

CURRICULUM VITAE

Name : **Girish Saran Agarwal, FRS, D Sc (hc)**
Present Position : Noble Foundation Chair and Regents' Professor
Department of Physics,
Oklahoma State University
Stillwater, OK-74078
Education : BSc 1964 (Gorakhpur University)
M.Sc., 1966 (Banaras Hindu University)
Ph.D., 1969 (University of Rochester)

Positions Held:

- Director and Distinguished Scientist- Physical Research Laboratory, Ahmedabad
- Indian National Science Academy's Albert Einstein Centenary research Professor.
- Honorary Professorship (1995-2000) at Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore
- Professor, University of Hyderabad; March 3, 1977- 1995, Served as the first Dean, School of Physics, University of Hyderabad, till November 1980
- Visiting Fellow- the Joint Institute for Laboratory Astrophysics, University of Colorado, Boulder, for the year 1981-1982.
- SERC Senior Visiting Fellow at the University of Manchester Institute of Science and Technology, 1985-1986.
- Visiting Professorships at University of Ulm, University of Essen,; University of Erlangen; Max-Planck-Institute für Quantenoptik, Garching; Technische Universität, Vienna.
- Research Associate– 1969-1971 and Assistant Professor (P-T) -1970-1971 in the Department of Physics and Astronomy, University of Rochester, Rochester, NY.
- Assistant at the Institute for Theoretische Physik, Universität Stuttgart , Germany, 1971-1973
- Visiting Fellow at the Tata Institute of Fundamental Research (TIFR), Bombay, 1973-1975
- Professor (and Head of the Department of Physics), Institute of Science, Bombay, March 1, 1975 – March 1, 1977.

Ph.D. Students:

Twenty one students completed Ph.D. thesis under my supervision.

Areas of Research Activity:

- (i) Quantum Optics, (ii) Nonlinear Optics, (iii) Quantum Information Science, (iv) Plasmonics - nano photonics,

Prizes and Awards

- Eastman Kodak Prize of the University of Rochester (1969).

- Max-Born Award of the Optical Society of America (1988)
- Humboldt Research Award (1997), Germany.
- The World Academy of Sciences Prize in Physics (1994), Trieste, Italy
- Einstein Medal of the Optical and Quantum Electronics Society, USA (1994)
- Eminent Faculty Award of The Oklahoma State University (2012)
- Shanti Swaroop Bhatnagar Award in Physical Sciences (1982), given by the Govt. of India.
- Meghnad Saha Award in Theoretical Sciences (1987), University Grants Commission, New Delhi.
- Goyal Prize in Physics (1994).
- G.D. Birla Award for Scientific Research (1995).
- R.D. Birla Award of the Indian Physics Association (1996).
- M.N. Saha Birth Centenary Award (2001-2002) of the Indian Science Congress Association.

Honorary Doctorates

Honoris causa (2011) University of Hyderabad, India

- Honoris causa (2007) University of Liege, Belgium

Chair Appointments

- J C Bose chair at IISER Pune,
- J R D Tata Chair at TIFR Mumbai

Fellowships

- Elected Fellow of the Royal Society (2008)
- Elected Fellow of the American Physical Society (1981)
- Elected Fellow, The World Academy of Sciences (1997).
- Elected Fellow of the Optical Society of America (1986)
- Elected Fellow of the Indian Academy of Sciences, Bangalore (1981).

- Elected Fellow of the Indian National Science Academy, New Delhi (1985).
- Elected Fellow of the National Academy of Sciences, India, Allahabad (1988).
- Honorary Fellow (2008)-Indian Association for Cultivation of Science, Kolkata, India

Other Honors

- Recognized outstanding referee by the American Physical Society (2009).
- Recognized outstanding referee by the European Physics Letters
- Nehru Birth Centenary Lecture award (2000), Indian National Science Academy.
- K.R. Ramanathan Gold Medal of the Indian Geophysical Union, Hyderabad, (1997).
- Indian Science Congress, Centennial and Platinum Jubilee Lecturer,

Research Publications:

Author of more than 650 original publications in top journals of Physics and Optics.

Books:

1. Quantum Optics, published by Cambridge University Press, 2013.
2. Monograph entitled “Quantum Statistical Theories of Spontaneous Emission and their Relation to other Approaches”, appeared as Vol.70 of “Springer Tracts in Modern Physics” (Springer-Verlag, New York, 1974).
3. “Stochastic Processes--Formalism and Applications”, Springer Lecture Notes in Physics, Vol.184 (Springer-Verlag, Berlin, 1983), edited with S. Dattagupta.
4. Selected Papers on “Fundamentals of Quantum Optics”, SPIE Milestone Series, Vol. MS103 (SPIE - Optical Engineering Press, Washington, USA (1994)), edited.
5. Selected Papers on “Resonant and Collective Phenomenon in Quantum Optics”, SPIE Milestone Series, Vol. MS104 (SPIE - Optical Engineering Press, Washington, USA (1994)), edited.

Review Articles:

1. **“Master Equations in Quantum Optics”**, in Progress in Optics, ed. E. Wolf (North Holland, Amsterdam, Vol. XI, p.1-76 (1973)).
2. **“Collision Induced Coherences in Optical Physics”** in Advances in Atomic, Molecular and Optical Physics”, eds. Sir D.R. Bates and B. Bederson (Academic Press, New York, Vol.28, p.113-176 (1991)).

Editorial and Other Activities:

Service on the editorial boards of many publications in Optical Physics and Physics:

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