

## Curriculum Vitae of Lokenath Debnath

Name: Lokenath Debnath

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### I. Scholarship and Academic Degree:

University of London	Ph.D.	1967	Applied Mathematics
Imperial College of Science and Technology, London	D.I.C.	1967	Applied Mathematics
University of Calcutta	Ph.D.	1965	Pure Mathematics
University of Calcutta	M.Sc.	1956	Pure Mathematics
University of Calcutta	B.Sc.	1954	Mathematics (Major) Physics and Chemistry (Minor)
Institute of Mathematics and its Applications, U.K.	F.I.M.A. (Fellow)	1972	

### II. Academic Appointments and Administrative Positions:

Professor of Mathematics, University of Texas-Pan American, 2011 – present.

Professor and Chair of Mathematics, University of Texas-Pan American, 2001 – 2011.

Professor of Mathematics, University of Central Florida, 1995 – 2001.

Professor & Chairman, Department of Mathematics, University of Central Florida, 1983 – 1995.

Acting Chair, Department of Statistics, University of Central Florida, 1989 – 1990.

Professor of Mechanical & Aerospace Engineering, University of Central Florida, 1991 – 2001.

Professor of Mathematics, East Carolina University, 1969 – 1983; and joint appointment as Professor of Physics, East Carolina University, 1972 – 1983.

Director of Graduate Studies in Mathematics at East Carolina University, 1979 – 1981.

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Associate Professor of Mathematics, East Carolina University, 1968 – 1969.

Lecturer in Mathematics at various colleges at the University of Calcutta, 1957 – 1965.

Senior Research Fellow, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, England, 1967 – 1968.

Visiting Professor, Centre of Advanced Study in Applied Mathematics and Department of Applied Mathematics, University of Calcutta, India, (seven times) 1969 – 1996.

Visiting Research Professor, Institute for Fluid Dynamics and Applied Mathematics, University of Maryland, College Park, 1974.

Visiting Professor, Geophysical Fluid Dynamics Institute, Florida State University, 1976.

Research Fellow and Junior Instructor, Imperial College of Science and Technology, University of London, 1965 – 1967.

Visiting Professor, Mathematical Institute, University of Oxford, England, 1980.

### **III. Teaching Experience and Effectiveness:**

Have had many years of teaching experience at various universities in the United States, England and India including University of Texas – Pan American, University of Central Florida; East Carolina University; University of Cambridge; Imperial College of Science and Technology, London; and University of Calcutta.

I have a wide range of undergraduate, graduate and postgraduate level courses in six different disciplines: Mathematics, Physics, Statistics, Computer Science, Mathematics Education, Mechanical Engineering, and Engineering Science.

#### **University of Texas – Pan American**

##### Undergraduate

Ordinary Differential Equations  
Elementary Linear Algebra  
Complex Analysis  
Boundary Value Problems  
Integral Transforms  
Fourier Analysis  
Special Topics in Undergraduate Research  
Applied Linear Algebra  
History of Mathematics  
Calculus

##### Graduate

Partial Differential Equations  
Special Topics in Applied Mathematics  
Special Topics in Mathematics  
Complex Analysis  
Master's Thesis I and II  
Fourier Analysis

#### **University of Central Florida**

##### Undergraduate

College Algebra

##### Graduate

Advanced Calculus

Finite Mathematics  
College Trigonometry  
Linear Algebra  
Differential Equations  
Vector and Tensor Analysis  
Calculus I  
Calculus II

Partial Differential Equations  
Complex Analysis  
Transform Methods  
Functional Analysis  
Applied Mathematics I  
Advanced Engineering Mathematics  
Linear and Nonlinear Waves

### III A. Evidence of Teaching Effectiveness:

I received a **Distinguished Teaching Award** from the University of Central Florida in 1998 and an Award for Excellence in Teaching from East Carolina University in 1972.

I received the **Teaching Incentive Program (TIP) award** of the University of Central Florida in 1998.

I received several teaching grants in the **amount of over \$400K** and grants for preparation of book manuscripts from the state and federal agencies and from publishers including Academic Press, Norte Holland, Birkhäuser Verlag, Springer Verlag and CRC Press.

I was awarded a **Senior Fulbright Fellowship** twice for lecturing in Indian Universities and for research in the Soviet Union.

I was appointed a **Senior Scientist** by NSF for teaching graduate courses and for the development of applied mathematics program in Indian Universities.

The multiple editions of my five successful senior undergraduate and graduate text books and published favorable reviews of these books (see section V, page 4) in national and national journals are clear evidences of my teaching and teaching effectiveness.

My textbooks have been adopted as senior undergraduate and graduate level textbooks by many universities in the United States and foreign countries of the world. This has also been a special recognition of my teaching effectiveness.

In view of my teaching effectiveness, I was selected by **SIAM (Society for Industrial and Applied Mathematics)** and the **MAA (Mathematical Association of America)** to serve on their national and international **Visiting Lecturer Program** at the undergraduate level for the last 20 years.

I was selected by the East Carolina University Mathematics Department to develop a Math Honors Program and teach exceptional students in mathematics selected to participate in the National Putnam Competition, 1970-1977.

From my experience and observations, both undergraduate and graduate students who pass my courses can continue and do very well in succeeding mathematics and physics courses and in graduate study and research.

I was also selected by both Mathematics and Physics Departments to teach graduate level physics courses and to direct research/thesis of physics graduate students at East Carolina University.

On scholarship weekend one of my classes at East Carolina University was always chosen for the students to visit.

I was also selected by both Mathematics Department and the East Carolina University Business College to teach Statistical Analysis I and II and a graduate level course on Mathematics for Business for Business faculty.

In view of my teaching reputation, I was selected by both Mathematics and Physics Departments to visit high schools and community colleges with lectures on mathematics and science. I have been invited numerous times by Mathematics and Physics Clubs, Senior High Schools and Colleges and other Honor Societies to deliver Banquet and Inaugural lectures in North Carolina and Florida.

#### **IV. Research Experience and Accomplishments:**

Major areas of Research:

Applied Mathematics, Partial Differential Equations, Numerical Methods, Integral Transforms, Mathematical Physics, Linear and Nonlinear Waves, Continuum Mechanics, Fluid Dynamics, Fractional Calculus and Fractional Differential Equations, Fixed Point Theory, Mathematical Inequalities, History of Mathematics, Wavelet Transforms and Time-Frequency Signal Analysis.

Number of research papers published in refereed journals: over 300

Number of research papers published in chapters of books and conference proceedings: 25

Number of one-hour invited lectures and the keynote addresses: over 30

Number of Graduate and Postgraduate students who completed their research and/or degree under my direction and guidance, and received special Awards:

Ph.D. Dissertation Students: 10 and 1 Ph.D. at U.M., Ann Arbor, 1998.

Undergraduate Research Students: 56

Master Thesis Students: 30

Undergraduate Students received Special Awards (Sigma Xi, Math Honors, HESTEC Awards and Pi Mu Epsilon): 19

Total citation of my research papers and books: over 5000

## V. List of Selected Undergraduate and Graduate Level Text Books

1. The Legacy of Leonhard Euler – A Tricentennial Tribute, Imperial College Press, London (2010), 400 pages.
2. Sir James Lighthill and Modern Fluid Mechanics, Imperial College Press, London (2008), 381 pages.
3. Introduction to Hilbert Spaces with Applications (with P. Mikusinski), Academic-Elsevier Press, **Third Edition**, 2005, 570 pages.
4. Partial Differential Equations for Scientists and Engineers (with T. Myint-U), **Fourth Edition**, Elsevier Science Publishing Company, 2006, 625 pages.
5. Nonlinear Partial Differential Equations for Scientists and Engineers, Birkhäuser, Boston (**Second Edition**), 2005, 737 pages and (**Third Edition**) 2012, 995 pages.
6. Nonlinear Water Waves, Academic Press, Boston, 1994, 544 pages.
7. Continuum Mechanics (with D. S. Chandrasekharaiah), Academic Press, Boston, 1994, 595 pages.
8. Integral Transforms and Their Applications, CRC, Chapman and Hall Press, Boca Raton (**Second Edition**), 2006, 600 pages. (The third edition is under preparation)
9. Nonlinear Waves, Cambridge University Press, Cambridge, 1983, 362 pages.
10. Wavelet Transforms and Their Applications, Birkhäuser, Boston, 2002, 561 pages.
11. Oceanic Turbulence, Memoir Series of Calcutta Mathematical Society, 1978, 92 pages.
12. Elements of the Theory of Elliptic and Associated Functions with Applications (with M. Dutta), World Press, Calcutta, 1965, 288 pages.
13. Elements of General Topology (with M. Dutta), World Press, Calcutta, 1964, 192 pages.

## VI. Member of the Editorial Board of Major Mathematics, Mathematical Physics and Engineering Journals:

In recognition of his effective research and publication activities in pure and applied mathematics, mathematical physics and engineering science, Lokenath Debnath was selected to serve on the editorial board of the following prestigious journals:

*Journal of Mathematical Analysis and Applications*, United States, 1995 – 2005

*International Journal of Engineering Science*, 2001-2005

*Journal of Inequalities in Pure and Applied Mathematics*, Australia, 1999 – present

*Integral Transforms and Special Functions*, United States, 1992 – present

*International Journal of Applied Mathematics*, Sofia, Bulgaria, 1999 – present

*International Journal of Mathematical Education in Science and Technology*, England, 1985 – 1992 and 2003 – present

*Journal of Pure Mathematics*, 1996 – present

*International Series on Advances in Fluid Mechanics*, England, 1995 – present

*Fractional Calculus and Applied Analysis*, 2000 – present

*International Journal of Pure and Applied Inequalities*, 2001 – present

Debnath is the **Founding Managing Editor** of *International Journal of the Mathematics and Mathematical Sciences*, 1978 – present which is sponsored by the University of Central Florida (UCF) and Calcutta Mathematical Society. The main editorial office of the International Journal was located at UCF, 1983 – 2001, and is now located at the Mathematics Department, University of Texas - Pan American from 2001 – present.

Delivered a Plenary Lecture on Linear and Nonlinear Ocean Waves at the International Conference on the Theory, Methods, and Applications of Nonlinear Equations at Texas A&M University, Kingsville in 2012. Other eight Plenary speakers include Professors Robert Finn (Stanford), J. L. Bona (University of Illinois, Chicago), I. Lasiecka (University of Virginia), James Serrin (University of Minnesota), E. Di Benedetto (University of Maryland), B. Mordukhovich (Wayne State), W. Takahasi (Japan), A. Bruno (Russia).

Served as Founding Managing Editor of the *International Journal of the Mathematics and Mathematical Sciences* from 1978; Editor-in-Chief of *Advances in Theoretical Applied Mathematics* and *Open Mathematics Journal* from 2008.

Served as *reviewer* of many book manuscripts for major publishers including Academic Press, Elsevier, Springer Verlag, Oxford University Press, CRC Press, Barlett and Jones, Birkhauser Verlag.

1. Served as Referee of hundreds of research papers for many major journals including *Journal of Mathematical Analysis and Applications*, *SIAM Journal of Applied Mathematics*, *Integral Transforms and Special Functions*, *International Journal of Mathematics Education in Science and Technology*, England, *Journal of Fluid Mechanics*, *Journal of Physics*, England; *International Journal of Inequalities and Applications*, *Applied Mathematics Letters*, *Proceedings of the Royal Society of London*, *MAA Math Monthly*, *Journal of Mathematical Biology*, *Canadian Journal of Physics*, *International Journal of Engineering Science*, *Applied Mathematics and Computation*, Germany, *Acta Mechanica*, *Quarterly of Applied Mathematics*, *Transactions of ASME*, *Journal of Applied Mathematics*, *Zeitschrift für Angewandte Mathematik and Mechanik*, *Bulletin of the Calcutta Mathematical Society*, *Mathematical Proceedings of Cambridge Philosophical Society*, *Plasma Physics*, *Zeitschrift für Angewandte Mathematik und*

*Physik, Bulletin of the Polish Academy of Sciences, Mechanics of Fluid and Gases (Russian), Czechoslovakia Journal of Physics, Quarterly Journal of Mechanics, Applied Scientific Research, Journal of Physical Society of Japan, Aequationes Mathematicae, Israel Journal of Technology, Physics Letters A, SIAM Journal of Mathematical Analysis, Annalen der Physik, Applied Mathematics Letters, Integral Transforms and Special Functions, Fractional Calculus and Applied Analysis, Indian Journal of Pure and Applied Mathematics, International Journal of Applied Mathematics and Computing, Journal of Applied Mathematics, Analysis Mathematica, and Journal of Inequalities in Pure and Applied Mathematics.*

**VII. Member of the Review Board of the Following Major Review Journals:**

*Mathematical Reviews of the American Mathematical Society*, 1970-present

*Zentralblatt für Mathematik* (Germany), 1975-present

*Applied Mechanics Reviews* (USA), 1968-present

*Journal of the Franklin Institute* (USA), 1980-present

*Transactions of the Institute of Electrical and Electronics Engineers* (IEEE), 1975-present

*SIAM Review*, 1990-present

**VIII. Selected Research and Teaching Grants:**

Received a total of over **one million dollars** from Federal Agencies (**9 from NSF** and 4 other Agencies plus many state agencies of North Carolina, Florida and Texas)

<u>Date</u>	<u>Funded Project Title</u>	<u>Agency</u>	<u>Amount</u>
2009-2010	Nonlinear Water Waves with Applications to Tsunamis	NSF	\$39,777
2004-2005	New Perspectives for Boundary Value Problems & Asymptotics (NSF-CBMS Conference)	NSF	\$38,031
2001	Study of Mathematical Inequalities and their Applications	UTPA	\$3,500
2002	Some Problems of Differential Equations	UTPA	\$3,500
2001-Present	Institutional Enhancement Grant	UTPA	\$60,000
2001	Elliptic Modular Curves (NSF-CBMS Conference)	NSF	\$41,985

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1998	Wavelet Transform Analysis as a Tool for Computational & Harmonic Analysis	NSF	\$33,000
1998	Technology for Dynamic Surf Environment Simulation	UCF	\$30,725
1996-1997	Teaching & Lectures on Applied Mathematics in India	Senior Fulbright Fellowship	\$100,000
1991	Nonlinear Dispersive Wave Systems	NSF	\$29,946
1990	Cauchy-Poisson Waves	NSF	\$5,200
1987	Nonlinear Instability Problems	ICTP, Italy	\$16,000
1982	Nonlinear Waves & Integrable Systems	NSF	\$27,484
1979	Special Functions & Their Relations with Representations of Lie Groups	NSF	\$40,800
1983-1997	Distinguished Lecture Series in Mathematics	UCF	\$75,000
1978-1979	Research on Linear & Nonlinear Waves in India & Russia	Senior Fulbright Fellowship	\$100,000
1977	Waves & Currents in Stratified Oceans	U.S. Oceanic & Atmospheric Science	\$82,500
1975	NSF Senior Scientist for Research & Lectures on Applied Mathematics	NSF	\$17,000
1975-1996	Many teaching and research grants from the University of Texas-Pan American, University of Central Florida, University of Maryland, University of Cambridge, University of Oxford, Florida State University, Calcutta University, Calcutta Mathematical Society, American Mathematical Society, East Carolina University, and University of Zulia, Venezuela		\$162,700

### IX. Professional Leadership, Honors and Awards:

In order to stimulate research among undergraduate and graduate students of the College of Science and Engineering, I established the **Nobel Laureate S. Chandrasekhar Award** with the Board of Regents of The University of Texas System as a permanent endowment for the use and benefit of The University of Texas-Pan American in 2007.

The Department of Mathematics was the recipient of the **First Annual UTPA Department of Excellence Award** in April 2004. Selected by a National Selection Committee from among three finalists, the award recognizes the teaching, research, and service contributions

including the publication of the *International Journal of Mathematics and Mathematical Sciences* as collaborative and cooperative efforts at national and international levels that our department makes in support of the mission of UTPA and our community. The accompanying cash award of \$20,000 will support activities towards continued improvement of the quality and excellence of the department. This award is a major accomplishment of our faculty, students and staff under my leadership.

Awarded the **UTPA (The University of Texas – Pan America) Award of Excellence in Research** in 2011.

Received the **UTPA (The University of Texas – Pan America) COSM College Award in Excellence in Service** in 2012.

Received the **UTPA Award of Excellence in Service** in 2013.

Received the UTPA College of Science & Mathematics **Award in Excellent in Service** in 2013.

Received the UTPA College of Science and Mathematics **Award for Service and Leadership** in 2011.

Awarded a **Senior Fulbright Fellowship** for lectures and research in India, 1996-1997.

Awarded a **Senior Fulbright Fellowship** for lectures and research in India and the U.S.S.R., 1978-1979.

Appointed a **Senior Scientist** to visit India under the United States-India Exchange of Scientists Programs by the National Science Foundation for lectures and research on applied mathematics, 1975.

Received a **Distinguished Teaching Award** from the University of Central Florida in 1998, and an **Award for Excellence in Teaching** by East Carolina University in 1972.

Received the **University Distinguished Researcher** Award in 1997, and **Distinguished Researcher** Award from the College of Arts and Sciences in 1997, 1988 and 1986.

Awarded the 1998 University of Central Florida **Excellence in Professional Service Award**.

Received a University of Central Florida **Teaching Incentive Program (TIP) Award** in 1999.

Received the University of Central Florida **Professorial Excellence Program (PEP) Award** in 1999.

Received the **University of Central Florida Faculty Leadership Award** in 1999.

Served as the **Director** of NSF-CBMS Research Conference with Professor Jean Dieudonne of France (one of the greatest mathematicians of the 20th Century) as the Principal Speaker

in 1979, and with Professor Alan C. Newell as the Principal Speaker at East Carolina University in 1982, with Professor T. Brooke Benjamin as the Principal Speaker at the University of Central Florida in 1991 with Professor Ronald Coifman as the Principal Speaker at UCF in 1998, with Professor Henri Darmon as the Principal speaker at UCF in 2001, with Professor A. Fokas at UTPA in 2005 and with Professor Adrian Constantin at UTPA in 2010.

Was a **visiting fellow** at Princeton University, 1971.

Served as a **Visiting Lecturer** of the SIAM Visiting Lecturer Program, 1992 - present.

Served as a **Visiting Speaker** of the Mathematical Association of America, 1995 - present.

**Established a Ph.D. Program in Mathematics** with emphasis on Applied and Industrial Mathematics at the University of Central Florida in 1993.

Served as a **reviewer of research grant proposals** for the National Science Foundation, the U.S. Army, Canadian Research Council, the International Centre for Theoretical Physics at Trieste, Italy, Austrian Science Foundation, Santi Sarup Bhatnagar Memorial Research Award, India 1974 - present (several times).

Was selected to serve as **Chair of the Local Arrangements Committee** of the Joint Annual Meetings of the AMS and MAA in Orlando in January 1996.

**Director** of the Distinguished Lecture Series in Mathematics from 1983 - 1997. A total of 70 famous mathematicians and scientists from the United States, Canada, England, Germany, Belgium, Poland, and Hungary have participated in the program. Seven of them were **Nobel Prize Winners** including Professors Gaiever, Glashow, Prigogine, Taylor, Chandrasekhar, Shallow, and Yang); two of them were **Field Prize Winners** (Professors Erdős and Thompson) One Abel Prize Winner (Peter Lax) in Mathematics. Thirty-Two of them were members of the National Academy of Science or Engineering, Fellow of Royal Society of London, Russian Academy of Science, and Polish Academy of Science.

Elected and reelected **President** of the Calcutta Mathematical Society for three one-year terms, 1987-89.

Elected **Vice President** of the S.N. Bose Center of Study and Research for Minimization of Environmental Pollution in India, 1999-present.

Awarded a **certificate** by the American Society of Mechanical Engineers in recognition of more than ten years of devoted and distinguished contribution as a **reviewer** for *Applied Mechanics Reviews*, 1980.

**Nominated** by the Chancellor of East Carolina University for the **Oliver Max Gardner Award of the UNC System** in 1979, 1980 and 1981 as the ECU faculty nominee from 800 faculty.

## X. Invited Lectures/Seminars at National and International Meetings:

Delivered over 130 **one-hour invited and memorial lectures**, seminar and colloquium lectures at many universities in the United States, Venezuela, Kuwait, Egypt, Canada, India, Trinidad and England.

Delivered many **one-hour invited lectures and the keynote addresses** at professional international meetings which include:

Delivered a Plenary Lecture on Linear and Nonlinear Ocean Waves at the International Conference on the Theory, Methods, and Applications of Nonlinear Equations at Texas A&M University, Kingsville in 2012. Other eight Plenary speakers include Professors Robert Finn (Stanford), J. L. Bona (University of Illinois, Chicago), I. Lasiecka (University of Virginia), James Serrin (University of Minnesota), E. Di Benedetto (University of Maryland), B. Mordukhovich (Wayne State), W. Takahasi (Japan), A. Bruno (Russia). A Special Lecture on Albert Einstein—The Man – Scientist Duality at the 2005 Science Symposium, HESTEC of the UTPA.

Delivered a **Plenary Lecture** on Four Major Discoveries in Applied Mathematics during the Second Half of the Twentieth Century at the International Conference on Differential and Difference Equations at the Florida Institute of Technology, Melbourne on August 3, 2005. Other nine Plenary Speakers of this weeklong conference are Professors Robert Finn (Stanford), Roger Temam (Indian University), Mikhail Safonov (University of Minnesota), Carlos Kenig (University of Chicago), Martin Schechter (University of California at Irvine), Gary Liberman (University of Iowa), Roberto Triggiani (University of Virginia), V. Lashmikantam (Florida Institute of Technology) & Irinea Lasiecka (University of Virginia).

Delivered an **opening keynote address** on Four Major Discoveries in Applied Mathematics during the Second Half of the Twentieth Century at the International Conference in Mathematics and Its Applications, Kuwait University, April 5, 2004. Other six Plenary speakers of this conference were Professors A.J. Scholl (University of Cambridge, England), B. Wegner Germany), V.D. Mazurov (Russia), G.V. Berghe (Belgium), J. Evans England), and S. Caenpeel (Belgium).

Delivered the 2003 Professor **P.L. Bhatnager Memorial Lecture** on Solitons and Compactons with Applications at the Indian Society of Theoretical and Applied Mechanics, Ranchi, India, December 19, 2003.

Delivered **two invited lectures** on (i) Fundamentals of Fractional Calculus and (ii) Theory and Applications of Fractional Calculus at the **IEEE Annual Conference** on Decision and Controls in Las Vegas in December 2002.

Selected to deliver the **keynote lecture on Sir James Lighthill** and Modern Fluid Mechanics at the Third International Conference on Advances in Fluid Mechanics, 2000, in Montreal, Canada in May 2000.

Selected to deliver an **invited lecture** on Nonlinear Evolution Equations with Applications at the International Conference in Mathematics and the 21<sup>st</sup> Century in Cairo, Egypt, June 2000.

**Keynote speaker** at the Mathematics Conference on Wavelet Transforms and Their Applications in the University of Zulia in Venezuela in 1999.

**Sir G. I. Taylor Memorial Lecture on Nonlinear Instability Problems** in Fluid Flows at the Annual Meeting of the Indian Society of Theoretical and Applied Mechanics in Cochin, December 1996.

**International Conference** on Mathematical Modeling and Computation, Eastern Illinois University, 1995.

**Eleventh Annual Meeting of the Canadian Applied Mathematics** at the Technical University of Nova Scotia, Canada, 1990.

**Invited Lecture First Caribbean Fluid Dynamics Conference** at the University of West Indies, Trinidad, 1989.

**International Symposium** to Celebrate the Birth Centenary of Srinivasa Ramanujan in Madras, India, 1987.

**International Conference** on Theory and Applications of Differential Equations, Pan American University, Texas, 1985.

**Professor N. R. Sen Memorial Lecture** at the Calcutta Mathematical Society, India, 1975.

**International Conference** on the Unsteady Boundary Layers at Laval University, Canada, 1971.

#### **XI. Professional Service and Major Committee Activities:**

Established a **Ph.D. Program in Mathematics** with special emphasis on Applied and Industrial Mathematics in 1993. This was one of my major accomplishments at the University of Central Florida.

Actively involved in developing undergraduate and graduate programs and courses at the University of Texas-Pan American, University of Central Florida, East Carolina University and Calcutta University.

Served on approximately 90 Ph.D. dissertation committees and 30 masters thesis committees in American, Canadian, Egyptian, Saudi Arabian, and Indian universities.

Following is a list of selected committees at UTPA served:

##### **University of Texas – Pan American (UTPA)**

Member, Academic Affairs Leadership Team (AALT), 2007 – 2011

Member, UTPA Faculty Senate, 2004 – 2007

Member, UTPA Graduate Council, 2002 – 2005

Member, UTPA Chair Council, 2001 – 2011

Full Member of Graduate Faculty, 2001 – present

University Scheduling Committee, 2004 – 2011

College of Science and Engineering (COSE)

Member, Chair Council of COSE, 2001 – 2009

Member, Chair Council of COSM, 2009-2011

Member of the COSE Annual Faculty Evaluation Committee, 2004 – 2005

Member of the COSE Science Symposium Committee for the 2005 HESTEC, 2005.

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College of Science and Mathematics (COSM)

Member, UTPA Physics Department Full Professor Promotion Committee, 2012-2013

Member, UTPA Physics Department Post Tenure Review Committee, 2013

Department

Ex Officio member of all departmental Committees, 2001 – 2011

Chair, Calculus Committee, 2011-present

Member, Mathematics Graduate Committee, 2012-present

Member, Undergraduate Scholarship Committee, 2012-2013

Chair, Mathematics Departmental Annual Report Committee, 2012-2013

University of Central Florida University:

Building Manager, Phillips Hall, UCF 1992 – 1996

Member, University Tenure and Promotion Committee, 1995 – 1997

Member of UCF Faculty Senate, 1995 – 1996

Chair, Review of the Office of the Institutional Research, 1993 – 1994

Member, International Students Services Committee, 1988 – 1992

Member, UCF Chair Council, 1986 – 1995

**XII. National and International Major Offices and Committees Served:**

**Vice President** of S.N. Bose Centre of Study and Research for Minimization of Environmental Pollution, India, 1999 – present.

**President** of the Calcutta Mathematical Society, 1987 – 1989.

**Chair of the Local Arrangements Committee** of the Joint Annual Meetings of the American Mathematical Society and Mathematical Association of America in Orlando, 1994 – 1996.

Served as **advisor** of International Baccalaureate Program at Winter Park High School, Florida, 1986 – 1988.

Served as **External Reviewer** of 50 Full Professor's Promotion at different Universities in United States, Canada, India, Saudi Arabia, Egypt, Jordan, Australia, and England, 1983 – present.

**XIII. Membership in Professional Organizations:**

American Mathematical Society  
American Physical Society

Life Member since 1968  
1970 – 2000

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Mathematical Association of America	1980 – present
Society of Industrial and Applied Mathematics (SIAM)	1970 – present
Calcutta Mathematical Society	Life Member since 1958
Indian Science Congress Association	Life Member since 1968
Indian Society of Theoretical and Applied Mechanics	Life Member since 1986
Institute of Mathematics and its Applications, England	1970 – present
Japanese Association of Mathematical Sciences	1995 – 2002

**Award membership of:**

Phi Kappa Phi	1978 – present
Pi Mu Epsilon	1970 – present
Sigma Xi	1972 – present
Sigma Pi Sigma	1974 – present

**B. *International Journal of Mathematics and Mathematical Sciences* and its Current Editorial Board**

In order to promote advanced study and research in mathematical and physical sciences and to increase scientific participation in international mathematics and science projects and programs – in a word, in order to provide more effective and meaningful scholarly service to the national and international scientific and mathematical community – a unique journal, the *International Journal of Mathematics and Mathematical Sciences (IJMMS)* was established in 1977 under the joint sponsorship of Calcutta Mathematical Society and East Carolina University, Greenville, North Carolina. When Lokenath Debnath joined the Department of Mathematics at the University of Central Florida (UCF) in 1983, the IJMMS went with him at the University of Central Florida. With the sponsorship of UCF, Dr. Debnath was selected to serve on the Distinguished Editorial Board as the Founding Managing Editor. This may be considered Debnath's most outstanding honor of distinction.

In his eminent service as Managing Editor of the International Journal, Debnath established an Editorial Office at UTPA in 2001 with the sponsorship of UTPA and the international Editorial Board that developed policies and procedures for the IJMMS. He provided a pronounced leadership in establishing and maintaining a distinguished Editorial Board of a worked-wide composition in an attempt to engage some of the most active and genuinely respected mathematicians and scientists in the promotion of significant research in fields or areas of high relevance to mathematics and science. The significance of this service, at least in part, lies in the potential for an increased world communication, world cooperation, world understanding, and even world discovery. Such professional service by Lokenath Debnath constitutes a far-reaching contribution.

To establish an international scientific journal on a university campus is a distinction worth many times the University's sponsorship. It is, indeed a rare opportunity for any individual or institution of higher learning which comes once in a lifetime. This program and its activities definitely reflect considerable honor and prestige to any individual and institution of higher learning. An effort to establish such a program at any university is a small but significant step forward for improving our academic reputation among the leaders of higher education institutions. It will always put the sponsoring institution "on the map" as pioneers in action.

In summary, the *International Journal* will always carry with it not only research, knowledge and information but also the name - - and therefore, the prestige - - of **the University of Texas – Pan American**.