*Armenian Journal of Physics, 2012, vol. 5, issue 2, pp. 47-50*

# ACADEMICIAN

ARMEN N. KOCHARIAN

## CURRICULUM VITAE

### PERSONAL DETAILS

Department of Physics and Astronomy, California State University, Los Angeles,
5151 State University Drive, Los Angeles, CA 90032
Tel: (312) 343-2125, Fax: (323) 343-2497
E-mail: armen.kocharian@calstatela.edu; http://www.calstatela.edu/faculty/akochar/

### RESEARCH INTERESTS

Critical Phenomena, Correlated Electrons in Condensed Matter and Nanomaterials
Superconductivity and Magnetism in Heterostructures and Nanomaterials
Quantum Statistical Physics and Information Theory
Mechanisms of High Temperature Superconductivity
Quantum Phase Transitions and Entanglement Confined
Fermions on Optical Lattices
Nucleon Matter on Lattice

### CURRENT POSITIONS

2007 – to present. Professor, Physics Department, California State University Los Angeles, California, USA

2009 – to present. Director, Scientific consultant, Nanomaterials and Nanoclusters Inc., Granada Hills, California, USA

## SCIENTIFIC DEGREES

Doctor of Science, (D.Sc.) Yerevan Physics Institute, Theoretical Division, Yerevan, 1991

Candidate of Science, (Ph.D.) Tamms Department of Theoretical Physics, Lebedev Physics Institute, Moscow, 1977

## COLLABORATIONS

- Center for Integrated Nanotechnologies, U.S. Department of Energy, Office of Basic Energy Sciences user facility at Los Alamos National Laboratory (Contract DE-AC52-06NA25396) and Sandia National Laboratories (Contract DE-AC04- 94AL85000)
- Center for Functional Nanomaterials, Brookhaven National Laboratory, which is supported by the U.S. Department of Energy, Office of Basic Energy Sciences (Contract No.DE-AC02-98CH10886)
- Strongly correlated electrons - microscopic models and unconventional pairing, superconductivity in Betts lattices, University of Connecticut (G.W. Fernando)
- Nanoscale pairing instabilities and inhomogeneities in clusters, Los Alamos National Laboratory (A. V. Balatsky)
- Exact many-body calculations of thermal properties of neutron and nuclear matter, California State University, Northridge (R. Seki)
- Computational research of materials with correlated electrons, California State University, Northridge (N. Kioussis)
- Critical behavior of seismic system and dynamics in ensemble of strong earthquakes, Schmidt Institute of Physics of the Earth, Moscow (S. Ts. Akopian)
- Magnetic and entanglement properties in Heisenberg-like clusters, Yerevan Physics Institute, Yerevan (N. S. Ananikian)
- Photonic density and nonreciprocal optical properties in chiral liquid crystals, Yerevan State University (A. H. Gevorgyan)
- Spin-polarizing properties of heterostructures with magnetic nano elements, State Engineering University of Armenia (A. S. Sahakyan)

## TEACHING RESPONSIBILITIES

Teach major graduate and undergraduate courses at California State University in Los Angeles, Northridge, Santa Monica and Pierce Colleges. Teaching responsibilities include many-body theory, classical and statistical mechanics, mathematical methods in physics, solid state physics, quantum mechanics, modern physics, general physics, etc.

**AWARDS**

- LUCILE PACKARD FOUNDATION TRAVEL GRANT to attend the Gordon Research Conference, Mount Holyoke College, MA (2009)
- TRAVEL GRANT for lecture series from Tamkang University, Taiwan (2002, 2001, 1997, 1996)
- INVITATION GRANT from Laboratoire Leon Brillouin, Saclay, France (1997)
- FELLOWSHIP INVITATION to work from International Centre for Theoretical Physics, Miramare-Trieste, Italy (1996)
- PERSONAL FELLOWSHIP granted by the Union College, Schenectady, NY (1993)
- MEYER FOUNDATION AWARD honored by the American Physical Society (1993)

**RECOGNITIONS**

- INTERNATIONAL ADVISORY BOARD of Centennial Anniversary Superconductivity on New$^3$SC-8, Chongqing, China (2011)
- INTERNATIONAL SCIENTIST OF THE YEAR from International Biographical Center of Cambridge, England (2001 and 2003)
- WHO IS WHO IN SCIENCE AND ENGINEERING publication Board awarded from STRATHMORE'S, Westbury, NY (2003)
- WHO IS WHO IN SCIENCE AND ENGINEERING awarded from Marquis Who's Who publications Board, Fifth Ed. (2000/2001)
- HONORARY SCHOLAR DIPLOMA in Residence awarded from New York University (1994)

**AFFILIATIONS**

Member of Topical Group in Magnetism
Member of Material Research Society
Member of New York Academy Sciences
Member of American Physical Society

**JOURNAL AND PEER REVIEWER**

Editorial Board Member of International Scholarly Research Network on Condensed Matter Physics (2012), Applied Surface Science (2011), Materials Science and Engineering B (2010), National Science Foundation Grant Board (2008), Physics Letters A (2004), International Journal of Modern Physics (2003, 2004), International Journal of Superconductor Science and Technology (since 1999)

**GUEST SPEAKER**

SLAC National Accelerator Laboratory, Stanford University (November, 2011)

California Institute of Technology (October, 2010)

Theoretical Division at Los Alamos National Laboratory (November, 2009) Computational Science Center, Brookhaven National Laboratory (October, 2009)

University of South California Los Angeles (April, 2008)

California State University Los Angeles, CA (May, 2008, April 2009) University of California Riverside (June, 2008)

University of California Davis (February, 2008)

University of California Irvine (July, 2007)

**PUBLICATIONS**

Nearly 200 publications in refereed International Journals;

http://www.calstatela.edu/faculty/akochar/publications.php