

Prof. Ghassan Saffarini
Physics Department
An-Najah National University
Nablus - West Bank
Palestine
Fax: +972-9-2345982
E-Mail: safarini @ najah.edu
Cell phone: +972-599-076421



Experience:

- **Professor**
Present
An-Najah National University
- **Visiting Professor**
2005-2006
Laboratoire PBM, UMR 6522, LECAP, Institut des Materiaux de Rouen, Faculte des Sciences, Rouen, France.
- **Professor**
2003-2005
An-Najah National University
- **Associate Professor**
1997-2003
An-Najah National University
- **Assistant Professor**
1991 - 1997
An-Najah National University
- **Lecturer**
1980 - 1987
An-Najah National University
- **High School instructor in Science**
1977 - 1978

Current research interests:

Physics of materials:

Electronic and structural properties, semi-conducting chalcogenide glasses. Emphasis is aimed at identifying the structure-property relationships in order to assess the suitability of the use of these materials in devices. Techniques such as X-ray photoelectron spectroscopy (XPS), X-ray diffraction (XRD) are employed in the course of these investigations. Surface science experience in XPS is gained using a Perkin-Elmer CI electron spectrometer.

Thermal properties:

Temperature Modulated Differential Scanning Calorimetry (TMDSC), Differential Thermal Analysis (DTA), and Thermogravimetric Analysis (TGA).

X ray Absorption Fine Structure (XAFS) Spectroscopy:

Extended X-ray absorption fine structure (EXAFS) and X-ray Absorption Near Edge Structure (XANES). Experience in EXAFS and XANES is gained on many international facilities such as the British synchrotron facility at Daresbury, the French synchrotron one (L.U.R.E.), Orsay and the Italian facility (ELETRA) at Trieste.

Gamma ray spectroscopy

Measurement of Naturally Occurring Radioactive Materials (NORM).

Radon concentration in air, water and soil

Long term measurements of radon concentration in air and soil using passive CR39 solid state nuclear track detector (SSNTD) and short term measurements in water using RAD7 active detector.

Funded research projects:

Office of External activities (OEA) at the International Center for Theoretical Physics (ICTP), Trieste, Italy, and International Atomic Energy Agency (IAEA) 1998.

Title: Measurement of radon concentration in hospitals and health centers in Nablus city, Palestine (completed).

Editorial board membership:

1. **2009-2012**, Editor-in-Chief of An-Najah University Journal of Research-A (Natural Sciences).
2. **2010-present**, Associate Editor of Journal of Physics.
3. **2006-present**, Member of the Advisory Board of the International Scientific Journal.
4. **1994-1996; 2003-2005**, Member of the Editorial Board of An-Najah University Journal of Research-A (Natural Sciences).

Administrative:

1. **2015-2016**, Dean of faculty of science.
2. **2009-2012**, Dean of scientific research.
3. **1994-1995; 2003-2005**, Chairman of physics department, An-Najah National University,
4. Head and member of various committees for the development of physics department.

Education:

- **Doctor of Philosophy in Experimental Condensed Matter Physics**
November 1991
Brunel University - London -England.
- **Master of Science in Physics**
March 1980
University of Manchester - England.
- **Bachelor of Science in Physics**
June 1977
University of Jordan - Amman.

Teaching:

Courses taught at undergraduate level:

Introductory Physics (mechanics, electricity and magnetism, both calculus and non calculus based).

Optics.

Thermodynamics.

Classical mechanics.

Solid state electronics.

Solid state physics.

Modern physics.

Nuclear physics.

Particle physics.

Selected topics.

Research methodology.

Advanced laboratories.

Non-conventional energy resources.

Courses taught at graduate level:

Experimental techniques in physics.

Special topics.

Teaching related activities:

Coordinated general physics I (mechanics), several times.

Coordinated general physics II (electricity and magnetism), several times.

Coordinated advanced laboratories, several times.

Awards:

1. **2017**, Excellence in scientific research award, Arab American University, Jenin, Palestine.
2. **2005-2006**, A distinguished scholar award from the Arab Fund for Economic and Social Development, Kuwait.
3. **2005**, The Islamic Bank award in Physics and chemistry, Participant.
4. **2003**, A fellowship at I.C.T.P., Trieste, Italy.
5. **2002**, A German government (DAAD) research fellowship, Saarbrucken University, Germany.

6. **2001**, A French government (E.G.I.D.E) research fellowship, L.E.C.A.P., University of Rouen, France.
7. **1999**, A fellowship at I.C.T.P., Trieste, Italy.
8. **1998**, A German government (DAAD) research fellowship, Osnabruck University, Germany.
9. **1998**, A fellowship at I.C.T.P., Trieste, Italy.
10. **1997**, A French government (A.P.A.P.E) research fellowship, L.E.C.A.P., University of Rouen, France.
11. **1996**, A Training and Research in Italian Laboratories (TRIL) research fellowship, the Science Park, Trieste, Italy.
12. **1995**, A French government (A.P.A.P.E) research fellowship, L.U.R.E., Orsay, University of Paris, France.
13. **1994**, A German government (DAAD) research fellowship, Osnabruck University, Germany.
14. **1993**, A fellowship at the International Center for Theoretical Physics (I.C.T.P.), Trieste, Italy.
15. **1992**, A British Council research fellowship, Brunel University - England.
16. **1987 – 1991**, A British Council scholarship, Brunel University, London, England,
17. **1973 – 1977**, A scholarship from the government of Jordan, University of Jordan, Amman, Jordan.

Computer skills:

Windows, Microsoft WinWord, Excel, Micro cal Origin, Sigma plot, Power point.

Professional Activities:

1. **2016**, Member of the Organizing Committee of the Fifth Palestinian Conference on Modern Trends in Mathematics and Physics, AAUJ, 31 July-2 August.
2. **2016**, Conference Chairman, Second Palestinian International Conference on Material Science and Nanotechnology (PICNM 2016), March 23-24, 2016.
3. **2013**, Head of Organization Committee, Research Day in Physics, 23rd November, An-Najah National University.
4. **2007-2012, 2003-2005**, Member of the Promotion Committee for the Scientific Faculties, An-Najah National University.
5. **2011**, Member of the International Advisory Board of the International Conference on Advances in Condensed and Nano Materials Feb. 23-26.
6. **2010**, Member of the Organizing Committee of the Palestinian Conference on Modern Trends in Mathematics and Physics II, 2-4 August.
7. **2002-2009**, Senior Associate of the Abdus Salam International Center for Theoretical Physics.

8. **2007-2008**, Referee for An-Najah research award.
9. **2004-2005, 2007-2014**, Member of the sabbatical Committee for faculty members.
10. **1994-1995; 2003-2005**, Member of the College of Science Board.
11. **2000**, Member of the Organizing Committee of the Palestinian Physics Conference, An-Najah National University, Nablus, Palestine, 3-4 May.
12. **1999-2001**, Member of the SESAME Scientific Committee (Synchrotron-light for Experimental Science and Applications in the Middle East).
13. Member of the Palestinian Physical Society (PPS).
14. Member of New York Academy of Science.
15. Supervised M. Sc theses for three students.
16. Served as an internal examiner for M. Sc students, many times.

Reviewer for the following journals:

Journal of Materials Science
 Optical Materials
 Thermochemica Acta
 physica status solidi
 Materials Research Bulletin
 Journal of Physics and Chemistry of Solids
 Acta Physica Polonica.
 Transactions on Electron Devices.

Conferences, workshops and meetings:

1. **2018**, Member Organizing Committee, Sixth Palestinian Conference on Modern Trends in Mathematics and Physics, PTUK, 5-8 August, 2018.
2. **2017**, The Second Palestinian International Graduate Conference on Natural, Medical, and Health Sciences and Humanities, April 20, An-Najah National University.
3. **2017**, First Palestinian International Conference on Peaceful Uses of Atomic Energy , Feruary 19-20, Palestine Technical University-Kadoorie, Tulkarem, Palestine.
4. Fourth Annual International Conference on Physics, 18-21 July 2016, Athens, Greece.
5. **2016**, Second Palestinian International Conference on Material Science and Nanotechnology (PICNM 2016), March 23-24, 2016.
6. **2015**, Fifth International Advances in Applied Physics and Materials Science Congress & Exhibition (APMAS2015), 16-19 April, Fethiye- Mugla, Turkey.
7. **2014**, Twelfth SESAME users' meeting, Amman, Jordan, 26-27 November.
8. **2013**, Research Day in Theoretical and Applied Physics, 23rd November.
9. **2011**, Higher Education Policy and Management Workshop, March 23-26, Central European University, Budapest, Hungary.

10. **2010**, Tenth SESAME users' meeting, Amman, Jordan, 7-9 November.
11. **2010**, Second EMUNI Research Souk, An-Najah National University, Nablus, Palestine, 14th June.
12. **2009**, Eighth SESAME users' meeting, Petra, Jordan, 19-21 November.
13. **2007**, Sixth SESAME users' meeting, Amman, Jordan, 17-19 November.
14. **2006**, The XI International Conference on the Physics of Non-Crystalline Solids, Rhodes-Greece, 29 October- 2 November.
15. **2006**, ICTP school on synchrotron radiation and applications, 16. 8-26 May.
17. **2005**, First UAE International Conference on Biological and Medical Physics, United Arab Emirates University, 27-30 March.
18. **2004**, Fourth Symposium on Use of Nuclear Techniques in Environmental Studies, Center for Theoretical and Applied Physical Sciences, Yarmouk University, Irbid, Jordan, 13-15 September.
19. **2004**, Summer University, EMC-PLC and IT, Tishreen University, Latakia- Syria, 23-31 August.
20. **2004**, The First Workshop in Medical Physics, United Arab Emirates University, 31st March.
21. **2002**, JSPS Asian Science Seminar : Synchrotron Radiation Science, Al-Balqa' Applied University, Al Salt, Jordan, 19-28 October.
22. **2001**, First International workshop on Amorphous and Nanostructured Chalcogenides "Fundamentals and applications", Bucharest, Romania, 24-28 June.
23. **2000**, Fourth Symposium on Magnetism, Yarmouk University, Irbid, Jordan, 6-8 November.
24. **2000**, Seventh Petra school of physics, University of Jordan, Amman, 17-21 September.
25. **2000**, UNESCO meeting on SESAME, Amman, Jordan, 21-22 June.
26. **2000**, The Palestinian physics conference "Condensed matter and applications", An-Najah National University, Nablus, Palestine, 3-4 May.
27. **2000**, The first conference on medical physics and its applications, Zarka Private University, Jordan, 24-26 April.
28. **2000**, Fourth international conference on the physics of condensed matter, University of Jordan, Amman, 18-22 April.
29. **2000**, The second Palestinian physics symposium, Al-Quds university, Palestine, 11-12 April.
30. **1999**, UNESCO committee meeting for a SR-source in the Middle East, Berlin, Germany, 19-21 August.
31. **1999**, UNESCO meeting for a SR-source in the Middle East, Paris, France, 15-16 June.

32. **1999**, Third workshop on physics and technology of thin films, Trieste, Italy, 8-26 March.
33. **1998**, First scientific day on physics, Al-Quds university, Palestine, 12 March.
34. **1997**, Seminar on experimental techniques in high-energy and synchrotron radiation (SR) physics, Torino, Italy 3-8 November.
35. **1997**, Seventh International conference on the structure of non-crystalline materials, Cagliari, Sardegna, Italy, 15-19 September.
36. **1996**, Condensed Matter and Material Physics (CMMP) conference, University of York, England, 17-19 December.
37. **1996**, Second symposium on magnetism and magnetic materials, Yarmouk University, Irbid, Jordan 4-6 November.
38. **1995**, Condensed Matter and Material Physics (CMMP) conference, University of Liverpool, England, 19-21 December.
39. **1995**, Second symposium on computational condensed matter Physics, Yarmouk University, Irbid, Jordan 6-8 November.
40. **1995**, First Palestinian conference on physics education, Bir-Zeit University, Palestine, 5-6 October.
41. **1995**, Third workshop on Van de Graff accelerators in research, training and technological applications, University of Jordan, Amman, Jordan, 14-17 August.
42. **1995**, First workshop on solar and wind energies in Palestine, Jenin, 10 August.
43. **1994**, Condensed Matter and Material Physics (CMMP) conference, The University of Warwick, England, 19-21 December.
44. **1993**, Research workshop on condensed matter physics, I.C.T.P, Trieste, Italy, 31 July-4 September.
45. **1991**, Chelsea Conference on Amorphous and Liquid Semiconductors, London, 19-20 December.
46. **1990**, Chelsea Conference on Amorphous and Liquid Semiconductors, London, 17-18 December.

Publications:

1. **2017**, I. Al-Khatib, H. Al-Zabadi, **G.Saffarini**, Journal of Environmental Radioactivity, **169-170** (2017) 192.
2. **2015**, M.Mansour, I.Warad, **G.Saffarini**, R.Salghi, S.Jodeh, A.Swafta, O.Abd-Elkader, Journal of Materials and Environmental Science **6**, 2717.
3. **2015**, H. Al Zabadi, K. Mallah, **G.Saffarini**, International Journal of Radiation Research **13**, 221.
4. **2014**, **G.Saffarini**, A.Saiter, J.M. Saiter, Research & Reviews: Journal of Physics **3**, 5.
5. **2013**, F. Shoqwara, N. Dwaikat, **G.Saffarini**, Research & Reviews: Journal of Physics **2**, 10.

6. **2012, G.Saffarini**, N. Dwaikat, M El Hasan, F. Sato, Y. Kato, T. Iida, Nuclear Instruments and Methods in Physics Research **A 680**, 82.
7. **2012, H. Al Zabadi, S.Musmar, S. Issa, N. Dwaikat, G.Saffarini**, BMC Research Notes **5**: 29.
8. **2010, N.Dwiakat, M. El-Hasan, M.Sueyasu, W. Kada, F. Sato, Y. Kato, G.Saffarini, T. Iida**, Nuclear Instruments and Methods in Physics Research **B 268**, 3351.
9. **2007, N.Dwaikat, G.Saffarini, M. El-Hasan, T. Iida**, Nuclear Instruments and Methods in Physics Research **A 574**, 289.
10. **2007, G.Saffarini, A.Saiter, M.R.Garda and J.M.Saiter**, Physica **B 389**, 275.
11. **2007, G.Saffarini, J.M.Saiter and H.Schmitt**, Optical Materials **29**, 1143.
12. **2007, G.Saffarini, J.M.Saiter and J.Matthiesen**, Materials Letters **61**, 432.
13. **2006, G.Saffarini, J.M.Saiter**, Chalcogenide Letters **3**, 49.
14. **2004, G.Saffarini and J.M.Saiter**, Journal of Materials Science **39**, 6141.
15. **2003, G.Saffarini, H.Schmitt, H.shanak, J.Nowoczin and J.Muller**, Physica Status Solidi (b) **239**, 251.
16. **2002, G.Saffarini, J.M.Saiter and J.Matthiesen**, Journal of Materials Science Letters **21**, 1481.
17. **2002, G.Saffarini and J.M.Saiter**, Materials Letters **57**, 219.
18. **2002, G. Saffarini**, Applied Physics **A 74**, 283.
19. **2001, G. Saffarini, J.M. Saiter and A. Zumailan**, Journal of Optoelectronic and Advanced materials **3**, 485.
20. **2001, G. Saffarini, J. Mathiesen and R. Blachnik**, Physica **B 305**, 293.
21. **2001, K. Chebli, J.M. Saiter, J. Grenet, A. Hamou and G. Saffarini**, Physica **B 304**, 228.
22. **2001, G. Saffarini and J. Matthiesen**, Applied Physics **A73**, 621.
23. **2000, G. Saffarini, and J. M. Saiter**, Materials Letters **46**, 327.
24. **2000, G. Saffarini**, Physica Status Solid (a) **179**, 109.
25. **2000, G. Saffarini**, Journal of Materials Science Letters **19**, 797.
26. **1999, G. Saffarini**, Physica Status Solidi (b) **213**, 261.
27. **1999, G. Saffarini**, An-Najah Journal of Research (Natural Sciences) **13**, 31.
28. **1998, G. Saffarini**, Physica Status Solidi (a) **170**, 23.
29. **1998, J. Ledru, J.M. Saiter, G. Saffarini and S. Benazeth**, J. Non-Crystalline Solids **232-234**, 634.
30. **1998, G. Saffarini**, Physica **B 253**, 52.
31. **1998, G. Saffarini**, Materials Letters **35**, 314.
32. **1998, G. Saffarini**, Journal of Material Science Letters **17**, 531.

33. **1998**, J.M. Saiter, J. Ledru, A. Hamou and **G. Saffarini**, Physica **B 245**, 256.
34. **1998**, J.M. Saiter, J. Ledru, **G. Saffarini**, and S. Benazeth, Materials Letters **35**, 309.
35. **1996**, J.M. Saiter, J. Ledru, **G. Saffarini**, and S. Benazeth, Materials Letters **28**, 451.
36. **1996**, **G. Saffarini** and A.Schlieper, Journal of Material Science Letters **15**, 463.
37. **1995**, **G. Saffarini**, An-Najah Journal of Research (Natural Sciences) **VIII**, 49.
38. **1995**, **G. Saffarini** and A. Schlieper, Physica Status Solidi (**b**) **191**, 243.
39. **1995**, **G. Saffarini** and A. Schlieper, Applied Physics **A 61**, 29.
40. **1995**, **G. Saffarini** and M. Neumann, Solid State Communications **95**, 577.
41. **1994**, **G. Saffarini** and B.R. Orton, An-Najah Journal of Research (Natural Sciences) **VII**, 110.
42. **1994**, **G. Saffarini**, Solid State Communications **91**, 577.
43. **1994**, **G. Saffarini**, Solid State Communications **90**, 677.
44. **1994**, **G. Saffarini**, Applied Physics **A 59**, 385.
45. **1990**, B.R. Orton, **G. Saffarini**, J. Gorgol and J.C. Riviere, Philosophical Magazine **B 62**, 71.

References: are provided upon request.