Hayk Harutyunyan – Curriculum Vitae (12/2007)

Contact information:

Permanent address: Dipartimento di Fisica, Universita' di Pisa, largo B. Pontecorvo 3, 56127 Pisa, Italy

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Education:

- **(01/2006 – present)** Ph.D. Student in Applied Physics, School of Graduate Studies G. Galilei, Department of Physics, University of Pisa, Pisa, Italy.
  Reasearch topic: Excited State Dynamics of Individual Single – Walled Carbon Nanotubes.
- **(09/2003 - 06/2005)** Master of Science (MSc) in Physics, Department of Molecular Physics, Faculty of Physics, Yerevan State University, Yerevan, Armenia. GPA 5.0 (out of 5.0).
  Thesis: Selective coordinational properties of the sublimed layers of mono-4pyridil-tri-phenil-phorphyrinatocobalt.
- **(09/1999 – 06/2003)** Bachelor of Science (BSc) in Physics, Department of Molecular Physics, Faculty of Physics, Yerevan State University, Yerevan, Armenia. GPA 4.8 (out of 5.0).
  Thesis: Comparative study of contribution of different types of interactions in helix – coil transition of DNA.
- **(06/1999)** Maturity (school graduation) certificate, A. Shirakatsi Lyceum, Yerevan, Armenia

Employment:

- **(08/2004 – 01/2006)** Research Assistant, Molecule's Structure Research Center, National Academy of Sciences, Yerevan, Armenia.

Research experience:

- Confocal microscopy of single molecules and nanostructures.
- Photoluminescence and Raman spectroscopy of single carbon nanotubes.
- Time-resolved photoluminescence measurements on single carbon nanotubes by time-correlated single photon counting.
- Infrared spectroscopy of porphyrins. Research on catalytic and heme-modeling properties of metalloporphyrins' sublimed layers.
- Experience with low temperature, high vacuum systems. Thermal deposition of molecular films.

Visiting stays, Conferences, Schools:

- **(11/2006 - present)** visiting Ph.D. student, Department of Physical Chemistry, Ludwig-Maximilians-University of Munich (LMU), Munich, Germany.
- **(02/2007)** CeNS Winter School "Nanosystems: From Quantum Devices to Biological Engines", Mauterndorf, Austria.
- **(07/2006)** ICPP – 4, International Conference on Porphyrins and Phthalocyanines, Rome, Italy.
- **(01/2005 – 03/2005)** visiting student**,** Nuclear Magnetic Resonance Laboratory, Institute of Organic Chemistry, Russian Academy of Sciences, Moscow, Russia.
- **(07/2003 – 09/2003)** Summer school, Deutsches Elektronen Synchrotron, Hamburg, Germany.
- **(08/2002 – 09/2002)** Summer school, Heavy – Ion Research Center (GSI), Darmstadt, Germany.
- **(06/2001 – 09/2001)** IAESTE student, Heavy – Ion Research Center (GSI), Darmstadt, Germany.

Scholarships and Awards:

- **(01/2006 – 12/2008)** G. Galilei School of Graduate Studies three year Ph.D grant, University of Pisa.
- **(06/2003**) BSc. Diploma with Honor, Yerevan State University.
- **(1997 – 1999)** 8 diplomas in Republican School Olympiads (Physics, Mathematics, Astronomy, Informatics).

Professional Membership:

- **(11/2006 - present)** Associate member of the Center of Nanoscience (CeNS), Munich, Germany.

Languages:

- Fluent in Armenian (native), English and Russian. Basic knowledge of Italian.

Publications:

- C. Casiraghi, A. Hartschuh, E. Lidorikis, H. Qian, H. Harutyunyan, T. Gokus, K. S. Novoselov, A. C. Ferrari, "Rayleigh Imaging of Graphene and Graphene Layers", Nano Lett. 7, 2711 (2007).
- T.S. Kurtikyan, H. A. Harutyunyan, R. K. Ghazaryan and J. A. Goodwin, "Spectral study of the nitrogen monoxide interaction with sublimed layers of meso-mono-4-pyridyl-tri-phenyl- and meso-mono-3-pyridyl-tri-phenyl-porphyrinatocobalt(II) " J. Porphyrins Phthalocyanines, 10, 971 (2006).