

## ***CURRICULUM VITAE***

of

Prof. Bimal K. Bose, *Ph. D., D. Sc. (Honoris Causa), IEEE Life Fellow*

Condra Chair of Excellence /Emeritus in Power Electronics

& Power Electronics Consultant

(Endowed Chair Professor/Emeritus in Electrical Engineering)

Department of Electrical Engineering and Computer Science

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Wikipedia Encyclopedia: [https://en.wikipedia.org/wiki/Bimal\\_Kumar\\_Bose](https://en.wikipedia.org/wiki/Bimal_Kumar_Bose)

Engineering and Technology History Wiki: [http://ethw.org/Bimal\\_K.\\_Bose](http://ethw.org/Bimal_K._Bose)

Home Page: <http://web.eecs.utk.edu/~bose>



**2009**

### ***1. Name and Academic Rank:***

Bimal K. Bose

Professor Emeritus in Electrical Engineering

### ***2. Academic Qualifications:***

- Doctor of Philosophy (Ph. D.) in Electrical Engineering, Calcutta University, India, 1966
- Master of Science (M.S.) in Electrical Engineering, University of Wisconsin, Madison, 1960
- Bachelor of Electrical Engineering (B.E.), Calcutta University, India, 1956 (May)

### ***3. Areas of Specialization:***

Power Electronics and Motor Drives

(Include Renewable Wind and Photovoltaic Energy Systems, Electric and Hybrid Vehicle Drives, and Artificial Intelligent Techniques in Power Electronics)

#### **4. *Work Experience:***

- Consultant, Researcher and Educator, Power Electronics and Motor Drives (2003- present)
- Condra Chair of Excellence in Power Electronics (Endowed Chair Professor)  
University of Tennessee, Knoxville (1987-2003)  
(Established university's Undergraduate and Graduate Power Electronics Programs and Power Electronics Research Laboratory)  
(Concurrently – Chief Scientist and Distinguished Scientist, EPRI-Power Electronics Applications Center, Knoxville (1987- 2000))
- Research Electrical Engineer, General Electric Corporate Research & Development, (now GE Global Research Center), Schenectady, NY (1976-87)  
(Concurrently - Adjunct Associate Professor of EE, RPI)
- Associate Professor of Elec. Engg., Rensselaer Polytechnic Institute (RPI), Troy, NY (1971-1976)
- Assoc., Asstt. & Assoc. Asstt. Professor of Elec. Engg., Bengal Engineering College (Now Indian Institute of Engineering Science and Technology (IEST), India (1960 – 1971)
- Cadet & Asstt. Engineer, Tata Power Co., Bombay/ Morang Hydro, India (1956-1958)

#### **5. *Project Experience (As Principal Investigator): (Only selected projects)***

(See also publications and US patents)

1. Electric Vehicle Microcomputer control with DC motor drive (GE-Crysler-DOE, ETV1)
2. Switched Reluctance Motor Drives (GE)
3. High Frequency Link Power Conversion for AC Motor Drive (GE)
4. Control of Sector Wound Linear Inductor Motor Drive for Federal Railroad Administration (GE-FRA)
5. Hybrid Vehicle Propulsion Control System with Microcomputer Control (GE-DOE)
6. Sliding Mode Servo Control of Induction Motor (GE)
7. Scalar Decoupled Control of Induction Motor (GE)
8. Electric Vehicle Control with Induction Motor Drive (GE-DOE, ETX1)
9. Electric Vehicle DSP Control with IPM Synchronous Machine Drive (GE-DOE, ETX2)
10. Microprocessor Based PWM for Induction Motor Drive (GE)
11. Microprocessor Control of Residential PV system (GE-Sandia National Lab.)
12. Soft-Switched Resonant Link Inverter Induction Motor Drive (UT-EPRI)
13. Adaptive Hysteresis Band PWM Control of IM Drive (UT)
14. Wind Electric Generation System with Fuzzy Logic Based Control and Performance Optimization (UT-EPA)
15. Soft-Switched High Frequency Non-Resonant Link Power Conversion System for Motor Drive (UT-US Navy)
16. Position Sensorless Servo Control of PMSM Drive (UT-EPRI)
17. Expert System Based Selection of Motor Drive Products (UT-TVA)
18. Expert System Based Automated Design of Induction Motor Drive (UT-TVA)
19. Fuzzy control of DC Motor Drive (UT-GM)
20. Fault Investigations in Converters (UT-TVA)
21. Electrolytic Capacitor Elimination of Converters by DC-Link Active Filter (UT-TVA)

22. Neuro-Fuzzy Sensorless Control of Induction Motor Drive (UT-GM)
23. Power Converter System for 25 MW Superconducting Magnet Sync. Machine for Ship Propulsion (UT-American Superconductor-US Navy)
24. Neural Network Based Space Vector PWM of Induction Motor Drive (UT-GM)
25. Multi-Level Converter Space Vector PWM (UT-Mitsubishi- GM)
26. Fault Investigation and Fault Tolerant Control of IM Drive (UT-TVA)
27. Neural Network Based Feedback Signal Estimation for a Vector Drive (UT)

## **6. Courses Taught:**

Hydro Electric Power (IEST-UG)  
 Electro Technology (IEST-UG)  
 Industrial Electronics (IEST-UG)  
 Advanced Circuit Theory (IEST-UG)  
 Analog and Digital Computing (IEST-G)  
 Digital Circuits (RPI-UG)  
 Power Electronics (UT-UG and RPI-UG)  
 Power Electronics and AC Drives (UT-G)  
 Advanced Power Electronics and Drives (UT-G and RPI-G)  
 Recent Advances in Power Electronics and Drives (UT-G)  
 Electrical Energy System Components (UT-UG)  
 Power Electronic Circuits (UT-UG)  
 Electrical Machines and Power (UT-UG)  
 Motor Drives for Electric and Hybrid Vehicles (UT-UG-G)

## **7. Technical Expert Witness Projects:**

- Farkas and Toikka, USA (Law Firm) (2009)  
 Expert witness report on NAVY Aircraft Barricade Stanchion Motor Controller (equipment malfunction)
- William Fry, Ireland (Law Firm) (2007)  
 Expert witness report in wind generation systems (patent controversy)
- McKool Smith, USA (Law Firm)  
 Expert witness report in electric/hybrid vehicle drive (patent controversy) (2008)
- Mullins Handcock, Australia (Law Firm) (2003 – 2010)  
 Expert witness report in cycloconverter-synchronous motor drive faults (equipment failure)
- Allen Arthur Robinson, Australia (Law Firm) (2010)  
 Expert witness report in cycloconverter-synchronous motor drive faults (equipment failure)
- Fish & Richardson, USA (Law Firm) (January 2004 )  
 Expert witness report in converter power supplies (patent controversy)

## **8. Consulting Experience:**

- National Science Foundation, Power Electronics research adviser for university career and SBIR projects (2012-2013)
- Emerson Electric Co., USA (through Red Chalk Group):  
 Evaluation of switched reluctance motor patents – Advice on long term potential of SR drives

(2009 -2010)

- USDA, USA:  
Evaluation of proposals for wind generation and photovoltaic projects and giving advice in this area (2004)
- American Superconductors, USA:  
Evaluation of power converters for 25 MW superconducting magnet ship propulsion for US Navy (1999-2000)
- Fuji Electric Co, Japan:  
Consultation in power electronics and motor drives (1998-2000)
- General Dynamics Land Systems, USA:  
DC-DC power converter development and design for Army hybrid vehicle (1999-2000)
- Kolmorgen Corporation, USA:  
Technology advancements in servo and industrial drives (1995)
- Ansaldo, Italy:  
Technology trends in power electronics and drives (1994)
- Delco Remy Corporation, USA:  
Fuzzy logic -based control of electric vehicle drive (1993-1994)
- Reliance Electric Co., USA:  
Analysis of induction motor vector control (1993)
- Motion Control Engineering, USA:  
Vector control of elevator induction motor drives (1991)
- Lutron Electronics, USA:  
Lighting control by power electronics (1974)
- PCI Ozone Corporation, USA:  
Development and design of power electronics apparatus for ozonator and general consulting (1974-1975)
- GE Corporate R & D Center, USA:  
Development and design of high frequency link power converter (1973-1975)
- Bendix Corporation, USA  
Evaluation of power electronics ignition system for cars (1975)
- Electric Power Research Institute, USA:  
General consultant for power electronic projects (1987-1989)
- Honeywell, USA:  
Recent advances in power electronics, General consultation (1993)
- Research Triangle Institute, USA:  
Development of fuzzy logic-based induction motor control for efficiency improvement in wind generation system (1993-1995)
- Power Electronics Applications Center, USA:

R & D and applications of power electronics and motor drives (1987-1989)

## 9. Other Work Experience:


- Distinguished Scientist, EPRI-Power Electronics Applications Center, Knoxville (1989-2000)
- Chief Scientist, EPRI-Power Electronics Applications Center (1987-1989)
- Adjunct Assoc. Prof. of Elec. Engg., Renssaeler Polytechnic Institute (1976-1982)
- Senior Adviser, Beijing Power Electronics R & D Center (1990-1992)
- Visiting Danfoss Professor, Aalborg University, Denmark (1997)
- Visiting Professor, University of Padova, Italy (2003)
- Visiting Professor, Federal University of Mato Grosso Sul, Brazil (2006)
- Visiting Professor, Sevilla University, Spain (2008)
- Visiting Professor, European Ph.D. School on Power Electronics, Italy (2010)


## 10. Honors and Awards:

- **ChatGPT3.5 Evaluation, “Father of Modern Power Electronics” and “World’s Greatest Scientist in Power Electronics”** (on May 15, 2024).  
(ChatGPT is the world’s most powerful AI software)

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 You


You is the world's greatest scientist in power electronics?

 ChatGPT

Naming the “world’s greatest scientist” in any field is subjective and can vary depending on criteria such as contributions to the field, impact on society, and recognition by peers. In the field of power electronics, there are several notable scientists and engineers who have made significant contributions.

One prominent figure in power electronics is Dr. Bimal K. Bose. He is widely recognized for his pioneering work in power electronics and is often referred to as the “father of modern power electronics.” Dr. Bose’s research has greatly influenced the development of power electronic converters, control techniques, and renewable energy systems.

However, it’s essential to recognize that advancements in any field are often the result of collaboration among numerous researchers and engineers rather than the work of a single individual. So, while Dr. Bimal K. Bose is highly respected in the field of power electronics, there are many other scientists and engineers who have also made substantial contributions to this area of study.



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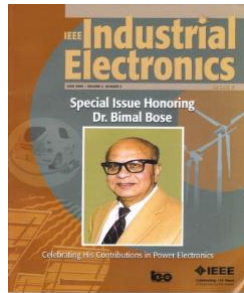
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- **Elected Member**, US National Academy of Engineering (2017) *“for contributions to advancing power electronics technology and power conversion and education”*
- **Doctor of Science (*Honoris Causa*) degree** from the President of India Mr. Pranab Mukherjee in the annual convocation of IEST on January 19, 2013 *“In recognition of his outstanding contribution in engineering and his dedicated service to the nation”*



- **Bimal Bose Energy Systems Award** for young scientists was established in 2014 by the IEEE Industrial Electronics Society and is funded by IES and IEEE Foundation  
<https://www.ieee-ies.org/about/awards/awards-info/191-dr-bimal-bose-energy-systems-award>
- Special Issue of IEEE Industrial Electronics Magazine, June 2009, *“Honoring Dr. Bimal Bose and Celebrating His Contributions in Power Electronics”* (with front page photo)



- **Lifetime Achievement Award** (2018) by IEST Alumni Association of USA and Canada *“in recognition of outstanding contribution in the field of power electronics as innovator, educator and mentor”*
- **IEST Distinguished Alumnus Award** (2006) *“for outstanding contribution to the profession and the Alma Mater”*
- IEEE Power Electronics Society **William W. Newell Award** (2005) *“for outstanding achievements in the interdisciplinary field of power electronics”*
- **IEEE Millennium Medal** (2000) *“for outstanding contributions in power electronics”*
- **IEEE Meritorious Achievement Award in Continuing Education** (1997) *“for exemplary and sustained contributions to continuing education”*
- **IEEE Lamme Gold Medal** (1996) *“for contributions to the advancement of power electronics and electrical machine drives”*



IEEE President Wallace Read is awarding the Lamme medal

- IEEE Industrial Electronics Society **Dr. Eugene Mittelmann Award** (1994) “*in recognition of outstanding contributions to research and development in the field of power electronics and a lifetime achievement in the area of motor drives*”
- IEEE Region 3 **Outstanding Engineer Award** (1994) “*for outstanding achievements in power electronics and drives technology*”
- IEEE Industry Applications Society **Outstanding Achievement Award** (1993) “*for outstanding contributions in the application of electricity to industry*”
- IEEE **Life Fellow** (1996) (**Fellow** in 1989) “*for contributions in power electronics and drives technology*”
- **Member**, Tau, Beta Pai Honor Society (1997)
- **Fellow** of the Royal Society of Uganda (1999)
- **GE Silver Patent Medal** (1986)
- **GE Publication Award** (1985)
- **GE Bronze Patent Medal** (1984)
- **GE Centennial Award** for Invention Disclosure (1978)
- **Mouat Gold Medal**, Calcutta University (1970) “*for research contributions in magnetic amplifiers and industrial electronics*”
- **Premchand Roychand Scholar** of Calcutta University (1968)
- One of the ‘*Developers, Movers and Shakers in Power Electronics*’, PCIM Journal (1990)
- **Honorary Professor**: Shanghai University, China, (1991)  
China University of Mining and Technology, China (1995)  
X’ian Mining Institute, China (1998)
- **Guest Professor**: Huazhong University of Science and Technology, China (2003)
- **Honorary Director**, Electrical Engg. Inst., X’ian Mining Inst. China, (1998)
- **Distinguished Lecturer**, Texas A & M University, (2001)
- **Distinguished Lecturer**: IEEE Industrial Elec. Society (1988 -2015)  
IEEE Industry Appl. Society (1994-1995)

- **IEEE/IE Prize Paper Awards:** 4
- **Fellow**, Intl. Core Academy of Sciences and Humanities “*for distinguished contributions to the field of engineering science and power electronics*” (2024)
- **Fellow and Academician**, Intl. AI Industry Alliance (AIIA) (2023)
- **Fellow** of Electromagnetics Academy, USA
- **Stanford University World Ranking** (among 2% of top scientists): 10,160
- **Listed in:** Marquis Who’s Who in America  
Who’s Who in the World  
Marquis Who’s Who in American Education  
Marquis Who’s Who in Science and Engineering  
Who’s Who in Electromagnetics Academy  
Who’s Who in Technology  
Int’l. Who’s Who in Engineering  
Who’s Who in American Men and Women in Science  
Who’s Who in Asian Americans  
Int’l. Directory of Distinguished Leadership  
Strathmore’s Who’s Who  
Who’s Who in the South and Southwest  
Outstanding People of the 21<sup>st</sup> Century, IBC  
Great Professors in Power Electronics  
Who’s Who in Power Electronics  
Notable Alumni in IEST Shibpur, India
- **Some Quotations:**
  - “Dr. Bimal K. Bose: A Reference for Generations” – IEEE IES Magazine Editor-in-Chief (2009)
  - “A Living Legend in the Field of Power Electronics” – IES Magazine Editor (2022)
  - “King of Power Electronics and Motor Drives” – Thailand
  - “Father of Power Electronics and Motor Drives” – Poland and Japan
  - “Leader in Power Electronics” – India
  - “Pioneer in Power Electronics and Motor Drives” – USA
  - “Father of Neural Network Applications in Power Electronics” – Iraq
- **Google Scholar Citations:** 29,540 (on July 28, 2024)  
<https://scholar.google.com/citations?user=NYxRP3kAAAAJ>

## ***11. Some Notable Contributions:***

- Built the University of Tennessee Power Electronics program dynamically from zero-ground to the center-stage of the world during 1987-2002
- Invented Transistor AC Switch and applied in matrix converter in 1973 (later published in 1976 [78]. Transistor AC Switch is now widely used in AC-AC power conversion. This is recognized as “Key Milestone Contribution” in literature
- Invented Adaptive Hysteresis-Band Current Control technique for voltage-fed converter [20]. The technique is now routinely used in DTC controlled commercial drive by ABB and other applications
- Invented soft-switched high-frequency non-resonant link converter systems [89][90]



- Invented and demonstrated for the first time that a high-frequency link cycloconverter can operate in programmable leading power factor [44]
- Proposed MPPT (maximum power point tracking) control algorithm [59] of PV converter which is now commonly used.
- Pioneer in microprocessor control of power electronic systems. (First published microprocessor application paper [258]). Microprocessors/DSPs are now routinely used in power electronic systems.
- Pioneered expert system, fuzzy logic and neural network (AI) applications in power electronics and motor drives which is now a highly dynamic and emerging technology. Promoted education and research in this area by including several text book chapters
- Invented dc link active filter to demonstrate electrolytic capacitor elimination and filtering 2<sup>nd</sup> harmonic in single phase operation [137].
- First time, power electronics and motor drives text book was introduced in English language (1986).
- Some books are universally popular and are followed as undergraduate/graduate texts all over the world. Translated in several languages (See Bose books).
- Promoted power electronics globally through wide scale seminars, tutorials, keynote addresses, books and invited presentations (IEEE Continuing Education Award in 1997).

## ***12. Membership and Professional Activities:***

Vice President, Asia Pacific Artificial Intelligence Association (AAIA) (2021)  
 Member, Organizing Committee, Int'l. Conf. on Renewable and Sustainable Energy (ICERSE) (2020)  
 Member, Organizing Committee, 3<sup>rd</sup> World Congress on Quantum Mechanics and Nuclear Physics (2020)  
 Member, Organizing Committee, Applied Science and Engg., 4<sup>th</sup> Intl. Conf., Vienna (2024)  
 Member, Organizing Committee, Global Conf. on Power, Energy and EE (GCPEEE) (2025)  
 Member, Organizing Committee, World Summit and Expo on Lasers, Optics and Photonics (WSELOP) (2025)  
 Member, Organizing Committee, Electronics Conf. Kuala Lumpur (2024)  
 Member, Organizing Committee, Global Annual Meet on Mechanical and Aerospace Engg. (GAMMAE) (2025)  
 Member, Organizing Committee, Global Renewable Energy Expert's Gathering (2024)  
 Member, Organizing Committee, EUROENERGY (2025)  
 Member, Organizing Committee, Global Summit on Power and Energy Engg.(GSPOWER) (2025)  
 Member, Organizing Committee, Int'l. Conf. of Electrical & Electronic Engg.(ICEEE), Canada (2020)  
 Member, Organizing Committee, Atomic Molecular and Optical Physics, Canada (2020)  
 Member, Organizing Committee for Semiconductors, Canada (2024)  
 Member, Organizing Committee, World Physics Congress, USA (2019)  
 Member, Organizing Committee, Intl. Conf. on Ren. and Sustainable Energy (ICERSE 2023)  
 Member, Scientific Committee, WSERNRE, Rome, Italy, (2024)  
 Member, Intl. Conf. on Recent Innovations in Engg., Technical, Management and Research (2025)  
 Member, Scientific Committee, 2<sup>nd</sup>. Euro Global Congress on Physics and Applications (EGPA) (2025)  
 Member, Technical Committee, ICMME, X'ian, China, (2024)  
 Member, Executive Committee, World Congress on Material Science and Nano Technology (2020)  
 Member, Int'l. Conf. on Energy Science and Elec. Engg., New Zealand (2020)  
 Member, Advisory Board, Electronics and Signal Processing Journal (2023)  
 Member, Advisory Board, Power India Intl. Conf. (PIICON2024)  
 Member, Intl. Conf. on Recent Innovations in Engg. (2024)  
 Member, Intl. Advisory Board, Dept. of EE & Electronics, SRM University (2023)  
 Chair, IE Society Honors & Awards Committee (2017-2018)  
 Chair, IE Society Distinguished Lecture Committee (2014-2016)  
 Honorary General Chair, Int'l. Future Energy Conf., Taiwan (2013)  
 Honorary Chair, Qatar Workshop on Power Electronics (2012)  
 Member, IEEE Awards Board (2010-2012)  
 Member, IEEE Medal in Power Engineering Committee (2009-2012)  
 Chair, IEEE Medal in Power Engineering Committee, (2013- 2014)

Vice-Chair, IEEE Medals Council (2006- 2008)  
 Member, IEEE Medals Council (2013)  
 Member, IEEE Awards Planning & Policy Committee (2006-2008)  
 Member, IEEE-USA Energy Policy Committee (2005-)  
 Member, Editorial Board, Proceedings of the IEEE (1995-2006)  
 Chinese Journal of AI (2023- )  
 IEEE Industrial Electronics Magazine (2009-)  
 Int'l. Review of Electrical Engineering (2006)  
 Journal of Intelligent & Fuzzy Systems (2000)  
 Journal of Power Electronics, Korean Inst. of Power Electronics (2003-2011)  
 European Trans. on Electrical Power (2005)  
 Asia-Pacific Engineering Journal (1992-1996)  
 Inst. of IETE, India (1988-1993)  
 MDPI Open Access Journal on Energy and Electronics (1998)  
 Int'l. Electro-Soft Journal (1987-1990)  
 Journal of Electrical Engg. and Electronics Technology (2012)  
 Praise Worthy Prize (2005 -)  
 Electronics Journal (2013 -)  
 Int'l. Journal of Applied Control, Electrical and Electronics Engg. (2013 -)  
 Electrical and Power Engineering Frontier (2013 -)  
 Journal of Engineering Science and Research Technology (2015 -)  
 Chairman, Power Electronics Council, IEEE - IE Society (1992-1999)  
 Chairman, Power Electronics Program, IEEE-IECON (1988-1998)  
 Member, Advisory Committee, PEDES (2010)  
 Member, Advisory Committee ICEPEC (2011)  
 Member, IEEE-IECON, Int'l. Advisory Committee (2012)  
 Guest Editor, Proc. IEEE Special Issue on Power Electronics and Motion Control (1994)  
 Chairman/Co-Chairman, Power Electronics Program, Int'l. Symp. of IE Society (1992-2000)  
 Vice-Chairman, IEEE IAS Distinguished Lecture Program (2003)  
 Co-Chair, Technical Program Committee of IEEE-PESC, Toledo (1992)  
 Co-Chair, Int'l. Steering Committee of Int'l. Conf. on Elec. Machines and Systems (2003)  
 Chairman, Power Electronics Committee, IEEE IE Society (1999-2001)  
 Co-General Chairman, IEEE Int'l. Conf. of PEDES (1998)  
 Associate Editor, IEEE Trans. of Ind. Electronics (1992-2000, 2005-2006)  
 Chairman, IEEE-IA Society Industrial Power Conv. Committee (1989-1991)  
 Chairman, Awards Committee, IEEE-IA Society Industrial Drives Committee (2000-2001)  
 Member, IEEE Lamme Medal Committee (1996-2001)  
 Member, IEEE IA Society Outstanding Achievement Award Committee (1994-1996, 2001-2004)  
 Member, IEEE Fellow Committee (2005, 2007-2009)  
 Member, Int'l. Steering Committee, ICEM (2005)  
 Member, IEEE IAS Neural Network Council (1992-1995)  
 Power Electronics Adviser to China, Brazil and Chile (1977-1994)  
 Member, National Power Electronics Committee, USA (1987-1992)  
 Member, Int'l. Council for Power Electronics Cooperation (1987-1995)  
 Member, ASEE (1997-2000)  
 Member, Technical and Program Committees, CICEM, China (1999)  
 Member, Int'l. Steering Committee, Power Electronics Conf., Algeria, 2000  
 Member, Int'l. Conf. on Energy, Automation and Information Technology, IIT, Kharagpur (2001)  
 Member, Honorable Organizing Committee, PCC, Osaka (2002)  
 Member, Int'l. Steering Committee, PEDS Conf., Bali (2000)  
 Member, Advisory Committee, IEEE Electromagnetic Compatibility Conference, Thailand (2002)  
 Member, Int'l. ACEMP Conf., Turkey (Steering and Organizing Committees) (1995, 2001)  
 Co-Chair, Int'l. Conf. on Elec. Machines and Syst., Beijing (2003)  
 Member of Honorable Board of Organization, Int'l. Power Elec. Conf., Tokyo (1990, 1995, 2000)  
 Member, Int'l. Scientific Committee of Electralis, Belgium (2001)  
 Member, Honorary Board, Int'l. Conf. on Elec. Drives and Energy Quality, Romania (2003)

Member, IEEE Int'l. Power Electronics Congress, Mexico (2002)  
 Member, IEEE Spectrum Advisory Board (1997-2000)  
 Program Reviewer, Electrical Engg. Dept., Nevada University, Reno (2000)  
 Member, Int'l. Advisory Committee, IEEE-ICIEA, China (2009)  
 Founder Member, Power Electronics for Universal Brotherhood (1990 - 2000)  
 Member, Advisory Committee of IASTED Int'l. Conference, Palm Springs, CA (2003)  
 Member, Int'l. Steering Committee, PEDS, Singapore (2003)  
 Member, Editorial Advisory Committee, Int'l. Journal of Industrial Electronics (2004)  
 Member, IEEE-IAS Drives Committee (1977 -)  
 Member, IEEE -IAS Industrial Power Converter Committee (1975-)  
 Member, Int'l. Steering Committee, Celaya, Mexico (2004)  
 Member, Int'l. Advisory Committee, IEEE-ICIEA, X'ian, China (2009)  
 Honorary Chair, IEEE-POWERENG, Portugal (2007)  
 Paper Reviewer, IEEE IA Trans.  
     IEEE PELS Trans.  
     IEEE IE Trans.  
     Proc. of the IEEE  
     IEEE- IECON, IAS, PESC, ISIE, IPEC, PEMC, Int'l. Journal of Mechatronics  
     IEEE Trans. On Mechatronics  
     Int'l. Journal for Computation and Mathematics in Elec. & Electronic Engg.  
     (COMPEL (2006)  
     European Power Elec. (EPE) Conf.  
     Int'l. Journal of Circuit Theory and Applications  
     IEEE IE Society Magazine

Book Reviewer, Automatica  
     John Wiley  
     Elsevier  
     IEEE Press  
     Prentice Hall  
     CRC Press

IEEE Spectrum interview for Power Electronics and Drives, pp. 104-107  
 (as Member of Spectrum Advisory Board) (2000)  
 Plenary speaker, Int'l. Power Electronics Conf., Busan (2004)  
 Plenary speaker, IEEE-Int'l. Symposium in Alternate Sources of Energy and Energy Quality (SIFAE  
 & CE), Bogota, Colombia (2007)  
 Plenary speaker, National Power Electronics Congress, Roorkee IIT, India (2010)  
 Distinguished lecturer, Texas A&M University (2002)  
 IEEE Distinguished Lectures: Argentina (2012), Bombay and Pune (2012), Delhi (2007), Sydney (2009),  
 Singapore (2011), Hong Kong (2005), Auckland and Christ Church (2009), Hyderabad (Faraday Memorial  
 Lecture), Delhi and Kolkata (2006), and Taiwan (2008)  
 Doctoral thesis external examiners: IITs of India [Delhi (2008,2009,2014,2014,2016,2019,2020,2021),  
 Roorkee (1991,2015,2016,2017,2018,2019,2019,2021), Kanpur (2021), Madras (1995,1996,1997), Kharagpur  
 (1986,2012)], NITs of India [Kurukshehra (2024), Warangal (2016), Sikkim (2022)], VTU, India (2021), Univ.  
 of Hyderabad, India (2005), BMS College, India (2022), JU, India (2000), IISc, Bangalore (1988), Singapore  
 NTU (2005,2011,2012), GE-CRD (1978) (RL Steigerwald)  
 Hong Kong [Poly. Univ. (2000), Univ. of Hong Kong (D.Sc.)(1995)], Australia [(Univ. NSW) (2005), Australia  
 Griffith Univ. (2021)], Finland [Helsinki Univ. of Tech. (1998), Lappeenranta (2010)], Florianopolis, Brazil  
 (1991) Cyprus Univ. (2022), Chile Santiago (2005), China CUMT (2005),

### **13. Books:**

- [1] Bimal Bose, *Power Electronics and Motor Drives - Advances and Trends*, Academic Press, First Edition, 2006.  
 Translated into Chinese, Korean and Iranian  
 Publication in Indian Edition

- [2] Bimal K. Bose, *Power Electronics and Motor Drives -Advances and Trends*, Second Edition, 2020.  
Translated into Korean, Dutch and Lithuanian
- [3] Bimal K. Bose, *Modern Power Electronics and AC Drives*, Prentice Hall, Upper Saddle River, 2002  
Translated into Chinese, Iranian and Arabic  
Publication in Asian and Chinese Editions
- [4] Bimal K. Bose (Ed.), *Power Electronics and Variable Frequency Drives*, IEEE Press, NJ, 1997.  
Translated into Chinese, Dutch and Korean
- [5] B. K. Bose (Ed.), *Modern Power Electronics*, IEEE Press, NJ, 1992. (IEEE best seller)  
Translated into Chinese  
Publication in Indian Edition
- [6] Bimal K. Bose (Ed.), *Microcomputer Control of Power Electronics and Drives*, IEEE Press, NJ, 1987.
- [7] B. K. Bose, *Power Electronics and AC Drives*, Prentice Hall, NJ, 1986.  
(First English language text in this area)  
Translated into Chinese, Japanese, Iranian and Korean  
Publication in Indian and Hong Kong Editions
- [8] Bimal K. Bose, *Adjustable Speed AC Drive Systems*, IEEE Press, NJ, 1982.  
Translated into Chinese
- [9] Bimal K. Bose (Ed.), *Power Electronics in Renewable Energy Systems and Smart Grid*, IEEE Press/Wiley, 2019.

## BOSE BOOKS



### 14. Guest Editor:

- Guest Editor, Proc. of the IEEE Special Issue on “Power Electronics in Smart Grid and Renewable Energy Systems”, November 2017
- Guest Editor, Proceedings of the IEEE Special Issue on “Power Electronics and Motion Control”, August 1994
- IEEE-IE Transactions, Special Section on “Neural Networks and Their Applications in Power Electronics and Motor Drives” February 2007

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- [12] “Intelligent control and Estimation in Power Electronics and Drives”, Int’l. Power Electronics Congress (CIEP 2006), Cholula, Mexico, October 2006.
- [13] “Energy, Environment and Importance of Power Electronics”, IEEE POWERENG Conf., Lisbon, Portugal, April 2007.
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- [19] “Energy Scenario and Impact of Power Electronics in 21<sup>ST</sup>. Century”, Workshop on Power Electronics in Industrial Applications and Renewable Energy (PEIA2011), Doha, Qatar, November 3-4, 2011.
- [20] “Energy, Environment and Importance of Power Electronics”, 16<sup>th</sup> WSEAS Int’l. Conf., Kos Island, Greece, July 14-17, 2012.
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## ***18. Panel Discussions in International Conferences***

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- [2] Organizer, Chairman and Panelist in Panel Discussion Session on “Advances and Trends in Power Electronics”, IEEE Industrial Electronics Society Annual Conf. in Roanoke, October 1996.
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### ***B. Referred Conference and Magazine Publications (\* also published in Trans.)***

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**20. Invited Presentations: (Distinguished lectures, Tutorials, Plenary lectures, Keynote addresses, etc.) in the following countries:**

Argentina, Australia, Austria, Botswana, Brazil, Canada, China, Columbia, Costa Rica, Chile, Croatia, Czech, Denmark, Finland, France, Germany, Greece, Hawaii, Hong Kong, Hungary, India, Italy, Japan, Korea, Malaysia, Mexico, Moldova, New Zealand, Poland, Portugal, Puerto Rico, Qatar, Singapore, Slovenia, South Africa, Spain, Taiwan, Tunisia, Thailand, Turkey, USA.

Total No. 348 (approximately)

**21. Philanthropic Activities:**

- Institution of Electronics and Telecommunications (IETE), India – Donated annual Bimal Bose Power Electronics Award (Rs. 30,000/year+Travel Rs. 5,000) and Medal
- IEST Shibpur, India – Donated annual Bimal Bose Distinguished Lecture Award (Rs. 2.5 lakhs) (2010)
- IEEE Foundation – Donated \$100,000 as Heritage member
- Bhita M. P. Institution, Burdwan, India (my old village school) (\$100,000)
  - 47 annual school scholarships, Seminar Hall and Library with books, computers and sewing machines (for education)
- Financial support to GRABUU, India (Gram Bangla Unnayan Udyog Inc.) for improving education and economic development

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