

# CURRICULUM VITAE

## 1. Personal

**Name** : DR. LAL MOHAN SAHA

**Date & Place of Birth** : 23<sup>rd</sup> June, 1943; Talpahari

**Citizenship** : INDIAN

**Qualifications** : M. Sc., Ph. D. (Applied Math.)

**Address** : Dr. L. M. Saha  
FLAT NO. 8235 / B-XI  
VASANT KUNJ, NEW DELHI-110070  
INDIA  
Tel. No.: 0091-011-26897602, 09873412244  
e-mail: [lmsaha.msf@gmail.com](mailto:lmsaha.msf@gmail.com)  
[lmsaha@sify.com](mailto:lmsaha@sify.com)

**Present Affiliation** : **Professor**  
Mathematical Sciences Foundation  
N-91, Greater Kailash I  
New Delhi-110048, India.

### **Past Academic Positions** :

1. **Reader in Mathematics**, Zakir Husain College, University of Delhi, New Delhi-110002, India, (23<sup>rd</sup> August 1988 to 22<sup>nd</sup> June 2008)
2. **Scientific Pool Officer of C I S R**, Department of Mathematics, University of Delhi, Delhi-110007, India, (11<sup>th</sup> Sept 1986 to 22<sup>nd</sup> August 1988).
3. **Associate Professor**, Department of Mathematics, Al-Fateh University, Tripoli, Libya, (25<sup>th</sup> August 1977 to 31<sup>st</sup> August 1986).
4. **Senior Associate**, Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune, India, (1989 to 2006).

**Present Area of Research** : Nonlinear Dynamical Systems & Celestial Mechanics  
(Chaos Control, Bifurcation Analysis, Fractals etc.), Numerical Analysis .

**Research Publications** : 80 Research Papers (please see the list attached):  
(in the area of Chaos Control Techniques, Bifurcation Analysis and applications to the problems of Celestial Mechanics)

**Research Experience** : 40 years

**Teaching Experience** : 30 years (Approx., Post-Graduate, Ph.D.  
and M.Phil. Course works & Undergraduate)

**Teaching Courses**

:Mechanics, Dynamical Systems, Fluid Dynamics, Celestial Mechanics, Mathematical Physics, Linear Algebra, Analysis, Numerical Analysis, Geometry, Calculus and Biomathematics.

**2. Research Supervision: Ph.D & M.Phil****(a) Ph.D. Supervision:**

**(Eleven students have been awarded Ph. D. and one has submitted his Ph.D. Thesis)**

S. No. & Name	Year	University	Topic
1. Jatinderpal Singh	2000	Jamia Millia Islamia	Temporal Chaos in Quantum Mechanics
2. Til Prasad Sarma	2001	Delhi University	On Some Problems of Chaotic Motions in Celestial Mechanics
3. Renu Sharma	2002	Delhi University	Chaotic Motion of an Ellipsoidal Satellite
4. Purnima Dixit	2004	Delhi University	Studies on Some Problems of Stability and Chaos
5. Ila Sahay	2005	Delhi University	On Some Problems of Bifurcation and Controlling Chaos
6. Khursheed Alam	2005	Jamia Millia Islamia	On Some Problems of Regular and Chaotic Motions in Non-linear Systems
7. Mohamed Ali	2006	Delhi University	Chaos, Predictability and Controllability in Nonlinear Systems
8. Monika Saxena	2006	Jamia Millia Islamia	Some Studies on Regular and Chaotic Motion of Satellites
9. Mridula Budhraj	2008	Delhi University	On Synchronization, Control and Characterization of Chaos in Dynamical Systems
10. Neenu Gupta	2009	Delhi University	On Regular and Chaotic Stellar Pulsations
11. Gobind Jha	2009	Jamia Millia Islamia	Application of Chaos Control

**List of Ph.D. thesis that may be submitted in 2009:Two**

S. No. & Name	Year	University	Topics
1. Rupesh Tehri	2009	Delhi University	On Techniques of Chaos Control in Nonlinear Systems
2. Bharti	2009	Delhi University	Hyperbolicity and Chaos in Nonlinear Dynamical Systems
3. Sadanand Kumar	2010	Delhi University	On Techniques of Chaos Control

**(b) M. Phil. Supervision: Six Awarded**

S. No. & Name	Status	Year	University	Topic
1. Zia Ahmed	Awarded	1997	Delhi	Lorenz Equation
2. Gaurav Sharma	Awarded	1998	Delhi	Melnikov's Integral and its Application
3. Rupesh Tehri	Awarded	1999	Delhi	Hopf Bifurcation in a Real Physical System
4. Mridula Pahwa	Awarded	2000	Delhi	OGY Technique in Chaos Control.
5. Kirti Jain	Awarded	2002	Delhi	OGY and Other Techniques for Controlling Chaos in Dynamical Systems
6. Sadanand	Awarded	2006	Delhi	Multi-Time Perturbation Techniques to Solve Nonlinear Problems.
7. Vijayveer	Submitted	2008	Delhi	Regular and Chaotic Motion in a Quarter-Car Model

**(c) Research Projects :**

- (i) **Chaos in Stars and Stellar Systems, (May 5 – July 5, 1997)**  
: Japan Society for the Promotion of Science, JSPS,  
Jointly worked with Professor Yasuo Tanaka, Ibaraki University,  
Mito, JAPAN.
- (ii) **On Instability and Chaos in Nonlinear Dynamical Systems and in Solar System, (1990-1993)**  
: Department of Science and Technology (DST), Govt. of India,  
Jointly worked with Professor K. B. Bhatnagar.
- (iii) **Chaos in Astronomy and Astrophysics, (1994 -1997)**  
: University Grants Commission (UGC), Govt. of India,  
Jointly worked with Professor K. B. Bhatnagar.
- (iv) **On Nonlinearity and Chaos in Dynamical Systems, (2001 – 2004),**  
: University Grants Commission (UGC), Govt. of India.

**(d) Institutions of Higher Studies & Research:**

- (i) **Centre of Advanced Study in Applied Mathematics, University of Calcutta, India, (11.08.1968 - 09.10.1972), as a Research Fellow.**
- (ii) **Scuola Normale Superiore, Pisa, ITALY: (10.10.1972 – 09.10.1974),**

**As a Research Fellow.**

- (iii) **Istituto di Elaborazione della Informazione del C. N. R., Pisa, ITALY, (01.10.1974 – 25.08.1977), Post-Doctorate Research.**
- (iv) **Department of Mathematics, University of Delhi, (17.09.1986 – 22.08.1988)  
: Scientific Pool Officer, Council of Scientific and Industrial Research (CSIR), Govt. of India.**

**3. Examiner of Ph. D. Thesis:**

**Examined and also conducted Viva-voce examination to students from H. P. University, Shimla and Jamia Millia Islamia**

**4. Visiting Fellowship**

- (i) **GERMANY** : Universitat Dusseldorff : August – September, 1975.  
Gesamthochschule Paderborn : July – August, 1978.
- (ii) **JAPAN** : Ibaraki University, Mito : May 5 – July 5, 1997.

**5. MEDAL AWARDED:**

**PROFESSOR KANEHISA HASHIMOTO, the President, Ibaraki University, Mito, JAPAN, has awarded a Medal on 4<sup>th</sup> July, 1997, in commemoration of visit to Japan with the invitation of Japan Society for the Promotion of Science, JSPS.**

**6. Participation in Conferences, Seminars etc. :**

**(National & International): More than 80 Conferences, Workshops etc.**

**7. Language Abilities:**

Hindi, Bengali, Santhali (Indian) : Reading, Writing & Speaking.  
English & Italian : Reading, Writing & Speaking  
German and French : Some Working knowledge.

**8. Membership of Learned Societies :**

- (i) Calcutta Mathematical Society : Life Member
- (ii) Society of Mathematical Sciences, Delhi : Life Member
- (iii) The Astronomical Society of India,(ASI)
- (iv) Indian Science Congress : Life Member