

Curriculum Vitae

Name: Dr. Neem Chandra Bhowmik

Date of Birth 31 March 1949

Position: Professor and Chairman
Dept. of Applied Physics, Electronics and Communication Engineering
University of Dhaka, Bangladesh
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Renewable Energy Research Centre
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Organizational Position: General Secretary
Bangladesh Hindu Bouddha Christian Oikya Parishad

General Secretary
Bangladesh Bharat Sampriti Parishad

Member Secretary
Bangladesh Muktijodha Kalyan Foundation

Educational Qualification: M.Sc, Ph.D (Solar Energy)

Research Experiences: Research on – Solar thermal systems, selective
Surface coating and PV systems

Supervising – M.Sc, M.Phil and Ph.D students on
Solar selective coating, Solar Thermal System
and PV systems.

Classes taken

(a) B.Sc. (Honours) - Electyricity and Magnetism
Applied Heat and Thermodynamics;
Vacuum technique, Refrigeration & Air conditioning

(b) M.Sc. - Renewable Energy Technology
(Theoretical class)
Supervision of Thesis on Solar Energy Technology

(c) M. Phil. - Renewable Energy Technology.

Publications: Total no. of important publication – 38
Paper published in important journal like-
Solar Energy, Renewable Energy, Energy Conversion and Management,
International Journal of Energy Research, Applied Optics, etc.

Others:

Awarded UNSECO Young Scientist award – 1988 Participated
World Renewable Energy Congress and worked in
India, UK, Germany, Italy and Thailand

List of Publications

A. The papers published in journals:

1. Calculation of tubular absorber heat loss factor, Solar Energy, 35, 219-225, 1985.
2. Operating temperatures of linear solar concentrators for optimum power output, Energy conversion and Management 25, 175-177, 1985.
3. Solar limb darkening and ray trace evaluation of solar concentrators, Applied Optics 24, 196-298, 1985.
4. Thermal performance of linear solar concentrators with tubular absorber, Energy Conversion and Management, 25, 419-421, 1985.
5. Ray trace evaluation of solar concentrators, Including limb darkening effects, Solar Energy, 36, 293-296, 1986.
6. Heat loss factor of evacuated tubular Receivers, Energy Conversion and Management, 26, 313-316, 1986.
7. Solar Collector operating temperatures for maximum coefficient of performance of an absorption refrigeration system, Energy Conversion and Management, 27, 285-287, 1987.
8. Optical flux mapping of seasonally adjusted linear solar concentrator using a triangular absorber, Energy Conversion and Management, 28, 35- 38, 1988.
9. Performance of an intermittently tracked cylindrical parabolic trough, Energy Conversion and Management, 28, 39-46, 1988.
10. Comparison of operating temperatures of linear solar concentrators with evacuated and non-evacuated tubular receiver for maximum power output, Dhaka University Studies, B. 36, 1-6, 1988.
11. Performance studies of a photovoltaic module and utilization of its energy for lighting, Dhaka University Studies, B. 37, (2), 117-121, 1989.
12. Performance studies of a seasonally adjusted linear solar concentrator using a selective surface coated absorber, Dhaka University Studies, B. 37, (2), 165-172, 1989.
13. Estimation of hemispherical total emittance of tubular absorber from heat loss tests, International Journal of Energy Research, 14, 1990.
14. Design and performance studies of an intermittently tracked cylindrical parabolic concentrator, Dhaka University Studies, 42, (1), 161-166, 1994.
15. Solar Hot water systems for Hospital, In Bangladesh, Renewable Energy, Vol. 5, part-III, Pergamon 1994.
16. Thermosyphon solar hot water system, Dhaka University Studies.
17. Forced flow solar hot water system, Dhaka University Studies.
18. To study the performance of Molybdenum black selective surface coating for optimized thickness, Md. Shafiuzzaman Khan Khadem, Zahid Hassan Mahmood, Neem Chandra Bhowmik, Md. Anwar Alam Khan, Jalalur Rahman, Dhaka. Univ.J. Sci., 2001, v- 49(2), p: 1-6.
19. An improved selective surface for photo thermal device, A. A. Khan, Md. Shafiuzzaman Khan Khadem, N.C. Bhowmik, Zahid Hasan Mahmood, J. Rahman, Dhaka Univ. J. Sci., 2003, v- 51(1), p:15 – 18.
20. Experimental studies on multi-layer CrO_3 black selective surface coating on different substrate, Md Anwar Alam Khan, Zahid Hasan Mahmood, Md Shafiuzzaman Khan Khadem, M A K Azad, N C Bhowmik and J Rahman, Dhaka Univ. J. Sci., 2003, v-51(2), p: 301-304.

21. Modified method of Cu₂S coating on activated Cu substrate, A. H. Siddique, M. A. K. Azad, Md. Shafiuzzaman Khan Khadem, N.C. Bhowmik, Dhaka Univ. J. Sci.,2004, v-52(1), p:1-4.

B. The papers presented in conferences and published in proceedings:

22. Electrical effects of Non-Uniform Temperature distribution in Current carrying conductors, Nuclear physics and solid state physics, physics symposium (India, 1973)
23. Measurement of susceptibility of some gamma irradiated organic components at room temperature, Boise symposium, 1974(Dhaka).
24. Heat Loss factor of tabular absorber, National Solar Energy conversion, 1984 (Bhopal, India). Published in proceedings.
25. Geometrical-optical performance and energy collection parabolic through, International conference on physics & Energy for Development, Dhaka (January 26-29, 1985).Published in proceedings.
26. Performance evaluation of linear Solar concentrators With tubular absorber,10th Annual Bangladesh Science Conference (22-27 March,1985
27. Heat Loss factor of E vacated Tubular Receiver, International conference on Physics & energy for Development, Dhaka (January, 22- 27,1985) Published in proceedings.
28. Estimation of global emittance of tubular absorber from heat loss tests Fourth Asian School on Solar Energy Harnessing, Solar Components and systems testing, AIT, Bangkok (12-20 Dec. 1985)
29. Operating temperatures of linear solar concentrator for optimum coefficient of performance of an absorption refrigeration system, 11th Annual Bangladesh Science Conference (2-5 March, 1986).
30. Optimizatiion of thermal condition of linear solar concentrators with tubular absorber. 11th Annual Bangladesh Science Conference (2- 5 March,1986).
31. Comparison of Optimum Operating temperatures of linear solar concentrators with evacuated and non-evacuated tubular receiver for maximum power output. Workshop on Mathematical Modeling in Natural and Social Science, Dhaka (14-15 June, 1986).
32. Comparative studies of performances of seasonally adjusted solar concentrators with triangular and tubular absorbers, National Solar convention, 1986 (Madurai, India) Published in proceeding.
33. Feasibility studies of linear solar concentrators on Bangladesh, 12th Annual Bangladesh Science Conference (10-14 January, 1987).
34. Performance studies of a cylindrical parabolic trough with a tubular absorber, 12th Annual Bangladesh Science conference (10-14 January, 1987).
35. Performance of a seasonally adjusted solar concentrator with triangular absorber, Workshop on Materials Science and physics of Non- Conventional Energy Sources, I.C.T.P.(Italy), (26 August-18 September, 1987, Published in proceedings).
36. Utilization of photovoltaic Module for Consumer Applications 13th Annual Bangladesh Science Conference (29-31 May, 1988).
37. Performance Studies of an intermittently tracked cyclindricai parabolic trough. Solar Energy Society of India, Integrated Renewable Energy for Rural Development, Jadavpur (1990).
Published in proceedings.
38. A study of solar radiation in Dhaka, Bangladesh, Solar Energy Society of India, International Renewable Energy for Rural Development, Jadavpur (1990), Published in proceeding.

C. Paper communicated for publication:

1. AlBr₂ – A new Selective Surface Coating: Solar Energy (2005)

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