

## **CURRICULUM VITAE**

Name : **Girish Saran Agarwal,**  
**Fellow, The Royal Society UK**

Present Position : Institute for Quantum Science and Engineering, and  
Departments of Biological and Agricultural Engineering;  
Physics and astronomy, Texas A&M University, College  
Station, TX 77843

Education : BSc 1964 (Gorakhpur University)  
M.Sc., 1966 (Banaras Hindu University)  
Ph.D., 1969 (University of Rochester)

### **Areas of Research Activity:**

Plasmonics -nano photonics; Quantum Optics; Nonlinear Optics,

### **Books**

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

### **Review Articles**

- “Master Equations in Quantum Optics”, in Progress in Optics, ed. E. Wolf (North Holland, Amsterdam, Vol. XI, p.1-76 (1973)).
- “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)).

**Research Publications nearly 700; H-index: more than 70 on Web of Science**

### **Positions Held:**

- Regents Professor and Noble Foundation Chair, Oklahoma State University
- 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.

#### **Prizes and Awards**

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

#### **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 and Other Honors**

- 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
- 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,

#### **Editorial and Other Activities:**

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