

CURRICULUM VITAE

Costas M. Soukoulis

<http://cmpweb.ameslab.gov/personnel/soukoulis/>

Address, Crete:

Institute of Electronic Structure and Laser (IESL)
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Address, Ames:

Ames Laboratory and Dept. of Physics
Iowa State University
Ames, Iowa, 50011, USA
Tel: +1-515-2942816
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e-mail: soukouli@iastate.edu

Education:

University of Athens, Athens, Greece.
B.S. Physics. 1969 -1974

University of Chicago, Chicago, Illinois.
MS Physics. 1975 **Ph.D.** Physics. 1978

Positions:

Distinguished Professor of Liberal Arts and Sciences, Iowa State University, since July 2005

Professor of Physics (part-time), Department of Materials Science and Technology, University of Crete, Heraklion, Crete, December 2001-present

Senior Physicist and Professor of Physics, Ames Laboratory and Department of Physics, Iowa State University, July 1990-present

Physicist and Associate Professor of Physics, Ames Laboratory and Department of Physics, Iowa State University, July 1986-June 1990

Associated Faculty, IESL-FORTH, Heraklion, Crete, Greece, since September 1984

Associate Physicist and Assistant Professor of Physics, Ames Laboratory and Department of Physics, Iowa State University, August 1984-June 1986

Research Physicist, Corporate Research Science Labs, Exxon Research and Engineering Company, June 1981-July 1984

Visiting Assistant Professor, Department of Physics, University of Virginia, September 1978-May 1981

Research Associate, Department of Physics and the James Franck Institute, University of Chicago, May 1978-August 1978

Research and Teaching Assistant, Department of Physics and the James Franck Institute, University of Chicago, September 1974-May 1978

Administrative/Scientific leadership achievements:

Created, directed and provided funding to a research group at ISU presently consisting of three professors at ISU, two researchers at Ames Lab., two post-docs, six graduate students, one undergraduate student and one computer technician.

Created, directed and provided funding to a research group at FORTH presently consisting of four professors, three researchers at FORTH, two post-docs, one graduate student, and one computer technician.

Put together an international team of senior scientists (Sir J. B. Pendry, Imperial College), D. R. Smith (Duke Univ.), Ekmel Ozbay (Bilkent Univ.), E. N. Economou (Univ. of Crete and FORTH),

and M. Wegener (Univ. of Karlsruhe) that created and developed the field of left-handed materials or negative index materials.

Has acted as evaluator of research center and department of physics.

Professional Honors/Awards:

- Fellow of the American Physical Society, 1991.
- Fellow of the American Association for the Advancement of Science, 2002.
- Fellow of the Optical Society of America, 2002.
- Descartes Price for Research, European Union, 2005.
- Humboldt Research Award for Senior U.S. Scientists, 2002.
- Outstanding Scientific Accomplishment in Solid State Physics (DOE Materials Sciences Division), 1992.
- Liberal Arts and Sciences (LAS) Excellence in Research Award, ISU 2000.
- Iowa State University (ISU) Outstanding Achievement in Research, 2001.
- Iowa State University (ISU) Awarded the title of Distinguished Professor of Liberal Arts and Sciences
- Alexander Von Humboldt Fellowship, 1991.
- Energy 100 Award and Science 100 Award, U. S. Dept. of Energy.

Research Interests:

Development of theoretical understanding of the properties of disordered systems, with emphasis on electron and photon localization, photonic band gaps, left handed materials, random lasers, spin glasses, random fields, superconductivity, and the effects of disorder on nonlinear systems. The understanding of the electronic and transport properties of amorphous semiconductors is also a major effort.

Citations:

| | | | | | | | | | |
|------|------------|------|------------|------|------------|------|------------|------|------------|
| 1978 | 10 | 1979 | 28 | 1980 | 38 | 1981 | 59 | 1982 | 52 |
| 1983 | 77 | 1984 | 109 | 1985 | 154 | 1986 | 145 | 1987 | 118 |
| 1988 | 167 | 1989 | 183 | 1990 | 170 | 1991 | 173 | 1992 | 165 |
| 1993 | 190 | 1994 | 245 | 1995 | 229 | 1996 | 313 | 1997 | 297 |
| 1998 | 386 | 1999 | 426 | 2000 | 463 | 2001 | 781 | 2002 | 592 |
| 2003 | 675 | 2004 | 686 | 2005 | 907 | | | | |

Total number of citations

- as of December 31, 2001 **4980**.
- as of December 31, 2003 **6247**.
- as of December 31, 2004 **6933**.
- as of December 31, 2005 **7840**.

Another index to quantify on individual's scientific research output is the so-called h-index, defined as the number of papers with citation number higher or equal to h. (see the following references about the h-index, <http://www.sciencemag.org/cgi/reprint/309/5738/1181c.pdf> , <http://xxx.lanl.gov/pdf/physics/0508025> and J. E. Hirsch, Proc.Nat.Acad.Sci. **46**, 16569 (2005))

The h-index for Prof. Soukoulis is 47.

All of the above information about citations was obtained from the Web of Science.

Publications:

He has 297 refereed publications, and has published extensively (more than 30 manuscripts) in *Physical Review Letters (PRL)*, the premier letters journal in the world for important discoveries in physics and in *Applied Physics Letters and Optics Letters*, the leading letters journals for important discoveries in applied physics and optics respectively. He has also published in *Science*, and in *Nature*.

Teaching Experience:

Have taught one major graduate or undergraduate course per semester since 1984 at Iowa State University, University of Crete and University of Virginia. These include modern physics, condensed matter physics, statistical physics and general physics.

Invited Review Articles, Popular Articles and Other Papers:

1. C. M. Soukoulis and E. N. Economou, "Electron States, Localized," in *Encyclopedia of Applied Physics; Vol. 5*, ed. by G. Trigg, VCH Publishers, New York (1993), p. 549-570.
3. C. M. Soukoulis, "Photonic Crystals," in *McGraw-Hill Yearbook of Science and Technology*, 1997, p.363.
4. K. Busch and C.M. Soukoulis, "Effective medium and Coherent Potential Approximation," *Springer tracts in modern physics* **144**, chapter 3 (1998).
5. M. M. Sigalas, K. M. Ho, C. M. Soukoulis, R. Biswas and G. Tuttle, "Photonic Crystals," in *Wiley Encyclopedia of Electrical and Electronics Engineering; Vol. 16*, ed. By J. G. Webster, J. Wiley, New York (1999), p. 345-359.
6. M. Sigalas, K. M. Ho, R. Biswas and C. M. Soukoulis, "Photonic Crystals," in *Optics of Nanostructured Materials*, J. Wiley, New York (2001), p.1.
7. C. M. Soukoulis and E. N. Economou, "Solid State Physics," in *AIP Physics Desk Reference*, Springer Verlag, New York (2003), p. 725.
8. E.N. Economou and C. Soukoulis, "Disorder and Localization Theory," article in the six volumes *Encyclopedia of Condensed Matter Physics*, Eds F. Bassani, G.L. Liedl, and P. Wyder. Elsevier (2005) Vol. 1, p. 444.
9. M. Kafesaki and C. M. Soukoulis, "A Historical Perspective and A Review of the Fundamental Principles in Modeling 3-D Periodic Structures with an Emphasis on volumetric EBGs," in *Electromagnetic Metamaterials: Physics and Engineering Aspects*, J. Wiley, New York (2006).

Discussion of our work in scientific journals and press:

1. "A Novel Architecture of Excluding Photons," *Science News* **144**, 199 (1993).
2. "Using Micro fabrication Techniques on Photonic Bandgap Structures," *Optics & Photonics News*, March 1994, p. 52.
3. "Light Gets the Bends in a Photonic Crystal," *Science News* **150**, 309 (1996).
4. "Infrared Photonic Crystals Fabricated using Deep x-ray Lithography," *Optical Engineering Reports*, January 1998, p.7.
5. "Visible Progress Made in three-dimensional Photonic Crystals," *Physics Today*, January 1999, p. 17.
6. "Mind the gap and Bright Switch," *Wired Magazine*, November 2000. (<http://www.wired.com/wired/archive/8.11/rants.html>).

7. "Random acts of brightness: From disordered systems comes coherent light," December 2000. (<http://www.eurekalert.org/features/doe/2000-12/dl-rao060502.php>)
8. "Manipulating Light in Photonic Crystals," March 2001 (http://www.er.doe.gov/Sub/Accomplishments/Decades_Discovery/17.html)
9. "Laser beams from scattered light - The big surprise," May 2001 (<http://www.external.ameslab.gov/Final/News/2001rel/01laserbeams.html>)
10. "Paint the town red: Want to brighten up your life? Grab a brush and a tin of laser paint," *New Scientist*, 30 June 2001, p. 23.
11. "Materials Aspects of Photonic Crystals," *MRS Bulletin*, August 2001. (http://www.mrs.org/publications/bulletin/2001/aug/Aug01_Intro_Bios.pdf).
12. "Costas Soukoulis honored by American Association for the Advancement of Science," November 2002. (<http://www.las.iastate.edu/newnews/soukoulis.shtml>).
13. "Good news for negative index materials," *PhysicsWeb*, March 2003. (<http://physicsweb.org/article/news/7/3/12>).
14. "Left handed but not in left field," *Science*, **299**, 1947 (March 28, 2003). (<http://www.sciencemag.org/cgi/reprint/299/5615/1947b.pdf>).
15. "The reality of negative refraction," *Physics World*, May 2003. (<http://physicsweb.org/article/world/16/5/3>).
16. "Positively Negative," *Nature*, **423**, 22 (May 1, 2003).
17. "Constantly throughout his career, Costas Soukoulis has been recognized for his professional work," March 2003. (<http://www.las.iastate.edu/newnews/soukoulis0324.shtml>)
18. "Recent results support the existence of negative refraction," *Materials Research News*, May 2003. (<http://www.mrs.org/geninfo/enews/enews200305.html#resnews>)
19. "New possibilities through negative refraction," *Optics and Photonic News*, August 2003.
20. "Light at the end of the tunnel," *Physical Review Focus*, March 2004. (<http://focus.aps.org/story/v13/st11>).
21. "Ames Lab. Physicist wins European's Union highest science prize," December 2005 (<http://www.external.ameslab.gov/final/News/2005rel/Descartesaward.htm>)
22. "2005 European Union Descartes prize for research laureates," December 2005. (http://europa.eu.int/comm/research/press/2005/pdf/pr02122005_annex_winners_dp_research2005_en.pdf)
23. "Smith Shares Descartes Award for Artificial Material that Reverses Light's Properties," December 2005. (<http://www.pratt.duke.edu/news/releases/index.php?story=239>)
24. "Former UCSD Physicist Shares Descartes Award for Material that Reverses Light's Properties," December 2005. (<http://ucsdnews.ucsd.edu/newsrel/science/mcdescartes.asp>)

Patents

K.M. Ho, C.T. Chan, and C.M. Soukoulis, *Periodic Dielectric Structures for Production of Photonic Band Gaps and Devices Incorporating the Same*, U.S. Patent 5,335,240.

K.M. Ho, G.L. Tuttle, E. Michel, R. Biswas, C.T. Chan, C.M. Soukoulis and E. Ozbay, *Periodic Dielectric Structure for Production of Photonic Band Gaps and Method for Fabricating the Same*, U.S. Patent 5,406,573.

C. M. Soukoulis, J. Zhou, T. Koschny, Lei Zhang and G. L. Tuttle, *Structures with negative index of refraction*, IPDR, Iowa State University and US patent application.

Grants Received (Non-Ames Lab)

Research Corporation, Amount \$10,500; Funding date: October 31, 1984

North Atlantic Treaty Organization (NATO), travel grants since 1985 (with E. N. Economou)

Electric Power Research Institute (EPRI), Amount: \$146,520 for three years
Funding date: February 20, 1989 (with Rana Biswas)

NSF Supercomputer Grant of 200 hours per year of CRAY-XMP time since 1987 (with Rana Biswas)

NSF (US-Greece Cooperative Science Program), Amount: \$16,000. Funding dates: May 1, 1992 - October 31, 1994.

NATO, award for organizing a NATO Advanced Research Workshop. Amount: \$35,000 (May 1992).

Department of Energy (Advanced Energy Projects) Amount \$909,605. Funding dates: Jan 1, 92 - Dec 31, 94 (with K. M. Ho, C. T. Chan, G. Tuttle)

Department of Education (FIPSE-Higher Education Collaboration), Amount: \$80,000 (with Rutgers, Courant Inst., Texas-Austin); Funding dates: Nov. 1, 1993 - Oct. 31, 1995.

Iowa Energy Center, Amount \$95,668. Funding dates: July 1, 1993 - June 30, 1995 (with Rana Biswas)

NATO, award for organizing a NATO ASI. Amount \$75,000 (June 1995)

Department of Energy, Photonic Band Gap Materials, Amount: \$450,000/yr. Funding dates: March 1, 1995-February 28, 1998 (with K.M. Ho, C. T. Chan, G. Tuttle)

Army Research Office, Amount: \$66,031, (subcontract with UC Santa Barbara). Funding dates: 9/1/97-4/31/00.

NATO, award for organizing a NATO ASI, Amount: \$75,000, Funding date: June 2000

NSF (US-Greece Cooperative Science Program), Amount: \$23,000. Funding dates: February 1, 2001 - January 31, 2003.

DARPA, Amount: \$216,000 (subcontract with Boeing). Funding Dates: June 1, 2001-May 31, 2005.

NATO, award for organizing a NATO ARW. Amount \$35,000 (June 2005).

DARPA, Amount: \$150,000 (subcontract with Boeing). Funding dates: June 1, 2005- May 31, 2007.

Presently, I have three DOE grants within the Ames Laboratory. One is for our work, both theory and experiment, on Photonic Crystals (\$500,000/yr), the second is on my work on Left-Handed Materials (\$150,000/yr), and the third one is on my work on Wave Propagation in Random Media (\$100,000/yr).

In addition, in collaboration with Drs. E. N. Economou and M. Kafesaki, I have two other grants at the Research Center of Crete, Heraklion, Crete on Photonic Crystals (200,000 Euro for 3 years (01/2000 - 01/2003)) and on Left-Handed Materials (800,000 Euro for 3 years

(09/2002 - 02/2006)). We also have two network of excellence (METAMORHOSE and PHOREMOST) grants, as well as a PYTHAGORAS grant from the Department of Education of Greece.

EDITORIAL ACTIVITIES:

Referee on the average 10-15 papers per year for *Phys. Rev. Lett.*, *Phys. Rev. B* and *E*, *J. of Phys.*, *Nature*, *Science*, *Optical Society of America*, *Appl. Phys. Lett.* and others.

Referee on the average 5-10 proposals per year for *NSF*, *DOE*, *European Community* and the *Greek Research and Development program*.

Editor of the book "*Photonic Band Gaps and Localization*," Plenum Publ. (1993).

Editor of the book "*Photonic Band Gap Materials*," Kluwer Publ. (1996).

Editor of the book "*Photonic Crystals and Light Localization in the 21st Century*," Kluwer Publ. 2001

Editor of the special volume of *Physica B* in honor of Professor Economou's 60th birthday, 2001

Co-editor of the MRS conference proceedings on "*Photonic Crystals: From materials to Devices*," 2002

Co-editor of the special issue of *JOSA B* on "*Localization, multiple-scattering and lasing in random nanomedia*." published in January 2004.

Co-founder and member of the organizing committee of the "*Photonic and Electromagnetic Crystal Structures (PECS-I)*," conference. This is the official conference for the Photonic Crystals field.

Invited by the editors of *Physics Reports* to write a review on *Photonic Crystals* in June 2002 (declined).

Invited by the editors of the AIP to write a review article on *Solid State Physics* published in the AIP Physics DESK REFERENCE in 2003.

Invited by the editors of *Review of Modern Physics* to write a review on *Left-handed Materials* in January 2004 (declined).

Senior Editor of the new Journal "*Photonic Nanostructures: Fundamentals and Applications*"

Professional Involvement:

Session chairman, American Physical Society Meeting, March 1982, 1989 and 1992, 2000, 2004.

Session chairman, Gordon Conference on Quantum Liquids and Solids, July 1987.

Member, Faculty Evaluation Committee of the Physics Department, University of Crete, 1987, 1988, 2000.

Chairman, Faculty Search Committee for the Research Center of Crete, Heraklion, Crete, 1989

Director of the NATO Advanced Research Workshop on "*Localization and Propagation of Classical Waves in Random and Periodic Structures*," held in Aghia Pelagia, Heraklion, Crete on May 26-30, 1992.

Director of the NATO Advanced Study Institute on "*Photonic Band Gap Materials*," held in Elounda, Crete on June 19-30, 1995.

Director of the NATO Advanced Study Institute on "*Photonic Crystals and Light Localization*," held in Hersonissos, Crete on June 19-30, 2000.

Director of the “*Wave Propagation and Electronic Structure in Disordered Systems,*” a 60th Birthday Symposium in Honor of E. N. Economou, Heraklion, Crete, Greece, June 16-18, 2000.

Member of the organizing committee of the “*Photonic and Electromagnetic Crystal Structures (PECS-III),*” conference, St. Andrews, Scotland, June 2001.

Member of the organizing committee of the MRS symposium on “*Photonic Crystals: From Materials to Devices,*” San Francisco, CA, April 2002.

Chairman, Search Committee for the Director of the Institute of Theoretical and Physical Chemistry, National Hellenic Research Foundation, Athens, Greece, July 1997, and December 2001.

Panel review of the Materials Synthesis and Processing, Materials Theory Program, NSF, April 1992.

Panel review of the Ministry of Education of Greece to evaluate the undergraduate and graduate physics programs, May 1997, December 2001 and December 2002.

Panel review of the European Community to evaluate Physics and Engineering proposals, 1999 - 2003.

Member of the organizing committee of the “*Photonic and Electromagnetic Crystal Structures (PECS-V),*” conference, Kyoto, Japan, March 2004.

Chairman of the organizing committee of the “*Photonic and Electromagnetic Crystal Structures (PECS-VI),*” conference, Aghia Pelagia, Crete, Greece, June 19-24, 2005.

Member of the Committee to review the scientific program of CUDOS, an Australian Research Council Center of Excellence, Sydney, Australia, July 2005.

Co-chairman of the organizing committee of the “*SPIE Congress on Optics and Optoelectronics: Metamaterials,*” Warsaw, Poland, August 28-September 2, 2005.

PH.D. STUDENTS

| | |
|------------------|---|
| Qiming Li | (1985) Graduated 1989, Researcher, Schlumberger, TX |
| Yi Wan | (1985) Graduated 1991, Financial Consultant, San Francisco |
| Inhee Kwon | (1987) Graduated 1992, Scientist, Seoul National University |
| Sreela Datta | (1989) Graduated 1994, Software Engineer, Ford Company, Detroit |
| G. Kopidakis | (1990) Graduated 1995, Assistant Professor, University of Crete |
| E. Lidorikis | (1995) Graduated 1999, postdoc at MIT |
| M. Ifti (Master) | (1996) Transferred to Univ. of British Columbia |
| X. Wang | (1996) Graduated 1998, Science Writer |
| M. Ruehlander | (1997) Graduated 2001, Software Engineer, Pandatel AG, Germany |
| X. Jiang | (1997) Graduated 2001, postdoc at MIT |
| S. Foteinopoulou | (1998) Graduated 2003, postdoc at Namur Univ., Belgium |
| X. Ma (Master) | (1999) Transferred to Computer Engineering |
| Lei Zhang | (2002) co-advisor with G. Tuttle (EE-ISU) |
| Jiangfeng Zhou | (2003) co-advisor with G. Tuttle (EE-ISU) |
| Anan Fang | (2004) |
| Lili Peng | (2004) |
| Bingnan Wang | (2004) |
| Weitao Dai | (2004) |

I have also been co-advising the following Ph.D. Students:

- K. Busch, graduated from U. of Karlsruhe in 1997, now at U. of Karlsruhe (C3 Professor)
- I. Zambetaki (Crete), graduated in 1997, now with the National Technical Univ. of Crete
- S. Katsoprinakis (Crete) graduated with Master. Transferred to the EE Dept. of Imperial College
- Mario Agio (Pavia), graduated in 2003, now at ETH-Zurich (Habilitation)
- Tamara Gundogdu (2003) Crete, co-advisor with E. N. Economou
- Nikos Maragos (2005) Crete, co-advisor with E. N. Economou

CURRENT POST-DOCS

Thomas Koschny
Rabia Moussa
Raluca Penciu

Invited Talks:

1. K. Levin, C. M. Soukoulis and G. S. Grest, 24th Conference on Magnetism and Magnetic Materials, Cleveland, Ohio, U.S.A. (1978).
2. G. S. Grest, C. M. Soukoulis and K. Levin, 5th EPS School on Materials, Magnetic Phase Transitions, Erice, Italy, July 1983.
3. C. M. Soukoulis, K. Levin and G. S. Grest, Workshop on the Physics of Disordered Systems, Institute for Theoretical Physics, University of California, Santa Barbara, California, U.S.A., August 1983.
4. M. H. Cohen, E. N. Economou and C. M. Soukoulis, *10th International Conference on Amorphous and Liquid Semiconductors*, Tokyo, Japan, August 1983.
5. G. S. Grest, C. M. Soukoulis and K. Levin, *29th Conference on Magnetism and Magnetic Materials*, Pittsburgh, Pennsylvania, U.S.A., November 1983.
6. C. M. Soukoulis, International Seminar on *Localization in Disordered Systems*, Johnsbach/Glashutte near Dresden, East Germany, December 1983 (invitation not accepted).
7. C. M. Soukoulis, *12th Midwest Solid Theory Symposium*, University of Minnesota, Minneapolis, Minnesota, U.S.A., September 1984.
8. C. M. Soukoulis, *32nd Annual Midwest Solid State Conference*, University of Nebraska, Lincoln, Nebraska, U.S.A., November 1984.
9. C. M. Soukoulis, *March Meeting of the American Physical Society*, Baltimore, Maryland, U.S.A., March 1985.
10. C. M. Soukoulis, NATO Advanced Study Institute on *Hydrogen in Disordered and Amorphous Solids*, Rhodes, Greece, September 1985.
11. C. M. Soukoulis, *Greek-Soviet Workshop on Solid State Physics*, Crete, Greece, December 1985.
12. C. M. Soukoulis, *1st International Workshop on Non-Crystalline Solids*, Sant Feliu de Guixols (Costa Brava), Spain, May 1986.
13. C. M. Soukoulis, *Conference on Glassy Dynamics and Optimization*, Heidelberg, West Germany, June 1986.
14. C. M. Soukoulis, *Conference on Disorder and Nonlinearity*, Los Alamos National Laboratory, New Mexico, May 1988.
15. C. M. Soukoulis, *SIAM Workshop on Random Media and Composites*, Xerox Training Center, Leesburg, Virginia, December 1988.
16. C. M. Soukoulis, *2nd International Workshop on Non-Crystalline Solids*, San Sebastian, Basque Country, Spain, July 1989.
17. C. M. Soukoulis, EEC Workshop on *Electronic Properties of Amorphous Semiconductors*, Grenoble, France, July 1989.
18. C. M. Soukoulis, NATO Advanced Study Institute *on the Science and Technology of Nanostructured Magnetic Materials*, Crete, Greece, June 1990.

19. C. M. Soukoulis, *6th General Conference of the Greek Solid State Physics Division*, Crete, Greece, September 1990.
20. C. M. Soukoulis, *19th Midwest Solid State Theory Symposium*, Michigan State University, East Lansing, Michigan, U.S.A., October 1991.
21. C. M. Soukoulis, *Workshop on the Development and Application of Photonic Band Gap Structures*, Park City, Utah, U.S.A., January 1992.
22. C. M. Soukoulis, NATO ARW on the *Localization and Propagation of Classical Waves in Random and Periodic Structures*, Crete, Greece, May 1992. (**Director**)
23. C. M. Soukoulis, *March Meeting of the American Physical Society*, Seattle, Washington, USA, March 1993.
24. C. M. Soukoulis, NATO Advanced Study Institute on *Nanophase Materials: Synthesis-Processes-Applications*, Corfu, Greece, June 1993.
25. C. M. Soukoulis, *21st Midwest Solid State Theory Symposium*, Wayne State University, Detroit, Michigan, USA, October 1993.
26. C. M. Soukoulis, *Advances in Optical Imaging and Photon Migration*, Optical Society of America, Orlando, Florida, USA, March 1994.
27. C. M. Soukoulis, *Waves in Random and Other Complex Media*, Institute for Mathematics and its Applications, Minneapolis, Minnesota, November 1994.
28. C. M. Soukoulis, NATO ASI on *Photonic Band Gap Materials*, Elounda, Crete, Greece, June 1995. (**Director**)
29. C. M. Soukoulis, *Materials Modeling*, Naval Research Laboratory, Washington, D. C., October 1995.
30. C. M. Soukoulis, *15th General Conference of the Condensed Matter Division*, European Physical Society, Baveno-Stressa, Lago Maggiore, Italy, April 1996.
31. C. M. Soukoulis, *Progress in Electromagnetic Research Symposium*, Innsbruck, Austria, July 1996.
32. C. M. Soukoulis, *Fluctuations, Nonlinearity and Disorder*, Heraklion, Crete, Greece, September 1996.
33. C. M. Soukoulis, *Progress in Electromagnetic Research Symposium*, Hong Kong, January 1997.
34. C. M. Soukoulis, NATO ASI on *Diffuse Waves in Complex Media*, Les Houches, France, March 1998.
35. C. M. Soukoulis, TMR Network Meeting on *Phase-Coherent Dynamics of Hybrid Nanostructures*, Ioannina, Greece, May 1998.
36. C. M. Soukoulis, XXII International Workshop on *Condensed Matter Theories*, Vanderbilt University, Nashville, TN, June 1998.
37. C. M. Soukoulis, *Progress in Electromagnetic Research Symposium*, Nantes, France, July 1998.

38. C. M. Soukoulis, *20th International Conference on Statistical Physics*, Paris, France, July 1998.
39. C. M. Soukoulis, *14th General Conference of the Greek Solid State Physics Division*, Ioannina, Greece, September 1998.
40. C. M. Soukoulis, *210th WE-Heraeus Seminar on Percolation, Interaction and Localization*, Berlin, Germany, October 1998.
41. C. M. Soukoulis, *Conference on Electromagnetic Crystal Structures: Design, Synthesis and Applications, (PECS-I)*, Laguna Beach, CA, January 1999.
42. C. M. Soukoulis, *International Conference on Mechanical and Electromagnetic Waves in Structured Media*, University of Sydney, Sydney, Australia, January 1999.
43. C. M. Soukoulis, *Cost268 Meeting on Wavelength Scale Photonic Components for Telecommunications*, Kista-Stockholm, Sweden, March 1999.
44. C. M. Soukoulis, *Hellenic Condensed Matter Society Meeting*, Athens, Greece, May 1999.
45. C. M. Soukoulis, *4th International Topical Conference on Optical Probes of Conjugated Polymers and Photonic Crystals*, Salt Lake City, Utah, February, 2000.
46. C. M. Soukoulis, *International Workshop on Photonic and Electromagnetic Crystal Structures, (PECS-II)*, Sendai, Japan, March 2000.
47. C. M. Soukoulis, *Tsukuba Mini-Workshop on Photonic Crystals*, Tsukuba, Japan, March 2000.
48. X. Jiang and C. M. Soukoulis, *March Meeting of the American Physical Society*, Minneapolis, Minnesota, March 2000.
49. C. M. Soukoulis, *Wave Propagation and Electronic Structure in Disordered Systems*, a 60th Birthday Symposium in Honor of E. N. Economou, Heraklion, Crete, Greece, June 2000.
50. C. M. Soukoulis, *NATO ASI on Photonic Crystals and Light Localization*, Limin Hersonissou, Crete, Greece, June 2000. (**Director**)
51. C. M. Soukoulis, *Wave Propagation in Diffusive and Nonlinear Media*, Cargese, Corsica, France, September 2000.
52. C. M. Soukoulis, *16th General Conference of the Greek Solid State Physics Division*, Nafplion, Greece, September 2000.
53. C. M. Soukoulis, *Fall Meeting of the Materials Research Society*, Boston, Massachusetts, November 2000.
54. C. M. Soukoulis, *Workshop on Photonic and Electromagnetic Crystal Structures, (PECS-III)*, St. Andrews, Scotland, June 2001.
55. C. M. Soukoulis, *Trends in Nanotechnology (TNT 2001)*, Segovia, Spain, September 2001.
56. C. M. Soukoulis, *First Hellenic-Turkish International Conference Physics Conference*, Bodrum, Turkey and Kos, Greece, September 2001.
57. C. M. Soukoulis, *Photonic Nanostructures, Advancing Materials to Control Light*, San Diego, CA, October 2001.

58. C. M. Soukoulis, *2001 Annual Meeting of Optical Society Meeting/ILS-XVVI*, Long Beach, CA, October, 2001.
59. C. M. Soukoulis, *7th International Symposium on Advanced Physical Fields, Fabrication and Characterization of Nanostructured Materials*, Tsukuba, Japan, November 2001.
60. C. M. Soukoulis, *Inauguration Meeting of the DFG - Center for Functional Nanostructures*, Karlsruhe, Germany, December 2001.
61. C. M. Soukoulis, *March Meeting of the American Physical Society*, Indianapolis, Indiana, March 2002.
62. C. M. Soukoulis, *NATO ASI on Wave Scattering in Complex Media: From Theory to Applications*, Cargese, Corsica, France, June 2002.
63. C. M. Soukoulis, *3rd WE-Heraeus Summer School on Photonic Crystals: Optical Materials for the 21st Century*, Lutherstadt Wittenberg, Germany, July 2002.
64. C. M. Soukoulis, *Photonic Crystals Down Under*, The Australian National University, Canberra, Australia, August 2002.
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Seminars at Institutions:

“Cluster Mean Field Theory of Spin Glasses: Static and Dynamic Properties”

Northwestern University, March 1978
Brookhaven National Laboratory, April 1978
University of Virginia, April 1978
Les Houches Summer School, July 1978
Naval Research Laboratory, September 1978
Purdue University, June 1979

“Disorder and Superconductivity”

University of Virginia, May 1979

“Superconductivity and Magnetic Order in Ferromagnets and Spin Glasses”

University of Virginia, November 1979

“Localization in Low Dimensions”

University of Virginia, May 1980, September 1980
Michigan State University, May 1980
University of Chicago, May 1980
Northeastern University, June 1980
Exxon Research Laboratories, September 1980

“Computer Simulations of Atomic Distributions in Zeolite Crystals”

Exxon Research Laboratories, September 1982

“Reversible and Irreversible Behavior of Spin Glasses”

Northeastern University, November 1982
Naval Research Laboratory, December 1982
Case Western Reserve University, January 1983
University of Michigan, January 1983
Purdue University, February 1983
Washington University, St. Louis, Missouri, February 1983
Iowa State University, February 1983
Princeton University, May 1983
University of Crete, June 1983
Kansas State University, April 1984

“Characterization of Wave Functions in Disordered Systems”

Iowa State University, January 1984
Kansas State University, April 1984
State University of New York at Binghamton, April 1984

“Transport Properties of Amorphous Semiconductors”

Amoco Research Center, Naperville, Illinois, May 1984
University of Crete, January 1985

“Order and Disorder in Random Spin Systems”

University of Crete, March 1985, March 1987
Iowa State University, March 1986
Nuclear Research Center, Democritos, Athens, Greece, April 1987
University of Ioannina, Greece, May 1987
Catholic University of Leuven, Belgium, December 1989

“Exponential Band Tails in Disordered Systems”

Exxon Research Laboratories, September 1987
Iowa State University, October 1987

“A Theoretical Investigation on Structural, Vibrational, and Electronic Properties of Amorphous Silicon”

University of Crete, Greece, November 1988

“The Physics of Disordered Systems: Are They Fractals?”

Iowa State University, October 1989

Universite de Montreal, Canada, April 1990

Nuclear Research Center, Democritos, Athens, Greece, January 1991

University of Athens, Greece, March 1991

University of Mainz, Germany, June 1991

Ecole Polytechnique Federale de Lausanne, Switzerland, June 1991

“Localization of Classical Waves and Photonic Band Gaps”

University of Amsterdam, Netherlands, December 1989

Ecole Polytechnique, Montreal, Canada, April 1990

University of Karlsruhe, Germany, June 1991

Université de Fribourg, Switzerland, June 1991

Niigata University, Japan, July 1991

Kansas State University, October 1991

University of Delaware, November 1991

Nuclear Research Center, Democritos, Athens, Greece, January 1992

University of North Texas, March 1992

Ecole Polytechnique Federale de Lausanne, Switzerland, June 1992

University of Pavia, Italy, July 1992

Iowa State University, October 1992

University of Crete, Greece, February 1993

Stanford University, March 1995

University of Illinois at Urbana, April 1995

University of Amsterdam, Netherlands, March 1999

“Electron-Phonon Interaction, Localization and Polaron Formation in 1-D Systems”

University of North Texas, March 1992

University of Karlsruhe, Germany, June 1992

“Localization Studies in Highly Anisotropic Systems”

University of Minnesota, November 1994

Iowa State University, September 1995

Nuclear Research Center, Democritos, Athens, Greece, January 1996

Technical University of Denmark, Lyngby, May 1996

University of Karlsruhe, Germany, July 1996

Iowa State University, September 1996

Iowa State University (Chemistry), September 1997

Nuclear Research Center, Democritos (Chemistry), Athens, GR, January 1998

University of Crete, Greece, December 1998

University of Amsterdam, Netherlands, April 1999

University of Karlsruhe, Germany, July 1999

“Photonic Band Gaps Materials: The Semiconductors of the Future?”

University of Toledo, April 1993
University of Minnesota, May 1993
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NEC Research Institute, Princeton, NJ, January 1994
Nuclear Research Center, Democritos, Athens, Greece, January 1994
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Australian National University, Canberra, Australia, January 1999
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Laboratory Leon Brillouin, CEA Saclay, France, May 2000
Institute di Spettroscopia Molecolare, Bologna, Italy, September 2000
Department of Physics, University of Crete, Greece, September 2001
Department of Physics, California State University at Northridge, October 2001
Department of Materials Science & Engineering, Cornell Univ., Ithaca, NY October 2001
Department of Physics, University of Dusseldorf, Germany, May 2003

“Random Lasers”

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Northwestern University, May 2000
Nuclear Research Center, Democritos, Athens, Greece, January 2001

“Left-handed Materials”

University of Crete, Greece, Heraklion, Crete, January 2002
University of Pavia, Italy, January 2003
Boeing Research, Seattle, Washington, January 2003
University of Karlsruhe, Physics Department, Germany, May 2003
University of Bonn, Physics Department, Germany, June 2003
ETH Zurich, Physical Chemistry Department, Switzerland, June 2003
Ecole Polytechnique Federale de Lausanne, Physics Dept., Switzerland, June 2003
University of Karlsruhe, EE Department, Germany, July 2003
Iowa State University, Physics Department, September 2003
Michigan State University, Physics Department, December 2003
Nuclear Research Center, Democritos, Athens, Greece, December 2003
Boston College, Physics Department, April 2004
University of Karlsruhe, Physics Department, Germany, July 2004
University of Crete, Heraklion, Crete, Greece, October 2004
ETH Zurich, Physical Chemistry Department, Switzerland, March 2005
Shanghai Institute of Microfabrication and Information Technology, Shanghai, China, August 2005
Institute of Physics (Optical Lab.), Chinese Academy of Sciences, Beijing, China, September 2005