

# Rossitza S Marinova



- Administrative Appointments

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|------------------------|----------------------------------|---------------------|
| Acting Dean of Science | Concordia University of Edmonton | 2016, 2017 - summer |
| Chair                  | Concordia University of Edmonton | 2014-2016           |
| Science Division Chair | Concordia University of Edmonton | 2008-2011           |

- Experience

## ACADEMIC APPOINTMENTS

|                              |                       |                |                      |
|------------------------------|-----------------------|----------------|----------------------|
| Professor                    | CUE                   | 2016 – present | Math & CS            |
| Associate Professor          | CUE                   | 2009 – 2016    | Math & CS            |
| Assistant Professor          | CUE                   | 2006 – 2009    | Math & CS            |
| Adjunct Professor            | Univ. of Sask.        | 2006 – 2011    | CS                   |
| Visiting Assistant Professor | CUE                   | 2004 – 2006    | Math & CS            |
| Research Scientist           | Enabled               | 2002 – 2004    | Industrial Computing |
| STA Research Fellow          | NAL Japan             | 2000 – 2002    | Scientific Computing |
| Visiting Researcher          | Univ. of Nijmegen     | 1998           | Math of Computing    |
| Assistant Professor III      | Varna Free Univ.      | 1998 – 2002    | Mathematics          |
| Visiting Researcher          | Univ. of Nijmegen     | 1997           | Math of Computing    |
| Assistant Professor III      | Technical Univ. Varna | 1995 – 1998    | Mathematics          |
| Assistant Professor II       | Technical Univ. Varna | 1990 – 1995    | Mathematics          |
| Assistant Professor I        | Technical Univ. Varna | 1985 – 1990    | Mathematics          |

## TEACHING EXPERIENCE (CUE)

|           |  |
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| 2017-2018 | CMPT 474 / MAT 424 Formal Languages, Automata, and Computability |
|           | MAT 331 Introduction to Differential Equations                   |

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|           | MAT 400            | Theses in Mathematics                                       |
| 2016-2017 | CMPT 111           | Introduction to Computing Science, Lecture                  |
|           | CMPT 340/ MAT 340  | Numerical Methods, Lecture and Lab                          |
|           | IT 101             | Introduction to Information Technology, Lecture and Seminar |
|           | IT 301             | Digital Media, Lecture                                      |
|           | MAT 311            | Functions of a Complex Variable, Lecture                    |
|           | MAT 401            | Real Analysis I, Lecture                                    |
|           | MAT 442            | Topics in Probability Theory and Statistics, Lecture        |
| 2015-2016 | CMPT 111           | Introduction to Computing Science, Lecture                  |
|           | CMPT 112           | Introduction to Software Development, Lecture               |
|           | CMPT 474 / MAT 424 | Formal Languages, Automata, and Computability               |
|           | IT 101             | Introduction to Information Technology, Lecture             |
|           | IT 202             | The World Wide Web, Lecture                                 |
| 2014-2015 | CMPT 111           | Introduction to Computing Science, Lecture                  |
|           | CMPT 112           | Introduction to Software Development, Lecture               |
|           | IT 101             | Introduction to Computers and Computer Networks, Lecture    |
|           | IT 302             | Introduction to Databases, Lecture                          |
| 2013-2014 | CMPT 111           | Introduction to Computing Science, Lecture                  |
|           | IT 101             | Introduction to Computers and Computer Networks, Lecture    |
|           | IT 102             | Operating Systems and Graphical User Interfaces, Lecture    |
|           | IT 202             | The World Wide Web, Lecture                                 |
|           | MAT 115            | Elementary Calculus II, Lecture                             |
|           | MAT 400            | Theses in Mathematics                                       |
| 2012-2013 | CMPT 111           | Introduction to Computing Science, Lecture                  |
|           | CMPT 112           | Introduction to Software Development, Lecture               |
|           | IT 101             | Introduction to Computers and Computer Networks, Lecture    |
|           | IT 301             | Introduction to Computer Graphics, Lecture                  |
|           | IT 302             | Introduction to Databases, Lecture                          |
|           | MAT 120            | Linear Algebra I  |
|           | MAT 340            | Numerical Methods   |
| 2010-2011 | CMPT 111           | Introduction to Computing Science, Lecture                  |
|           | CMPT 112           | Introduction to Software Development, Lecture               |
|           | IT 101             | Introduction to Computers and Computer Networks, Lecture    |
|           | IT 301             | Introduction to Computer Graphics, Lecture                  |
|           | IT 302             | Introduction to Databases, Lecture                          |
|           | CMPT 474 / MAT 424 | Formal Languages, Automata, and Computability               |
|           | MAT 331            | Introduction to Differential Equations                      |
|           | MAT 400            | Theses in Mathematics                                       |
| 2009-2010 | CMPT 111           | Introduction to Computing Science, Lecture                  |
|           | CMPT 112           | Introduction to Software Development, Lecture               |
|           | MAT 340            | Numerical Methods, Lecture                                  |
|           | CMPT 227           | Computer Organization and Architecture, Lecture             |
|           | CMPT 301           | Practical Programming Methodology, Lecture                  |
|           | IT 101             | Introduction to Computers and Computer Networks, Lecture    |
|           | IT 201             | Computer Security, Lecture                                  |
|           | IT 202             | The World Wide Web, Lecture                                 |
| 2008-2009 | CMPT 111           | Introduction to Computing Science, Lecture                  |
|           | CMPT 112           | Introduction to Software Development, Lecture               |
|           | CMPT 220           | Basic Algorithms and Data Structures, Lecture               |
|           | IT 101             | Introduction to Computers and Computer Networks             |
|           | IT 301             | Computer Graphics, Lecture & Lab                            |

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| 2007-2008 | CMPT 111 Introduction to Computing Science, Lecture<br>CMPT 112 Introduction to Software Development, Lecture<br>CMPT 220 Basic Algorithms and Data Structures, Lecture<br>CMPT 221 Algorithms, Lecture<br>MAT 340 Numerical Methods, Lecture & Lab<br>MAT 331 Introduction to Differential Equations, Lecture & Lab<br>MAT 400 Theses in Mathematics<br>IT 101 Introduction to Computers and Computer Networks    |
| 2006-2007 | CMPT 111 Introduction to Computing Science, Lecture<br>CMPT 112 Introduction to Software Development, Lecture<br>CMPT 220 Basic Algorithms and Data Structures, Lecture<br>CMPT 227 Computer Organization and Architecture, Lecture & Lab<br>CMPT 301 Practical Programming Methodology, Lecture & Lab<br>MAT 214 Intermediate Calculus I, Lecture & Lab<br>IT 101 Introduction to Computers and Computer Networks |
| 2005-2006 | CMPT 111 Introduction to Computing Science, Lecture<br>CMPT 112 Introduction to Software Development, Lecture<br>CMPT 220 Basic Algorithms and Data Structures, Lecture<br>CMPT 221 Algorithms, Lecture<br>MAT 113/114 Elementary Calculus I, Lecture & Lab<br>IT 202 World Wide Web, Lecture & Lab  |
| 2005-2006 | CMPT 111 Introduction to Computer Science, Lecture<br>CMPT 112 Programming with Data Structures, Lecture & Lab<br>CMPT 227 Computer Organization and Architecture, Lecture & Lab CMPT 301<br>Practical Programming Methodology, Lecture & Lab<br>MAT 214 Intermediate Calculus I, Lecture & Lab<br>MAT 215 Intermediate Calculus II, Lecture & Lab   |

- Research areas

Dr. Marinova research has primarily focused on problems connected with the analysis and the development of computational tools and models for engineering and scientific problems. This comprises problems in the area of scientific computation such as the Navier-Stokes and convection-diffusion equations and the application of the Method of Variational Imbedding for inverse and/or ill-posed problems. During her work in the software industry, Dr. Marinova worked on pedestrian motion in realistic virtual reality environments applied to the area of evacuation dynamics, and on several other industrial applications, among them design of marine drilling risers.

Dr. Marinova is also actively involved in outreach activities for increasing the appreciation of mathematics and science in the community, and in the production of math enrichment materials for pre-university students and educators.

- Research projects

Development of a research line and scholarly activity in computing.

Summarizing research findings on the Method of Variational Imbedding (MVI), used on numerous occasions for tackling various scientific and engineering problems.

Production of math enrichment materials for pre-university students and educators.

- Publications

### Books Authored or Edited

- 2017 G. Momcheva, T. Glushkova, R. Marinova, Informatics for Grade 8 for Teachers, Bulvest 2000 (in Bulgarian).
- 2017 G. Momcheva, T. Glushkova, R. Marinova, Informatics for Grade 8, Bulvest 2000 (in Bulgarian).
- 1999 Vectorial Operator-Splitting Difference Schemes for Navier-Stokes Equations, Bulgarian Academy of Sciences
- 1995 T. Marinov, R. Marinova, Practicum in Numerical Methods with Illustrations in PASCAL, Technical University

### Refereed Publications

- 2017 Solitary Wave Solutions with Non-Monotone Shapes for the Modified Kawahara Equation (with T. T. Marinov), Journal of Computational and Applied Mathematics. <https://doi.org/10.1016/j.cam.2017.08.027>. Elsevier. In Press.
- 2015 T. T. Marinov, R. Marinova, Aghalaya Vatsala, 2015. Coefficient Identification in Euler-Bernoulli Equation from Over-posed Data, Journal of Neural, Parallel, and Scientific Computations 23:193-218.
- 2014 Inverse problem for coefficient identification in SIR epidemic models (with T. T. Marinov, Joe Omojola, Michael Jackson), Computers & Mathematics with Applications, Elsevier. Volume 67, Issue 12, July 2014, Pages 2218–2227. DOI: <http://dx.doi.org/10.1016/j.camwa.2014.02.002>.
- 2014 Soliton Solutions as Inverse Problem for Coefficient Identification (with T. T. Marinov), 9th International Conference, Large Scale Scientific Computation, Sozopol, Bulgaria, June 2013, Revised Selected Papers, Large-Scale Scientific Computing. Springer Lecture Notes in Computer Science, June 2014, pp 47-54.
- 2013 An inverse problem for estimation of bending stiffness in Kirchhoff–Love plates (with T. T. Marinov), Computers & Mathematics with Applications, Elsevier, Volume 65, Issue 3, Pages 512–519.
- 2012 An Inverse Problem for the Stationary Kirchhoff Equation (with T. T. Marinov), 8th International Conference, LSSC 2011, Springer Lecture Notes in Computer Science, Revised Selected Papers, Springer, Lirkov, Margenov, Wasniewski (Eds.), 598-605.
- 2010 Time Stepping for Vectorial Operator Splitting (with R. Spiteri and E.Essien). Journal of Computational and Applied Mathematics, 235(2), pp. 460-469.
- 2010 Inverse Problem for Coefficient Identification in Euler-Bernoulli Equation by Linear Spline Approximation (with T. T. Marinov). Journal of Computational and Applied Mathematics, 235(2), pp. 450-459.
- 2010 Inverse Problem for Coefficient Identification in Euler-Bernoulli Equation by Linear Spline Approximation (with T. T. Marinov), Seventh International Conference on Large-Scale Scientific Computations, June 4-8, 2009, Sozopol, Bulgaria. Springer Lecture Notes in Computer Science, 2010, Volume 5910/2010, Pages 588-595, DOI: 10.1007/978-3-642-12535-5\_70.
- 2010 Fully Implicit Methods for 3D Incompressible Fluid Flows Based on Vectorial Operator Splitting Preserving Velocity-Pressure Coupling (with R. Spiteri and E.Essien), Seventh International Conference on Large-Scale Scientific Computations, June 4-8, 2009, Sozopol, Bulgaria. Springer Lecture Notes in Computer Science, 2010, Vol. 5910/2010, Pages 596-603, DOI: 10.1007/978-3-642-12535-5\_71.
- 2009 Cubic Spline Approximation of the Coefficient in Euler-Bernoulli Equation from Over-posed Data (with T.T. Marinov), Proceeding from the 1st Conf. AMiTaNS, Sozopol, Bulgaria, June 22-27, 2009, American Institute of Physics.
- 2009 Does the Stationary Viscous Flow Around a Circular Cylinder Exist for Large Reynolds Numbers? A Numerical Solution via Variational Imbedding (with C.I. Christov & T.T. Marinov), Journal of Computational and Applied Mathematics. Volume 226 (2009) 205-217.
- 2009 Identification of Solitary-Wave Solutions as an Inverse Problem: Application to Shapes with Oscillatory Tails (with C.I. Christov & T.T. Marinov), Mathematics and Computers in Simulation Journal. Volume 80, Issue 1, September 2009, 56-65.

- 2008 Identifying the Stationary Viscous Flows around a Circular Cylinder at High Reynolds Numbers (with C.I. Christov & T.T. Marinov), Lecture Notes in Computer Science Springer I. Lirkov, S. Margenov, J. Wasniewski, Volume 4818, 175-183.
- 2007 Variational Imbedding Approach to Coefficient Identification in Elliptic Partial Differential Equation (with C.I. Christov, T. Marinov), International Journal of Computational Science and Engineering 3(4), 277-286.
- 2006 T.T. Marinov, R.S. Marinova, & C.I. Christov, Coefficient Identification in Elliptic Partial Differential Equation, Lecture Notes in Computer Science, Springer Verlag I. Lirkov, S. Margenov, J. Wasniewski, Eds. 365-372.
- 2005 T.T. Marinov, C.I. Christov, & R.S. Marinova, Novel Numerical Approach to Solitary-Wave Solutions Identification of Boussinesq and Korteweg-de Vries Equations, Int. Journal of Bifurcation and Chaos 15(2), 557-565.
- 2003 Pedestrian Motion in Realistic Virtual Reality Environments: Application to High-Rise Building Evacuation (with I. Ourdev, V. Stoilov, L. Brinkworth, & J.H. Gu), Pedestrian and Evacuation Dynamics. 283-293.
- 2003 A Fully Coupled Solver for Incompressible Navier-Stokes Equations using Coordinate Operator Splitting (with C.I. Christov, & T. Marinov), International Journal Computational Fluid Dynamics 17(5), 371-385.
- 2003 Conservation Properties of Vectorial Operator Splitting (with T. Takahashi, H. Aiso, C.I. Christov, & T.T. Marinov), Journal of Computational & Applied Mathematics. 152(1-2), 289-303.
- 2003 A Parallel Solver for Incompressible Navier-Stokes Equations (with J. Breil, H. Aiso, T. Takahashi), Special Publication of National Aerospace Laboratory. SP-57 2003, Tokyo, 244-248.
- 2003 Fully Coupled Solver for Incompressible Navier-Stokes Equations using a Domain Decomposition Method (with J. Breil, H. Aiso, and T. Takahashi), Parallel Computational Fluid Dynamics 2002, K. Matsuno, A. Ecer, J. Periaux, N. Satofuka, (Eds) and P. Fox (Asst. Editor), Elsevier Publishing Co. 2003.
- 2002 A Hybrid Method of Characteristics and Central Difference Method for Convection-Diffusion Problems (with O. Axelsson), Computational & Applied Mathematics 21(3), 631-659.
- 2002 Second Order Bicyclic Splitting Difference Scheme for Multidimensional Advection-Diffusion Problems (with T.T. Marinov, K. Sakai, C.I. Christov, H. Aiso, T. Takahashi), Computational Fluid Dynamics Journal. 11(2) 121-127.
- 2002 Numerical scheme for Boundary-Layer Approximation of Two Opposite Flows (with T.T. Marinov, K. Sakai), Journal of SIT. 11, 109-119.
- 2002 Some Requirements Regarding Difference Schemes For Incompressible Navier-Stokes Equations (with H. Aiso, and T. Takahashi). Proc. of International Minisymposium on Math. Modelling and Scientific Computations, Borovets, Bulgaria, April 3-6, 2002, 374-379.
- 2001 Implicit Vectorial Operator Splitting for Incompressible Navier-Stokes Equations in Primitive Variables (with C.I. Christov), Journal of Computational Technologies 6(4) 92-119.
- 2001 A Numerical Scheme Based on Characteristic Line Method for Conservative Advection-Equations (with T.T. Marinov, K. Sakai), Computational Fluid Dynamics Journal. 10(2), 137-142.
- 2001 A bicyclic splitting difference scheme for unsteady advection-diffusion problem (with T.T. Marinov, K. Sakai, and C.I. Christov), Journal of SIT. 10, 51-59.
- 2001 Vectorial Splitting Approach to Incompressible Navier-Stokes Equations (with T. Takahashi, H. Aiso), Special Publication of National Aerospace Laboratory SP-53 2002, Tokyo, 209-214.
- 2001 Mathematical Investigation on the Conservative CIP Scheme (with T.T. Marinov, K. Sakai), Journal of SIT 10, 43-49.
- 2000 High-Reynolds Number Solutions of Incompressible Navier-Stokes Equations using Vectorial Operator Splitting (C.I. Christov, T.T. Marinov), Computational Fluid Dynamics 2000, Nobuyuki Satofuka (Ed.) Springer: 247-252.
- 2000 Fully Implicit Implementation of Boundary Conditions in Operator-Splitting Methods for Steady Incompressible Navier-Stokes Equations (C.I. Christov, T.T. Marinov), Advances in Computation: Theory and Practice Vol. 7: Scientific Computing and Applications, P. Minev, Y. Lin (Eds), Nova Sci. Publishers, Inc. Huntington, New York, 27-36.

- 2000 A Splitting Scheme for Advection-Diffusion Problem Based on Finite Variable Difference Method (with T.T. Marinov, K. Sakai, and C.I. Christov), 16th IMACS World Congress 2000 Proceedings, edited by: Michel Deville and Robert Owens, ISBN 3-9522075-1-9, paper 134-3.
- 2000 A Combined Finite Difference and Local Method of Characteristic Line Approximation for Convection-Diffusion Problems (with O. Axelsson), Analytical and Numerical Methods for Convection-Dominated and Singularly Perturbed Problems, J.J.Miller, G.I.Shishkin, L.G.Vulkov (Eds) 2000, Nova Sci. Publishers: 7-21.
- 1998 Numerical Solutions for Steady Flow past a Circular Cylinder via Method of Variational Imbedding (with C.I. Christov). Annuaire de l'Universit'e de Sofia "St. Kl. Ohridski". 90, 177-189.
- 1998 Implicit Scheme for Navier-Stokes Equations in Primitive Variables via Vectorial Operator Splitting (with C.I. Christov), Notes on Numerical Fluid Mechanics 62, edited by M. Griebel, O.P. Iliev, S.D. Margenov and P.S. Vassilevski, Vieweg, Germany: 251-259.
- 1996 Identification of the Unstable Stationary Solutions of Navier-Stokes Equations at High Reynolds Numbers, Continuum Models and Discrete Systems, ed. K. Markov, @World Sci.: 452-460.
- 1994 Numerical Investigation of High Re Stationary Viscous Flow around Circular Cylinder as Inverse Problem (with C.I. Christov). Journal of Meteorology and Hydrology, 5(3-4), 105-118.
- 1993 Numerical Investigation of Stationary 2D flow past a cylinder via Method of Variational Imbedding (with C.I. Christov), Proceedings of XVIII International Summer School on Applications of Mathematics in Techniques, Varna, August, 1992: 162-165.
- 1991 Smoothing of edges obtained by the intersection of two surfaces (with T.T. Marinov), Proceedings of The National Conference on Contribution of Young Scientists in Progress of Science and Technology, Varna, Oct 1990: 47-50.

### **Mathematics Outreach Publications**

- 2016 Ildiko Pelczer and R. Marinova. Canadian Math Kangaroo Contest: Questions and Solutions 2016. Grades 1-2.
- 2016 R. Marinova. Canadian Math Kangaroo Contest: Questions and Solutions 2016. Grades 3-4.
- 2015 R. Marinova and H. Sendov. Canadian Math Kangaroo Contest: Questions and Solutions 2015. Grades 1-2, 3-4.
- 2014 Canadian Math Kangaroo Contest: Questions and Solutions 2014. Grades 1-2, 3-4, 5-6, 7-8, 9-10, and 11-12.
- 2012 Math Kangaroo Contest-Game in Canada, IEEE TISP Newsletter.
- 2012 Popularizing Mathematics in Canada through Math Kangaroo Competition, CMS (Canadian Mathematical Society) Notes, Education Notes, Volume 44 No. 3, June 2012, Pages 8-9, 11.
- 2012 Problems for Skoliad No 139 in Crux.
- 2011 Canadian Math Kangaroo Contest: Questions and Solutions 2008-2010. Grades 3-4, 5-6, 7-8, 9-10, and 11-12. Concordia University College of Alberta.

### **Non-refereed Publications**

- 2012 Math Kangaroo Contest-Game in Canada, IEEE TISP Canada Courier 2, 10-11.
- 2001 Splitting Algorithm for Unsteady Incompressible Navier-Stokes Equations in Primitive Variables, Proceedings of the symposium of Saitama Institute of Technology, Jul 30-Aug 2, 2001, Saitama Institute of Technology, Japan, 171-174.
- 2001 A Numerical Scheme Based on Characteristic Line Method for Conservative Advection-Equations, Proceedings of the Symposium of Saitama Institute of Technology, Jul 30-Aug 2, 2001, Saitama Institute of Technology, Japan, 175-178.
- 2000 Vectorial Operator-Splitting Difference Schemes for Steady Incompressible Navier-Stokes Equations in Primitive Variables, Annual Meeting of the Japan Society for Applied Mathematics, Seta, Japan, Dec 20-22, 2000, 253-258.
- 2000 Mathematical Investigation on the Conservative CIP Scheme, Annual meeting of the Japan Society for Industrial and Applied Mathematics, Tokyo Institute of Technology, Tokyo, Japan, Oct 5-8, 2000, 26-27.
- 2000 Bicyclic Scheme for Advection-Diffusion Problems, Annual meeting of the Japan Society for Industrial and Applied Mathematics, Tokyo Institute of Technology, Tokyo, Japan, Oct 5-8, 2000, 324-325.

1999 On a hybrid method of characteristics and central difference method for convection-diffusion problems, Report No. 9941, Department of Mathematics, University of Nijmegen. The Netherlands

### Conference Presentations

- 2017 11<sup>th</sup> Int. Conf. on Large-Scale Scientific Computations, Sozopol, Bulgaria, June 5-9, 2017.  
2015 Math Chairs Meeting, November 7, 2015, Winnipeg.  
2015 Seventh International Conference on Dynamic Systems and Applications, May 27-30, 2015, Atlanta, Georgia.  
2014 CMS 2014 Summer Meeting, Winnipeg, Canada, June.  
2013 9<sup>th</sup> Int. Conf. on Large-Scale Scientific Computations, Sozopol, Bulgaria, June 3-7, 2013.  
2012 Math Kangaroo Workshop, BIRS, Banff, Alberta, August 3-5, 2012.  
2012 Nonlocal Continuum Models for Diffusion, Mechanics, and Other Applications Summer Program, Stat. and Appl. Mathematical Sciences Institute, Research Triangle Park, NC, USA, June 25-29, 2012.  
2011 8th Int. Conf. on Large-Scale Scientific Computations, Sozopol, Bulgaria, June 6-10, 2011.  
2011 Alberta Colleges Mathematics Conference. Calgary, Alberta, May 5-6, 2011.  
2011 Faculty of Education Technology in Teaching and Research Fair, March 25, 2011, University of Alberta.  
2010 19th Canadian Symposium on Fluid Dynamics, CAIMS\*SCMAI, St. John's NL, July 16-20, 2010.  
2010 MITACS Annual Conference, Shaw Conference Centre, Edmonton AB, May 25 - 28, 2010.  
2009 1st Conf. AMiTaNS, Sozopol, Bulgaria, June 22-27.  
2009 7th Int. Conf. on Large-Scale Scientific Computations, Sozopol, Bulgaria, June 4-8.  
2008 Alberta Colleges Mathematics Conference. Calgary, Alberta, May 2-3.  
2008 American Mathematical Society Winter Meeting, San Diego, California, January 6-9.  
2007 6th Int. Conf. on Large-Scale Scientific Computations, Sozopol, Bulgaria, June 5-9.  
2007 CAIMS\*SCMAI 2007 Annual Meeting, Banff Centre, Alberta, May 20-24.  
2006 Int. Conf. on Hybrid Systems and Applications, Univ. of Louisiana at Lafayette, May 22-26.  
2005 5th Int. Conf. on Large-Scale Scientific Computations, Sozopol, Bulgaria, June 6-10.  
2004 16th Canadian Symposium on Fluid Dynamics, CAIMS/CMS 2004, Halifax, June 13-15.  
2003 2nd Int. Conf. in Pedestrian and Evacuation Dynamics, London, UK, August 20-22.  
2003 CMS 2003 Summer Meeting, Edmonton, Canada, June 14-16.  
2003 Workshop Connecting Women in Mathematics across Canada, Edmonton, June 12-13.  
2002 Int. Mini-symposium on Math. Modeling and Scientific Computations, Bulgaria Apr. 3-6  
2002 International Interdisciplinary Research Exchange Symposium, Tokyo, March 1-2  
2001 Aerospace Numerical Simulation Symposium 2001, NAL, Tokyo, Japan, June 20-22  
2001 Symposium of SIT, Saitama Institute of Technology, Japan, July 30-August 2.  
2001 Int. Conf. on Recent Advances in Comp. Mathematics, Matsuyama, Japan, Oct. 10-13  
2000 1st Int. Conf. on Computational Fluid Dynamics, Kyoto, Japan, July 10-14.  
2000 Annual meeting of Japan Society for Applied Mathematics, Seta, Japan, Dec. 20-22  
2000 Annual meeting of Japan Soc. for Industrial and Applied Mathematics, Tokyo, Japan, Oct.  
1997 1st Int. Workshop on Large-Scale Scientific Computing of Eng. and Environmental Problems, Bulgaria, June.  
1995 Int. Symposium on Continuum Models and Discrete Systems, Varna, Bulgaria, June.  
1992 Int. Summer School on Applications of Mathematics in Techniques, Varna, Bulgaria, Aug.  
1992 Jubilee Symposium of Technical University of Varna, Bulgaria, Oct.  
1990 National Conf. on Contribution of Young Scientists in Progress of Science and Technology, Bulgaria, Oct.