



Volume 6, Issue 2

December 2018

Newsletter of the International Society of Difference Equations



TABLE OF CONTENTS

A Letter from the President	1
Introduction from the Newsletter Editor	5
ICDEA 2019	6
Other Conferences 2019	8
ISDE Calendar	15
Books authored by ISDE Members	16
ISDE Board of Directors 2017 – 2019	18
Goals of the Society	19

Newsletter Editor:

Agnieszka Malinowska

Ewa Schmeidel



A Letter from the President

December 19, 2018

2018 Conference of the Society



ICDEA, the International Conference on Difference Equations and Applications, is the flagship conference of our society. It is held annually since 1994. ICDEA 2018, the 24th International Conference on Difference Equations and Applications, took place at the Technische Universität Dresden, Dresden, Germany, May 21–24, 2018. The conference was a tremendous success, and the society is indebted to the organizers, in particular the Chair of the Organizing Committee, **Stefan Siegmund** (Technische Universität Dresden, Dresden, Germany). The Scientific Committee, chaired by **Zuzana Došlá** (Masaryk University, Brno,

Czech Republic), selected the plenary speakers. ICDEA 2018 featured top-quality plenary talks given by **Elena Braverman** (University of Calgary, Calgary, Canada), **Rafael de la Llave** (Georgia Institute of Technology, Atlanta, USA), **Robert Devaney** (Boston University, Boston, USA), **Katrin Gelfert** (Federal University of Rio de Janeiro, Rio de Janeiro, Brazil), **Yun Kang** (Arizona State University, Tempe, USA), **Bernd Krauskopf** (University of Auckland, Auckland, New Zealand), **Alexandra Rodkina** (University of the West Indies, Kingston, Jamaica), **Roman Šimon Hilscher** (Masaryk University, Brno, Czech Republic), and **Erik Van Vleck**

(University of Kansas, Lawrence, USA). Please look at the next page for a group picture taken in front of the “Willersbau” on the campus of the Technical University in Dresden.

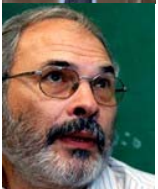
As a reminder, during ICDEA 2017 in Timișoara, it was decided to hold PODE (Progress on Difference Equations), ISDE’s second conference series, from then on in odd-numbered years only, while merging with ECIT (European Conference on Iteration Theory), taking place in even-numbered years. Hence, in 2018, no PODE was held, but ECIT 2018 took place at the University of Murcia, Spain, July 3–6, 2018.



Martin Bohner

ISDE President

2018 Prize awarded by the Society



The most prestigious award of our society, the Bernd Aulbach Prize, is awarded biennially for significant contributions to the areas of difference equations and/or discrete dynamical systems. The Bernd Aulbach Prize is awarded in odd-numbered years, so there was no award in 2018, but there will be a call for nominations soon at the

beginning of next year.

Another prize given by the society is the prize for the best JDEA paper. This prize is awarded annually. In 2018, the recipients of this prize for the best 2017 JDEA paper were **Juan Luis García Guirao** (Technical University of Cartagena, Cartagena, Spain) and **Jaume Llibre** (Autonomous University of

Barcelona, Barcelona, Spain) for their paper “Periods of Continuous Maps on Some Compact Spaces”, *J. Difference Equ. Appl.* 23(1-2), 1–7, 2017.



A Letter from the President



ICDEA 2018 Dresden

Above: Group picture at Technische Universität

Left: During conference dinner at Bülow Palais



A Letter from the President

Upcoming Conferences of the Society



ICDEA 2019, the 25th International Conference on Difference Equations and Applications, is just around the corner, so please mark your calendars to attend this exciting event at the University College London in London, UK, June 24–28, 2019. The Chair of the Organizing Committee is **Stephen Baigent**, the 2017 recipient of the best JDEA paper prize. The conference website is www.ucl.ac.uk/mathematical-physical-sciences/icdea-2019. During ICDEA 2019, the annual assembly of ISDE will be held, and the winners of the Bernd Aulbach Prize and the best JDEA paper prize will be announced. For more information on ICDEA 2019, please see later in this Newsletter.

PODE 2019 will be held at the Instituto Politécnico de Bragança in Bragança, Portugal, May 27–30, 2019. The Chair of the Organizing Committee is **João Almeida**, an ISDE member since 2007. The conference website www.pode2019.ibp.pt is not yet ready but will be available soon.

ICDEA 2020, the 26th International Conference of Difference Equations and Applications, will be held at the University of Sarajevo in Sarajevo, Bosnia–Herzegovina. The Chair of the Organizing Committee is **Senada Kalabušić**, an ISDE member since 2004.

ICDEA 2021, the 27th International Conference on Difference Equations and Applications, will be held at CentralSupélec in Gif-sur-Yvette, France. The Chair of the Organizing Committee is **Sorin Olaru**.

PODE 2021 will be held at Liepaja University in Liepaja, Latvia. The Chair of the Organizing Committee is **Michael Radin**, an ISDE member since 2007.

ICDEA 2022, the 28th International Conference of Difference Equations and Applications, will be held at Sorbonne University in Paris, France. The Chair of the Organizing Committee is **Svetlin Georgiev**.

Any ISDE member who wishes to organize an

upcoming ICDEA or PODE conference is cordially invited to submit a proposal to me or any of the members of the ISDE Board of Directors. Guidelines for preparing proposals for ICDEA conferences are available on the ISDE website at <http://isdeds.com>. As per a decision of the Board of Directors, contrary to the past, PODE conferences, being now held only biennially, now also require preparation of a proposal. Please refer to the society website for details.

I am looking forward to receiving your proposals for organizing these important conferences. Successful organizations will continue to demonstrate that the area of difference equations and its applications is an active and important area of research in mathematics.



A Letter from the President

Society Membership



I am excited to announce that, while ISDE during the year 2017 saw an increase of 42 members, our society has seen a growth of 128 new members during the year 2018. As of today, ISDE has 848 members. We truly are an international society, and this is manifested by the fact that our members are based in 79 different countries (an increase by three during 2018). The countries with the most members are (in that order) USA (160), China (101), India (49), Poland (44), Turkey (40), Romania (39), Portugal (36), Czech Republic (21), Italy, Spain (each 19), Japan (18), Russia, South Africa (each 17), Germany (16), Ukraine, UK (each 14), Canada (13), Iran (12), Egypt, France, Greece, and Pakistan (each 11).



Directory is available by entering a password. If you forgot this password, please send an e-mail to bohner@mst.edu, I will respond with the password. Moreover, if you find any errors or would like me to change any of the information given in there, please inform me by e-mail.

That said, I ask all of you to help in recruiting even more new members for our society. If you know anybody working in the areas of difference equations and/or discrete dynamical systems, please take a moment to invite this person to become an ISDE member. Applying for ISDE membership is easy: Just go to <http://isdeds.com> and click on "Membership application" and fill in the requested information. The applicant has the option to apply for regular membership (which is free of charge) or to become a sponsoring member of the society. Sponsoring membership is 100 USD a year, and the dues can be paid conveniently online using a credit card or PayPal. The funds received through sponsoring memberships help to



I would like to remind the society members about the html version of the current ISDE Membership Directory. This directory is available only to ISDE members. You may go to the society's website at <http://isdeds.com> and then click on "Members". From there, the ISDE Membership

support the society's activities in developing and enhancing research and education in difference equations and discrete dynamical systems. The 2018 ISDE Sponsoring Members are **Ziyad Al-Sharawi** (UAE), **Martin Bohner** (USA), **Elena Braverman** (Canada), and **Ann Brett** (USA). I hope many of you will sign up as a 2019 ISDE Sponsoring Member. Another way to support the society is to make a donation in any amount, which is now possible to do on the website. Finally, I am glad to report that **Stefan Siegmund**, the Chair of the ICDEA 2018 Organizing Committee, has transferred to the society funds that remained from this year's ICDEA organization. The society would like to thank Stefan Siegmund and hopes that future ICDEA organizers have similar possibilities.

With my Best Regards and Best Wishes for the Holiday Season and a Happy New Year 2019,

M. Bohner

INTRODUCTION FROM THE NEWSLETTER EDITORP



Dear Colleagues,

it is my great pleasure to present to you the new issue of the ISDE Newsletter.

I hope you find this interesting.

Many thanks to all who have sent information for this Newsletter.

I also would like to ask you to contribute information about new books, new conferences, new grants and job opportunities to the newsletter and the webpage, as well as any relevant information about mathematics or about our members. Please, send information directly to me.

Best Regards

Ewa Schmeidel

Ewa Schmeidel

eschmeidel@math.uwb.edu.pl

<https://www.ucl.ac.uk/mathematical-physical-sciences/icdea-2019>

ICDEA 2019

PLENARY SPEAKERS

Paul Glendinning (Manchester, UK)
Mats Gyllenberg (Helsinki, Finland)
Ewa Schmeidel (Bialystok, Poland)
Adina Luminita Sasu (Timișoara, Romania)
Mihaly Pituk (Pannonia, Hungary)
Horst Thieme (Arizona, USA)
Andrey Shilnikov (Georgia State, USA)
Patricia J Y Wong (Nanyang, Singapore)

ORGANIZING COMMITTEE

Stephen Baigent, Chair (UCL, UK)
Rodney Halburd (UCL, UK)
Steve Bishop (UCL, UK)

SCIENTIFIC COMMITTEE

Elena Braverman, Chair (Calgary, Canada)
Stephen Baigent (UCL, UK)
Josef Diblík (Brno, Czech Republic)
Laura Gardini (Urbino, Italy)
Yun Kang (Arizona, USA)
Agnieszka Malinowska (Bialystok, Poland)
Jean Mawhin (Louvain, Belgium)
Martin Rasmussen (Imperial, UK)



The **25th International Conference on Difference Equations and Applications (ICDEA 2019)** will be held at **University College London, England** from **Monday 24th June–Friday 28th June 2019**. ICDEA is the official conference of the International Society of Difference Equations (ISDE) and hosts its General Meeting.

This annual 5-day meeting is a key forum for Researchers, Phd students and Postdocs worldwide to present and discuss research in Difference Equations, Discrete Dynamical Systems, and related topics, as well as their applications to various sciences.

There will be 8 invited plenary talks, several parallel sessions of 30 = (25+5) minutes talks for researchers, plus facilities for posters. Also available will be individual day registration. Plenary speakers are experts chosen from the many areas of difference equations, discrete dynamical systems and their interplay with nonlinear science. Contributed talks in any area of difference equations and discrete dynamical systems are welcome.

As part of the General Meeting of ISDE, the "Best JDEA Paper Prize" will be awarded for the best paper published in the Journal of Difference Equations and Applications (JDEA) in 2018.

The previous conferences were held in **Dresden (Germany)** in 2018, **Timișoara (Romania)** in 2017, **Osaka (Japan)** in 2016, **Białystok (Poland)** in 2015, **Wuhan (Hubei, China)** in 2014, **Muscat (Oman)** in 2013, **Barcelona (Spain)** in 2012, **Trois-Rivières (Quebec, Canada)** in 2011, **Riga (Latvia)** in 2010, **Estoril (Portugal)** in 2009, **Istanbul (Turkey)** in 2008, **Lisbon (Portugal)** in 2007, **Kyoto (Japan)** in 2006, **Munich (Germany)** in 2005, **Los Angeles (California, USA)** in 2004, **Brno (Czech Republic)** in 2003, **Changsha (China)** in 2002, **Augsburg (Germany)** in 2001, **Temuco (Chile)** in 2000, **Poznan (Poland)** in 1998, **Taipei (Taiwan)** in 1997, **Veszprém (Hungary)** in 1995 and **San Antonio (Texas, USA)** in 1994.

<https://www.dea.agh.edu.pl/>

DEA 2019

PLENARY SPEAKERS

Artur Avila, IMPA in Brazil and University of Zurich,

Martin Hairer, Imperial College London

Pierre-Louis, Collège de France and CEREMADE, Université Paris-Dauphine

Stanislav Smirnov, University of Geneva and Skoltech

Shing-Tung Yau, Harvard University

Maciej Zworski, University of California, Berkeley

SCIENTIFIC COMMITTEE

Luis Caffarelli, University of Texas at Austin, USA

Sylvain Crovisier, Université Paris-Sud 11, France

Manuel del Pino, University of Chile, Chile

Alessio Figalli, ETH Zürich, Switzerland

Peter Kloeden, Huazhong University of Science and Technology, China & Goethe-Universität, Germany

Krystyna Kuperberg, Auburn University, USA

Irena Lasiecka, University of Memphis, USA

Peter Markowich, KAUST, Saudi Arabia

Michał Misiurewicz, Indiana University - Purdue University Indianapolis, USA

Piotr Oprocha, AGH University of Science and Technology, Poland

Zsolt Páles, University of Debrecen, Hungary

Benoit Perthame, Sorbonne Université, France

Feliks Przytycki, Polish Academy of Sciences, Poland

Ludwig Reich, Karl-Franzens-Universität Graz, Austria

Oleksandr Sharkovsky, National Academy of Sciences of Ukraine, Ukraine

Weixiao Shen, Fudan University, China

Yakov Sinai, Princeton University, USA

Jaroslav Smítal, Silesian University in Opava, Czech Republic

Neil Trudinger, Australian National University, Australia

Sebastian van Strien, Imperial College London, UK

Marcelo Viana, IMPA, Brazil

Juncheng Wei, University of British Columbia, Canada

Benjamin Weiss, Hebrew University of Jerusalem, Israel

LOCAL ORGANIZING COMMITTEE

Krzysztof Ciepliński - chairman

Ilona Michalik - vice-chairman

Piotr Oprocha - vice-chairman

Elżbieta Adamus

Tomasz Drwięga

Rafał Kapica

Anna Pudełko

Tomasz Zabawa

<https://sites.google.com/site/sandrapinelas/icddea-2019>

ICDDEA 2019

PLENARY SPEAKERS

Natig Atakishiyev, Universidad National Autonoma de Mexico, Mexico

Martin Bohner, Missouri University of Science and Technology, USA

Gabriele Bonanno, Universita' degli Studi di Messina, Italy

Tomás Caraballo, Universidad de Sevilla, Spain

Pavel Drabek, University of West Bohemia, Czech Republic

Wenyng Feng, Trent University, Canada

José Augusto Ferreira, Universidade de Coimbra, Portugal

Johan Glells, University of Antwerp, Belgium

John R. Graef, University of Tennessee at Chattanooga, USA

Istvan Gyori, University of Pannonia, Hungary

Anatoli Ivanov, Pennsylvania State University, USA

Hans-Otto Walther, Universität Giessen, Germany

George Karakostas, University of Ioannina, Greece

Peter Kloeden, Huazhong University of Science & Technology, China

Sergey Korotov, Bergen University College, Norway

Wojciech Kryszewski, Nicolaus Copernicus University, Poland

Garyfalos Papaschinopoulos, Democritus University of Thrace, Greece

Gabriel Pires, Instituto Superior Técnico, Portugal

Paolo Emilio Ricci, Università Campus Bio-Medico di Roma, Italy

Biagio Ricceri, University of Catania, Italy

Felix Sadyrbraev, University of Latvia, Latvia

Luís Sanchez, Universidade de Lisboa, Portugal

Christos Schinas, Democritus University of Thrace, Greece

B.-Wolfgang Schulze, Universität Potsdam, Germany

Adélia Sequeira, Instituto Superior Técnico, Portugal

Fabio Zanolin, University of Udine, Italy

Alexander Zeifman, Vologda State University, Russia

SCIENTIFIC COMMITTEE

Sandra Pinelas, Academia Militar, Portugal (Chair)
Ravi P. Agarwal, Texas A&M University-Kingsville, USA
Haydar Akca, Abu Dhabi University, UAE
Allaberen Ashyralyev, Near East University, Turkey
Sui Sun Cheng, Tsing Hua University, Taiwan
Julio G. Dix, Texas State University, USA
Wenyang Feng, Trent University, Canada
Evgeny Galakov, Peoples' Friendship University of Russia, Russia
Nazim Mahmudov, Eastern Mediterranean University, North Cyprus
Małgorzata Migda, Poznan University of Technology, Poland
Samir Saker, Mansoura, University, Egypt
Theodore Simos, King Saud University, Saudi Arabia
Ewa Schmeidel, University of Białystok, Poland
Ethiraju Thandapani, University of Madras, India
G. Britto Antony Xavier, Sacred Heart College (Autonomous), India
Mehmet Unal, Sinop University, Turkey

ORGANIZING COMMITTEE

Sandra Pinelas, Academia Militar, Portugal (Chair)
Tomás Caraballo, Universidad de Sevilla, Spain
José Augusto Ferreira, Universidade de Coimbra, Portugal
John R. Graef, University of Tennessee at Chattanooga, USA
Stefan Hilger, Katholische Universität Eichstätt, Germany
Garyfalos Papaschinopoulos, Democritus University of Thrace, Greece
Gabriel Pires, Instituto Superior Técnico, Portugal
Luís Sanchez, Universidade de Lisboa, Portugal
Adélia Sequeira, Instituto Superior Técnico, Portugal
Christos Schinas, Democritus University of Thrace, Greece
Alexander Zeifman, Vologda State University, Russia

<https://www.impan.pl/en/activities/banach-center/conferences/19-dynamical>

DYNAMIC EQUATIONS ON TIME SCALES 2019

PLENARY SPEAKERS

Martin Bohner, US

Christian Pötzsche, Austria

SCIENTIFIC COMMITTEE

Zbigniew Bartosiewicz, Poland

Martin Bohner, US

Christian Pötzsche, Austria

LOCAL ORGANIZING COMMITTEE

Agnieszka Malinowska,

Małgorzata Migda

Magdalena Nockowska-Rosiak

Ewa Schmeidel

<https://www.adu.ac.ae/icmpe/icmpe-conference-chairs>

ICMPE 2018

PLENARY SPEAKERS

Yuri Kozitsky, Maria Curie-Sklodowska University, Poland

Fathalla A. Rihan, United Arab Emirate University, UAE

SCIENTIFIC COMMITTEE

Haydar Akca (UAE)

Said Taan Alhajjar (Bahrain)

Adnène Arbi (TUNISIA)

Martin Bohner (USA)

Valery Covachev (Bulgaria)

Kishor D. Kucchet (India)

Martin Juras (USA)

Xiaodi Li (China)

Vyacheslav Maksimov (Russia)

Arkadi Ponossov (Norway)

Saburou Saitoh (Japan)

T. K. Suresh (India)

Barbulescu Alina (UAE)

Mariam Ahmad Al-Mannai (Bahrain)

Ghada AIObaidi (UAE)

Linda Smail (UAE)

Radwan Abdul Rahman Al Jarrah (USA)

Yuri Kozitsky (Poland)

Nail Suleiman Khabeev (Bahrain)

Abdul Hamid Kara (South Africa)

Mostepha Neceri (Algeria)

Sandra Pinelas (Portugal)

Mukhambetzhonov Saltanbek (Kazakhstan)

LOCAL ORGANIZING COMMITTEE

Hamdi Mustafa Sheibani (Honorary Chair)

Haydar Akca

Hamdi Mustafa Sheibani

Abdelwahab Kharab

Hikmat Hamad

Grira Sofiane

Jamal Benbourenane

Haitham Farok

Hichem El Euch

Makhtar Sarr

<https://side13conference.net/>

SIDE 13

SCIENTIFIC COMMITTEE

Ralph Willox (Chair, Tokyo)

Wolfgang Schief (UNSW)

Lucia Di Vizio (Versailles-St Quentin)

Decio Levi (Rome TRE)

Satoshi Tsujimoto (Kyoto)

Rei Inoue (Chiba)

Takao Suzuki (Kinki University)

LOCAL ORGANIZING COMMITTEE

Kenji Kajiwara (Chair, IMI, Kyushu University, Fukuoka)

Saburo Kakei (Rikkyo University, Tokyo)

Kazuki Maeda (Kwansei Gakuin University, Hyogo)

Ken-ichi Maruno (Waseda University, Tokyo)

Nozomu Matsuura (Kurume Institute of Technology, Fukuoka)

Atsushi Nagai (Tsuda University, Tokyo)

Masatoshi Noumi (Kobe University, Kobe)

Daisuke Takahashi (Waseda University, Tokyo)

Tomoyuki Takenawa (Tokyo University of Marine Science and Technology, Tokyo)

Tetsuji Tokihiro (University of Tokyo, Tokyo)

Satoshi Tsujimoto (Kyoto University, Kyoto)

Ralph Willox (University of Tokyo, Tokyo)

Yasuhiko Yamada (Kobe University, Kobe)

ISDE CALENDAR

11-17 November 2018, Symmetries and Integrability of Difference Equations (SIDE 13),
<https://side13conference.net/>

November 30 - December 02, 2018, International Conference on Sciences and Applications (ICMPE 2018), <https://www.adu.ac.ae/icmpe/icmpe-conference-chairs>

12-16 June, Dynamic Equations on Time Scales (DETS 2019),
<https://www.impan.pl/en/activities/banach-center/conferences/19-dynamical>

24-28 June 2019, 25th International Conference on Difference Equations and Applications (ICDEA2019), <https://www.ucl.ac.uk/mathematical-physical-sciences/icdea-2019>

1-5 July 2019, International Conference on Differential & Difference Equations and Applications 2019 (ICDDEA 2019), <https://sites.google.com/site/sandrapinelas/icddea-2019>

16-20 September 2019, 25th Dynamics, Equations and Applications (DEA 2019),
<https://www.dea.agh.edu.pl/main>



BOOKS AUTHORED BY ISDE MEMBERS

Formal and Analytic Solutions of Diff. Equations by Galina Filipuk, Alberto Lastra, Sławomir Michalik (Eds.), Springer 2018, <https://www.springer.com/gp/book/9783319991474>

Qualitative Theory of Volterra Difference Equations by Youssef N Raffoul, Springer 2018, <https://www.springer.com/us/book/9783319971896>

Functional Numerical Methods: Applications to Abstract Fractional Calculus, by George A. Anastassiou and Ioannis K. Argyros, Springer 2018, <http://www.springer.com/la/book/9783319695259>

Spectral Theory for Bounded Functions and Applications to Evolution Equations, by G.M. N'Guerekata, Nova Science Publisher, 2017, https://www.novapublishers.com/catalog/product_info.php?products_id=62455

Generalized Fractional Programming, by G. M. N'Guerekata, R. U. Verma, Nova Science Publisher, 2017, https://www.novapublishers.com/catalog/product_info.php?products_id=63514

Intelligent Computations: Abstract Fractional Calculus, Inequalities, Approximations, by G. A. Anastassiou, Springer 2017, <https://www.springer.com/gp/book/9783319669359>

Multivariable Dynamic Calculus on Time Scales, by Martin Bohner and Svetlin G. Georgiev, Springer 2016, <http://www.springer.com/us/book/9783319476193>

Applied Impulsive Mathematical Models, by Ivanka Stamova and Gani Stamov, Springer 2016, <http://www.springer.com/us/book/9783319280608>

Integral Equations on Time Scales, by Svetlin G. Georgiev, Springer 2016, <http://www.springer.com/gp/book/9789462392274>

Nonlinear Interpolation and Boundary Value Problems, by Paul W. Eloe (University of Dayton, USA) and Johnny Henderson (Baylor University, USA). World Scientific 2016, <http://www.worldscientific.com/worldscibooks/10.1142/9877>

Stability Theory for Dynamic Equations on Time Scales, by A. A. Martynyuk, Springer 2016 <http://www.springer.com/gp/book/9783319422121>

Asymptotic Integration of Differential and Difference Equations, by Sigrun Bodine and Donald A. Lutz, ISBN 978-3-319-18248-3, <http://www.springer.com/us/book/9783319182476>

Difference Equations, Discrete Dynamical Systems and Applications, ICDEA, Wuhan, China, July 21-25, 2014, Editors: Martin Bohner, Yiming Ding, Ondřej Došlý, ISBN: 978-3-319-24745-8 (Print) 978-3-319-24747-2 (Online), <http://link.springer.com/book/10.1007%2F978-3-319-24747-2>

Positive Dynamical Systems in Discrete Time. Theory, Models, and Applications, by Ulrich Krause, De Gruyter Studies in Mathematics 62, 2015, <http://www.degruyter.com/view/product/430890>

Computational Methods in the Fractional Calculus of Variations, by Ricardo Almeida, Shakoor Pooseh and Delfim F. M. Torres, Imperial College Press, 2015, <http://www.worldscientific.com/worldscibooks/10.1142/p991>

Advanced Methods in the Fractional Calculus of Variations, by Agnieszka B. Malinowska, Tatiana Odziejewicz, and Delfim F. M. Torres, Springer, 2015,
<http://www.springer.com/mathematics/book/978-3-319-14755-0>

Difference Equations by Differential Equation Methods, by Peter Hydon, Cambridge University Press 2015, <http://www.kent.ac.uk/smsas/personal/ph282/pub.htm>

Infinite-Horizon Optimal Control in the Discrete-Time Framework, by Joel Blot and Naila Hayek, SpringerBriefs in Optimization, 2014, 124 pages,
<http://www.springer.com/us/book/9781461490371>

Quantum Variational Calculus, Series: SpringerBriefs in Electrical and Computer Engineering, Subseries: SpringerBriefs in Control, Automation and Robotics, by Agnieszka B. Malinowska and Delfim F. M. Torres, Series Editors: Basar, Tamer; Bicchi, Antonio; Krstic, Miroslav. Published by: Springer, 2014, <http://www.springer.com/us/book/9783319027463>

ISDE BOARD OF DIRECTORS 2017—2019



Martin Bohner
President

Missouri University of Science and
Technology, Rolla, Missouri, USA



Saber Elaydi
Vice President

Trinity University,
San Antonio, Texas, USA



**Elena
Braverman**

University of Calgary,
Calgary, Alberta, Canada



Jim Cushing

University of Arizona,
Tucson, Arizona, USA



**Małgorzata
Guzowska**

University of Szczecin,
Szczecin, Poland



István Györi

University of
Pannonina, Veszprém,
Hungary



Stefan Hilger

Katholische Universität
Eichstätt-Ingolstadt,
Eichstätt, Germany



Allan Peterson

University of Nebraska,
Lincoln,
Nebraska, US



Stefan Siegmund

Technische Universität Dresden,
Dresden, Germany

GOALS OF THE SOCIETY

To promote difference equations and discrete dynamical systems, defined broadly, as one of the fundamental subjects in Mathematics.

To promote discrete models as models of premiere mathematical importance in the natural sciences, engineering, economics, etc.

To coordinate activities in the area of difference equations such as organizing conferences, annual meetings, workshops, special sessions, etc.

To lend support to researchers in difference equations from developing countries and those who need help by making available copies of research articles, lecture notes, technical reports and books.

To promote the publication of books, monographs, lecture notes and expository articles in the area of difference equations.



We are on the web
<http://isdeds.org/>