

**CURRICULUM VITAE**  
**LÁSZLÓ A. SZÉKELY**

**ADDRESS:** Department of Mathematics, University of South Carolina, Columbia, SC 29208

**E-MAIL:** [szekely@math.sc.edu](mailto:szekely@math.sc.edu)

**HOMEPAGE:** <http://www.math.sc.edu/~szekely/> (includes list of publications, current preprints, and lists 1600 citations)

**LANGUAGES:** I speak English and Hungarian, read German and Russian.

**DEGREES:**

- Master of Sci., Eötvös University, 1980
- Ph.D., Eötvös University, 1983; Thesis: "Geometric Graphs", supervisors: Vera T. Sós and M. Simonovits.
- Candidate for Math. Sci., Hungarian Academy of Sciences, 1987, Thesis: "Analytic Methods in Combinatorics", referees: Zoltán Füredi and Paul Erdős.

**POSITIONS:**

- 1982–84: research fellow at József Attila University, Szeged
- 1984–91 associate professor at Eötvös University, Budapest
- 1986–87: postdoctoral fellow at the University of Auckland, New Zealand
- 1988–90: visiting associate professor at University of New Mexico, Albuquerque, NM
- Summer 1990: held a visiting position at Memphis State University, Memphis, TN
- 1991–1996 senior associate professor at Eötvös University, Budapest
- 1991–92: Alexander von Humboldt Fellow at the Rheinische Friedrich-Wilhelms Universität, Institut für Ökonometrie und Operations Research, and Institut für Diskrete Mathematik, Bonn, Germany
- 1992–93: visiting associate professor at University of New Mexico, Albuquerque, NM
- 1994–96 Director of the Institute of Mathematics I at Eötvös University, Budapest
- 1996– professor at the University of South Carolina, Columbia
- 2002–03 Visiting Fellow at the National Center for Biotechnology Information, supported by the Oak Ridge Institute for Science and Education (while on sabbatical leave)
- 2005–07 Interim Director of the Industrial Mathematics Institute of the University of South Carolina

## INVITED CONFERENCE TALKS:

1. Conference of the Australasian Combinatorial Society, Dunedin, New Zealand, December 1986 “Inclusion-exclusion formulae without higher terms” (50 mins)
2. AMS Meeting at Manhattan, Kansas, Graph Theory Session, March 1990 “Integral concurrent flows” (20 mins)
3. Twente/Osnabrück Seminar, Enschede, The Netherlands, February 1992 “Applications of classical inequalities in graph theory” (50 mins)
4. 7<sup>th</sup> Midwest Conference on Combinatorics, Cryptography and Computing, Carbondale, Illinois, October 1992 “Reconstruction of evolutionary trees” (50 mins)
5. AMS Meeting at deKalb, Illinois, Extremal Combinatorics Session, May 1993 “Crossing number problems” (20 mins)
6. Extremal Combinatorics Workshop, MSRI, Berkeley, November 1996 “Crossing numbers and Szemerédi-Trotter theorems” (30 mins)
7. DIMACS Workshop on Probabilistic Analysis of Algorithms, Princeton University, May 1997 “The Short Quartet Method” (30 mins)
8. AMS Meeting at Oaxaca, Mexico, Graph Theory and Combinatorial Geometry Session, December 1997 “On bipartite crossings, largest biplanar subgraphs, and the linear arrangement problem” (20 mins)
9. Buneman and Beyond, Massey University, Palmerston North, New Zealand, May 1998 “The Short Quartet Method” (30 mins)
10. Frontiers of Combinatorics, Los Alamos National Laboratory, August 1998 “The Short Quartet Method” (two times 50 mins)
11. AMS Meeting at Winston-Salem, North Carolina, Combinatorics and Graph Theory Session, October 1998 “Inverting random functions” (20 mins)
12. Numbers, Information and Complexity — in honour of Professor Rudolf Ahlswede on his 60th birthday, Bielefeld, Germany (30 mins) (I could not go but contributed to the volume)
13. Meeting of the Canadian Mathematical Society, December 1998, Kingston, Ontario “New Erdős-Ko-Rado type problems” (20 mins)
14. 12<sup>th</sup> Cumberland Conference, May 1999 Louisville, Kentucky “Katona type proof for the 2-intersecting Erdős-Ko-Rado theorem” (20 mins)
15. The Mathematics of Paul Erdős, July 1999, Budapest, Hungary “Erdős on unit distances” (30 mins)
16. 14<sup>th</sup> Clemson Mini-Conference, September 1999, Clemson, South Carolina, “Erdős on unit distances and the Szemerédi-Trotter theorems” (50 mins)
17. AMS Meeting at Charlotte, NC, October 1999, Applied Probabilistic Combinatorics Session, “Phylogeny needs more probability for sure” (20 mins)

18. Third UNCG Mini-conference in Combinatorics and Graph Theory, November 1999, Greensboro, NC, “Are there infinitely many Leech trees?” (20 mins)
19. Tenth SIAM Conference on Discrete Mathematics, Minisymposium on Combinatorial Geometry, June 2000, Minneapolis MN, “Crossing numbers of graphs” (30 mins)
20. Sixth International Conference on Graph Theory, Marseille, August 2000 “A successful concept for measuring non-planarity of graphs: the crossing number” (60 mins)
21. Fourth UNCG Mini-conference in Combinatorics and Graph Theory, November 2000, Greensboro, NC, “Sets in Euclidean spaces without certain distances” (50 mins)
22. Workshop and Conference on Hypergraphs (Gyula O.H. Katona is 60) June 4-17, 2001 Rényi Institute, Budapest, Hungary, “Katona type proof for the 2-intersecting Erdős-Ko-Rado theorem” (30 mins)
23. DMV-Seminar “Mathematical Challenges of Molecular Biology” (45 mins), Mathematisches Forschungsinstitut Oberwolfach, Germany, November 11–17 2001 “Methods for Phylogeny Reconstruction” (45 mins),
24. Kolloquium über Kombinatorik, November 16–17 2001, Technische Universität Braunschweig, Germany, “Crossing numbers and biplanar crossing numbers” (55 mins)
25. 15th Cumberland Conference on Combinatorics, Graph Theory and Computing, University of Mississippi, May 16–18, 2002, “Biplanar crossing numbers” (15 mins)
26. PARC Mini-Symposium, Parallel Algorithms and Architecture Research Centre, Loughborough University, England, June 18, 2002, “Biplanar Crossing Numbers” (60 mins)
27. DIMACS Special Focus: Computational Geometry and Applications, workshop on Geometric Graph Theory at Rutgers University, New Brunswick, September 30–October 4, 2002 “Crossing numbers and biplanar crossing numbers” (45 mins)
28. AMS Meeting at Bloomington, Indiana, April 4-6, 2003, Probability Session, “Crossing numbers and probability” (45 mins)
29. Paths, Permutations and Trees, February 25 - 27, 2004, Tianjin, P. R. China, “Subtrees of trees” (30 mins)
30. PARADAY V, Fifth PARC Theory Day, Loughborough University, “Subtrees of trees” (30 mins), May 2004, Loughborough, England
31. Special Session on Extremal Combinatorics at the AMS Central Section Meeting (#1001) at Evanston, IL on October 23-24, 2004 “Convex crossing numbers, circular arrangement problem, and isoperimetric functions” (25 mins)
32. SOFSEM 2005, Liptovsky Jan, Slovakia “Progress on Crossing Number Problems” (90 mins), January 2005
33. Southeast Geometry Conference, Columbia SC, March 2005, “Crossing Numbers”, (50 min)
34. Bioinformatics Mini-Symposium, Columbia SC, March 19 2005, “Paradoxes for Cavender-Farris model trees”, (20 min)

35. Discrete Geometry, Oberwolfach, Germany, April 10–16, 2005, “Variants of the Crossing Number Problem”, (20 min)
36. Joel Spencer is 60 / DIMACS Challenges for Combinatorics April 24–29, DIMACS, Rutgers University, “Biplanar crossing numbers” (20 min)
37. SIAM Discrete Mathematics Conference, Vancouver, June 25–28, 2006, Geometric Graph Theory minisymposium “TBA” (could not travel)
38. BIRS Workshop, Banff, Canada, October 21–25, 2006 “Bounds on the minor crossing number” (20 min)
39. CanaDAM, Minisymposium on Combinatorial Geometry and Graph Drawing, May 28–31, 2007, Banff Conference Center, Alberta, Canada (25 min) (could not travel)
40. ”Extremal Combinatorics” Budapest, June 4-8, 2007 “Lovász Local Lemma for random functions” (45 min)
41. Sixth Slovenian International Conference on Graph Theory, June 23–30 2007, Bled, Slovenia, Minisymposium on Crossing Numbers of Graphs, “An optimality criterion for crossing numbers” (25 min)
42. Special Session in Graph Theory at the AMS Central Section Meeting at DePaul University, Chicago, October 5-6, 2007 “On the minor crossing number” (25 min)
43. Cumberland Conference on Graph Theory, Vanderbilt University, Nashville, May 2008 ”Lovász Local Lemma - a new tool for asymptotic enumeration?” (20 min)
44. International Conference on Interdisciplinary Mathematical & Statistical Techniques IMST 2008 / FIM XVI (Memphis, May 2008) “Classical and phylogenetic combinatorics” (30 min)
45. 23th Clemson Mini-Conference, October 2008, Clemson, South Carolina, “Lovász local lemma: a tool for asymptotic enumeration?” (45 min)
46. Ulam Centennial Conference March 7–11, 2009 Gainesville, FL (30 min)
47. AMS 2009 Spring Central Sectional Meeting Meeting 1047, Special Session on Probabilistic and Extremal Combinatorics, Urbana IL (30 min)
48. Algorithmic and Combinatorial Geometry, Rényi Institute, Budapest, June 15–19, 2009 (50 min)
49. Phylogeny workshop, Rényi Institute, Budapest, June 22–25, 2009 (50 min)
50. Triangle Lectures in Combinatorics, North Carolina State University, Raleigh NC, February 6, 2010 (50 min)
51. Paul Erdős Memorial Lecture Series, University of Memphis, Memphis TN, March 19–20, 2010 (45 min)
52. Search Methodologies II, Universität Bielefeld, Germany, October 25–29, 2010 (30 min)
53. Atlanta Lecture Series in Combinatorics and Graph Theory, Georgia Institute of Technology, April 16–17, 2011 (50 min)

**VISITS AND SEMINARS AT UNIVERSITIES:** (seminars given at my affiliation and in my home town not listed)

1. University of New South Wales, Sydney (1986);
2. LaTrobe University, Melbourne (1986);
3. University of Western Australia, Perth (1986);
4. University of Queensland, Brisbane (1986);
5. University of Newcastle, Newcastle (1986);
6. Otago University, Dunedin (1986);
7. University of Colorado at Denver (1988);
8. Queen's University, Kingston (1990, 1997);
9. University of North Texas, Denton (1990);
10. University of Waterloo, Waterloo (1990);
11. Università degli Studi di Napoli Federico II, Naples (1991);
12. Zentrum für interdisziplinäre Forschung, Bielefeld (one week) (1991);
13. Arizona State University, Tempe (1993);
14. DIMACS, Rutgers University, Special Year of Mathematical Support to Molecular Biology, Piscataway (one month) (1995);
15. Yale University, New Haven (1995, 1999);
16. University of Pennsylvania, Philadelphia (1997);
17. József Attila University, Szeged (1997, 2010);
18. University of Canterbury, Biomathematics Research Centre, Christchurch, New Zealand (one month in 1998)(two weeks in 2000)(three weeks in 2004)(one month in 2010);
19. University of Memphis (1999);
20. Stefan Banach International Mathematical Center, Warsaw (two weeks) (1999);
21. University of North Carolina, Pembroke, NC (2000);
22. University of Louisville, Louisville, KY (2000);
23. University of Loughborough, Loughborough, England (three weeks in 2001)(two weeks in 2002)(1 month in 2004) (1 month in 2005)(1 month in 2006);
24. State University of West Georgia, GA (2003);

25. Virginia Tech, VA (2003);
26. University of Illinois at Urbana-Champaign, IL (2003)
27. Rényi Institute, Budapest, Hungary (2003) (3 talks)
28. Allan Wilson Centre for Molecular Ecology and Evolution, Massey University, New Zealand (2004)
29. The College of William & Mary, VA (2004)
30. University of California, Berkeley, Department of Statistics, Neyman Seminar (2005)
31. Illinois Institute of Technology (2006)
32. Georgia Tech (2006)
33. University of Delaware (2006)
34. University of Florida (2006) (two talks)
35. University of Alberta (2006)
36. Rényi Institute, Budapest, Hungary (2007) (2 months) (2008) (2 months) (2009) (2 months) (2010) (2 months)
37. Cambridge University, Newton Institute (2007) (1 month)
38. Oxford University (2007)
39. Stellenbosch University (2008)
40. University of Kwa-Zulu-Natal (2008)
41. Mathematics Institute of the Slovak Academy of Sciences (2008)(2009)(2010)
42. University of Alabama (2008)
43. Notre Dame University, Center for Complex Network Research (2009)
44. University of Texas at Dallas (2009)
45. Georgia Southern University (2009)
46. Ohio State University, Colloquium of the Mathematical Biosciences Institute (2010)
47. University of Maribor, Slovenia (2010)
48. Rheinische Friedrich-Wilhelms Universität, Bonn, Germany (2010) (3 months)
49. Technische Universität Berlin Germany (2010)

## RESEARCH INTERESTS:

My primary research areas are combinatorics and graph theory, and their applications to geometry, computer science and biology. In particular:

- Combinatorial geometry: Erdős type problems in geometry, density of sets without certain distances, maximum number of unit distances or minimum number of distinct distances in finite point sets, Szemerédi-Trotter type theorems
- Graph drawing: crossing numbers of graphs, applications of crossing numbers of graphs to discrete geometry, graph drawing algorithms on surfaces, books, etc., approximation algorithms for crossing number problems
- Phylogeny reconstruction: stochastic models of the evolution of biomolecular sequences, identifiability conditions for reconstructible past, polynomial time algorithms for phylogeny reconstruction, the length of biomolecular sequences necessary for phylogeny reconstruction for all methods and for particular methods, Fourier-Hadamard transform
- Discrete probability: stochastic models for biomolecular sequence evolution, derandomization of randomized algorithms for graph drawing, Lovász Local Lemma
- Design and analysis of algorithms: algorithms for graph drawing, approximation algorithms for crossing number problems, algorithms for phylogeny reconstruction
- Combinatorial optimization: the multiway cut problem, integral uniform multicommodity flow problem
- Extremal problems (graphs and set systems): Erdős-Ko-Rado type theorems, Sperner and LYM type theorems, extremal graph theory

## TEACHING:

- Courses taught: combinatorics, number theory, calculus and advanced calculus, vector analysis, algorithms, and abstract algebra at undergraduate levels, and several courses of combinatorics, combinatorial optimization and theoretical computer science at graduate level
- Supervising Ph. D. students:
  1. Hua Wang, USC 2005, “Subtrees of trees, Wiener index, and related problems” (Hua Wang was a John G. Thompson Research Assistant Professor at the University of Florida, and is currently a tenure-track assistant professor at Georgia Southern University) (Hua Wang received the “Dean’s Award of Excellence” and the “Dissertation Award of the Graduate School in Science, Mathematics, and Engineering”)
  2. Yiting Yang, USC 2010, ”Genome rearrangement, Randić index and routing number” (Yiting Yang received ”Outstanding Graduate Student Award” from the Department of Mathematics at USC (Yiting Yang is currently a postdoc at Zhejiang University)
  3. current Ph.D. student: Austin Mohr
- Substantial joint research, resulting in papers, Ph. D. students whom I did not supervise:
  1. Y. Zhang (Ph. D. in CSE, 2005, USC), (currently Zhang is an assistant professor at a College)

2. E. Czabarka (Ph. D. in Math., 1998, USC), (Czabarka is an assistant professor at the University of South Carolina)
  3. A. Kooshesh (Ph. D. in Comp. Sci., 1992, University of New Mexico), (currently Kooshesh is a professor at the Sonoma State University)
  4. J. McCanna (Ph. D. in Math., 1990, University of New Mexico), (was a faculty at the University of Western Michigan, Kalamazoo)
  5. T. Porter (Ph. D. in Math., 1990, University of New Mexico), (Porter is a professor at the Southern Illinois University, Carbondale)
- Supervising Master's Degree students:
    1. Kirk McMullan, USC 2006, (left school without degree)
    2. Devin James Henson, USC 2006, "Optimization Problems from Genome Sequence Rearrangement"
    3. Henry Chen, USC 2001, (left school without degree)
    4. Jason Burns, USC 2000, "Graph subdivision problems" (graduated with Ph. D. from M.I.T.)
    5. Szilárd Bokros, USC 1999, "Implementing the Short Quartet Methods"
    6. Li Chong, USC 1998, "Minimum spanning trees and more: algorithms and analysis"
    7. Csaba Szász, Eötvös University, 1996, "Tournaments"
    8. Gábor Hetyei, Eötvös University, 1988, "Catalan numbers" (currently Hetyei is an associate professor at the University of North Carolina at Charlotte)
    9. József Solymosi, Eötvös University, 1988, "Combinatorial Problems in Finite Ramsey theory" (currently Solymosi is an associate professor at the University of British Columbia)
    10. Bernd Radtke, József Attila University, 1985, "Flow and circulation problems: effective algorithms and combinatorial consequences"
    11. Lenke Körmöczi, József Attila University, 1984, "Expander graphs in the theory of algorithms"
    12. Zoltán Blázsik, József Attila University, 1984, "Interconnection of probability theory and combinatorics" (currently Blázsik is a faculty at Szeged University, Szeged)
  - Wrote the lecture notes "Combinatorial Exercises" at József Attila University (1982)
  - Ran study group for highschool students specializing in advanced mathematics (1975-76, 1984-86)
  - Course development "Theoretical Computer Science" at Eötvös University (1984-86)
  - Taught a course at the "Budapest Semester in Mathematics" for mathematically inclined North-American undergraduates (1988)
  - Taught a short course on graph theory in Naples and wrote lecture notes (1991)
  - Prepared problems the USC Highschool Mathematics Contest and participated in running the Contest (1996-2000)
  - Gave talks to undergraduates about research:
    1. SCSU, 1997, "The Mathematics of Paul Erdős"

2. SCSU, 1998, “Phylogeny reconstruction”
3. USC PME, 1999, “Phylogeny reconstruction”
4. SCSU, 2002, “Hilbert’s problems from 1900”
5. USC SIAM Student Chapter, 2005, “Complexities of phylogeny reconstruction”
6. Georgia Tech ACO (Algorithm and Combinatorial Optimization) Pizza Seminar, February 2006, “Mathematical problems of phylogeny”

- Programs written by students

1. S. Bokros implemented under my supervision my “Short Quartet Method” in a program package, <http://www.math.sc.edu/~szekely/szilard/Laciproject/shortq.html>
2. Yong Zhang implemented under my supervision a program to find Leech trees <http://www.math.sc.edu/~szekely/leechtree/index.htm>

### **AWARDS, HONOURS, SCHOLARSHIPS:**

1. “People’s Republic Scholar”, twice, for the academic years 1978–79 and 1979–80 (the most prestigious scholarship of the time in Hungary, given to one percent of the university student population).
2. “Outstanding Student of the Faculty of Sciences”, 1980, by Faculty of Sciences of Eötvös University
3. Alexander von Humboldt Fellow, 1991–92, at the Rheinische Friedrich-Wilhelms Universität, Bonn, Germany (12 months)
4. Exterior member, Alfréd Rényi Mathematical Institute of Mathematics, Hungarian Academy of Sciences, from 1996
5. “Doctor of the Hungarian Academy of Sciences”, 1998
6. Visiting Fellow at the National Center of Biotechnology Information (NCBI/NLM/NIH) supported by the Oak Ridge Institute for Science and Education, 2002–2003 (ten months)
7. External Advisory Board Member of a \$2.5 million NSF “Research Infused STEM Curriculum” grant at the South Carolina State University 2005–2010
8. Russell Research Award for Science, Mathematics and Engineering, University of South Carolina, 2007
9. Marie Curie Fellowship in bioinformatics at the Rényi Mathematical Research Institute of the Hungarian Academy of Sciences (2 months in 2007) (2 months in 2008) (2 months in 2009) (2 months in 2010)
10. Two Thumbs Up! teaching award, University of South Carolina, 2009
11. Alexander von Humboldt Fellow, 2010, at the Rheinische Friedrich-Wilhelms Universität, Bonn, Germany (3 months)
12. Elsevier “Top Cited Paper Award” 2010

## RESEARCH GRANTS:

1. Efficient communication in networks, (1992-93) by the U.S. Office of Naval Research under the contract N-0014-91-J-1385 co-PI, PD: Roger C. Entringer total amount: \$75,000
2. New problems in the theory of finite set systems, (1995-98) by the Hungarian National Science Fund under the contract T 016 358 PD, co-PI: Péter L. Erdős total amount: HUF 1,480,000
3. Extremal combinatorics, (1997-2000) by NSF under the contract DMS 9701211 co-PI, co-PI: Jerry Griggs total amount: \$135,000
4. On the analysis and interpretation of biological sequence data, (2000), by the South Carolina Commission on Higher Education, co-PI, PD: A. Hughes. total amount applied for: \$170,000 (approved with reduced budget),
5. Combinatorics and its applications, (2000-2003) by NSF under the contract DMS 0072187 co-PI, co-PI: Jerry Griggs total amount: \$165,000.
6. Computational improvements in statistical genomics through the use of novel hardware and parallelized software (2002) by USC (Focal Points of Excellence) co-PI, co-PIs: Peter Waddell and Duncan Buell total amount: \$58,108
7. Visiting Fellow at the National Center of Biotechnology Information (NCBI/NLM/NIH) (2002-03, ten months) by the Oak Ridge Institute for Science and Education total amount: \$34,000
8. Combinatorics with Applications (2003–2006) by NSF under contract number 0302307, co-PI, co-PI: J. Griggs total amount: \$210,000
9. Phylogenetic Analysis with Complex Genome Rearrangement Events (2006–2009) by NIH NIGMS under contract number 1 R01 GM078991-01 co-PI, PI: Jijun Tang, co-PI: Todd Vision total amount: \$639,000
10. Extremal and Probabilistic Combinatorics (2007–2010) by NSF under contract DMS 070 1111 PI, co-PI: Lincoln Lu total amount: \$104,118
11. Support from SIAM to organize the 33rd annual SIAM-SEAS conference in Columbia, SC, April 4-5, 2009 \$4,180
12. Administrative Supplement: Phylogenetic Analysis with Complex Genome Rearrangement Events (2009–10) by NIH NIGMS under contract number 3 R01 GM078991-03S1 co-PI, PI: Jijun Tang, co-PIs: Eva Czabarka and Todd Vision total amount: \$89,000
13. Extremal and Probabilistic Combinatorics II (2010–2013) by NSF under contract DMS 1000475 PI, co-PI: Lincoln Lu total amount: \$184,500
14. Support from the Banff International Research Station to co-organize a 20-participant workshop "Crossing numbers turn useful" with G. Salazar and D. Archdeacon, August 21-26 2011, Banff

## EDITORSHIP:

1. Editor of the international journal *Combinatorica* since 1987, managing editor till 1995
2. One of the guest editors of the special issue XXXV A (1993) of *Ars Combinatoria*
3. One of the editors of the volume *Graph Theory and Combinatorial Biology*, Bolyai Society Mathematical Studies **7**, Budapest, 1999.
4. one of the guest editors of the special issue vol. 28, no 4, Dec 2002 of *Discrete and Computational Geometry* based on selected papers presented at the special session “Discrete and Computational Geometry and Graph Drawing” at the # 963 Sectional Meeting of the American Mathematical Society
5. Editor of the international journal *SIAM Journal on Discrete Mathematics* since 2003
6. Editorial board member of the journal *Central European J. Mathematics* since 2009
7. Editorial board member of the journal *International J. Combinatorics* since 2009

## CONFERENCE ORGANIZATION:

1. A session on “Mathematical Methods in Molecular Biology” at the International Conference on Combinatorics and Graph Theory held at Balatonlelle, 1996
2. Poster session of the conference “Paul Erdős and His Mathematics” held at Budapest, 1999
3. Co-organizer of a special session on “Discrete and Computational Geometry and Graph Drawing” at the # 963 Sectional Meeting of the American Mathematical Society, Columbia SC, March 2001.
4. Member of the organizing committee of the NSF/CBMS Regional Research Conference in Mathematical Sciences on Geometric Graph Theory, May 28 - June 1, 2002, University of North Texas, Denton TX
5. Co-organizer of an invited double minisymposium at the SIAM Conference on Discrete Mathematics Nashville, June 2004
6. Member of the program committee of the 12th International Symposium on Graph Drawing, New York City, September 29–October 2, 2004
7. Member of the organizing committee of the SIAM Conference on Discrete Mathematics, June 25-28, 2006, Vancouver, BC, Canada
8. Co-organizer of the “Ondrej Sykora Memorial Theory Day” at Loughborough University, England, June 2006
9. Co-organizer of a Special Session on “Algebraic and Extremal Combinatorics” at the AMS Southeastern Sectional Meeting, March 2007, Davidson College, NC
10. Member of the organizing committee of the “Mini-Conference on Applied Combinatorics with emphasis on Search Theory” at Columbia SC, October 2007

11. Member of the Scientific Committee of "Fifth International Conference of Applied Mathematics and Computing" Plovdiv, Bulgaria, August 12 - 18, 2008
12. Invited minisymposium at the SIAM 2008 Conference on Discrete Mathematics, June 2008, Burlington, Vermont
13. Chair of the Organizing Committee of the 33rd SIAM Southeastern-Atlantic Section Conference April 4–5 2009, University of South Carolina
14. Co-organizer of a Special Session on "Applied Combinatorics" at the AMS #1068 Southeastern Sectional Meeting, Georgia Southern University, Statesboro, GA, March 12-13, 2011.
15. Co-organizer of a 20-participant workshop "Crossing numbers turn useful" with G. Salazar and D. Archdeacon, August 21-26 2011, Banff International Research Station

**MEMBERSHIP:**

- American Mathematical Society
- János Bolyai Mathematical Society
- Fellow of the Institute of Combinatorics and its Applications
- Society for Industrial and Applied Mathematics

**SERVICES TO SCIENCE:**

- Wrote 23 book reviews
- Reviewed more than 300 papers for Zentralblatt
- Reviewed grant proposals for NSF, NSA, NSERC (Canada), Hungarian OTKA, Israeli NSF, Austrian FWF, Louisiana Board of Regents
- Refereed more than 10 papers per year in recent years
- Advisor to the Political Secretary of Culture and Education in Hungary on issues of higher education and legislation in this area (1996)

**MAJOR SERVICES TO INSTITUTION:**

- Director of the Institute of Mathematics I at Eötvös University 1994–96
- Member of Dean's Council at Eötvös University 1994–96
- Undergraduate advisor at USC 1996–2002, 2004-05
- Member of the departmental Undergraduate Advisory Committee 1997–2001
- Member of the departmental Post-Tenure Review Committee 2003–04
- Member of the departmental Peer Review of Teaching Committee in several years

- Member of the Highschool Mathematics Contest Committee at USC 1996–2000
- Colloquium chair at the mathematics department 1997–98
- Faculty Senator at USC 2001–02
- Interim Director of the Industrial Mathematics Institute of the University of South Carolina 2005–07
- Member of the Faculty of Excellence Initiative hiring committees on bioinformatics and on computational nanoscience (2006–08)
- Member of the Russell Research Award in Sciences, Mathematics and Engineering 2007–10, chair in 2008–2009
- Member of the departmental Grant Mentoring Committee 2007–2010
- Member of the departmental chair search committee, 2008
- PME and Gamecock Math Club faculty advisor, 2008–2010
- Chair of the Tenured Faculty in Mathematics, 2009–2010
- Run the Combinatorics Seminar at USC for several years
- Attracted a number of visitors to USC