



**A short
overview
of the
collaboration
between the
University of
Primorska
[UP FAMNIT
and UP IAM]
and the USA**



BILATERAL SCIENTIFIC AND RESEARCH COOPERATION BETWEEN THE RS AND THE USA

UP IAM / UP FAMNIT FUNDED BY THE SLOVENIAN RESEARCH AGENCY

These research cooperation projects are intended to strengthen relationships between researchers and institutions in Slovenia and the USA. Our university has enthusiastically participated in 27 of these projects since 2008.

| Years | Topics | No. of Projects |
|-------------|--|-----------------|
| 2018 - 2019 | Mathematics, Wood science, Plant genetics | 7 |
| 2017 - 2018 | Mathematics, Computer science | 3 |
| 2016 - 2017 | Mathematics, Forest sector business, Psychology, Food safety and competitiveness | 6 |
| 2015 - 2016 | Mathematics, Wood science, Computer science | 7 |
| 2014 - 2015 | Mathematics, Wood science, Psychology | 5 |
| 2013 - 2014 | Mathematics | 3 |
| 2012 - 2013 | Mathematics | 2 |
| 2011 - 2012 | Mathematics | 1 |
| 2009 - 2012 | Mathematics | 1 |
| 2009 - 2010 | Mathematics | 1 |
| 2008 - 2010 | Mathematics | 1 |

Molecular characterization of pomegranate (*Punica granatum* L.) and identification of unknown genotypes from north Adriatic region through the comparison of USDA collection: bilateral research cooperation between RS and USA (2018-2019), UP FAMNIT and National Clonal Germplasm Repository, University of California, Davis.

Innovation and research management for improved renewable material processing: bilateral research cooperation between RS and USA (2018-2019), UP IAM and Oregon State University.

Studies in graph representations: dual graphs on surfaces, Cartesian dimension, and readability of graphs: bilateral research cooperation between RS and USA (2018-2019), UP IAM and Rutgers University.

Bipartite distance-regular graphs with exactly two irreducible T-modules with endpoint 2, both thin: subspace MW: bilateral research cooperation between RS and USA (2018-2019) UP IAM and Seattle University.

Hamiltonicity of vertex-transitive graphs: bilateral research cooperation between RS and USA (2018-2019), UP IAM and Vanderbilt University.

Color Preserving Automorphisms: bilateral research cooperation between RS and USA (2018-2019), UP IAM and Mississippi State University.

Nonparametric statistics, Brownian motion and analysis: bilateral research cooperation between RS and USA (2018-2019), UP IAM and University of Washington.

New trends in chromatic graph theory: bilateral scientific – research cooperation between RS and USA (2017-2018), UP FAMNIT and Iowa State University.

Computer Algorithm Development for Molecular Dynamics Simulation of Macromolecules – research cooperation between RS and USA (2017-2018), UP FAMNIT and NIH Laboratory of Computational Biology.

Analysis of linked networks: bilateral scientific – research cooperation between RS and USA (2017-2018), UP IAM and Stanford University.

Abstract polygonal complexes and their representations: bilateral scientific - research cooperation between RS and USA (2016-2017), UP IAM and Northeastern University.

Some combinatorial problems: graphs, hypergraphs, and positional games: bilateral scientific - research cooperation between RS and USA (2016-2017), UP IAM and Rutgers University.

Leadership Diversity in Forest Sector Firms: Performance Impacts: bilateral scientific - research cooperation between RS and USA (2016-2017), UP IAM and Oregon State University.

Research and prevention of suicidal behavior: bilateral scientific - research cooperation between RS and USA (2016-2017), UP IAM and Oregon State University.

Abstract polytopes, groups and cyclic configurations: bilateral scientific - research cooperation between RS and USA (2016-2017), UP IAM and University of Alaska Fairbanks.

International competitiveness and marketing of safe and quality food: bilateral scientific - research cooperation between RS and USA (2016-2017), UP FAMNIT and Saint Joseph's University and Institute of Food Products Marketing.

Genetic characterization and comparison of Adriatic figs with the USDA fig collection in California using molecular approaches: bilateral scientific - research cooperation between RS and USA (2016-2017), UP FAMNIT and UC Davis.

Interlacing inequalities for simplicial complexes: bilateral scientific - research cooperation between RS and USA (2015-2016), UP IAM and Mississippi State University.

The Use of Dynamical Mechanical Analysis (DMA) to Characterize Thermo-Hydro-Mechanically Densified Wood: bilateral scientific - research cooperation between RS and USA (2015-2016), UP IAM and US Forest Service, Forest Products Laboratory.

Snap.py - a Pythonic interface to the large network analysis library SNAP: bilateral scientific - research cooperation between RS and USA (2015-2016), UP IAM and Stanford University.

Cryptographic Boolean Functions and Graph Theory: bilateral scientific - research cooperation between RS and USA (2015-2016), UP IAM and Naval Postgraduate School.

Bipartite distance-regular graphs: irreducible T-modules with endpoint 2: bilateral scientific - research cooperation between RS and USA (2015-2016), UP IAM and University of Wisconsin Madison.

Hamiltonicity of vertex-transitive graphs: bilateral scientific - research cooperation between RS and USA (2015-2016), UP IAM and Vanderbilt University.

Computer Algorithm Development for Molecular Dynamics Simulation: bilateral scientific - research cooperation between RS and USA (2015-2016), UP IAM and NIH/NHLBI/Lab. of Computational Biology.

Using probability in Graph Theory and Networks: bilateral scientific - research cooperation between RS and USA (2014-2015), UP FAMNIT and University of California - Davis.

Abstract polygonal complexes and their representations: bilateral scientific - research cooperation between RS and USA (2014-2015), UP IAM and Northeastern University.

Cliques, stable sets, and graph classes: bilateral scientific - research cooperation between RS and USA (2014-2015), UP IAM and Rutgers University, RUTCOR.

Viscoelastic properties of thermo-hydro-mechanically treated wood: bilateral scientific - research cooperation between RS and USA (2014-2015), UP IAM and Oregon State University.

Research and prevention of suicidal behavior: bilateral scientific - research cooperation between RS and USA (2014-2015), UP IAM and Oregon State University.

Resolving the conjecture on almost cospectrality of the components of NEPS of graphs: bilateral scientific - research cooperation between RS and USA (2013-2014), UP IAM and University of Wisconsin - Madison.

Hamiltonicity of Vertex-transitive graphs: bilateral scientific - research cooperation between RS and USA (2013-2014), UP IAM and Vanderbilt University.

Strongly Regular (Di)graphs: bilateral scientific - research cooperation between RS and USA (2012-2013), UP IAM and Worcester Polytechnic Institute.

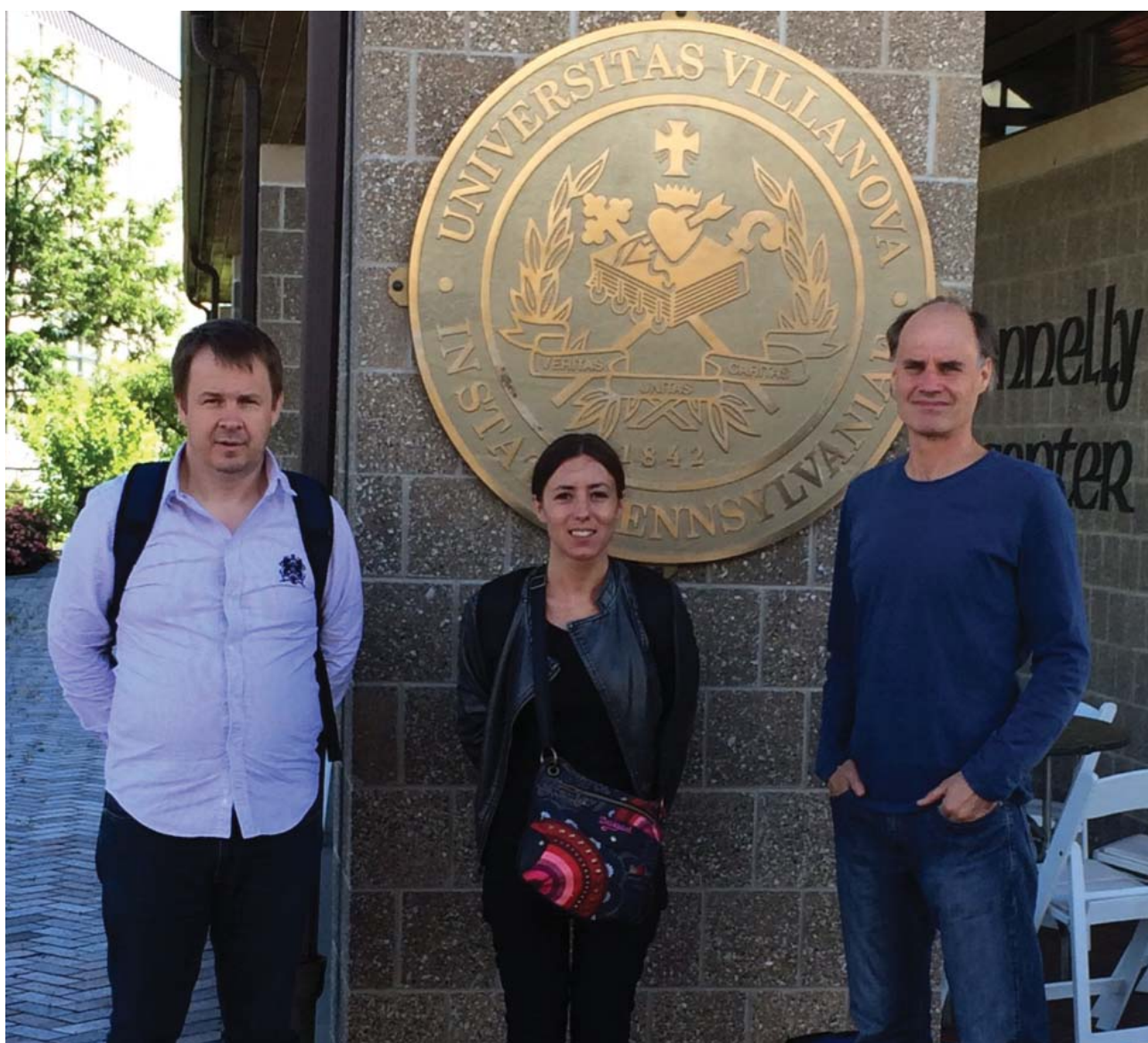
Numerical Characterizations of Graph Theoretic Properties: bilateral scientific - research cooperation between RS and USA (2012-2013), UP IAM and Rutgers Center for Operations Research.

Hamiltonicity of Vertex-transitive Graphs: bilateral scientific - research cooperation between RS and USA (2011-2012), UP PINT in Ohio State University.

Semiregular Automorphisms in Vertex-transitive Graphs: bilateral scientific - research cooperation between RS and USA (2009-2012), UP PINT and Mississippi State University.

Bipartite Distance-regular Graphs: bilateral scientific - research cooperation between RS and USA (2009-2010), UP PINT and University of Wisconsin - Madison.

Vertex-transitive Graphs: Hamiltonicity and Semiregularity: bilateral scientific - research cooperation between RS and USA (2008-2010), UP PINT and Ohio State University.



VISITING PROFESSORS AND RESEARCHERS AT UP FAMNIT AND UP IAM FROM USA

Leah Berman, University of Alaska Fairbanks

Endre Boros, Rutgers University

Kendall Conroy, Oregon State University

David Devallance, West Virginia University

Elizabeth Dickinson, West Virginia University

Andrew P. Fabel, Mississippi State University

Charles Frihart, Forest Products Laboratory

Henry H. Glover, Ohio State University

Williams Gordon, University of Alaska Fairbank

Janko Gravner, University of California, Davis

Vladimir Gurvich, Rutgers University

Eric Hansen, Oregon State University

Scott Heppell, Oregon State University

Frederick A. Kamke, Oregon State University

David Kerr, Oregon State University

Chi-Kwong Li, College of William and Mary

Bernard Lidicky, Iowa State University

Alison Gordon Lynch, University of Wisconsin–Madison

Mark Maclean, Seattle University

Roderick Mast, Conservation International

Paul Medvedev, Penn State University

Lech Muszyński, Oregon State University

Gabriel Hernan Pretel, University of Wisconsin–Madison

Laura Jean Sheppardson, University of Mississippi

David Stallcop, Universal Forest Products

Paul Terwilliger, University of Wisconsin–Madison

Gordon Williams, University of Alaska Fairbanks

Stephen Wilson, Northern Arizona University

Russell Stephen Woodroffe, Mississippi State University

Jonathan Woody, Mississippi State University

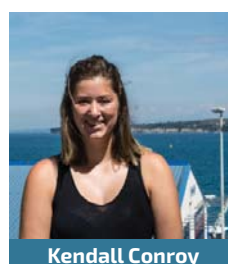
Andrew John Wright, George Mason University



Leah Berman



Endre Boros



Kendall Conroy



David Devallance



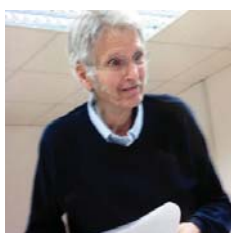
Elizabeth Dickinson



Andrew P. Fabel



Charles Frihart



Henry H. Glover



Williams Gordon



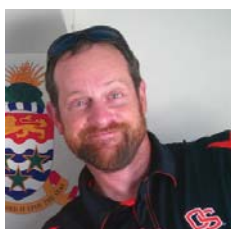
Janko Gravner



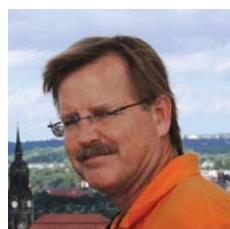
Vladimir Gurvich



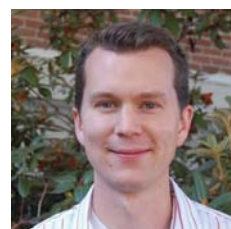
Eric Hansen



Scott Heppell



Frederick A. Kamke



David Kerr



Chi-Kwong Li



Bernard Lidicky



Alison Gordon Lynch



Mark Maclean



Roderick Mast



Paul Medvedev



Lech Muszyński



Gabriel H. Pretel



Laura J. Sheppardson



David Stallcop



Paul Terwilliger



Gordon Williams



Stephen Wilson



Russell Stephen



Jonathan Woody



Andrew John Wright



AMC - ARS MATHEMATICA CONTEMPORANEA

ARS Mathematica Contemporanea was founded by UP's Rector, Prof. Dragan Marušič, and Prof. Tomaž Pisanski. Many Americans serve on its highly international editorial and advisory boards. The journal's current managing editor is Prof. Edward T. Dobson who has appointments at UP and at Mississippi State University.

Founding Editors and Editors-in-Chief:

Dragan Marušič, University of Primorska and University of Ljubljana, Slovenia

Tomaž Pisanski, University of Primorska and University of Ljubljana, Slovenia

Americans serving on Editorial and Advisory Board of the journal:

Edward T. Dobson, Mississippi State University and UP, United States

Gordon Ian Williams, University of Alaska Fairbanks, United States

Leah Wrenn Berman, University of Alaska Fairbanks, United States

Egon Schulte, Northeastern University, Boston, United States

Brigitte Servatius, Worcester Polytechnic Institute, United States

Herman Servatius, Worcester Polytechnic Institute, United States

Henry H. Glover (1935 - 2011), Ohio State University, United States

Jack Edward Graver, Syracuse University, United States

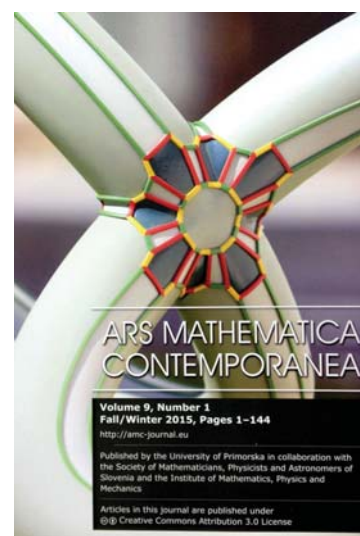
Jonathan L Gross, Columbia University, United States

Branko Grünbaum, University of Washington, United States

Thomas W. Tucker, Colgate University, United States

Mark E. Watkins, Syracuse University, United States

Steve Wilson, Northern Arizona University, United States



ADAM - THE ART OF DISCRETE AND APPLIED MATHEMATICS

ADAM is a modern, high quality on-line open source international scientific journal in the field of discrete and applied mathematics. Starting in 2018, it will be published twice a year in English language with abstracts in Slovenian. The journal is published by UP FAMNIT and Slovenian Discrete and Applied Mathematics Society.

Founding Editors and Editors-in-Chief:

Dragan Marušič, University of Primorska and University of Ljubljana, Slovenia

Tomaž Pisanski, University of Primorska and University of Ljubljana, Slovenia

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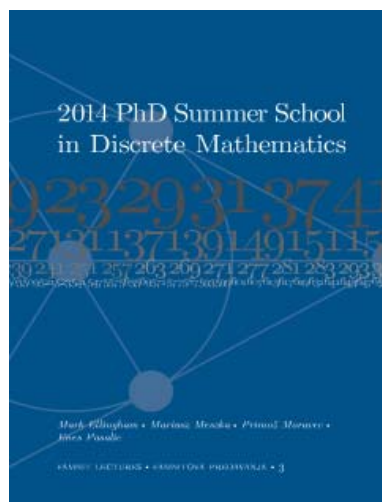
Egon Schulte, Northeastern University, Boston, United States

Janko Gravner, University of California, Davis, United States

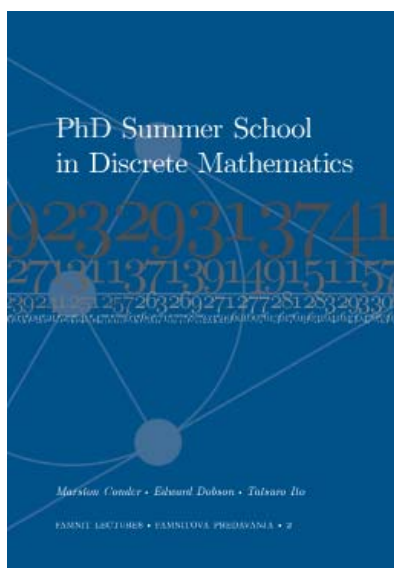
Thomas W. Tucker, Colgate University, United States

AMERICANS PUBLISHING GRADUATE TEXTBOOKS AT UP

Ellingham Mark, Mariusz Meszka, Moravec Primož, Pasalic Enes (2014):
2014 PhD Summer School in Discrete Mathematics



Conder Marston, Edward Dobson, Tatsuro Ito (2013):
PhD Summer School in Discrete Mathematics



INSTITUTIONAL AGREEMENTS OF UP WITH INSTITUTIONS IN USA

St. Thomas University (Miami, Florida)

Oregon State University (Corvallis, Oregon)

Ball State University (Muncie, Indiana)

Dowling College (Oakdale, New York)

Hawai'i Pacific University (Honolulu, Hawaii)

Mississippi State University (Starkville, Mississippi)



EXCHANGE AGREEMENTS

Mississippi State University (Overall)

Ball State University, Indiana University,

Oregon State University, San Diego State University,

West Virginia University (Erasmus+ Programme)



WORKSHOPS ORGANIZED BY UP IN COOPERATION WITH UNIVERSITIES FROM USA

5th annual Mississippi Discrete Mathematics Workshop,

Oxford (USA), November 4-5, 2017

4th annual Mississippi Discrete Mathematics Workshop,

Oxford (USA), November 14-15, 2015

3rd annual Mississippi Discrete Mathematics Workshop,

Starkville (USA), November 15-16, 2014

2nd annual Mississippi Discrete Mathematics Workshop,

Starkville (USA), November 2, 2013



SUMMER SCHOOLS ORGANIZED BY UP IN COOPERATION WITH OREGON STATE UNIVERSITY



The summer schools organized between UP and Oregon State University bring undergraduate and graduate students together in Slovenia and the region to learn about specific topics while visiting important locales. Students from both countries spend time with each other and build lasting friendships while learning about their topics and gaining unique experiences.

- Production of Housing in Europe: innovation, conservation and design with natural resources, June 2015
- The forest sector's contribution to sustainability of the built environment in Alpine Europe, June 2017
- International School of Marine Conservation Science - isMSC, June 2018



CURRENT UP EMPLOYEES FROM USA



The InnoRenew CoE Team members from US with project leader Andreja Kutnar



Edward Tauscher Dobson

Research field: Mathematics
From: Mississippi State University
Employment at University of Primorska:
Andrej Marušič Institute, Department of Mathematics
Full Professor since May 20, 2011
Fulbright Scholar at University of Primorska in 2008-09
Contact: dobson@math.msstate.edu



Matthew John Schwarzkopf

Research field: Biotechnical sciences/Forestry, wood and paper technology/Wood technology
From: Oregon State University
Employment at University of Primorska:
Andrej Marušič Institute, Department of Technology
Research Assistant since July 15, 2015
Contact: matthew.schwarzkopf@iam.upr.si



Michael David Burnard

Research field: Biotechnical sciences/Forestry, wood and paper technology/Wood technology
From: Oregon State University
Employment at University of Primorska:
Andrej Marušič Institute, Department of Technology
Research Assistant since July 12, 2013
Contact: michael.burnard@iam.upr.si



Amy Noel Simmons

Research field: Natural sciences and mathematics/Geology
From: Oregon State University
Employment at University of Primorska:
Andrej Marušič Institute, Department of Technology
Research Assistant since July 15, 2015
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Servatius Mary Agnes

Research field: Mathematics & Computer science and informatics
From: Worcester Polytechnic Institute (MA)
Achieved Master of Mathematics at UP FAMNIT in June 2014
Employment at University of Primorska:
Andrej Marušič Institute, Department of Mathematics
Young Researcher since November 1, 2016
Contact: mary.servatius@iam.upr.si



Gravner Janko

Research field: Mathematics/Probability and statistics
From: University of California - Davis
Employment at University of Primorska:
Andrej Marušič Institute, Department of Mathematics
Research Professor since February 5, 2009
Contact: gravner@math.ucdavis.edu



Russell Stephen Woodroffe

Research field: Mathematics/Combinatorics
From: Mississippi State University
Employment at University of Primorska:
UP FAMNIT, Department of Mathematics
Associate Professor at UP FAMNIT since June 20, 2017
Contact: russ.woodroffe@famnit.upr.si



FULBRIGHT SCHOLARS FROM UNIVERSITY OF PRIMORSKA IN THE USA

Dragan Marušič

Professor of Mathematics and Rector of University of Primorska (2011-ongoing)

Recipient of Žiga Zois Award for scientific achievements in algebra and graph theory (highest form of scientific recognition in Slovenia)

Leader of the National programme "Algebra, discrete mathematics, probability theory and game theory" (1999-ongoing)

Fulbright Scholar from 1991-92 at the University of California, Santa Cruz, USA

Contact: dragan.marusic@upr.si

Dušanka Janežič

Professor of Mathematics in Natural Sciences

Faculty of Mathematics, Natural Sciences and Information Technologies

Recipient of Ambassador in Science of the Republic of Slovenia Award

Recipient of Žiga Zois Award for outstanding research achievements in mathematics in natural sciences (highest form of scientific recognition in Slovenia)

Fulbright Scholar from 1994-95 at the National Institutes of Health, Bethesda, Maryland, USA

Contact: dusanka.janezic@upr.si

Klavdija Kutnar

Associate Professor of Mathematics

Dean of the Faculty of Mathematics, Natural Sciences and Information Technologies (2011-ongoing)

Fulbright Scholar from 2010-2011 at Ohio State University, USA

Contact: klavdija.kutnar@upr.si

Štefko Miklavič

Professor of Mathematics

Faculty of Mathematics, Natural Sciences and Information Technologies

Vice Rector for Research and Development at University of Primorska (2011-2015)

Recipient of Žiga Zois Distinction for scientific achievements in Mathematics (highest form of scientific recognition in Slovenia)

Fulbright Scholar in 2007 at the University of Wisconsin, Madison, USA

Contact: stefko.miklavic@upr.si

FULBRIGHT SCHOLARS AT UNIVERSITY OF PRIMORSKA FROM THE USA

Edward Tauscher Dobson

Professor of Mathematics

Mississippi State University, Department of Mathematics and Statistics

Fulbright Scholar from 2008–2009 at the Faculty of Mathematics, Natural Sciences and Information Technologies

Contact: dobson@math.msstate.edu

Nelson Velvet

Professor of Geography

Sam Houston State University, Department of Geography and Geology

Fulbright Scholar from 2009–2010 at the Faculty of Humanities

Contact: vnelson@shsu.edu

Stuart Aitken

Professor of Geography

San Diego State University, Department of Geography

Fulbright Scholar from 2013–2014 at the Faculty of Humanities

Contact: saitken@mail.sdsu.edu

Thomas Michael Maher

Professor of Media and Democracy, and American Communication Theory

University of Louisiana, Department of Communication

Fulbright Scholar from 2016 at the Faculty of Humanities

Contact: maher@louisiana.edu



Americans regularly participate in workshops organized by the University of Primorska.

On the picture invited speakers at SME ViLLab Workshop, March 2013:

Eric Hansen – Professor of Forest Products Marketing at Oregon State University, USA,

Chris Knowles – Assistant Professor of Forest Products Marketing & Assistant Director of the Oregon Wood Innovation Center at Oregon State University, USA,

Arijit Sinha – Assistant Professor of Renewable Materials and LEED Green Associate at Oregon State University, USA,

Robert Kozak – Professor & Head, Department of Wood Science at University of British Columbia, Canada,

Rajat Panwar – Associate Professor of Management at Appalachian State University, USA,

Erlend Nybak – Researcher in Entrepreneurship and Innovation Management at Norwegian Forest and Landscape Institute, Norway.



A short overview of activities
of the **University of Primorska**
[UP FAMNIT and UP IAM] with **USA**

Koper, 2017