Aligarh Muslim University, India, 2014
- 4. "Shield of Faculty of Science", Dean, Excellence in Teaching, Cairo University, Egypt, 2016
- '3. 'Shield of Faculty of Science", Dean, Excellence in Teaching, Cairo University, Egypt, 2015
- '2. 'Shield of Faculty of Science", Dean, Excellence in Teaching and introducing STEM program, Cairo University, Egypt, 2013
- 1. "Daniel R. Gustafson Memorial Award for a Graduate Teaching Assistant", Wayne State University, USA, 1984

REFEREE OF 40 JOURNALS AND BOOKS:

- 1. Arabian J. Chemistry, 2. Astronomy & Astrophysics (A&A), 3. Astrophysical Journal (ApJ), 4. Astrophysical Journal Letters (ApJL), 5. Astrophysical Journal Supplements (ApJS), 6. Astrophysics and Space Science (ASTR), 7. Atomic Data Nuclear Data Tables (ADNDT), 8. Atoms, 9. Canadian Journal of Physics (CJP), 10. Environmental Science and Pollution Research, 11. European Physics Journal D (EPJD), 12. IEEE-Transactions on Plasma Science, 13. Indian Journal of Physics (IJP), 14. Intl J. Mass Spectrometry, 15. The International Conference and Exhibition for Science (ICES), Saudi Arabia. 16. Int Journal of Radiation Oncology, Biology, Physics, 17. Japanese Journal of Applied Physics, 18. Journal of Astrophysics and Astronomy D, 19. Journal of Biomedical Nanotechnology, 20. Journal of Earth and Space Sciences, 21. Journal of Electron Spectroscopy and Related Phenomena, 22. Journal of Optical Society of America (JOSA), 23. Journal of Optics and Laser Technology, 24. Journal of Physics B (JPB), 25. Journal of Physics B Letter, 26. Journal of Quantitative Spectroscopy & Radiative Transfer (JQSRT), 27. Monthly Notices of Royal Astronomical Society (MNRAS), 28. New Astronomy, 29. New Journal of Physics (NJP), 30. Ohio Journal of Science, 31. Optics Letter, 32. Physical and Chemical News, 33. Physica Scripta, 34. Physical Review A (PRA), 35. Physical Review Letters (PRL), 36. Physics of Plasmas (POP), 37. PRA Rapid Communications, 38. Radiation Physics and Chemistry, 39. The Open Astronomy Journal (TOAJ) 40. Centennial Book Series of Dhaka University, Bangladesh
- Elsevier Reviewer Recognition Certificates, Appreciation letter: JQSRT (2014), Rad.Phys.Chem.(2016), Opt.Las.Tech(2016), New Astronomy (2012) **EDITOR**:
- 5. Chief Editor, e-magazine "An-Nisa" for women in STEM, published by Indo-US STEM Education and Research Center of OSU and AMU at AMU, India, International Women's Day, 2022
- 4. Chief Editor with Prof. G. Hinojosa (Editor): "Photoionization of atoms", special issue of journal ATOMS with publisher MDPI (2021-2022)
- 3. Editor: Newsletters for "International Society of Muslim Women in Science", 2014 present 2022 (originated, 2010)
- 2. Journal of Taibah University for Science (JTUSCI, Elsevier, 2014-2020)
- 1. "Atomic Data for X-ray Astronomy" (Editors: A.K. Pradhan, S.N. Nahar, P.L. Smith),

Proceedings of IAUXXV JD 17 in "Highlights of Astronomy", Vol. 13, IAU 2003, Astronomical Society of the Pacific Conference Series (ASP Publisher, 2006, Edited by O. Engvold), p621

REVIEWER/EVALUATOR OF PROPOSALS:

- 9. NSF
- 8. NASA APRA
- 7. National Research Council of National Academy of Sciences (2017- present 2022),
- 6. Army Research Lab (2017-present 2022),
- 5. Physics and Astronomy prizes, Al Azhar University, Egypt, 2016
- 4. APS Fellowships, Award
- 3. NASA Fellowships
- 2. Ohio Supercomputer Center

Bangladesh, during Feb 5-7, 2021

1. Razzaq-Shamsun Physics Research prizes, Bangladesh, 2003 - present 2022

SCIENTIFIC ORGANIZER OF CONFERENCES (National/International): 36

- 36. Member of SOC (Scientific Organizing Committee) for atomic Data for "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
- 35. Organized Session X "US-Bangladesh Education Collaboration Program" of the annual conference of Bangladesh Physical Society, Dhaka, Bangladesh, May 19-21, 2022
- 34. Chair of the organizing committee, celebration of the international (US, India, Egypt) Women's Day (supported by the International Society of Muslim Women in Science and Indo-US STEM Education Center of OSU-AMU, virtual platform, March 26, 2022
- 32. Chair of the organizing committee, celebration of the international (US, India, Egypt) Women's Day (supported by the International Society of Muslim Women in Science (ISMWS founded in 2010 by Nahar) and Indo-US STEM Education Center of OSU-AMU, March 20, 2021 31. The US Organizer (for Frontiers of Physics) along with Bangladesh Physical Society for the first US+Bangladesh physics conference "International e-Conference on Physics", operated in
- 30. Co-organizer, Symposium on "Prospects of STEM Education in 21st Century and Contributions of Women Scientists in STEM" at the Indo-US STEM Education and Research Center of OSU-AMU, celebrating the centenary of Aligarh Muslim University, India, October 13-14, 2020
- 29. Co-organizer for the symposium on "International collaboration and prospects in STEM Education and Research", Indo-US STEM Education and Research Center of OSU-AMU, India, March 3-4, 2020
- 28. Co-Coordinator, workshop of the "Leadership for Academicians Programme (LEAP)" of government of India organized by OSU in Ohio, Sep 9 14, 2019
- 27. Organizer, Celebration of International Women's Day, Aligarh Muslim University, India (support: US Dept of State & ISMWS), 2018
- 18-26, Director organized 9 workshops in 6 cities (Aligarh, Delhi, Hyderabad, Kolkata, Kurnool, Patna) on Women in STEM Roadshow under US Department of State, 2018
- 17. Member of the international Scientific Committee, the 6th International Conference of Science and Developments (ICSD VI), Gaza, Palestine, March 14-15, 2017
- 16. Organizer, Celebration of International Women's Day, Aligarh Muslim University, India

- (support: Dept of Physics & ISMWS), 2017
- 15. Member of International Committee, Modern Trends in Physics Research 2016 (MTPR-016), Hurghada, Egypt, December 17-20, 2016
- 14. Organizer, Celebration of International Women's Day, Aligarh Muslim University, India (support: Dept of Physics & ISMWS), 2016
- 13. Co-convener, joint international conference on nanotechnology, ALIGARH NANO-V and STEM Education and Research (STEMCON16, organizer) of the Ohio State University and Aligarh Muslim University, Aligarh, India, March 12-15, 2016
- 32. Member of International Advisory Committee, Modern Trends in Physics Research 2014 (MTPR-014), Dec 19-23, 2014, Cairo, Egypt
- 11. Organizer, Celebration of International Women's Day, Aligarh Muslim University, India (support: Dept of Physics & ISMWS), 2014
- 10. Convener, ALIGARH NANO-4 International 2014, an International Conference on Nanoscience and Nanotechnology, Aligarh Muslim University, India, March 8-10, 2014
- 9. Worked with organizing committee for US speakers, 3rd intl conference on "Current Development of Atomic, Molecular, Optical and Nano Physics with Applications", India, 2011
- 8. Coordinated US Speakers, "International Workshop on Ultra-Fast Laser Technology and Applications" (UFLTA), Egypt, 2010
- 7. Coordinator of "Nanospectroscopy Consortium" of The Ohio State University, CfA-Harvard University, Thomas Jefferson University, Ohio State U, December 8, 2006
- 6. Scientific Organizer: Joint international IP/ITAMP workshop "High Accuracy Atomic Physics in Astronomy", Harvard-Smithsonian CfA, Cambridge, Massachusetts, August 7-9, 2006
- 5. Data Panelist, JD 17 "Atomic Data for X-ray Astronomy", International Astronomical Union General Assembly, Sydney, Australia, July 13-26, 2003
- 4. Scientific Organizer: The international symposium "Advances in Atomic Physics and Applications to Astrophysics", in honor of birthdays of Professor Micheal J. Seaton and Dr. Werner Eissner; University College London, London, U.K., December 13, 2002
- 3. Scientific Organizer: International workshop "Astrophysical Applications of the Iron Project/Opacity Project data for NLTE Models"; University of Stuttgart, Germany, July 19, 2002
- 2. Scientific Organizer: The international workshop "Astrophysical and Laboratory Applications of the Iron Project and the Opacity Project"; Goddard NASA, Maryland, USA, Feb 22, 2002
- 1. Coordinator of the International scientific collaboration: "The Iron Project", July 2001 June 2002. Organized semi-annual international general IP meetings at
- (i) Goddard-NASA, USA, Feb 23-24, 2002,
- (ii) University of Stuttgart, Germany, July 20-21, 2002
- CHAIR OF SCIENTIFIC SESSIONS (7): DAMOP-APS, ACAG-5, MTPR, CDAMOP, Aligarh NANO, STEMCON16, US+Bangladesh Physics Conference.

NATIONAL AND INTERNATIONAL ELECTED POSITIONS: 12

- 12. Reviewer, Research Associateship Programs of National Academic of Sciences, 2014-present
- 11. Member of the National Committee, IAU100 Celebrations in Bangladesh, 2018 2019
- 10. Vice Chair, High Accuracy Stellar Spectroscopy, Division B / Commission B5, IAU, 2016-2021
- 9. Associate Member, Innovation in Science, Technology, Education, Modeling and Management (ISTEMM), Chouaib Doukkali University, El Jadida, Kingdom of Morocco, 2018 2022
- 8. Selection committee: John Wheatley Award of APS, 2015

- 7. Leader, OSU Delegation, the 5th International Exhibition and Conference on Higher Education (IECHE), Saudi Arabia, April 15-18, 2014
- 6. Selection committee: APS Fellows through FIP, 2012-2014
- 5. Elected Member, Executive Committee, Forum on International Physics, APS, 2012-2014
- 4. Coordinator, the International Iron Project, 2001-2002
- 3. President, International Society of Muslim Women in Science (ISMWS), 2010 present
- 2. Class Representative in B.Sc.Hons, Dhaka University, Bangladesh
- 1. Class Representative, throughout Elementary and High Schools

FOUNDING MEMBER OF GLOBAL NETWORKS & TRUSTS FOR STEM RESEARCH AND EDUCATION: 8

- Founder & Sponsor of STEM Research & Education Recognition Programs: Universities and institutions in 6 countries- Bangladesh, Egypt, India, Pakistan, Palestine, USA, and formulate the terms and regulation for the recognition
- Co-founder and Co-Director with Prof. A.K. Pradhan, Indo-US A.P.J. Abdul Kalam Centre for STEM Education and Research of OSU, USA and Aligarh Muslim University, India, Established: 2013 -present
- introduced global teaching and research training at the Center since 2021
- introduced REU (Research Experience for Undergraduates) since 2018
- introduced symposium celebrating International Women's Day and recognition to women for research achievements since 2013
- introduced International Society of Muslim Women in Science chapter to promote STEM for women in 2021
- Co-founder: Frontiers of Physics (FOP) for advancement of science education in Bangladesh (with Dr. Charles Clark at NIST) that partners with Bangladesh Physical Society (BPS) and various universities (Established: 2019)
- Organized US-Bangladesh conference in 2021, organized session on US-Bangladesh collaboration in Physics with BPS in 2022.
- established four student presentation prizes at BPS conferences
- working lectureship recognition program
- Founder: International Society of Muslim Women in Science (ISMWS), about 400 members from 32 countries to promote STEM education and research in STEM, 2010
- 1. USA, 2. Afghanistan, 3. Algeria, 4. Australia, 5. Bangladesh, 6. Canada, 6. Egypt, 8.
- England, 9. Ghana, 10. India, 11. Indonesia, 12. Iran, 13. Iraq, 14. Jordan, 15. Kenya, 16.
- Kuwait, 17. Lebanon, 18. Malaysia, 19. Morocco, 20. Nigeria, 21. Oman, 22. Pakistan, 23.
- Palestine, 24. Russia, 25. Saudi Arabia, 26. Somalia, 27. Sri Lanka, 28. Sudan, 29. Syria, 30. Turkey, 31. United Arab Emirates, 32. Yemen
- Founder: ISMWS at Ohio State, Student Chapter, Established: 2017
- ISMWS student chapter at East Carolina University, USA (gave some guidance only)
- ISMWS student chapter at Aligarh Muslim University, Kashmir, India
- ISMWS student chapter at NED University of Science & Technology, Pakistan
- ISMWS student chapter at Karachi University, Pakistan
- Co-Founder: International Society of Arab Women in Science (with Prof. Lotfia El Nadi of Cairo University), 250 members from 7 countries, Established: 2010
- 1.USA, 2. Algeria, 3. Egypt, 4. Jordan, 5. Lebanon, 6. Qatar, 7. United Arab Emirates

- Founder: A Network of Scientists in Developing Countries: 30
- Exchange of information on science issues, conferences, bring APS memberships at no cost etc. Algeria (1), Bahrain (2), Bangladesh (3), Egypt (4), Ethiopia (5), Ghana (6), India (7), Iran (8), Iraq (9), Jordan (10), Madagascar (11), Malaysia (12), Morocco (13), Nepal (14), Nigeria (16), Oman (17), Pakistan (18), Palestine (19), Rwanda (20), Russia (21), Saudi Arabia (22), Senegal (23), Sudan (24), Syria (25), Tunisia (26), Turkey (27), Ukraine (28), United Arab Emirates (29), Yemen (30)
- Founder and sponsor: Abdur Razzaq & Shamsun Nahar Trust for Education, Bangladesh: introduced recognition program in 8 institutions

Support: 2 elementary schools, 1 Girls School, 1 Boys School, 1 Women College, 1 Coed Collage, 2 Madrasa schools

PROFESSIONAL MEMBERSHIP: 16

- The American Physical Society (APS, lifetime)
- International Astronomical Union (IAU, lifetime)
- Division of Atomic, Molecular and Optical Physics (DAMOP, life) of APS
- Forum on International Physics (FIP, life) of APS
- EGLS (former Ohio Section) of APS
- Forum on Industrial & Applied Physics (FIAP) of APS
- Member of Committee on the Status of Women in Physics of APS
- Honorary member of the Topical Society of Laser Sciences (TSLS)
- The Egyptian Physical Society (25 years)
- Bangladesh Physical Society (BPS, lifetime LM Q0062)
- Life member of Dhaka Physics Group, Bangladesh
- Member of Planetarium Founders' Society, Ohio State University
- Member of Association of Staff and Faculty Women at OSU
- International Network of Women Engineers and Scientists (INWES) 2009-2012
- Patron, Council for Research & Empowerment of Women (CREW), Aligarh, India, Life since 2016

SERVICES:

- Panelist, SSGSA USA: Selection of prospective AMU students for SSGSA awards for study in the US universities, May 28, 2022
- Built up the foundation for collaboration between OSU and Sharda University in India, 2021
- Panelist, SSGSA USA: Selection of prospective AMU students for SSGSA awards for study in the US universities, May 22, 2021
- Panelist, OSU Faculty Panel Discussion, Reception for incoming Assistant and Associate Faculty of diversity, Office of Diversity and Inclusion (ODI), January 28, 2021
- Judge, OSU Hayes Forum for Ph.D. students (2020 present 2022)
- Panelist, Wayne State University Review Committee for the Department of Physics and Astronomy, WSU, Jan 28, 2021
- Committee member of Honor Nominations:
- i) APS Fellowships (2012-2014), ii) John Wheatly Award of APS (2018),
- iii) Razzaq-Shamsun Physics Research prizes, Bangladesh (2003 - present), iv
) Physics & Astronomy prizes, Al Azhar University, Egypt (2015),

Aligarh Muslim University, India (2011 - present)

- Evaluation for Tenured promotions: USA (2015), Iraq (2016)
- Panelist, OSU: LEAP workshop panel discussion on international collaboration, 2019
- Panelist, India: Indo-US collaboration, International conference on STEM Education and Research, April, 2016
- Judge, Contributed research posters, international conference on Aligarh Nano V and STEM Education and Research, Aligarh Muslim University, 2016
- Judge, OSU Contributed Research Posters, Denman Undergraduate Research Forum, The Ohio State University, March (2014, 2015)
- Judge, Egypt: Posters, international conference on "Modern Trends in Physics Research", 2010, 2014
- Judge, Wayne State University: Research Posters, 3rd Physics Graduate Research Day, Michigan, 2012
- State Science Day, Ohio, Certificates from Ohio Academy of Science (OAS) (2010, 2011)
- District Science Day, Ohio Academy of Science (OAS) (2010, 2011)
- Ohio Governor's Award "Excellence in Information Science & Technology Research in H.S.", 2010

• PROFESSIONAL MENTOR:

- Faculty Advisor of Student Associations:
- i) International Society of Muslim Women in Science at Ohio State (founder), 2017-present
- ii) Bangladesh Student Association, 2012-present
- iii) Pakistani American Students Association, 2020-present
- E-Mentoring Network for Diversity in Engineering and Science (www.MentorNet.net), 2007-2013
- Certificates of Appreciation, E-Mentoring, 2010, 2011
- Professional Mentor of Freshman Students in Science (Minority), the Office of Minority Affairs and Retention Services, Ohio State U. (1999 2005)
- Certificates of Appreciation, 2002, 2005

AWARDS/SCHOLARSHIPS/HONORS/RECOGNITIONS:

- Elected Fellow of The World Academy of Sciences (TWAS-UNESCO, Category Physics) 2023
- American Physical Society (APS): 6
- APS published as the Front Page article in APS newsletter "International Teaching Can Transform Physics", on the global online teaching and research training to over 100 participants from 11 countries (Bangladesh, Egypt, Ethiopia, India, Mexico, Morocco, Pakistan, Palestine, Saudi Arabia, United Arab Emirates, USA) at the same time in 2021, APS Newsletter Vol 31, No. 6, June 2022 (This is her 19th news article published in APS newsletters)
- John Wheatley Award of American Physical Society-Forum of International Physics. Citation: "For efforts to promote physics research and teaching through collaboration, mentoring, and philanthropy in several third-world countries, and in particular for her promotion, as both an advocate and role model, of Muslim women scientists.", 2013
- "CSWP Woman Physicist of the Month", American Physical Society, March 2013
- Elected member of the Executive Committee, Forum of International Physics of APS, 2012-2014
- APS Fellow, 2006 Citation: "For seminal contributions to studies of photoionization and recombination of multicharged atomic systems fundamental to atomic physics and plasma physics and pioneering calculations of remarkable complexity on astrophysically significant processes."
- APS travel grant for conference presentation by a graduate student, DAMOP of APS,

University of Oregon-Eugene, Oregon, 1986

- The Ohio State University (OSU): 18
- Recognized along with 8 other females in STEM in Ohio with feature in "Hidden Figures: Women in Science" booklet in celebration of the International Day of Women and Girls in Science on Feb 11, 2023 by the Office of Equity, Diversity, and Global Engagement of College of Education and Human Ecology, OSU 2023
- OSU President K. Johnson's congratulatory message for the TWAS Fellowship in her weekly highlights news report "Notes from a Fellow Buckeye" section "Celebrating success" (p.3) to the whole OSU community, December 14, 2022
- Featured in "New Chapter of International Society of Muslim Women in Science Inaugurated", Middle East Studies Center webpage News, OSU, Nov 7, 2022
- Leadership award for outstanding advisor in "Student Organization Individual Contribution Award for Advisors", Office of Student Life, OSU, 2022
- OSU 2-Ruby Silver Pin Service Recognition honoring 30 Years at OSU, December 18, 2020
- Featured along with Pradhan in ASC news story: "Two astronomy faculty launch programs around the world to uplift STEM professionals", OSU, Dec 11, 2019
- Featured in news story of the OSU Office of International Affairs "Astronomy professor awarded adjunct professorship at Cairo University", August 6, 2018
- Featured as the story of ENGAGED SCHOLAR of OSU newspaper THE LANTERN: "Ohio State professor connects cultures to promote science", page 1, Year 137, Issue 4, January 24, 2017
- "Outstanding Research Mentor Award", Denman Undergraduate Research Forum, 2012
- OSU 1-Ruby Silver Pin Service Recognition honoring 25 Years at OSU, 2015
- Featured on OSU "Excellence to Eminence" for "Resonant Nano-Plasma Theranostics" research, the most significant report of the month titling 'What Success Looks Like", September 11, 2011
- Featured along with Pradhan OSU press release "ASTRONOMERS REACH FOR THE STARS TO DISCOVER NEW CANCER THERAPY", June 22, 2011 (reported over 100 news media)
- Featured as "Meet the Iron Lady" for research publications on iron ions, the first annual magazine of OSU Astronomy Department for circulation outside, 2004, p.page 21
- Certificate of Appreciation for contributions as University Postdoctoral Fellow, 1990-1991
- University Postdoctoral Research Fellowship Award for Women and Minorities, College of Mathematical and Physical Sciences, The Ohio State University, 1990-1993
- Certificate of Appreciation for services, Professional Mentor for minority students, Office of Minority Affairs & Retention Services, OSU, 2005
- Certificate of Appreciation for services, Professional Mentor for minority students, Office of Minority Affairs and Retention Services, OSU, 2002
- Certificate: "Outstanding Staff Award" nomination, College of Arts and Sciences, OSU 2012
- OSC: Highlights at the Ohio Supercomputer Center: 9
- Featured in the OSC Annual Report 2020 "Breaking Barriers Nahar aids female Muslim scientists with supercomputing", p.16, published in April 2021
- Featured in OH-TECH press release "Educating the masses: OSC helping Nahar share computational knowledge in Columbus, around the world", August 24, 2017
- Featured in OH-TECH Annual Report article "HELPING NAHAR SHARE COMPUTATIONAL KNOWLEDGE IN COLUMBUS, AROUND THE WORLD", p.8-9, September 2017
- Featured in OH-TECH blog on lecture course in Cairo University "Recent workshop illustrates

OSC's support", S.N. Nahar, December 2016

- Featured along with Pradhan in OSC-OH-TECH profiles of research collaboration at OH-TECH website https://www.oh-tech.org/profiles/sultana_nahar_and_anil_pradhan, 2014
- OH-TECH featured blog for the observation of the 2014 Astronomy Day "Studying Our Star, the Sun", S.N. Nahar, A.K. Pradhan, OSC website, Columbus, OH, May 10, 2014
- Featured in "Noteworthy Research Activities" of OSC Annual Research Report "Applying High-end X-rays to Cancer Treatment", p.16, 2010
- Featured as Iron Lady on OSC Research Highlights of 2009 in article "High Precision Atomic Astrophysics X-ray research for black holes and in nanotechnology",
- The highlight was featured in i) the 2010 calendar (February 2010 page) as the *ground-breaking* studies by the Ohio leading researchers using OSC resources, and ii) as Highlights of OSC achievements at the 25th Anniversary celebration in OSC, 2013
- Featured along with Pradhan in Ohio Supercomputer Center press release "X-ray researchers turn focus from black holes to cancer", Jan 28, 2010 (refers "Iron Lady")

- Wayne State University: 11

- "Distinguished Alumni Award" of 2014, President of Wayne State University, Detroit, Michigan
- Featured with title "Finding a cancer treatment in space", in dedicated magazine titled "Moments of Discovery" of Wayne State Alumni Magazine, Vol 27, No. 4, Winter 2013
- "Woman of Wayne Headliner Award" -For "WSU Alumni who have been recognized in the media for their outstanding achievements. To honor extraordinary Wayne State University Alumni who have impacted the community in a positive manner", 2013
- Guest Speaker of the annual Physics Graduate Research Day, 2012
- "Women Stars in Physics", Lead Speaker, Special focus session of Women Physicists, 2012
- Thomas C. Rumble University Graduate Fellowship Award, WSU, Detroit, 1985-1986
- Thomas C. Rumble University Graduate Fellowship Award, WSU, Detroit, 1984-1985
- Knoller Fellowship Award in Physics, Dept of Physics & Astronomy, WSU, 1985-1986
- Knoller Fellowship Award in Physics, Dept of Physics & Astronomy, WSU, 1984-1985
- Knoller Fellowship Award, Wayne State University, 1979
- Daniel R. Gustafson Memorial Award to a graduate student for excellence in teaching, 1984

- University of Dhaka, & Bangladesh: 10

- Fellow, Bangladesh Academy of Sciences (BAS), Expatriate category, "... acting as an ambassador of Bangladesh Academy of Sciences devoted to promoting science and technology, in the country you are working and residing...", 2021
- Fellow, Bangladesh Physical Society (BPS), "for distinguished research and outstanding contributions in Physics", 2021
- Shield of Dhaka University for "Teaching a certificate course on Computational Atomic Astrophysics", Department of Physics, presented by the Vice Chancellor, Dhaka University, 2017
- Medal of Dhaka University and recognized with certificate "For her continuing inspirational and sincere work for promotion of physics research and education in whole Bangladesh", Vice-Chancellor, 2014
- First Position Award, M.Sc. in Theoretical Physics, (1979), University of Dhaka, Bangladesh
- Merit Scholarships, M.Sc. 1977-1979, University of Dhaka, Bangladesh
- First Position Award, B.Sc. Hons. in Physics, 1977, University of Dhaka, Bangladesh
- Salekunnessa Award for the Best Woman Student in the B.Sc.Hons. examinations, University of Dhaka, 1977

- Kalidas Merit Scholarships, B.Sc.Hons. 1973-1977, University of Dhaka
- University Admissions: in Dhaka University in 4 individual Departments (Physics, Mathematics, Statistics, & Chemistry), in Bangladesh University of Engineering and Technology (BUET), in Mymensing Medical College all through countrywide competitions for each subject

- Up to High School:

- Merit Scholarship Central Women's College, H.S.C.- First Division
- Annual Awards Academic, Music, Art throughout school life Class I Class X, Maniza Rahman Girls High School; S.S.C First Division with Letters, Dhaka, Bangladesh
- Physics/Astronomy National/International: 46
- Award plaque for the A.H. Siddiqi (founder of Industrial Mathematics in India) lecture at the the A. H. Siddigi Centre for Advanced Research in Applied Mathematics & Physics" (CARAMP) at Sharda University campus, Gr. Noida, India, September 23, 2022
- Honoring with a plaque of Kashmir art on authentic Kashmir paper mashi for contributions in STEM and public lecture by Dean of Academic Affairs and Dean of Science, Islamic University of Science and Technology (IUST), Awantipora, Kashmir, India, September 19, 2022
- Certificate of "Deliberation of the research based course on Atomic Astrophysics and Spectroscopy with computational workshops on the SUPERSTRUCTURE and R-matrix codes II" to global participation" (11 countries), jointly by OSU (OIA Vise Provost) and AMU (Director), 2022
- Centenary 1921-2021 plaque of NED University of Engineering and Technology from Vice Chancellor Prof. Sarosh Lodhi, Pakistan, 2021 (presents the NEDUET centenary stamp and coin introduced by government of Pakistan 2021)
- Certificate of "Deliberation of the research based course on Atomic Astrophysics and Spectroscopy with computational workshops on the SUPERSTRUCTURE and R-matrix codes" to global participation", jointly by OSU (OIA Vise Provost) and AMU (VC), 2021
- Certificate of Recognition "In recognition For Outstanding Efforts and the Successful Completion of the Online Research Based Course on ATOMIC ASTROPHYSICS AND SPECTROSCOPY with computational workshops", University of Chouaib Doukkali University, El Jadida, Morocco, December 2020
- Shield of Quaid-Azam University, for Cooperation, Prof. Raheel. Physics Department, Islamabad, Pakistan 2020
- Cinar Leaf Shield of Azad Kashmir University, Prof. Rafique. Physics Department, Muzzafarabad-Kashmir, Pakistan 2020
- Shield of Beni-Suef University by the President, Beni-Suef, Egypt, 2018
- Medal of Faculty of Science, Department of Physics, Helwan University, Egypt, 2018
- Symbolic Chinar Leaf Shield of University of Kashmir, India, 2018
- Guest Speaker: Scientific Colloquium (through meticulous selection by a NASA panel) for "Knowing the universe through atoms", Goddard Space Flight Center NASA, Greenbelt, USA, December 13, 2017
- Shield of Dhaka University Science Society, Public Nov 4, 2017
- "Shield of MTPR-016" for a keynote speaker and "Medal of Faculty of Science", the 6th international conference on Modern Trends in Physics Research (MTPR), Hurghada, Egypt, December 17-20, 2016
- Shield of Faculty of Science by the Dean honoring International Experts, MTPR-016 ceremony, Cairo University, Egypt, 2016

- Shield of "Guest of Honor" for scientific contributions (first woman recipient), the Arab Conference on Astronomy and Geophysics the 5th Assembly (ACAG-5), National Research Institute of Astronomy and Geophysics (NRIAG), Helwan, Egypt, October 17-20, 2016
- "Shield of Faculty of Science" and certificate of recognition, Dean of Faculty of Science, Cairo University, Citation "for her contributing and supporting the activities of the Faculty of Science, Cairo University", Lecture course with computation workshops, 2016
- Shield of Faculty of Science by the Dean, Helwan University and pennant of the University, Helwan, Egypt, November 7, 2016
- "AMU Victoria Gate memento" in appreciation for all contributions (in an attached letter) of the joint international conference on Nanotechnology and STEM Education and Research for presentations, co-convener, organization etc, Chair of Nanotechnology Center, Aligarh Muslim University, March 12-15, 2016
- Chief Guest, National Science Day celebration, Physics Department, Aligarh Muslim University, India, March 11, 2016
- Golden Dome Shield of the President (highest honor from Cairo University) and Certificate of Recognition for "Her contributing and supporting the activities of Cairo University", President Prof Gaber Nassar and Vice President of Research Prof Gamal Esmat, Cairo University, Giza, Egypt, April 15, 2015
- Shield of Celebration of 2015 International Year of Light and Certificate of Recognition for "Outstanding effort for contributing and supporting the activities of the society", at the annual convention of Topical Society of Laser Sciences (TSLS) celebrating the Year of Light, Keynote speech "The Sun. Allah's Source of Radiation", April 8, Egypt, 2015
- Shield of Faculty of Science by Dean Prof Elsayed Fahiem and Certificate of Recognition for "Her contributing and supporting activities of Faculty of Science, Cairo University", Giza, Egypt, April 18, 2015
- The only invited honorary participant in the group of Deans of Faculty of Science and honored faculty of year 2015 Professor Lotfia El Nadi to lead the parade of graduates and distribute certificates in the Main dome auditorium, Cairo University, Egypt, March 30, 2015
- Medal of National Research Institute of Astrophysics and Geophysics (NRIAG), President Prof. Abo El-Ela Amin Mohamed, Helwan, Egypt, April 8, 2015
- Shield of Taibah University by President Dr. Adnan Almazroa with citation "Congratulations on delivering an outstanding talk during your visit to Taibah University. Truly speaking your topic was timely and your perceptions were sound pragmatic and thought provoking and the audience were fascinated. Therefore in recognition to your excellent services rendered to the cause of education, please accept this plaque as a token of our appreciation and gratitude", Saudi Arabia, April 1 2014. The three days program was written in a poem by a university official
- Medal of Dammam University" and certificate of recognition, Dean of College of Engineering, Dammam University, Saudi Arabia, April 2014
- Shield of Jagannath University, "Recognition for contributions to science", Vice Chancellor, Jagannath University, Dhaka, Bangladesh, 2014
- Recognition by symbolic Kashmir Samovar for "Contributions in Science", Vice Chancellor Professor Talat Ahmad, University of Kashmir, India, 2014 (media coverage)
- Memento of Aligarh Nano-IV International for an invited speaker, Founder of Nanotechnology Center Professor A. Naqvi, India, 2014
- i) "Shield of MTPR-014" & certificate, 5th Intl conf. on Modern Trend in Physics Research",

- and ii) Medal of Cairo University, Dean of Faculty of Science, Cairo University, Egypt, 2014
- Inaugurated the new 14 in telescope at Aligarh Muslim University, India, September 17, 2013 (coverage in India Education, AMU News, Two Circles Net news etc)
- "Shield of Faculty of Science" and appreciation letter for founding "STEM program in Physics, and Excellence, devotion and care in the lecture course provided during Spring 2013", Cairo University, Egypt, March 2, 2013
- "Highest Honor Gold Medal of TSLS" (same as given to Nobel Laureate Ahmed Zewail), 25th Anniversary of the Topical Society of Laser Sciences, Egypt, (broadcast with interview by Egyptian national TV NILES, Arts and Sciences News of OSU, APS-FIP Newsletter, Canadian Bengali Times, etc);
- Citation: "Due to your activities in the field of advanced science and technology, which employs Atomic Spectroscopy, in the Astrophysical Fields", 2012
- Golden Dome Shield of Cairo University Research" by Vice President of Research and Graduate Studies Professor Gamal Esmat, for the MOA with OSU and other research cooperation with Cairo University, April 8, 2012, Egypt (Egyptian newspaper and Cairo University YouTube: -http://www.youtube.com/watch?v=lUrMWSbfzTE, OSU "Middle East Studies Bulletin", Spring 2012 and Fall 2012 issues)
- Honorary "Shield of UFLTA12" and Certificate of Appreciation, 4th International Workshop on Ultra Fast Laser Technology and Applications, NILES and Luxor, Egypt, April 8-12, 2012
- Memento of Appreciation award for an Invited Speaker, 3rd International Conference on "Current Development in Atomic, Molecular, Optical, & Nano Physics with Applications", New Delhi, India, December 14-16, 2011
- Certificate of Appreciation, Topical Society of Laser Sciences, Egypt in recognition "Of extensive collaboration within all our International Meetings concerning Ultra Fast Laser Technology and Applications UFLTA, as well as all the International Conferences on Modern Trends in Physics Research. She was introducing important modern aspects encountered in the field of Atomic Physics, Plasma Physics, and remarkable calculations of opacities initiated in High Power Laser Interactions Simulating Important Astrophysical Phenomena", October 2011
- Certificate of Appreciation. Egyptian Physical Society, Citation: In recognition "of extensive contributions to studies of photoionization and recombination of multi-charged atomic systems fundamental to atomic physics and plasma physics and pioneering calculations of remarkable complexity on astrophysically significant processes.", October 2011
- Certificate for the 2nd "Radha Gobinda Chandra Public Lecture in Astronomy" lecturer; Citation: "Honorable Dr. Sultana N. Nahar in Appreciation for contributions for popularizing Astronomy and charitable activities in Bangladesh", Bangladesh Astronomical Society, July 28, 2011 (announced & reported in newspaper)
- Recognition plaque for research success and achievements, Vice Chancellor Professor Mesbahuddin Ahmed, Jagannath University, Dhaka, Bangladesh, July 24, 2011
- Medal of Honor, 4th Intl conference on Modern Trends in Physics Research, Egypt, 2010
- Certificate of High Appreciation for contribution in MTPR-010, Egypt, 2010
- Honorary "Shield of TSLS" for physics research contributions, Topical Society of Laser Sciences (TSLS), 20th Anniversary celebration, Egypt, 2008
- Certificate of High Appreciation for the efforts given to the international conference MTPR-08, April 6-10, 2008, Cairo University, Egypt
- Honorary plaque for keynote speech of session "Global warming and Food Crisis" and other

contributions, Department of Management Studies, University of Chittagong, Bangladesh, 2008

- Honorary plaque by Department of Physics for Astrophysics seminar and various contributions, Jahangirnagar University, Bangladesh, August 2008
- Enlisted in "Pioneer Women of Bangladesh" (as the first Astrophysicist), Foundation of Voice of the Voiceless Women, Bangladesh, featured in 12 First Women calendar 2008
- "Our Pride Award" by Bangladesh Association of Central Ohio (BACO), December 29, 2007, "In Recognition of Outstanding Achievements in the Field of Astronomy and Physics"
- Shield of N-TV, for a Successful Scientist, N-TV of Bangladesh, 2005
- Featured in a number of wikipedias
- Cancer Therapy Research: 5
- Memento and certificate for the invited lecture "X-RAY ABSORPTION BY HEAVY ELEMENT COMPOUNDS AND APPLICATIONS IN RADIATION THERAPY", Intl Conf on Emerging Trends in Biomedical Sciences (ETBS), Aligarh Muslim U, India, March 6-8, 2016
- Chapter 5: "Dreaming of the Star Treatment" in the book "Science Unshackled" (Renee James, Fall 2014, Johns Hopkins U press)) describes astronomical study and leads to cancer treatment that we propose and includes section 35 "The Iron Lady and the Gold Standard"
- "What has astronomy done for you lately?", Cancer research RNPT findings as one of the four important impacts of Astronomy to human life (i) GPS, ii) wireless Internet, iii) RNPT, and iv) laser surgery of eyes), Astronomy Magazine, May 2012, p.31-35
- Press release worldwide (over 100) of method "Resonant Nano-Plasma Theranostics (RNPT)" for cancer treatment, including "Physics Inventions", "Cancer Discovery", "Innovations of Nano Patent", "Discovery News", "MSNBC.com", "Science Daily", "TechColumbus", "Rockefeller News", "Chicago Chronicle", etc.
- 11 Interviews by CBS, The Daily, AnandBazzar Patrika, Dispatch, Philadelphia Inquirer, etc International STEM Education and Research: 22
- Recognition crest for US-Bangladesh collaboration for education and research, Bangladesh Physical Society (BPS), Annual BPS conference, May 2022
- Recognition shield for fundamental contributions at Indo-US APJAK STEM Education and Research Center, Symposium on "International collaboration and prospect in STEM Education and Research", Aligarh Muslim University, India, March 5, 2020
- Recognition shield for the coordinator and lecturer, LEAP ("Leadership for Academicians Programme" of government of India) workshop at OSU, September 9 -14, 2019
- Memento from Marine Sciences of Annamalai University, Dean of the Faculty Prof. Muthu Srinivasan, LEAP (Leadership of Academicians Programme), Sep 8-14, 2019
- Trophy and certificate "For leadership, lecturing and inspiring participants of the Women in STEM Roadshow workshops of the US Department of State held in Aligarh, Delhi, Hyderabad, Kolkata, Kurnool, Patna in India during February 2018. We wish Sultana continued contribution for the project", Prof. Gifty Ako-Adounvo, Activing Vice President of Global Strategies and International Affairs of OSU, 2018, Ceremony of completion of 9 workshops of Women in STEM Roadshow
- "Certificate of Appreciation" for delivering the "Atomic Astrophysics with Computational workshops", Department of Physics, Rajshahi University, Rajshahi, Bangladesh, 2017
- Kashmiri samovar gift, for research and education work in STEM, Vice Chancellor Prof Andrabi, University of Kashmir, India, 2017
- Appreciation token for the OSU STEM Education and Research Faculty Training Project,

Indian Deputy Chief in Washington DC, August 19, 2016

- Memento of University Monogram and letter of appreciation by Vice Chancellor Prof. Khursheed Andrabi, In appreciation of the STEM Education and Research at University of Kashmir, India, March 2016
- Trophy of Appreciation, Office of Research and Graduate Studies Affairs, IUG Annual Research Celebration Day, Islamic University of Gaza, Palestine, April 18, 2016
- "Gift of Appreciation" (a fine Kashmiri shawl) for contributions on STEM Education and Research at Aligarh Muslim University, Professor Alim Naqvi, Founder of Nanotechnology center of AMU, Keynote session where Nahar was introduced by Prof. Lotfia El Nadi with appreciation of her work at Cairo University, International conference MTPR-014, Egypt, December 15-19, 2014
- Indian Emblem trophy "for Scientific contributions & role in STEM education & research in India under Obama-Singh project", Vice Chancellor General Shah, Aligarh Muslim U, 2014
- Sealed plaque, jointly by AMU-DUTY Society and Indian Society of Industrial and Applied Mathematics (ISIAM), in recognition of contribution to scientific education in India via Obama-Singh 21st Century Knowledge Initiative Award, 2013 (Guest of honor public lecture)
- "Bab-e-Syed" plaque, Vice Chancellor General Shah of Aligarh Muslim University, in recognition for contribution for Obama-Singh 21st Century Knowledge Initiative Award of USIEF for the partnership between OSU and AMU, India, 2013 (Guest of Honor of the program), Sep 2013
- "Shield of Faculty of Science", Al-Azhar University, in appreciation for "promotion of physics research and education", Dean, Faculty of Science, Cairo, Egypt, 2014
- "Distinguished Guest Plaque", Higher Education Symposium, Odisha Development Day, Odisha Society of Americas, July 3, Columbus, OH, 2014
- FIP Spring 2013 newsletter, Article highlighting work on development of Physics in Bangladesh "Recent Visit to Bangladesh Universities and Physics Prizes"
- Letter of Appreciation for contribution of books, President Hatem Odah, National Research Institute for Astronomy and Geophysics (NRIAG), Helwan, Egypt, 2016
- Certificate letter of Appreciation for contribution of books, Astronomy Chair, Al-Azhar University, Cairo, 2013, Egypt
- Certificate letter of Appreciation for contribution of books, Physics Chair, Al-Azhar University, Cairo, 2013, Egypt
- Certificate letter of Appreciation for contribution of books, Chair, Astronomy and Meteorology, Cairo University, Giza, 2013, Egypt
- Certificate letter of Appreciation for contribution of books, Physics Chair, Ain Shams University, Cairo, 2013, Egypt
- Certificate letter of Appreciation for contribution of books, Dean of Faculty of Science, Suez Canal University, Ishmylia, 2013, Egypt
- Certificate letter of Appreciation for contribution of books, Dr. Adel Abdel-Momen, Dean, Faculty of Science, Beni-Suef University, Beni-Suef, Egypt, October, 2012
- Certificate letter of Appreciation for contribution of books, Dr. Hassan M. A. Naboohdah, Dean, University Libraries, UAE University, Al Ain, United Arab Emirates, March 27, 2012
- Official Letter of Appreciation for books contribution from Prof. Shaheen, Head of Department of Library & Information Service, Cairo University Library, Egypt, 2010
- Honorary plaque of Appreciation for Contributions in education, Maniza Rahman Girls High School, Dhaka, Bangladesh, March, 2010
- Honorary Crest of Appreciation for contributions in excellence in education, Maniza Rahman

Girls High School, Dhaka, Bangladesh, 2003, 2004, 2005, 2006, 2007, 2008, 2009

- Certificate of Appreciation, E-Mentoring Network for Diversity in Engineering & Science, 2009
- Certificate of Appreciation, E-Mentoring Network for Diversity in Engineering & Science, 2010
- Role Model of a Woman/Muslim Scientist: 32
- 32. Chief Guest, "Exchange information for improvement of monthly newspaper Ohio Sanbad (Bengali)", Bengali newspaper "Ohio Sangbad" in Ohio, Carriage Place, Columbus, October 30, 2022
- 31. Chief Guest, "Inauguration of the publication of monthly newspaper Ohio Sanbad (English)", first Bengali newspaper "Ohio Sangbad" in Ohio, BACO Center, August 8, 2022
- 30. Featured with two other women in STEM in "Islamic Horizons" magazine of Islamic Society of North American (ISNA), July/August 2022 issue: "Muslim Women in STEM: A Minority Within a Minority" (p.28-29) and on its webpage
- 29. "For her contribution for understanding the Sun, and strengthening ISMWS with new chapters at OSU and internationally", Celebration of International Women's Day, Indo-US APJAK STEM Education and Research Center of OSU and AMU, and International Society of Muslim Women in Science, March 26, 2022
- 28. A role model with 4 others in Astronomy, Syeda Lammim Ahad (Ph.D. candidate in Astronomy, Leiden University, Holland), celebration of "Women in Space in World Space Week 2021" presentation, October 9, 2021
- 27. OSU OIA-India Gateway "celebrated the visibility and achievements of Ohio State women faculty and alumnae via social media posts" and featured 5 Ohio State faculty (including atomic physicist Sultana Nahar in the College of Arts and Sciences) "who are at the forefront of their fields and are engaged with partners in India", International Women's Day 2021 (OIA-OSU post, April 2, 2021)
- 26. Certificate of Recognition for her contributions as a role model for Knowledge, inspiration, and intellectual growth, International Women's Day, Indo-US APJ Abdul Kalam STEM Education and Research Center of OSU-AMU (Aligarh Muslim University, India), March 20, 2021
- 25. Featured among the prominent female scientists in the UGC (University Grant Commission) lecture "Women in STEM Subjects" under the National Women Studies course participated by University members from all over India covering all areas and broad casted held at UGC Center at Aligarh during Sep 3 18, 2020
- 24. "Featured Physicist Activity Sultana Nahar", Prof. Dimitri Dounas-Frazer, Course "Matter and Energy in Physical System", Western Washington University, USA, Spring 2020
- 23. Featured at Lotus STEMM stories: "Rendezvous with Sultana N Nahar", October 15, 2019
- 22. Featured woman of Voice of America Bangla news "Naree Kantho: Conversation with scientist Dr. Sultana Nurun Nahar" (video news and featured article at VOA website), April 25, 2019
- 21. Featured Physicist Activity: "Dr. Sultana Nurun Nahar", Prof. Dimitri Dounas-Frazer, Course "Matter and Energy in Physical System", Western Washington University, USA, Spring 2019
- 20. Guest of Honor: Certificate citation "A lady of vision and action" and trophy, International Women's Day, Celebration by Women in STEM Roadshow program, Aligarh Muslim University, India 2018
- 19. Recognition plaque, "All Students of West Bengal" at Aligarh Muslim University, Celebration of International Mother Language Day, Feb 25, 2018, India

- 18. Feature article in Bangladesh newspaper "Pradham Alo" (wide circulation): "A Source of Inspiration Sultana Nahar", by Dr. Rauful Alam (U of Penn), January 17, 2018
- 17. "Prof. Sultana Nahar: The Lady with Vision and Action", Sabiha Parveen (Chemistry, AMU), National Seminar on "Global Contribution of Muslim Women in Natural and Social Sciences, College of Education, Aligarh Muslim University, India, November 6, 2017
- 16. Felicitated as Guest of Honor and a Distinguished Guest, Annual Cultural Functions, Begum Sultan Jahan Hall, Aligarh Muslim University, 2017
- 15. Recognition trophy for the Patron and Stitched gift from graduating girls, Certificate ceremony of CREW (Council for Research and Empowerment of Women), Aligarh 2017
- 14. Guest of Honor trophy and Certificate citation: "For her contributions as an international model of a Muslim female scientist for knowledge, inspiration, and intellectual growth", International Women's Day celebration, Aligarh Muslim University, India, 2017
- 13. Inducted to Patron of Council for Research & Empowerment of Women (CREW) with citation: "In recognition of her contribution to the growth of science & scientific thinking among the women at Global Level", Aligarh, India, March 16, 2016
- 12. Memento and Certificate of Recognition, "For her contributions in Atomic Astrophysics and promoting STEM education and research internationally", Celebration of International Women's Day, Department of Physics, Aligarh Muslim University, India, March 10, 2016
- Intruding Comment of Convener Prof. Asma of Mathematics "... She has the courage, persistence and power to excel in all fields mostly dominated by men."
- 11. Certificate of Appreciation and gift, "We are honored by and proud of your achievements and representation of Bangladesh in the scientific world. You are our inspiring Hero and as OSU Prof S.A. Akbar says a Legend", Bangladeshi community of Columbus, Celebration of the Victory Day of Bangladesh, December 5, 2015
- 10.. Poem in Arabic to welcome her visit at Taibah University, Saudi Arabia, March 2014
- 9. Poems dedicated to her by the inspired students in her atomic astrophysics and spectroscopy course at Aligarh Muslim University, 2014
- 8. Recognition trophy "for promotion as an advocate and role model of Muslim Women Scientist", and Certificate of Recognition "for her contributions as a role model for knowledge inspiration and intellectual growth", Celebration of International Women's Day, Aligarh Muslim University, India, March 11, 2014
- 7. On receiving John Wheatley award of APS: PBC 24 news: "Role model of Mulim women: Dr. Sultana Nurun Nahar", News BD: "Role model of Muslim women Dr. Sultana Nurun Nahar recieved American Physical Society Award", Asian News Broad 24: ""Role model of Muslim women Dr. Sultana Nurun Nahar recieved American Physical Society Award", November 2012 6. "Dr. Sultana Nurun Nahar: More Alig than Aligs", An Alig's Armchair, An Aligarh Movement Footnote, Maripat2Aligarh.Blogshot.com, Dec 14, 2011
- 5. Certificate for promoting STEM to the female students, Women Residential College for public presentation, United Arab Emirates U, 2011
- 4. "Dr. Sultana Nahar, The Iron Lady of Mathematical Computations", a modern Muslim pioneer woman scientist, presentation by the female Science students to a university wide event (picture on display in the library), United Arab Emirates University, UAE, December 2009
- 3. Guest of Honor, "International Women's Day" observation, keynote speech "Perspectives of a woman scientist on problems and inspiring women to science", organized by the Progressive Forum in New York, New York, March 18, 2006

- 2. Subject of projects on Muslim woman scientist or Bangladeshi origin scientist by Middle and High school students, California, Texas, New Jersey, OSU in the USA, UAEU, Pakistan
- 1. "Pride of Bangladesh Dr. Sultana Nahar:..." Press release on astrophysics research impact and life, THIKANA (popular Bangla newspaper in the US & Canada), Vol 15, No.6, March 26, 2004
- Modified versions of the THIKANA 2004 article were published by a number of newspapers in Bangladesh; Ittefaq, Prathom Alo etc, 2004
- THIKANA Editor's comment "Dr. Sultana is our pride", listed in the news Highlights of 2004
- Featured in THIKANA a number of times made OSU known to most Bangladeshi Americans
- In wikipedias: i) "Muslim Astronomers and Astrophysicists of 21st century" (among the 8 listed), CHOWK ilogs, November 1, 2009 (http://www.chowk.com/ilogs/74478/51363); ii) Siasat website iii) "Is there Muslim Astronomers or Astrophysicists", Islamic Glory website, in "List of Women Astronomers" wikipedia (http://en.wikipedia.org/wiki/List_of_women_astronomers), iv) "Sultana N. Nahar", v) "List of Wayne State University people (under Science section)", vi) "University of Dhaka alumni", vii) "list of Women Astronomers", viii) "Bangladeshi astronomers", ix) "Bengali astronomers", x) "Bengali physicists", xii) "Bangladeshi physicist", xii) "Bangladeshi scientists", xiii) "Bangladeshi Scientists Snipview"

GLOBAL OUTREACH FOR STEM EDUCATION & RESEARCH

- 1. Global teaching and research training: 29 times
- Described in teaching section above

• 2. Partnership with EducationUSA: 13

- xiii) Organized Session X "US-Bangladesh Education Collaboration Program" in collaboration with EducationUSA and at the annual conference of Bangladesh Physical Society, Dhaka, Bangladesh, May 19-21, 2022
- xii) A session on "American Physical Society", about APS and its programs, free membership, job scopes. recognition programs etc, for physicists in Bangladesh and developing countries, Education USA at US Embassy in Bangladesh, October 21, 20211
- xi) Organization and hosting the program "Admission Adda with the Ohio State University" for prospective Bangladeshi students and researchers, EducationUSA at US Embassy, Bangladesh, August 25, 2021
- x) Organized a session with EducationUSA for US collaborative opportunities for Bangladeshi researchers and students at the first US+Bangladesh "e-conference of Physics" jointly with Bangladesh Physical Society, University of Dhaka, and Frontiers of Physics (US) in February 2021 i-ix) Organized session on educational scopes and funding with EducationUSA in each 9 workshop on promoting "higher degrees in STEM disciplines" to female college students of minority and disadvantaged groups in India under "Women in STEM Roadshow" program of US Department of State, Feb 5 26, 2018

• 3. Global Networks of scientists and programs:

- Described in Founding members section above

• 4. International Collaboration

• Initiator & liaison coordinator of the Memorandum of Agreement (MOA) between the Ohio State University and Cairo University in Arts and Sciences, Engineering, 2012 - 2017 (News:

Egyptian newspaper, Middle East Bulletin at OSU, Youtube: http://www.youtube.com/watch?v=lUrMWSbfzTE)

- MOA renewed for 2017 2022
- Activities involve i) teaching, ii) computational workshops, iii) collaboration in conferences, iv) reaching out to all Egyptian universities for giving astronomy books for introducing the undergraduate course, lectures, various information on admission, research, etc
- Co-founder and Co-Director, and active in all programs, Indo-US A.P.J. Abdul Kalam Centre for STEM Education and Research of OSU-AMU partnership, India, 2013 -
- \bullet Initiator and liaison officer, STEM Faculty Training program for postgraduate students of Indian universities under Obama-Singh 21st Century Knowledge Initiative Award of OSU in partnership with AMU, 2013 2017
- Leader of OSU Delegation: International Exhibits & Conference on Higher Education, Riyadh, 2014
- Research guidance through emails: provided self-written program on electron/position scatting with atoms and collaboration with University of Roorkee, India in 1990. The program is still in use (2021) by many
- The research guidance has extended to Iran, Iraq, Bangladesh, Turkey, Jordan, Pakistan
- Visits to developing countries include seminars/ public talks / conference participation, helping admission to US universities, Astronomy books distribution etc. These have had enormous effect on the choice of the Ohio State University for degree/research applications
- DOS Proposal: PI and Director: "Indo-US collaboration: STEM educational and research opportunities for women from minorities and disadvantaged groups" (Women in STEM Roadshow), Held nine workshops in Tier-1 and Tier-2 cities in New Delhi, Hyderabad and Kolkata consulate districts and 1 year follow-up
- USIEF proposal: Co-PI: "The STEM -Faculty Project: Training the Next Generation of STEM faculty at Higher Eduction Institutes in India", PI: A.K. Pradhan, W. Haider, Obama-Singh 21st Century Knowledge Initiative Award, US India Education Foundation,

4. WAYNE STATE UNIVERSITY: PHYSICS RESEARCH & EDUCATION PROGRAM

• Founder, sponsor & member of Evaluation Committee: Annual recognition program for i) the best research publications, ii) the best teaching, iii) the best Ph.D thesis, Department of Physics and Astronomy, Wayne State University, (founded in 2015-)

5. BANGLADESH: PROMOTER OF PHYSICS RESEARCH & STEM EDUCATION

- Founder, sponsor & member of Board of Trustees of the annual "Razzaq-Shamsun Physics Research Prize" (founded in 1995) and "Razzaq-Shamsun Lifetime Achievement Award for Contributions in Physics" (founded in 2008) for any researcher in Bangladesh, Administered by Dhaka University
- Founder, Sponsor & member of three best research publications in **Bangladesh Journal of Physics (BJP)** (founded in 2017)
- Co-Founder and Sponsor with Charles Clark at NIST of four (two males and two females) best research presentations in **Bangladesh Journal of Physics** (founded in 2022)
- Sponsor, founder and member of the Evaluation Committee of the annual recognition program for Distinguished physics teacher (teaching + research) and Best teacher awards in Physics and in Arabic, University of Dhaka (founded in 2008)
- Sponsor, founder & member of the Evaluation Committee of the annual recognition program for

- Distinguished Teacher (teaching + research), Best Teacher and four best student awards in Physics, **Chittagong University**, Chittagong (founded in 2008)
- Sponsor, founder & member of the Evaluation Committee of the annual recognition program for Distinguished Teacher (teaching + research), Best teacher and four best student awards in physics, **Jagannath University**, Dhaka, Bangladesh (founded in 2011)
- Sponsor, founder & member of the Evaluation Committee of the annual recognition program for Distinguished teacher (teaching + research), Best teacher, and four best student awards in Physics, **Jahangirnagar University**, Savar (founded in 2008)
- Sponsor, founder & member of the Evaluation Committee of the annual recognition program for Distinguished Teacher (teaching + research), Best teacher awards and one best student scholarship in Physics, **Rajshahi University**, Rajshahi (founded in 2011)
- Sponsor, founder & member of the Evaluation Committee of the annual recognition program for Distinguished Teacher (teaching + research), Best teacher and four best student awards in physics, Shah Jalal University of Science and Technology, Sylhet, Bangladesh (founded in 2017)
- Founder & Chair of the "Abdur Razzaq and Shamsun Nahar Trust for Education", for improvement of education in schools in Bangladesh (founded in 2003)
- Sponsor, founder & Chair of the annual recognition program for 2 best teachers (Math & Science, General) awards, "Anjuman J.R. Islamia Junior High School, Dhaka (founded, 2017)
- Sponsor, founder & Chair of the annual recognition program for 3 best teachers awards (Math & Science, Business, General), **Central Women's College**, Dhaka (founded in 2008)
- Sponsor, founder & Chair of the annual recognition program for 2 best teachers (Math & Science, General) and 3 annual best graduating students, **Char Domdoma Primary School**, Gazipur (founded, 2011)
- Sponsor, founder & Chair of the annual recognition program for 2 best teachers (Math & Science, General) and 3 best graduating students, **Gandaria Mahila Samitee Primary School**, Dhaka (founded, 2011)
- Sponsor, founder & Chair of the annual recognition program for 3 best teachers (Math & Science, Commerce, general), and 6 best students awards, **Gumta Ishakia High School**, Comilla (founded in 2017)
- Sponsor, founder & Chair of the annual recognition program for 3 best teachers awards (Math & Science, Business, General), **K. Nazrul Gov. College**, Dhaka, (initiated 2008, finalized 2011)
- Sponsor, founder & Chair of the annual recognition program for 7 best teachers (Math & Science, Commerce, general), and all lifetime teaching awards, **Maniza Rahman Girls High School**, Dhaka (founded in 2003)
- Sponsor, founder & Chair of the annual recognition program for 2 best teachers (Math & Science, General) and 3 best graduating students awards, **Panchdona Madrasa and Orphanage**, Narsindhi (founded, 2008)
- Distributed of Physics and Astronomy books for undergrad course at Universities of Dhaka, Jahangirnagar, Chittagong, Rajshahi, Jagannath, & Kabi Nazrul Government College, Central Women's College; Bangladesh Astronomical Society, Maniza Rahman Girls High School, Panchdoan Madrasa and Orphanage, Gumta Ishakia High School
- This introduced undergraduate Astronomy course at i) Jahangornagar University, ii) Chittagong University, iii) Jagannath University, iv) course by Bangladesh Astronomical Society
- Collaborate with Bangladesh Astronomical Society for article, lectures, IAU proposal, donated

books for workshop, etc.

- Brought IAU membership for Bangladesh Astronomical Society while Bangladesh is not a member of IAU
- Organized the first US+Bangladesh "e-conference of Physics" jointly with Bangladesh Physical Society and University of Dhaka in February 2021. Brought US Ambassador to participate and organized the first session, in collaboration with EducationUSA, on the US collaborative opportunities for Bangladeshi researchers and students.
- Brought Dhaka University and Cairo University together for medical physics research collaboration
- Deliver lectures/Seminar/public presentation on current research interests in institutions to promote physics research
- Deliver research based atomic astrophysics lecture course with computational workshops at Universities of Dhaka, Rajshahi, Jahangirnagar
- Brought many physicists to membership of American Physical Society (APS) at no cost

4. EGYPT: PROMOTION & COLLABORATION FOR RESEARCH & EDUCATION

• Founder & sponsor of a annual recognition program for 10 annual prizes in **Cairo University**: **Physics:** 1 Distinction in research, 1 Best teaching awards, 2 best (male & female) Ph.D., 2 Masters (male & female) graduating students

Astronomy: 1 Distinguished faculty prize in research & 1 in teaching **Mathematics** distinguished faculty prize in research & 1 in teaching

- Founder & sponsor of a annual recognition program for 16 annual prizes in **Physics** and **Astronomy** Departments, **Al Azhar University** (Cairo and Assiut campuses): 8 Distinguished teaching (teaching + research) and Best teaching, 4 best (male & female) Ph.D., 4 Masters (male & female) graduating students prizes
- Founder & sponsor of a recognition program for 6 annual prizes for the best research publications in Astronomy, Geophysics at the National Research Institute of Astronomy and Geophysics (NRIAG)
- Founder & sponsor of a recognition program for annual prizes for the best research publications in Egyptian Journal of Physics (initiated in 2016)
- Founder & sponsor of a recognition program for 2 annual prizes for the best research publications in **Physics**, **Beni-Suef University**, Beni-Suef, Egypt
- Delivering research based lecture course on Atomic Spectroscopy, process, and computational workshops, **Cairo University** attended by post-graduate students, researchers, faculty members from 7 institutes since 2013
- Hold the Adjunct Professorship in Cairo University, given only to well-known Egyptian origin scientists working a developed country
- Seminars and research issues at Zewail City of Science & Technology, National Research Centre, National Institute of Astronomy & Geophysics, American University in Cairo, Helwan University, Ain Shams University, Al Azhar University, etc
- Research guidance at Cairo University, Beni-Suef University, Evaluation of Ph.D., Masters thesis
- Collaborated with National Research Centre in Cairo
- Collaborated with programs at Banha University, Menoufia University
- Initiated collaborative research agreement between Cairo University and Aligarh Muslim

University in India. Dhaka University in Bangladesh

- Distributed physics and astronomy books in many institutions, such as, Cairo, Al Azhar, Suez Canal, Beni-Suef, Ain Shams, Helwan Universities, NRIAG, Zewail City of Science and Technology, Suez Canal University, etc.
- USA liaison for speakers for conferences, such as, Modern Trend in Physics Research (MTPR), workshop of Ultra-Fast Laser Technology and Applications (UFLTA)
- Brought physicists to no-cost membership of American Physical Society (APS), nominated for Fellowship

5. INDIA: PROGRAMS IN PHYSICS & STEM RESEARCH & EDUCATION

- Adjunct Professor under UGC scheme, Department of Physics, Aligarh Muslim University, 2017-2022
- Co-founded with Prof. Anil Pradhan, and in collaboration with Aligarh Muslim University (AMU), the Indo-US APJ Abdul Kalam STEM Education and Research Center of the Ohio State University and AMU, and has been serving as the Co-Director and the research advisor of it since foundation in 2013. One of the 3 OSU members to introduce curriculum for M.S.in Ed-STEM degree program at OSU.
- Founded the REU (Research Experience for Undergraduates) program with partial fund at the Center in 2018
- Founded a chapter of the International Society of Muslim Women in Science (ISMWS) at the Center in 2021
- Introduced annual celebration of the International Women's Day with presentations and recognition
- Founder & sponsor of a recognition program for annual faculty & students prizes for research, teaching and academic excellence in **Aligarh Muslim University**: 7 in **Physics**, 2 in **Mathematics**, 2 in **Zoology**, 2 in **Microbiology** Departments
- \bullet Delivering research based lecture course on Atomic Astrophysics and Spectroscopy, and computational workshops, Aligarh Muslim University since 2014 -
- Founder & sponsor of a recognition program for faculty & student prizes for research, teaching, academic excellence in **University of Kashmir**: 8 in **Physics**, 2 in **Mathematics**, 6 in **Departments of Biological Sciences**
- Founder & sponsor of a recognition program for annual faculty & students prizes for research, teaching and academic excellence in **Jamia Millia Islamia**: 2 in **Physics**, 2 in **Mathematics**, 2 in **Chemistry** Departments
- Founder & sponsor of a recognition program for annual faculty & students prizes for research, teaching and academic excellence in Islamic University of Science and Technology (IUST, Awantipore, Kashmir: 3 in Physics, 1 in Mathematics, 3 in Chemistry Departments
- Delivered research based lecture course on Atomic Astrophysics and Spectroscopy, and computational workshops, University of Delhi, 2014
- Continued research collaboration with University of Delhi and Delhi Technical University
- Delivered lecture course and computational workshop, Kashmir University, 2016
- Examiner of Ph.D. thesis, Aligarh Muslim University, University of Delhi, National Institute of Technology, Indian School of Mines
- Distributed physics and astronomy books in Aligarh Muslim and Kashmir Universities for the introduction of undergraduate astronomy course

- Seminars and public lectures at various institutes Indian Institute of Astrophysics, IFTR-Mumbai, AMU, Kashmir University, Women's College in Kashmir, National Institute of Technology Srinagar, Jain University, SMVD University, etc.
- Research collaboration with Indian Institute of Technology at Dhanbad, 2017 -
- Research collaboration, seminars, conferences, contribution of books etc with NIT-Srinagar, Kashmir, India, 2015-
- • Founded International Society of Muslim Women (ISMWS) Kashmir at NIT with founding president Prof. Seemin Rubab of NIT for any women in Kashmir
- A member of the consortium of US and Indian universities for STEM education and research initiatives under Indo-US program
- Brought physicists to no-cost membership of American Physical Society (APS), nominated Fellowship

6. PAKISTAN: STEM RESEARCH & EDUCATION

- Founder & sponsor of a recognition program for faculty and student prizes for teaching, research, academic excellence in Physics at Quaid-i-Azam University (Founded in 2021)
- Founder & sponsor of a recognition program for faculty and student prizes for teaching, research, academic excellence in Physics at University of Jammu and Kashmir (Founded in 2021)
- Founder & sponsor of a recognition program for faculty and student prizes for teaching, research, academic excellence in Physics at **NED University of Science and Technology** (Founded in 2021)
- Brought physicists to APS membership
- Provided astronomy books for undergraduate course
- Serve as Ph.D. thesis examiner
- Featured in Scientia Magazine, Pakistan: "A Glimpse into the Cosmos with Dr. Nahar", September 2020
- "Astronomy and Beyond", S.N. Nahar, Guest speaker of the webinar series of Muslim Women in Science and Technology of Khwarizmi Science Society of Pakistan, broadcast from Lahore to all of Pakistan, August 23, 2020
- Guest speaker, Physics Camp for Girls, Association of postgraduate students of Pakistan, Dec18-19,2021

7. PALESTINE: STEM RESEARCH & EDUCATION

- Founder & sponsor of a recognition program for faculty and student prizes for teaching, research, academic excellence in Islamic University in Gaza (IUG): 4 in Physics, 2 in Biology, 2 in Chemistry, 2 in Mathematics, 4 in Departments of Engineering (founded in 2015)
- Founder & sponsor of a recognition program for faculty and student prizes for teaching, research, academic excellence in Al-Aqsa University in Gaza: 2 in Physics, 2 in Mathematics (founded in 2018)
- Member of the International Organizing Committee and Keynote Speaker, International Conference on Science Developments VI, organized by and held at IUG, March 12-15, 2017
- Published an article on Physics research in Gaza in APS newsletter 2017
- Brought physicists to no-cost membership of American Physical Society (APS)

8. SAUDI ARABIA: COLLABORATION IN STEM EDUCATION & RESEARCH

• Visiting faculty to Taibah University, Dammam University, King Saud University, and Princess

Nora University for presentations on physics seminars, Med-STEM program, Muslim Women in Science, APS, 2014

- Lectures and workshop at King Saud University, 2014
- Research connection with Taibah University, Contributed undergraduate astronomy books, 2014
- Brought Physics Chair of female section of Dammam University to Physics Department of Miami University, OH, 2016
- Brought physicists to no-cost membership to American Physical Society (APS)

9. TURKEY: COLLABORATION FOR RESEARCH

- Research collaboration with Selcuk University, 2014 -
- Research guidance and collaboration: Canakkale Onsekiz Mart University, Karamanoglu Mehmetbey University, 2014
- Advisor for M.S. thesis of Yasin Gokce, Karamanoglu Mehmetbey University, 2015
- Collaborated with Marmara University on an IAU proposal and research connection, 2009 -
- Brought Physicists to no-cost membership of American Physical Society (APS)

10. COLLABORATION WITH UNITED ARAB EMIRATES

- Research connection with UAE University, An Ains since 2011
- Nahar featured as the role model for a Muslim woman scientist by science students 2009
- Visiting faculty, United Arab Emirates University, presentations of seminars university wide audience, 2011
- Appreciation certificate by the Dean of UAE University Libraries for Contribution of Books, 2011
- Appreciation Certificate for the International Society of Muslim Women in Science, 2011
- Connected IIT-Srinagar, India and UAEU for research collaboration in 2020
- Brought physicists to no-cost membership of American Physical Society (APS)

OTHER MEMBERSHIPS AND SERVICES:

- Columbus Folk Dancers (CFD http://recfolkdancecolumbus.org/CFD/Home.html) American, European, South American, Asians (1991 present) Emcee of CFD
- Odity Performers Bengali songs

FEATURED IN ARTICLES/ PRESENTATIONS

i) Featured Articles in Science: 31

- 1. Featured as recognition in "Hidden Figures: Women in Science in Science" booklet in celebration of the Internaitonal Day of Women and Girls in Science on Feb 11, 2023 by the Office of Equity, Diversity, and Global Engagement of College of Education and Human Ecology, OSU 2023
- 2. Featured in section "ACHIEVEMENTS: AWARDS AND RECOGNITION OF FELLOWS" (p.15), Annexture of 7a&b Activities Report of BAS annual report, 2021-2022
- 3. Featured with two other women in STEM in "Islamic Horizons" magazine of ISNA, July/August 2022: "Muslim Women in STEM: A Minority Within a Minority"

- 4. Featured in the OSC Annual Report 2020 "Breaking Barriers Nahar aids female Muslim scientists with supercomputing", p.16, published in April 2021
- 5. Featured as a role model with 4 others in Astronomy, Syeda Lammim Ahad (Ph.D. candidate in Astronomy, Leiden University, Holland), "Women in Space World Space Week" presentation, October 9, 2021
- 6. Featured in Scientia Magazine, Pakistan: "A Glimpse into the Cosmos with Dr. Nahar", September 2020
- 7. Featured among the prominent female scientists in the UGC (University Grant Commission) lecture "Women in STEM Subjects" under the National Women Studies course participated by University members from all over India covering all areas and broad casted held at UGC Center at Aligarh during Sep 3 18, 2020
- 8. "Featured Physicist Activity Sultana Nahar", Prof. Dimitri Dounas-Frazer, Course "Matter and Energy in Physical System", Western Washington University, USA, Spring 2020
- 9. Featured woman of Voice of America Bangla news "Naree Kantho: Conversation with scientist Dr. Sultana Nurun Nahar" (video news and featured article at VOA website), April 25, 2019
- 10. Featured Physicist Activity: "Dr. Sultana Nurun Nahar", Prof. Dimitri Dounas-Frazer, Course "Matter and Energy in Physical System", Western Washington University, USA, Spring 2019
- 11. Featured news story of the OSU Office of International Affairs "Astronomy professor awarded Adjunct professorship at Cairo University", August 6, 2018
- 12. Feature article in Bangladesh newspaper "Pratham Alo" (wide circulation): "A Source of Inspiration Sultana Nahar", by Dr. Rauful Alam (U of Penn), January 17, 2018
- 13. OH-TECH press release feature "Educating the masses: OSC helping Nahar share computational knowledge in Columbus, around the world", August 24, 2017
- 14. OSC Annual Report 2016-2017 article "OSC HELPING NAHAR SHARE COMPUTATIONAL KNOWLEDGE IN COLUMBUS, AROUND THE WORLD", p.8-10 (p.10-12 on webfile), OH-TECH 2017
- "Prof. Sultana Nahar: The Lady with Vision and Action", Sabiha Parveen (Chemistry, AMU), National Seminar on "Global Contribution of Muslim Women in Natural and Social Sciences, Aligarh Muslim University, India, November 6, 2017
- 16. Featured in OH-TECH blog on lecture course in Cairo University "Recent workshop illustrates OSC's support", S.N. Nahar, December 2016
- 17. Featured in Chapter 5: "Dreaming of the Star Treatment" of the book "Science Unshackled" (Renee James, Fall 2014, Johns Hopkins U press) describes astronomical study that led to cancer treatment that we proposed and includes section 35 "The Iron Lady and the Gold Standard", 2014

- 18. Featured along with Pradhan in OSC-OH-TECH profiles of research collaboration in May 20214 at OH-TECH website https://www.oh-tech.org/profiles/sultana_nahar_and_anil_pradhan, 2014
- 19. Featured with title "Finding a cancer treatment in space", in dedicated magazine titled "Moments of Discovery" of Wayne State Alumni Magazine, Vol 27, No. 4, Winter 2013
- 20. Featured her work in the article describing cancer research findings (RNPT) as one of the four important contributions of Astronomy to human life "What has astronomy done for you lately?" in (4 items: GPS, wireless internet, RNPT, and laser surgery of eyes), Astronomy Magazine, p.31-35, May 2012
- 21. Featured in "Excellence to Eminence" recognition (featuring the most significant news of the month at OSU) with title "What Success Looks Like", September 11, 2011, Ohio State University on research news of x-rays in medical treatment "Astronomers reach for the stars for new cancer therapy", September 11, 2011, Ohio State University, on Campus article: "Astronomers reach for the stars for new cancer therapy", July 13, 2011
- 22. OSU press release: "ASTRONOMERS REACH FOR THE STARS TO DISCOVER NEW CANCER THERAPY", Ohio State University, June 22, 2011 (reported over 100 news media)
- 23. OSC Annual Research Report,: Biomed Research summary "Applying High-end X-rays to Cancer Treatment" published among the Noteworthy Research Activities (p.16), 2010
- 24. Ohio Supercomputer Center (OSC) press release "X-ray researchers turn focus from black holes to cancer", Columbus, OH, January 28, 2010 (refers "Iron Lady")
- 25. In OSC highlighted feature on i) "2009 Research Highlights by Ohio Supercomputer Center (OSC)" (refers Nahar "Iron Lady"), ii) calendar page (February 2010) on "High Precision Atomic Astrophysics X-ray research for black holes and in nanobiotechnology" featuring ground-breaking studies by the Ohio leading researchers using OSC resources, 2010 iii) Highlighted in OSC Achievements at the 25th Anniversary of OSC, 2013
- 26. Featured by Thikana (Bengali newspaper published in New York) editor on research and related issues after interview, article spanning three pages, first week issue of weekly newspaper Thikana in April, 2006
- 27. Featured in an article on educational and charity activities in Bangladesh, Bengali newspaper Thikana, New York, 2005
- 28. OSU: Featured in the first annual magazine of the Astronomy Department (for circulation outside):"Meet the Iron Lady" on Sultana's research on irons, p.page 21, 2004
- 29. Featured in "Pride of Bangladesh Dr. Sultana Nahar: ...", Top press release on the front page detailing astrophysics research impact and life, THIKANA (the most widely circulated Bangla newspaper in the US and Canand), Vol 15, No.6, March 26, 2004

 THIKANA Editor's comment: "Dr. Sultana is our pride", in the news Highlights of 2004

- Modified versions of the 2004 THIKANA article were published by a number of newspapers in Bangladesh; Ittefaq, Prathom Alo etc, 2004
- Featured with news in THIKANA a number of times have made OSU known to most Bangladeshi Americans
- 30. In various wikipedias: i) "Muslim Astronomers and Astrophysicists of 21st century" (among the 8 listed), CHOWK ilogs, November 1, 2009 (http://www.chowk.com/ilogs/74478/51363); ii) Siasat website iii) "Is there Muslim Astronomers or Astrophysicists", Islamic Glory website, in "List of Women Astronomers" wikipedia (http://en.wikipedia.org/wiki/List_of_women_astronomers), iv) "Sultana N. Nahar", v) "List of Wayne State University people (under Science section)", vi) "University of Dhaka alumni", vii) "list of Women Astronomers", viii) "Bangladeshi astronomers", ix) "Bengali astronomers", x) "Bengali physicists", xii) "Bangladeshi physicist", xiii) "Bangladeshi scientists", xiii) "Bangladeshi Scientists Snipview"

ii) Featured Articles in STEM Education and Research: 10

- 1. Featured in news article "New Chapter of International Society of Muslim Women in Science Inaugurated", Middle East Studies Center News, Nov 7, 2022
- 2. Featured as OSU Office of International Affairs-India Gateway celebrated the visibility and achievements of Ohio State women faculty and alumnae via social media posts and featured 5 Ohio State faculty (including atomic physicist Sultana Nahar of College of Arts and Sciences) "who are at the forefront of their fields and are engaged with partners in India", International Women's Day 2021 (OIA-OSU post April 2, 2021)
- 3. Featured along with Pradhan in ASC news story: "Two astronomy faculty launch programs around the world to uplift STEM professionals", OSU, Dec 11, 2019
- 4. Featured at Lotus STEMM stories: "Rendezvous with Sultana N Nahar", October 15, 2019 (LOTUS is a web-based platform featuring women in STEMM from South Asia)
- 5. SPAN Magazine (US Department of State): "Training Future Teachers", January/February 2018
- 6. Featured in a number of Urdu newspapers as the Director of the program "Women in STEM Roadshow" conducted in India, 2018
- 7. Featured as the story of ENGAGED SCHOLAR of OSU newspaper THE LANTERN: "Ohio State professor connects cultures to promote science", page 1, Year 137, Issue 4, January 24, 2017
- 8. Featured in FIP news: "Sultana Nahar, FIP Executive Committee Member, Winner of the John Wheatley Award", p. 11, Spring 2013
- 9. Featured in FIP APS newsletter: "Newly Elected to the FIP Executive Committee", p.7-8, Spring 2012

10.	Featured in FIP for Member-at-I	e "Sultana N.	Nahar The Ol	nio State Universi	ty Candidate