CURRICULUM VITAE

OF

PROFESSOR DR. M. SHAMSHER ALI

PERSONAL DATA

Name : M. SHAMSHER ALI (First Name: Shamsher, Surname: Ali)
Sex : Male
Date and Place of Birth : 9-11-1937, Bheramara, Kushtia, Bangladesh
Nationality : Bangladeshi
Present Position : Professor Emeritus, Southeast University
President, Bangladesh Academy of Sciences (2004-2012)
Founder Vice Chancellor, Southeast University
Founder Vice Chancellor, Bangladesh Open University
Mailing Address : House # 28, Road # 4, Dhanmondi R/A, Dhaka-1205
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EDUCATION

Diploma/Degree	Institution	Year of Passing	Division /Class	Subjects
Matriculation	Jessore Zilla School	1954	First	English, Bengali, Maths, Science, History, Geography, Urdu
Intermediate (Science)	Rajshahi Govt. College	1956	First	English, Bengali, Maths, Physics, Chemistry, Biology
BSc. Hon's in Physics	Dhaka University	1959	First	Physics (Major), Minor Subjects: Maths & Statistics
M.Sc. in Physics	Dhaka University	1960	First	All branches of Physics (Thesis in Nuclear Physics)
Diploma in Advanced Studies in Science	Manchester University, U.K.	1962		Almost all branches of theoretical Physics
Ph.D.	Manchester University, U.K.	1965		Theoretical Nuclear Physics

RESEARCH AND ACADEMIC POSITIONS

Scientific Officer, Atomic Energy Commission, Pakistan 1961-1965
Senior scientific Officer, Atomic Energy Commission, Pakistan 1965-1969
Principal Scientific Officer,
Pakistan & Bangladesh Atomic Energy Commission 1970-1974
Chief Scientific Officer, Bangladesh Atomic Energy Commission 1975-1982
(The highest scientific rank of the Bangladesh Atomic Entry Commission)
Professor of Physics, University of Dhaka 1982-2006
Also visited and worked in a number of research institutions in Europe and America.

POSTS HELD IN SCIENTIFIC & EDUCATIONAL ADMINISTRATION

Director, Atomic Energy Centre, Dhaka (The then Premier Installation of the Bangladesh Atomic Energy Commission)	1970-1978
Founder Vice-Chancellor, Bangladesh Open University	1992-1996
Founder Vice-Chancellor, Southeast University	2002-2010

DISTINCTIONS

1. Was awarded a number of scholarships; was awarded the Hari Prasanna Roy Gold Medal in 1974 by the University of Dhaka for original contribution to Nuclear Physics.
2. As a mark of recognition of career and contribution to Physics, had been made Honorary Professor of Physics in 1973 by the University of Dhaka, as a lone exception.
3. Was awarded the Bangladesh Academy of Science Gold Medal in 1985 (Physical Science Group).
4. Was awarded the Khan Bahadur Ahsanullah Gold Medal-2004.
5. Fellow, Bangladesh Physical Society.
6. Fellow, Bangladesh Academy of Sciences.
7. Fellow, Islamic-World Academy of Sciences (IAS), Jordan.
8. Fellow, the Academy of Sciences for the developing world (TWAS), Trieste, Italy.
9. Member, New York Academy of Sciences.
10. Senior & Honorary Associate of the International Centre for Theoretical Physics at Trieste, Italy.
11. Elected to Honorary Fellowship (the highest award) of the World Innovation Foundation, (H.Q. in UK); Founded by Nobel Laureate Dr. Glenn Seaborg.
12. Obtained TWNSO (Third World Network of Scientific Organizations) Award for the promotion of the Public Understanding of Science.
13. Was awarded "The Lifetime Achievement Award" in Higher Education Leadership by the International University Leadership Colloquium (Malaysia) on 10th November 2009.
14. Has been made a Founding Member Director of the International Distance Education Accreditation League (IDEAL) formed in 2009.
15. Obtained the TWAS-ROCASA Award in the Central and South Asian Region in 2013 for Popularization of Science.

ASSOCIATIONS WITH PROFESSIONAL BODIES AT HOME AND ABROAD

Vice-President, AASSA (The Association of Academies and Societies of Sciences in Asia), 2014-2016.
President-Elect, FASAS (2011-2013).
Senior & Honorary Associate, the Abdus Salam International Centre for Theoretical Physics, Trieste, Italy.
Fellow, TWAS (The World Academy of Sciences), Trieste, Italy.
Fellow, Islamic World Academy of Sciences (IAS), Jordan.
Fellow, Bangladesh Academy of Sciences.
Fellow, Bangladesh Physical Society.

Fellow, Bangla Academy (the most prominent cultural organization in Bangladesh).
Life Member, Asiatic Society of Bangladesh.
Life Member, Bangladesh Mathematical Society.
General Secretary of BASSP (Bangladesh Association of Scientists and Scientific Professions), 1978-1981.
Member, National Council of Science and Technology (NCST), Govt. of Bangladesh.
Patron, Dhaka Ahsania Mission.
Member, PUGWASH Group.
Member, American Physical Society.
Former Member, Board of Governors of the Bangladesh Museum of Science & Technology.
Member, Regional Committee of ICSU (International Council for Science) for Asia and the Pacific.
Executive Member, Inter-Academy Panel (IAP) on International Issues (2003 -2009).

RESEARCH EXPERIENCE

The fields of research include the following:
1. Study of Three Body problems in Nuclear Physics
2. Resonating group studies of light nuclei
3. Phenomenological studies of the Alpha-Alpha Interaction
4. Study of Lambda Nucleon and Lambda-Lambda interactions from analysis of Lambda Hyper-nuclear systems
5. Study of non-local interactions in the co-ordinate representation
6. Study of equivalent local interactions
7. Studies of the local as well as non-local Folding mode for nuclear reactions

RESEARCH PUBLICATIONS

Published a large number of papers in International Journals of repute (List enclosed).

TEACHING EXPERIENCE

1. Have been teaching at the graduate and post-graduate level for about 30 years. Subjects taught include quantum mechanics, nuclear physics, mathematical methods of physics etc.

2. Developed a special aptitude for teaching science in an integrated manner pointing to the unity of science amongst its various disciplines and suggested at national and international conferences ways and means of creating interest in science & mathematics education at all levels; recently wrote a monograph on the crisis in mathematics education.

SPECIAL INTERESTS

1. Distance and Open Learning.

2. Popularization of Science and Technology (Delivered more than 300 talks on TV and Radio on different aspects of Science and Technology; broadcast a series of talks on BBC on Science & Culture); prepared a documentary film on 'Science learning at home' at a UNESCO sponsored workshop at Poona, India in 1985, which has been frequently telecast by Indian TV Channel Door-Darshan; obtained the TWNSO (Third World Network of Scientific Organizations). Award for the promotion of the public understanding of science: obtained the TWAS-ROCASA Award for popularization of science.

3. Science Education; delivered a number of lectures in Educational Institutions in Bangladesh and India on the Training of Trainers(ToT) for Mathematics and Science Education in Schools; recently wrote a book titled “Making Math Fun”.

4. Synthesis of science and culture.

5. Science and Development Issues in the Third World (Environment, Poverty alleviation, energy issues, gender issues, science education etc.).

6. Understanding of the relation between Science and Religion.

PROFICIENCY IN LANGUAGES

Language	Read	Write	Speak
Bengali	√	√	√
Urdu	√	√	√
English	√	√	√
Italian	√	√	√

TRAININGS/VISITS ABROAD (Incomplete)

Participated (by invitation) at a number of International Conferences:

Trainings /Visits	Country	Year
Commonwealth Fellowship	UK	1961-65
Post-Doctoral visit at the ICTP, Trieste, Italy	Italy	1966-68
Scientific Visit	Italy, USA, Greece, Holland, West Germany	1969
"	Italy, UK, Mexico, India, USA, Poland	1972
"	Italy, UK, Yugoslavia	1973
Visit	Nepal	1975
Scientific Visit	India, Italy, UK, West Germany	1976
"	Japan, Thailand, Malaysia, Hong Kong, Singapore	1977
"	Pakistan, Iraq, Italy, UK, Algeria, Egypt, Saudi Arabia, Austria	1978
"	India, Holland	1980
"	Canada, UK	1981
"	Philippines, USA, Indonesia	1982
"	Australia, USA	1983
"	Sweden, Denmark, Italy, UK	1984
"	Italy, India, Pakistan	1985
"	Argentina, USA	1986
"	USA, UK, Italy, India	1987
"	UK, USSR, Italy, Canada	1988

Training/visits (Contd.)	Country	Year
"	UK, Italy, Kuwait	1989
"	China, India, Jordan, Venezuela, Turkey	1990
"	India, Philippine, UK, Canada, Sri Lanka	1992
"	Australia, UK, Canada, Thailand, Sri Lanka	1993
"	New Zealand, Australia	1994
"	Sudan, Norway	1995
"	Malta, UK, India, Nigeria	1996
"	Brazil, Indonesia, USA, Saudi Arabia	1997
"	USA, France (Gave a talk during the UNESCO conference at an Arab sponsored meeting on distance education)	1998
"	Iran, Hungary, USA, Senegal, South Africa	1999
"	USA, Tunisia	2000
"	USA, Morocco, Saudi Arabia	2001
"	Turkey, Pakistan, India, Indonesia, Dubai Uzbekistan, Siberia (Russia)	2002
"	Italy, Egypt, China, Iran, Mexico, USA	2003
"	Dubai, Maldives, Turkey, China, Italy	2004
"	UK, Sweden, Malaysia, Pakistan, Thailand, Japan, China, Saudi Arabia, Australia	2005
"	India, Malaysia, Spain, Russia, USA, Vietnam, Singapore, Turkey, Egypt	2006
"	Cyprus, Russia, Tajikistan, Germany, Mongolia UK, Thailand, Singapore, Uganda	2007
"	Netherlands, India, Turkmenistan Germany, Russia, China, Japan, Mozambique Cyprus, Turkey, Kazan (Russia), Hong Kong	2008
"	India, Italy, Netherlands, Belgium, UK	2009
"	Uzbekistan, South Africa, Malaysia, Japan, China UK, Mongolia, Kirgizstan	2010

"	Canada, USA	2011
"	Philippines, UK, China, Singapore, India	2012
"	Argentina, India, Korea	2013
"	India, Italy, Oman	2014
"	India, USA, Canada, Russia, Austria, Portugal, Korea	2015

NAMES OF REFEREES

1. Prof. Adnan Badran
   President
   Petra University
   P. O. Box 961343
   Amman 11196
   Jordan.

2. Sir, S.F. Edwards, FRS
   Former Head, Cavendish Laboratory
   249 Bragg Building, Cavendish Laboratory
   Cambridge, England, U.K.

LIST OF PUBLICATIONS OF PROFESSOR M. SHAMSHER ALI

AUTHOR	TITLE	PUBLISHED IN
A. R. Bodmer and S. Ali	A self consistent two body method for three-body systems and the hypernucleus ${}^{9}_{\Lambda}Be$	Nucl. Phys. 56 (1964) 657
A. R. Bodmer and S. Ali	The Λ Λ - hypernucleus ${}^{10}_{\Lambda\Lambda}Be$ and the Λ-Λ interaction	Phys. Rev. 138 (1965) B644
S. Ali, J. W. Murphy and A. R. Bodmer	The excited state of ${}^{9}_{\Lambda}Be$ and the Λ -N interaction	Phys. Rev. Letters 15(1965)534
S. Ali and A. R. Bodmer	Phenomenological α-α potentials	Nucl. Phys. 80 (1966) 99
S. Ali and M. Islam	Phase shift calculation for real and realistic potentials	Journal of Natural Sc. & Math. Vol 6, No. 2(1966)
S. Ali and M. Islam	Bound state eigenvalue calculations	Journal of Natural Sci.& Math. Vol. 6, No. 2(1966)
S. Ali and A. R. Bodmer	The Λ -Λ hypernuclei ${}^{10}_{\Lambda\Lambda}Be$ and ${}^{6}_{\Lambda\Lambda}He$ and Λ -N and the Λ- Λ interactions	Phys. Letters 24B(1967) 343
S. Ali and A. R. Bodmer	The Λ- Λ hypernucleus ${}^{6}_{\Lambda\Lambda}He$	Nuovo Cimento 50A(1967)511
S. Ali and S. A. Afzal	α -d model & the form factor of ^{6}Li	Nuovo Cimento 49(1967) 103
S. Ali and S. A. Afzal	Phenomenological α-α potential and the ground state of ^{8}Be	Nuovo Cimento 50 (1967) 103
S. Ali	Studies of Nuclear and elementary particle physics with hypernuclei	Nuclear Sc. & Applications 2 (1967)32
S. Ali, M.E. Grypeos and L. P. Kok	Λ- P scattering and the Λ- N interaction	Phys. Letters 24B (1967) 543

AUTHOR	TITLE	PUBLISHED IN
S. Ali, L. P. Kok and M. E. Gryopeos	A note on the ΛΛ-hypernucleus $^{14}_{\Lambda\Lambda}C$	Nuovo Cimento 50(1967) 373
S. Ali and L. P. Kok	The $^{11}_{\Lambda\Lambda}Be$ interpretation of the first discovered ΛΛ-hypernuclear event	Nucl. Phys. B3 (1967) 542
S. Ali, L. P. Kok and M.E. Gryopeos	The binding of a Λ-particlc in Nuclear Matter	Nucl. Phys. B3 (1967) 335
S. Ali, L. P. Kok and M. E. Gryopeos	A possible determination of Λ-nucleon correlation function	ICTP Internal Report 34/1967 contributed paper read at the physical Society confc on Nuclear Physics at Harwell, England March 27-29,'67
S. Ali, L. P. Kok and M. E. Gryopeos	Analysis of the ΛΛ-Hypernucleus $^{14}_{\Lambda\Lambda}C$	Phys. Rev. 171 (1968) 1203
S. A. Afzal, A. A. Z. Ahmed and S. Ali	Systematic survey of the α-α interaction	Review of Modern Physics 41(1969) 247
S. Ali, S. M. M. R. Chowdhury and S. A. Afzal	Alpha-deutron Resonating Group Structure of ^{6}Li	Nucl. Science & Application Ser. B, 4 (1968) 1
S. Ali, L. P. Kok and M. E. Grypeos	A review of the roles of ΛΛ - hypernuclei	Proceedings of the International Conference on Hypernuclear Physics Argonne National Laboratory, Argonne, USA, May 1969
S. Ali, L. P. Kok and M. E. Grypeos	Binding energy of a Λ-particle in nuclear matter and Λ-nuclear interaction	Ibid

AUTHOR	TITLE	PUBLISHED IN
S. Ali, M. E. Gryopeos and L. P. Kok	An Extension of Jastrow's method for the quantum mechanical many-body problem with strong forces	Progress of Theoretical Physics 141 (1969) 217
S. A. Afzal and S. Ali	Central nucleon-nucleon potentials and the behavior of the ground state wave function of ^{6}Li	Nucl. Phys, 157A (1970) 363
D. Husain and S. Ali	Scattering from a separable Non-local potential	Amer. J. Phys.38 (1970) 597
D. Husain and S. Ali	Equivalent Local Potentials from Non-local separable ones	Phys. Rev. 2 (1970) 1587
S. Ali, M. Rahman and D. Hossain	Coulomb potentials and separable interactions	Phys. Rev. D6 (1972) 1178
M. Rahman, S. Ali and S. A. Afzal	A note on the 1-dependence of the α- α interaction	Nuovo Cimento Letter 6(1973) 107 Also published in the International Conference on Few body problems, Los Angeles, USA, Aug 1972
S. Ali, S. A. Afzal and M. Rahman	A note on the anatomy of the S-wave α- α interaction	ICTP Internal Report IC/73/ 185 Trieste, Italy
S. Ali, M. Rahman and D. Hussain	Non-local separable potential and p-p scattering	Phys. Rev. C9 (1974) 1657
M. Rahman, D. Hussain and S, Ali	Separable potential for α- α interaction	Phys. Rev. C10 (1974) 1
S. Ali	A review of studies of some 5-Baryon systems	Invited paper read at the International Physics Symposium (dedicated to Prof. S. N. Bose) held at Dhaka during 18-21 November, 1974

AUTHOR	TITLE	PUBLISHED IN
S. Ali 1975	Invited talk on "Some Aspects Interactions between light nuclear systems"	Proceedings of the VII International Conference on Few-body problems in Nuclear and Particle Physics, held at New Delhi during the period 29 Dec. to 4 Jan. 1976, North Holland Publishing Co, 1976, p. 70
S. A. Afzal and S. Ali	Consistent Calculation of α-α interaction in the resonating Group method	Ibid, page 433
S. Ali, A. A. Z. Ahmad, Nasim Ferdous and Masuma Ahmad	Non-local separable potential and p-α scattering	Nuovo Cimento 30A (1975) 385
S. Ali, M. E. Grypeos and B. Kargas	Calculation of the $_{\Lambda}$-particle binding energy in Nuclear Matter with a simple functional variation method	Phys. Rev. C14 (1976) 285
S. Ali and Nasreen Gul	α- α Scattering as a Limiting Test Case for the folding Model for α-Nucleus Scattering	Proceedings of the International Conference on Nuclear Structure held at Tokyo (Sep. 5-10-1977) published by the Organizing Committee, page 514
S. Ali	Some thoughts on Separable Potential Model Description of Heavy-Ion Scattering	Ibid, page 580
S. Ali and S. A. Afzal	A note on the Hall-post Theorem and α-Cluster Structure of Nuclei	ICTP Internal Report IC/78/103
S. Ali and G. Schiffrer	Theoretical aspects of the Non local folding model and the Perey-Buck Potential	ICTP Internal Report IC/78/104
S. Ali	An overview of the folding model for Nuclear Reactions	Proceedings of the Physics Symposium held at Dhaka, Bangladesh, January 17-20, 1979, published by Bangladesh Physical Society Dhaka, 1981.

AUTHOR	TITLE	PUBLISHED IN
A.M. Khan and S. Ali	A Weiszsacker-Bethe-Type mass Formula for Hypernuclei	Nuovo Cimento Letters 31, (1981) 528
Alfazuddin and S. Ali 19	A Folding Model Study of the scattering of neutrons by ^{6}Li	Journal of the Bangladesh Academy of Sciences 8, (1984)
S. Ali and (1984) G. Schiffrer	The Non-Local Folding Model and its relation with the Perey-Buck potential	Nouvo Cimento Letters 41 571
M.H. Ahsan and S. Ali	A variational approach to the calculation of the binding energy of the double hypernucleus $^{31}_{\Lambda\Lambda}Si$	Australian Journal of Physics 38 (1985) 33
S. Ali, A.A.Z. Ahmed and N. Ferdous	A survey of the α -N Interaction	Reviews of Modern Physics 57 (1985) 23
S. Ali, A.M. Khan and G. Schiffrer	Equivalent Local Potentials from non-local separable ones	Phys. Rev. C. 32 (1985) 318
S. Ali	Non-locality and the Five Baryon Problem	Proceedings of the International Conference on Mathematical Physics held at Chittagong, Bangladesh, January 86
P. Sarangi, S. Ali and I. Satpathy	Bonding potential between two ^{12}C nuclei	Pramana, 34 (1990) 111
M.H. Ahsan, M. Kaykobad and S.Ali	Four body Calculation of $^{31}_{\Lambda\Lambda}Si$	Phys. Rev. C 43 (1991) 146
I.Ahmed, S.Ali and G.M.Bhuiyan	α -^{12}C elastic Scattering at 1.37 Gev in the α -particle model.	Nuovo Cimento, Series A (1994)
M. N. A. Abdullah (2003) S. Hossain M.S.I. Sarker M. A. Uddin, S. K. Das A. S. B. Tariq	Cluster Structure of ^{16}O	Euro. Phys. J. A 18, 65–73

A. K. Basak, S. Ali H. M. Sengupta and F. B. Malik		
AUTHOR	TITLE	PUBLISHED IN
M. N. A. Abdullah M. S. I. Sarker S. Hossain, S. K. Das A. S. B. Tariq, M. A. Uddin A. S. Mondal, S. Ali H. M. Sengupta and F. B. Malik	Cluster structure of ^{40,44,48}Ca	Phys. Letters B 571 (2003) 45–49
S. Hossain, M.N.A. Abdullah, K.M. Hasan, M. Asaduzzaman, M.A.R. Akanda, S.K. Das, A.S.B. Tariq, M. A. Uddin, A.K. Basak, S. Ali and F.B. Malik.	Shallow folding potential for ^{16}O+^{12}C elastic scattering	Phys. Letters B 636 (2006) 235

LIST OF SOME IMPORTAT POPULAR ARTICLES

1. "Ways and Means of Creating Interest in University Physics education", published in the proceedings of the Regional Conference on University Physics Education, held at Penang, Malaysia, 1977.

1. "On creating interest in Physics education at all levels", in 'The Physicist', 2(1977) 25, Journal of the Bangladesh Physical Society, Dhaka, Bangladesh.

2. "The World Beyond Uranium", Journal of the Defense Science Organization, Bangladesh, 1978.

3. "Green's Function and its uses" in the 'Physicist', 3 (1978) 69, Journal of the Bangladesh Physical Society, Dhaka, Bangladesh.

4. "Science education through an open school system in Bangladesh" presented at the 3rd Annual Bangladesh Science Conference, 1978.

5. "The Science Club Movement of Bangladesh", printed in a book titled "Science Club", sponsored by the Bangladesh Association of Scientists and Scientific Professions, 1979.

6. "Problems of Inflow of Information to the Scientific and Technological Research Workers of Bangladesh" in the proceedings of the UNESCO National Workshop of Users of Scientific and

Technical Information, held at Dhaka, 1979, published by BANSDOC (Bangladesh Scientific Documentation Centre), BCSIR Laboratories, Dhaka, 1979.

7. "Education of Scientific and Engineering Personnel" in the proceedings of the International Symposium on Science, Technology and Development held at Algiers, Algeria (September, 1978), published by the J-World Federation of Scientific Workers, London (1979).

8. "The Birth of New Mechanics", presented in 1980 on the occasion of a Physics exhibition titled "The Golden Days of Physics", organized jointly by German Cultural Institute, Dhaka and the Bangladesh Physical Society.

9. "Modalities for Out of School Education, published in the proceedings of a UNESCO Conference on "Out of School Science Education" held at the Science Museum, Dhaka, 1980.

10. "Muslim Contributions to Science and Technology", published in the journal SIFIMA (Society International for Islam and the Modern Age), 1 (1980) 1.

11. "Science for the Common Man", presented as the Qudrat-e-Khuda Memorial Lecture, Chittagong in 1980. (Organized by Chittagong Biggyan Parishad, Bangladesh)

12. "Rights and Responsibilities of Scientists", invited paper presented at Bangladesh Academy of Sciences Meeting held at Dhaka in 1981.

13. "Plant Life as a Source of Energy", invited paper presented at the Annual Botanical Conference of Bangladesh held at Dhaka, in 1981.

14. "Integration of Islamic Values and Concepts in Modern Education", key-note paper presented at the symposium held, on the occasion of the visit of a Muslim delegation form china to Bangladesh, by the Islamic University of Bangladesh, 1982.

15. "The Synthesis of Science and Religion", presented at the International Conference on the Unity of the Sciences, held at Philadelphia, U.S.A., November, 1982.

16. "The Culture of Science in the Context of Bangladesh", presented in a book titled "Culture of Science in Bangladesh", published by the Bangla Academy, Dhaka, Bangladesh, March, 1983.

17. "The Science-Mindedness of Poet Rabindranath Tagore", invited paper presented at a special seminar on Tagore, held by the Bangla Academy Dhaka in April, 1983.

18. "Tools and Techniques of non-formal Science Education", held at the Science Museum, Dhaka in March, 1984 under the sponsorship of the Bangladesh National commission for UNESCO (BNCU).

19. "S and T Information for National Development - some problems and solutions", invited paper published in the proceedings of the Conference on International Co-operation in Science & Technology (January, 1984) organized by the Bangladesh Academy of Sciences.

20. "Assessment of the Appropriateness of Technology in use in Bangladesh - Past and Present" - invited paper in the proceedings of the National Seminar on 'Technology & Development', held at Dhaka in January, 1984, by the Bangladesh Unnayan Parishad.

21. "Ways and Means of Creating Pleasure and Interest in Mathematics Education", invited paper read at the Bangladesh Mathematical Conference at Dhaka, 1984.

22. "The role of Scientists in the Development of Bangladesh" in the proceedings of the symposium (held on the same topic on the occasion of the observance of the Eighth National Science Week of Bangladesh, February, 1985) published by the Science & Technology Division of the Government of Bangladesh.

23. "Distance Learning", in the proceedings of the Third World Academy of Science Conference on South-South and North-south Co-operation in the Sciences, held at the International Centre for Theoretical Physics at Trieste, Italy, July, 1985.

24. "Science and Philosophy", invited paper presented on the occasion of "Sayedur Rahman Memorial Lectures" published by the Dhaka University, Dhaka, 1985.

25. "Science, Technology and the Ethics of Mankind", published in February, 1986 in the International Journal, 'The World and I', Washington Times Corporation.

Books, Monographs etc.

1. Published a Book on "Science Club", sponsored by the Bangladesh Association for Scientists and Scientific Professions in March, 1979.

2. Authored "Science Curriculum for Elementary Schools: An Islamic Model" in a book titled "Muslim Education" published by King Abdul Aziz University, Jeddah, Saudi Arabian in 1982.

3. Co-author of book titled "The Culture of Science in Bangladesh" published by the Bangla Academy, Dhaka in March, 1983.

4. Co-author of a five-volume publication on "Study of Technology Transfer & Development", sponsored by the Planning Commission of the Govt. of the People's Republic of Bangladesh in April, 1985.

5. Prepared and directed a documentary film titled 'Science learning at home - the hand that rocks the cradle rules the world' at a UNESCO International Conference held at Puna, India in January, 1985 on 'The Role of Television in Physics Teaching'.

6. Co-author of book titled "Poverty and Technology" published by Professors World Peace Academy, in 1986.

7. Co-author of "Scientific Indications in the Holy Quran" published by Islamic Foundation Bangladesh December, 1990: was also chairman of the committee of authors formed for this purpose.

8. Co-author of the book "Muslim Contributions to Science and Technology" (1996) published by the Islamic Foundation, Bangladesh. Was also chairman of the committee of authors formed for this purpose.

9. Co-authored a book titled “Brain Twister: Delightful Mathematics” published by Voyager Publications in 2002.

10. Authored a book titled “Aladdin’s Real Lamp (science and Technology)” published by Shuchipotro in 2011.

11. Authored a book titled “Making Math Fun” in 2014 published by Jagriti Prokashoni.

EFFORTS OF PROF. M. SHAMSHER ALI FOR POPULARISING SCIENCE AND TECHNOLOGY

LIST OF SCIENCE PROGRAMMES PRESENTED ON BANGLADESH TELEVISION (INCOMPLETE)

1. Local innovations and appropriate technology
2. Solar energy
3. Standards
4. Why do I look like my daddy?
5. Control of insects
6. Expeditions into outer space
7. Wind and rain
8. Floods
9. The Expanding Universe
10. Cyclones
11. Analysis of trace elements
12. Storm surge
13. Electromagnetic methods for Bone Therapy
14. Human energy
15. Environmental pollution and remedies
16. Earthquakes
17. Origin and exploration of oil and gas
18. Use and development of oil and gas
19. The world of electronics
20. Some aspects of solar energy
21. Wild life in Bangladesh
22. Advent of computers
23. Green Energy
24. Microelectronics
25. Science in the growth of the child
26. Energy Crisis
27. Use of radio waves in studying bird movement
28. Defense of the human body
29. How does the Computer work?

30. Computers in Modern life
31. Production of electronic goods and spare parts
32. Maintenance of electronics gadgets
33. Use of radio signals in studying animal behavior
34. Long distance flight of birds
35. Nuclear techniques in Medicine
36. Use of ultrasonic in medical science
37. Man and the ecological balance of nature
38. Unconventional food
39. Mystery of life (Organization of the Cell)
40. Mystery of life (DNA as the unit of life)
41. Mystery of life (DNA as the Blue-Print of life)
42. Mystery of life (Errors of life at birth)
43. Appropriate Technology
44. Geo-stationary satellites
45. Food preservation (I)
46. Food preservation (II)
47. Tissue Culture
48. Laser (I)
49. Laser (II)
50. Water hyacinth - friend or foe?
51. House building research (structure)
52. House building research (materials)
53. Vitamins
54. Enzymes
55. Bangladesh in the world of Computer
56. New Technology in material science (metallic glass)
57. Biopsy and its instrumentation
58. Genetic Engineering (I)
59. Genetic Engineering (II)
60. Surface and Underground Water resources of Bangladesh
61. Forecasting of floods
62. Appropriate technology in agriculture (I)
63. Appropriate technology in agriculture (II)
64. Microprocessor
65. Algae as fertilizers
66. Germ - Plasma Bank
67. Science for the House-wives
68. Microcomputer
69. Electronics
70. Species of animals whose existence is endangered
71. Light and life
72. Weapons (I)
73. Weapons (II)
74. Weapons (III)
75. Mental Health (I)
76. Mental Health (II)
77. Quality Control of Industrial Products (I)
78. Quality Control of Industrial Products (II)
79. Tigers facing extinction

80. The science of Jute (agriculture)
81. The science of Jute (structure studies)
82. Jute technology (Conventional uses)
83. Jute technology (unconventional uses)
84. Use of Isotopes (I)
85. Use of Isotopes (II)
86. Herbal Medicine
87. CAT (Computerized Axial Tomography)
88. Electron Microscope
89. Nuclear Winter
90. Recombinant DNA
91. Ceramics
92. Bone Resonance
93. Nerve Conduction Velocity
94. The Year 2000 and Health for All
95. Magnetism and the Future
96. AIDS

LIST OF EDUCATIONAL TALKS ON RADIO (INCOMPLETE)

1. Transistor
2. Solar energy
3. Our Sun
4. Electromagnetic Waves
5. George Stevenson and the Steam Engine
6. Volta and the Electric battery
7. Gases
8. Solar energy from the sun
9. Ways and means of creating inters in physics education at all levels
10. Invention of aero-plane
11. A new horizon in the nuclear researches in Europe
12. Energy crisis and recent scientific researches
13. Discovery of a natural atomic reactor at Gabon
14. Meteors
15. Use of atomic energy in Bangladesh
16. Use of solar cooker for domestic purposes
17. Identification of country-problems for scientific and technological research
18. Sending man into space
19. Use of Bengali language in the teaching of science and technology
20. 3 more programmes on this topic
21. Biogas
22. Life at the bottom of the sea
23. International cholera prevention programme
24. Use of ultrasonic waves in medicine
25. Use of solar energy in meeting the energy crisis
26. Electronics Symposium in Bangladesh 1981
27. Magnetism in daily life
28. Expedition into outer space

29. Life on Mars
30. Atomic Energy and food preservation
31. Floods in Bangladesh
32. Works of Newton
33. Einstein
34. Properties of water
35. The discovery of rockets
36. Landing on the moon
37. Comments
38. Scientific achievements of Jagadish Chandra Bosu
39. Scientific achievements of Michael Faraday
40. The world beyond Uranium
41. Waterfalls
42. The influence of climate on plant life
43. Properties of air
44. The uses of satellites
45. Heart diseases in Bangladesh and their control and remedies
46. Radioisotopes
47. The kinetic theory of gases
48. Spreading of appropriate technology in Villages
49. Appropriate technology for women
50. Solar monopoly of the West
51. Use of solar energy in piloting planes
52. The international year of the disabled
53. Avoiding the energy crisis
54. March of Sweden towards a solar society
55. Energy from the Wind machines
56. Visit of Professor Abdus Salam to Dhaka
57. Microprocessor and unemployment
58. The green forms of energy
59. Use of plants in tapping solar energy
60. New and Renewable sources of energy
61. In search of pure air
62. The mysteries of Saturn
63. Saturn - The Lord of the Rings
64. The independent pursuit of science
65. Inventing the photocopying machine
66. The tale of Antarctica from the study of meteors
67. The role of beauty in Research
68. A scientific researcher and his society
69. Small is beautiful
70. Tributes to Madame Curie
71. On Unidentified flying objects
72. Scientific research and Bangladesh
73. Science and Society
74. The use of applied science for human welfare
75. Science and education
76. Microwave cooker
77. Nuclear research and its diverse applications
78. New technology for the motor car

79. Open University of England - a pointer for Bangladesh
80. International co-operation in the field of science and technology
81. On UNCSTD (United Nations Conference on Science and Technology for Development) held in Vienna in 1979
82. Outcome UNCSTD
83. World of anti-matter
84. Science Club movement of Bangladesh
85. Science education for the young
86. On observing a National Science Week every year
87. Space expedition and human welfare
88. On the role of NATIS (National Information Systems)
89. The salinity of sea-water - a design or an accident
90. Science and technology and the deprived two-thirds of humanity
91. Science and World problems (1)
92. Science and World problems (2)
93. Armaments and the conscience of scientists
94. The role of science and technology in the implementation of the NIEO (New International Economic Order)
95. The Pugwash movement and its success

SERVICES RENDERED FOR THE UNDERSTANDING OF ISLAM

1. Have been delivering talks on TV and Radio regularly for the last thirty years on different aspects of Islam and Sciences.

2. Worked as the Convener of the following two research projects of the Islamic Foundation, Bangladesh:
   (A) Science in Al-Quran
   (B) Muslim contributions to Science and Technology

(A) Has already been published by Islamic Foundation, (1990, 1995) Bangladesh under the title “Scientific Indications in the Holy Quran” and has made a wonderful impact in the Islamic World.

(B) Published by Islamic Foundation, Bangladesh (1996, 2013)

3. Worked as a member of the “Islamic Encyclopedia Project”, Islamic Foundation, Dhaka.

4. Acted as the Rapporteur-General of the Third World Conference on Muslim Education, held at Dhaka in 1981.

5. Was appointed Chairman of the session on “Teaching of Physical Sciences at the University level from the Islamic Point of View” at the Fourth World Conference on Muslim Education held at Jakarta, Indonesia in 1982.

6. As Chairman of the committee set up in 1981 by the Institute of Islamic Education and Research, Dhaka for framing an Integrated Islamic Model for Science Curriculum for

Elementary Schools of Bangladesh, prepared a detailed document on the subject. This was published from Cambridge, England by the Islamic Academy in its Journal on Muslim Education (Vol. 1, No.2, 1982).

7. Presented a key-note paper at a seminar on “Integration of Islamic Values and Concepts in Modern Education” held on the 21st Oct. 1982 at Dhaka under the auspices of the Islamic University of Bangladesh.

8. Presented a paper at a special session on “The Synthesis of Science and Religion” at the Eleventh International Conference on the Unity of the Sciences held at Philadelphia, USA during Nov. 25-28, 1982.

9. Authored a paper on “Science, Technology and Human Ethics” Published in the journal “The World and I” (February, 1986, p 274) a publication of the Washington Times Corporation.

10. Acted as a guide at the 3-week Teacher Education Programme for Muslim Teachers of the United States held at Dar-al-Salaam, Abiqui, New Mexico, USA during July 1-21, 1986. Delivered twelve lectures at this assembly of teachers on “How to teach science from the Islamic point of view”.

11. Attended the “Educational Conference” of the World Muslim League, preceding Hajj at Makkah, Saudi Arabia in 1986.

12. Participated as a member of the Bangladesh Delegation at the OIC Ministerial level meeting of the Standing Committee on Science and Technology held at Islamabad, Pakistan in November, 1986.

13. Worked as an active Council member of IIFTIHAR (International Islamic Forum for Science, Technology and Development in the Muslim World) chaired by H.E.B.J. Habibie, Former Vice-President and Acting President of Indonesia.

14. Published a CD on Science and Islam (in Bengali).

15. Participated as a member of the Bangladesh Delegation at the EU-OIC sponsored conference on Resolution of conflict following the September 11, 2001 incident.

16. Co-authored a book titled "Brain Twister" (Delightful Mathematics), published in Feb, 2002 (ISBN: 984-32-0319-4).

17. Acted as a resource person in the ISESCO workshop at Dhaka held during 26-30 April, 2003 on preparing “Guidance Counselors” for imparting informal Islamic education.

18. Presented a paper on “Truth - The Meeting of Al-Quran and Science” in the international conference on Science & Quran at Dubai, Arab Emirates held during 22-25 March 2004.

19. Presented a paper on “Islam - A Religion of Peace, progress and Harmony” in a regional seminar organized by the CNRS (Centre for National & Regional Studies) during 22-24 September 2005 at Dhaka.

20. Presented a paper on “Root Causes of Militancy-Religion or Otherwise” in the 55th Pugwash Conference on Science & World Affairs - 60 years after Hiroshima and Nagasaki at Hiroshima, Japan held during 20-27 July 2005.

21. Wrote an article on interfaith harmony titled “Dialogue for Interfaith Harmony: Towards Building a Peace and Solidarity of World Communities (Muslim Perspective)”.

22. Wrote an article titled “Teachings of Prophet Muhammad (SM) in the Light of Science.”

23. Wrote an article titled “Understanding the Developments in the Theological Foundations of Violence in an Islamic Context.”

24. Wrote an article titled “Contemporary Implications of Mavlana Rumi’s Thoughts”.

25. Wrote an article titled “Al Biruni and the Spirit of Learning”.

Prof. Dr. M. Shamsher Ali