CURRICULUM VITAE

Keith William Hipel

Officer of the Order of Canada (*O.C.*)

PhD, PEng, DrHC, HDSc, Hon.D.WRE, NAE,
FRSC, FCAE, FIEEE, FEIC, FINCOSE, FASCE, FAWRA, FAAAS

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Former President
Academy of Science
Royal Society of Canada

April 5, 2019

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IMPACTS of ACADEMIC CONTRIBUTIONS of KEITH W. HIPEL

Awards and Honours

For valuable contributions to research, mentoring and service, Hipel has received 63 prestigious awards including:

- **Governor General's recognition of outstanding achievements for Canada** (*Officer of the Order of Canada* (O.C.) from Her Excellency the Right Honourable Julie Payette, Governor General and Commander-in-Chief of Canada);
- **Top international acknowledgement of distinguished contributions to engineering** (*Foreign Member* of the National Academy of Engineering (NAE) of the United States of America);
- **Canada's most important prize in engineering research** (*Killam Prize in Engineering*, one per year)
- **Important Japanese science prize** (*Japan Society for the Promotion of Science Eminent Scientist Award* for which the previous 6 out of 7 recipients are Nobel Prize Laureates);
- **Notable Chinese recognition** (*Jiangsu Friendship Medal*, 5 *Honorary Professorships*);
- **Highest international distinction in systems engineering research** (*Norbert Wiener Award* from the IEEE Systems, Man and Cybernetics (SMC) Society);
- **Top prizes in water resources research** (*Honorary Diplomate, Water Resources Engineers (Hon.D.WRE)* from the American Academy of Water Resources Engineers within the American Society of Civil Engineers (ASCE); *W.R. Boggess Award* from the American Water Resources Association (AWRA));
- **Key international hydrology award** (*Ven Te Chow Award* from the Environmental and Water Resources Institute (EWRI), ASCE);
- **Canada's highest environmental research recognition** (*Miroslaw Romanowksi Medal* (Royal Society of Canada (RSC));
- **Interdisciplinary research awards** (*Sir John William Dawson Medal* (RSC); *Icko Iben Award* (AWRA));
- **Fellow** of 8 professional societies (FRSC, FCAE, FIEEE, FINCOSE, FASCE, FAWRA, FEIC, FAAAS));
- **Professional engineering recognition** (*Engineering Medal for Research and Development* (Ontario));
- **Honorary doctorate degrees** from 3 nations (France, Hungary, Canada);
- **Teaching awards** (*Outstanding Engineering Educator Award* from IEEE Canada; *Distinguished Teacher Award* (University of Waterloo); *Award of Excellence in Graduate Supervision* from Waterloo);
- **Outstanding career awards** from 4 organizations (*Joseph G. Wohl Outstanding Career Award* from the IEEE SMC Society; *Honorary Member in the American Water Resources Association* (AWRA); *World Automation Congress Lifetime Achievement Award*; *Water 2010 Lifetime Achievement Award*).

Other Contributions and Impacts

- **Highly-cited leading-edge research** (5 books, 12 edited books, 342 journal papers and 243 conference articles; high Hirsch Index of 57, i10 Index of 280, and over 15,200 citations);
- **Mentoring students** (37 PhD and 49 Master's students have graduated; taught over 5,000 students in Canada and 1,000 more overseas; mentored 20 Postdoctoral Fellows, 70 Visiting Scholars);
- **Curriculum development** including the design and teaching of the courses *Conflict Resolution* and *Time Series Modelling* for which he co-authored a textbook and decision support system for each course;
- **Internationalization of university education** via the establishment of *successful student exchange programs* with three Japanese universities and a Chinese university (mentored numerous Asians students);
- **Founder** and **Chair** of the Steering Committee of the ongoing *International Conferences on Water Resources and Environment Research (ICWRER)*; ICWRER 2019 will be held in Nanjing, China;
- **Technology transfer** via carrying out advanced *consulting* with engineering firms, utilities and government agencies; conflict resolution software used by 95 groups in 28 nations; and
- **Co-Chair, Expert Panel on Energy Use and Climate Change** (Council of Canadian Academies) which produced the report "*Technology and Policy Options for a Low-Emission Energy System in Canada*" (2015).
- **Leadership positions**: President, Academy of Science (RSC); Chair, Board of Governors of Renison University College; Chair of Systems Design Engineering, Senator and Governor at University of Waterloo.

RESEARCH INTERESTS

Keith W. Hipel is globally renowned for his interdisciplinary research in *Systems Engineering* on the development of *conflict resolution*, *multiple criteria decision analysis*, *time series analysis* and other *decision-making methodologies* for addressing complex *system of systems* problems lying at the confluence of society, technology and the environment, with applications in *water resources management*, *hydrology*, *environmental engineering*, *energy*, *sustainable development* and elsewhere. K.W. Hipel is the recipient of 63 academic and professional awards, 51 of which are listed below according to different categories. His Hirsch Index of 57, i10 Index of 280 and total citations of over 15,200 are excellent for his interdisciplinary fields of research.

NATIONAL AWARDS

Killam Prize in Engineering from the Canada Council for the Arts (2019).
Officer of the Order of Canada (O.C.) (2017)
Miroslaw Romanowski Medal from the Royal Society of Canada (2017)
Centenary Medal from the Royal Society of Canada (2015)
Sir John William Dawson Medal from the Royal Society of Canada (2011).
Outstanding Engineering Educator Award from IEEE Canada (2011).
Killam Research Fellowship from the Canada Council for the Arts (2001).
Fellow of the Royal Society of Canada (FRSC) (1998).

PROFESSIONAL ENGINEERING AWARDS

Foreign Member, National Academy of Engineering (NAE) of the United States of America (2016)
Honorary Diplomate, Water Resources Engineers (Hon.D.WRE) (2013)
Engineering Medal for Research and Development from Ontario Professional Engineers (2010).
Fellow of the Engineering Institute of Canada (FEIC) (2005).
Fellow of the Canadian Academy of Engineering (FCAE) (1997).

INTERNATIONAL AWARDS

IEEE Life Fellow, from José J.F. Moura, IEEE President and CEO (2019)
Ven Te Chow Award, Environmental and Water Resources Institute (EWRI), ASCE (2018)
Fellow, American Association for the Advancement of Science (FAAAS) (2018)
Disaster Prevention Research Institute (DPRI) Award, Kyoto University (2016)
Jiangsu Friendship Award, People's Republic of China (2016)
Honorary Fellow, International Association of Grey Systems and Uncertainty Analysis (2016)
Fellow of the American Society of Civil Engineers (FASCE) (2015)
Member, Omega Alpha Association (Systems Engineering Honor Society) (2014)
Group Decision and Negotiation Section Award (2013)
Japan Society for the Promotion of Science (JSPS) Eminent Scientist Award (2012)
Joseph G. Wohl Outstanding Career Award from the IEEE SMC Society (2012)
Honorary Professor of Óbuda University (2012)
World Automation Congress Lifetime Achievement Award (2012)
Honorary Member in the American Water Resources Association (AWRA) (2011).
Water 2010 Lifetime Achievement Award (Presented in Quebec City on July 6, 2010).
Fellow of the International Council on Systems Engineering (FINCOSE) (2007).
Most Active Systems, Man and Cybernetics (SMC) Technical Committee Award (2007).
Icko Iben Award from AWRA (2004).
Norbert Wiener Award from the IEEE SMC Society (2000).
Fellow of the Institute of Electrical and Electronics Engineers (FIEEE) (1996).
Outstanding Contribution Award from the IEEE SMC Society (1995).

Fellow of the American Water Resources Association (FAWRA) (1993).

HONOURARY DOCTORATE DEGREES

Honorary Doctorate of Science Degree, Vancouver Island University (*HDSc*) (2017)
Doctor Honoris Causa from Obuda University (*DrHC*) (2013).
Docteur Honoris Causa from École Centrale de Lille (*DrHC*) (2007).

UNIVERSITY OF WATERLOO AWARDS

Honorary Senior Fellow, Renison University College (2016)
Faculty of Engineering Teaching Excellence Award (2013)
Award of Excellence in Graduate Supervision (2008).
University Professor Designation (2007).
Award for Excellence in Research (2002).
Distinguished Teacher Award (1996).

INTERNATIONAL RESEARCH FELLOWSHIPS

Monbusho Kyoto University Visiting Professor Position (May to December, 1999).
Stanley Vineberg Memorial Visiting Professorship (Technion, Israel, January to April, 1999).
Centre National de la Recherche Scientifique (CNRS) Research Fellowship (France, September 1989 to August 1990).
Japan Society for Promotion of Science (JSPS) Fellowship (Kyoto University, January to August, 1984, February to April, 2009).

BEST PAPER AWARDS

1. 2012 Best Publication Award in Environment and Sustainability from the Section on Energy, Natural Resources, and the Environment within the Institute for Operations Research and the Management Sciences (INFORMS) across all journals during the previous four years for the paper entitled "Basin-wide Cooperative Water Resources Allocation" (with L. Wang and L. Fang), European Journal of Operational Research, DOI: 10.1016/j.ejor.2007.06.045, Volume 190, Issue 3, pages 798 to 817, November 2008.
2. 2011 Best Peer-Reviewed Paper for the best paper published in 2010 in the ASCE Journal of Management in Engineering for the paper entitled "Attitude-Based Negotiation Methodology for the Management of Construction Disputes" (with S. Yousefi and T. Hegazy), DOI: 10.1061/(ASCE)ME.1943-5479.0000013, Volume 26, pages 114 to 122, July 2010.
3. Best Paper Award at the "2009 IEEE Toronto International Conference – Science and Technology for Humanity" in the "Symposium on Sustainable Development and Energy Availability" for the paper entitled "Preventing Future Brownfields: Engineering Solutions and Pollution Prevention Policies" (with B. Taylor, L.J. Hipel, L. Fang, and M. Heng), Conference held at Ryerson University, Toronto, Ontario, Canada (September 26 to 27, 2009).
4. Best Paper Award at the Eighth International Symposium on the Analytic Hierarchy Process (ISAHP 2005) for the paper entitled "An Effective Approach to Infrastructure Reconstruction of Devastated Countries" (with K.A. Nigim and G.B. Smith), Conference held at the East West Center, University of Hawaii, Honolulu, Hawaii, USA (July 7 to 10, 2005).
5. 1984 W.R. Boggess Award from the American Water Resources Association for the most outstanding paper entitled "Trend Assessment of Water Quality Time Series" (with A.I. McLeod and F. Camacho) published during 1983 in the international journal Water Resources Bulletin (now called Journal of the American Water Resources Association), DOI: 10.1111/j.1752-

1688.1983.tb02768.x, Volume 19, Number 4, pages 537 to 547, 1983.

ASSOCIATE EDITORSHIPS (Current) (Career total is 22)

1. IEEE Transactions on Systems, Man and Cybernetics: Systems
2. ASCE Journal of Hydrologic Engineering (Board of Advisors)
3. Group Decision and Negotiation
4. Grey Systems: Theory and Application
5. Journal of Environmental Informatics
6. Journal of Systems Science and Systems Engineering
7. Interdisciplinary Information Sciences (Advisory Board)

PROFESSIONAL AFFILIATIONS

1. National Academy of Engineering (NAE) of the United States of America (Foreign Member).
2. Royal Society of Canada (RSC) (Fellow).
3. Institute of Electrical and Electronics Engineers (IEEE) (Fellow).
4. American Society of Civil Engineers (ASCE) (Fellow).
5. American Water Resources Association (AWRA) (Fellow).
6. International Council on Systems Engineering (INCOSE) (Fellow).
7. Canadian Academy of Engineering (CAE) (Fellow).
8. American Geophysical Union (AGU).
9. Professional Engineer (PEng) and Member of the Professional Engineers of Ontario (PEO).
10. Ontario Society of Professional Engineers (OSPE).
11. Engineering Institute of Canada (EIC) (Fellow)
12. Institute for Operations Research and Management Science (INFORMS)
13. American Association for the Advancement of Science (AAAS)

ACADEMIC APPOINTMENTS AT THE UNIVERSITY OF WATERLOO

Position	**Date**
University Professor	June 16, 2007 to present
Professor	July, 1985 to June 16, 2007
Associate Professor	July 1, 1981 to June 30, 1985
Assistant Professor	April 1, 1976 to June 30, 1981

DEGREES

PhD in Civil Engineering, University of Waterloo, 1975.
MASc in Systems Design, University of Waterloo, 1972.
BASc in Civil Engineering, University of Waterloo, 1970. (Graduated first in class).

RESEARCH PUBLICATION SUMMARY

(Status as of April 5, 2019)

(a) **Books** - 5 refereed books have been published.
(b) **Edited Books** - 12.
(c) **Journal Papers** – 342.
(d) **Conference Articles** – 243.
(e) **Book and Handbook** Chapters – 20.
(f) **Encyclopedia and Yearbook Articles** – 13.
(g) **Magazine, Newsletter and Newspaper Articles** – 16.
(h) **Discussions, Comments and Replies in Refereed Journals** - 7.
(i) **Technical Reports** - 57.

Research publications under the above categories are not directly listed in this document. Instead,

representative publications are classified according to research topics with a focus on journal papers.

RESEARCH TOPICS

In this section, relevant refereed journal papers, encyclopedia articles, conference papers and books are categorized according to research topics.

Graph Model for Conflict Resolution

Books

1. Xu, H., Hipel, K.W., Kilgour, D.M., and Fang, L., "Conflict Resolution Using the Graph Model: Strategic Interactions in Competition and Cooperation", Studies in Systems, Decision and Control 153, Springer, Cham, Switzerland, DOI: 10.1007/978-3-319-77670-5, ISBN 978-3-319-77669-9 (hard copy), ISBN 978-3-319-77670-5 (eBook), 436 pp., 2018.
2. Fang, L., Hipel, K.W., and Kilgour, D.M., "Interactive Decision Making: The Graph Model for Conflict Resolution", Wiley, New York, ISBN: 0-471-59237-4, 221 pp., 1993.

Edited Books

1. Hipel, K.W., Fang, L., Cullmann, J., and Bristow, M. (Editors), "Conflict Resolution in Water Resources and Environmental Management", Springer, Heidelberg, ISBN: 978-3-319-14215-9, DOI: 10.1007/978-3-319-14215-9, 291 pp., 2015.
2. Hipel, K.W. (Editor), "Conflict Resolution, Volume 1", Eolss Publishers, Oxford, United Kingdom (ISBN-978-1-84826-120-4 (Adobe e-Book), ISBN-978-1-84826-570-7 Library Edition (Hard Cover)) (Earlier versions of the papers appeared in the Encyclopedia of Life Support Systems.), 2009.
3. Hipel, K.W. (Editor), "Conflict Resolution, Volume 2", Eolss Publishers, Oxford, United Kingdom (ISBN-978-1-84826-121-1 (Adobe e-Book), ISBN-978-1-84826-571-4 Library Edition (Hard Cover)) (Earlier versions of the papers appeared in the Encyclopedia of Life Support Systems), 2009.

Encyclopedia Articles

1. Hipel, K.W., Kilgour, D.M., and Fang, L., "The Graph Model for Conflict Resolution", in Wiley Encyclopedia of Operations Research and Management Science, edited by J.J. Cochran (Editor-in-Chief) with L.A. Cox, P. Keskinocak, J.P. Kharoufeh, and J.C. Smith (Area Editors), Wiley, New York, Vol. 3 of 8, pp. 2099-2111, 2011.
2. Hipel, K.W., Kilgour, D.M., and Fang, L., "Conflict Analysis and Resolution", McGraw-Hill Yearbook of Science and Technology, 2006, McGraw-Hill, New York, pp. 75-77, 2006.
3. Hipel, K.W., "Conflict Resolution", theme overview paper, in Conflict Resolution, Encyclopedia of Life Support Systems (EOLSS), edited by K.W. Hipel, Eolss Publishers, Oxford, United Kingdom, [http://www.eolss.net], Volume I, pp. 1-31, 2009.
4. Hipel, K.W., "Formal Models for Conflict Resolution and Case Studies", topic overview paper, in Conflict Resolution, Encyclopedia of Life Support Systems (EOLSS), edited by K.W. Hipel, Eolss Publishers, Oxford, United Kingdom, [http://www.eolss.net], Volume Ⅱ, pp. 86-122, 2009.
5. Hipel, K.W., Kilgour, D.M., and Fang, L., "The Graph Model for Conflict Resolution", in Conflict Resolution, Encyclopedia of Life Support Systems (EOLSS), edited by K.W. Hipel, Eolss Publishers, Oxford, United Kingdom, [http://www.eolss.net], Volume Ⅱ, pp. 123-143, 2009.
6. Hipel, K.W., "Conflict Resolution", in Our Fragile World: Challenges and Opportunities for Sustainable Development (Forerunner to the Encyclopedia of Life Support Systems), edited by M.K. Tolba, Eolss Publishers, Oxford, United Kingdom, Vol. 1, pp. 935-952, 2001.

Overviews

1. Hipel, K.W., Fang, L., and Xiao, Y., "Conflict Resolution", In Vijay P. Singh (Editor) "Handbook of Applied Hydrology", Second Edition, McGraw-Hill, New York, Chapter 141, pp.141-1 - 141-5, 2016.
2. Hipel, K.W. and Bernath Walker, S., "Conflict Analysis in Environmental Management", Environmetrics, published online in Wiley Online Library on 7 June 2010, DOI: 10.1002/env.1048, Vol. 22, pp. 279-293, 2011.
3. Kilgour, D.M. and Hipel, K.W., "Conflict Analysis Methods: The Graph Model for Conflict Resolution", In Kilgour, D.M. and Eden, C. (Editors), "Handbook of Group Decision and Negotiation", Springer, Dordrecht, The Netherlands, pp. 203-222, 2010.
4. Kilgour, D.M., and Hipel, K.W., "The Graph Model for Conflict Resolution: Past, Present, and Future", Group Decision and Negotiation, DOI: 10.1007/s10726-005-9002-x, Vol. 14, No. 6, pp. 441-460, 2005.
5. Hipel, K.W., Kilgour, D.M., Fang, L., and Li, W., "Resolution of Water Conflicts between Canada and the United States", invited paper published as Section 4.3 in "State-of-the-Art Report on Systems Analysis Methods for Resolution of Conflicts in Water Resources Management", edited by K.D.W. Nandalal and S.P. Simonovic, a Report prepared for the Division of Water Sciences, United Nations Educational, Science and Cultural Organization (UNESCO), Paris, France, pp. 62-75, 2003.
6. Hipel, K.W., Fang, L., and Kilgour, D.M., "Decision Support Systems in Water Resources and Environmental Management", Keynote Paper, Proceedings of the Third International Conference on Water Resources and Environment Research, edited by G.H. Schmitz, held at the Dresden University of Technology, Dresden, Germany, July 22-25, 2002, vol. I, pp. 287-300, 2002.
7. Hipel, K.W., Fang, L., and Kilgour, D.M., "Game Theoretic Models in Engineering Decision Making", invited paper, Journal of Infrastructure Planning and Management, Japan Society of Civil Engineering, No. 470/IV-20, pp. 1-16, July 1993.
8. Hipel, K.W., Radford, K.J., and Fang, L., "Multiple Participant-Multiple Criteria Decision Making", IEEE Transactions on Systems, Man, and Cybernetics, DOI: 10.1109/21.247900, Vol. 23, No. 4, pp. 1184-1189, 1993.

Theory

1. Fang, L., Hipel, K.W., and Kilgour, D.M., "Conflict Models in Graph Form: Solution Concepts and their Interrelationships", European Journal of Operational Research, DOI: 10.1016/0377-2217(89)90041-6, Vol. 41, No. 1, pp. 86-100, 1989.
2. Kilgour, D.M., Hipel, K.W., and Fang, L., "The Graph Model for Conflicts", Automatica, DOI: 10.1016/0005-1098(87)90117-8, Vol. 23, No. 1, pp. 41-55, 1987.

Mixed Stabilities in Sanctioning

1. Zhao, S., Xu, H., Hipel, K.W., and Fang, L., "Mixed Stabilities for Analyzing Opponents' Heterogeneous Behavior within the Graph Model for Conflict Resolution", European Journal of Operational Research, DOI: 10.1016/j.ejor.2019.02.043, accepted for publication on February 20, 2019.

Preference Elicitation

1. Silva, M.M., Hipel, K.W., Kilgour, D.M., and Costa, A.P.C.S., "Urban Planning in Recife, Brazil: Evidence from a Conflict Analysis of the New Recife Project", Journal of Urban Planning and Development, DOI: 10.1061/(ASCE)UP.1943-5444.0000391, Vol. 143, No. 3, pp. 05017007-1-05017007-11, 2017.
2. Silva, M.M., Kilgour, D.M., Hipel, K.W., and Costa, A.P.C.S., "Probabilistic Composition of

Preferences in the Graph Model, with Application to the New Recife Project", Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, DOI: 10.1061/(ASCE)LA.1943-4170.0000235, Vol. 9, No. 3, pp. 05017004-1-05017004-13, 2017.

3. Bristow, M., Fang, L., and Hipel, K.W., "From Values to Ordinal Preferences for Strategic Governance", IEEE Transactions on System, Man, and Cybernetics: Systems, DOI: 10.1109/TSMC.2014.2308154, published online on April, 15, 2014, Vol. 44, No. 10, pp. 1364-1383, 2014.
4. Ke, Y., Fu, B., De, M., and Hipel, K.W., "A Hierarchical Multiple Criteria Model for Eliciting Relative Preferences in Conflict Situations", Journal of Systems Science and Systems Engineering, DOI: 10.1007/s11518-012-5187-0, Vol. 21, No. 1, pp. 56-76, 2012.
5. Ke, Y., Li, K.W., and Hipel, K.W., "An Integrated Multiple Criteria Preference Ranking Approach to the Canadian West Coast Port Congestion Problem", Expert Systems with Applications, DOI: 10.1016/j.eswa.2012.02.086, Vol. 39, Issue 10, pp. 9181-9190, August 2012.

Attitudes

1. Yousefi, S., Hipel, K.W., and Hegazy, T., "Attitude-Based Conflict Management for Resolving Disputes over Water Quality of the Seymareh River in Iran", Scientia Iranica, Transactions A: Civil Engineering, DOI: 10.24200/SCI.2018.20599, accepted for publication on March 10, 2018, official acceptance letter received on June 23rd, 2018.
2. Bernath Walker, S., Hipel, K.W., and Inohara, T., "Dominating Attitudes in the Graph Model for Conflict Resolution", Journal of Systems Science and Systems Engineering, DOI: 10.1007/s11518-012-5198-x, Vol. 21, No. 3, pp. 316-336, 2012.
3. Bernath Walker, S.G., Hipel, K.W., and Inohara, T., "Attitudes and Preferences: Approaches to Representing Decision Maker Desires", Applied Mathematics and Computation, DOI: 10.1016/j.amc.2011.11.102, Vol. 218, Issue 12, pp. 6637–6647, February 2012.
4. Bernath Walker, S., Hipel, K.W., and Inohara, T., "Strategic Decision Making for Improved Environmental Security: Coalitions and Attitudes in the Graph Model for Conflict Resolution", Journal of Systems Science and Systems Engineering, special issue on Strategic Decision Making for Global Security from a Systems Engineering Perspective in the Post-911 Environment, DOI: 10.1007/s11518-009-5119-9, Vol. 18, No. 4, pp. 461-476, 2009.
5. Inohara, T., Hipel, K.W., and Walker, S., "Conflict Analysis Approaches for Investigating Attitudes and Misperceptions in the War of 1812", Journal of Systems Science and Systems Engineering, DOI: 10.1007/s11518-007-5042-x, Vol. 16, No. 2, pp. 181-201, 2007.

Fuzzy Preferences

1. Bashar, M.A., Hipel, K.W., Kilgour, D.M., and Obeidi, A., "Interval Fuzzy Preferences in the Graph Model for Conflict Resolution", Fuzzy Optimization and Decision Making, DOI: 10.1007/s10700-017-9279-7, published online on December 22, 2017, 29 pp., 2017.
2. Bashar, M.A., Obeidi, A., Kilgour, D.M., and Hipel, K.W., "Modeling Fuzzy and Interval Fuzzy Preferences within a Graph Model Framework", IEEE Transactions on Fuzzy Systems, DOI: 10.1109/TFUZZ.2015.2446536, published online on June 17, 2015, Vol. 24, No. 4, pp. 765 - 778, 2016.
3. Bashar, M.A., Hipel, K.W., Kilgour, D.M., and Obeidi, A., "Coalition Fuzzy Stability Analysis in the Graph Model for Conflict Resolution", Journal of Intelligent and Fuzzy Systems, DOI: 10.3233/IFS-141336, Vol. 29, No. 2, pp. 593-607, 2015.
4. Bashar, M.A., Kilgour, D.M., and Hipel, K.W., "Fuzzy Option Prioritization for the Graph Model for Conflict Resolution", Fuzzy Sets and Systems, DOI: 10.1016/j.fss.2014.02.11, appeared online on February 26, 2014, Vol. 246, pp. 34-48, 2014.

5. Bashar, Md.A., Kilgour, D.M., and Hipel, K.W., "Fuzzy Preferences in the Graph Model for Conflict Resolution", IEEE Transactions on Fuzzy Systems", DOI: 10.1109/TFUZZ.2012.2183603, Vol. 20, No. 4, pp. 760-770, August 2012.
6. Hipel, K.W., Kilgour, D.M., and Bashar, M.A., "Fuzzy Preferences in Multiple Participant Decision Making", Scientia Iranica, Transactions D: Computer Science & Engineering and Electrical Engineering, special publication dedicated to the lifelong achievements of Professor Lotfi A. Zadeh, DOI: 10.1016/j.scient.2011.04.016, Vol. 18, No. 3(D1), pp. 627-638, June 2011.
7. Al-Mutairi, M.S., Hipel, K.W., and Kamel, M.S., "Fuzzy Preferences in Conflicts", Journal of Systems Science and Systems Engineering, DOI: 10.1007/s11518-008-5088-4, Vol. 17, No. 3, pp. 257-276, 2008.
8. Al-Mutairi, M.S., Hipel, K.W., and Kamel, M.S., "Trust and Cooperation from a Fuzzy Perspective". Mathematics and Computers in Simulation, online since April 6, 2007, doi:10.1016/j.matcom.2007.04.006, Vol. 76, pp. 430-446, 2008.

Grey Preferences

1. Kuang, H., Bashar, M.A., Kilgour, D.M., and Hipel, K.W., "Strategic Analysis of a Brownfield Revitalization Conflict Using the Grey-based Graph Model for Conflict Resolution", EURO Journal on Decision Processes, DOI: 10.1007/s40070-015-0042-4, published online on May 28, 2015, Vol. 3, No. 3, pp. 219-248, November 2015.
2. Kuang, H., Bashar, M.A., Hipel, K.W., and Kilgour, D.M., "Grey-based Preference in a Graph Model for Conflict Resolution with Multiple Decision Makers", IEEE Transactions on Systems, Man and Cybernetics: Systems", DOI: 10.1109/TSMC.2014.2387096, Vol. 45, No. 9, pp. 1254-1267, September 2015.

Unknown Preferences

1. Yu, J., Hipel, K.W., Kilgour, D.M., Fang, L., and Yin, K., "Graph Model under Unknown and Fuzzy Preferences", IEEE Transactions on Fuzzy Systems, DOI: 10.1109/TFUZZ.2019.2905222, 14 pages, accepted for publication on March 7, 2019.
2. Yu, J., Hipel, K.W., Kilgour, D.M., and Zhao, M., "Option Prioritization for Unknown Preference", Journal of Systems Science and Systems Engineering, DOI: 10.1007/s11518-015-5282-0, published online on July 28, 2015, Vol. 25, No. 1, pp. 39-61, 2016.
3. Li, K.W., Hipel, K.W., Kilgour, D.M., and Noakes, D.J., "Integrating Uncertain Preferences into Status Quo Analysis with Application to an Environmental Conflict", Group Decision and Negotiation, DOI: 10.1007/s10726-005-9003-9,Vol. 14, No. 6, pp. 461-479, 2005.
4. Li, K.W., Hipel, K.W., Kilgour, D.M., and Fang, L., "Preference Uncertainty in the Graph Model for Conflict Resolution" IEEE Transactions on Systems, Man, and Cybernetics, Part A, Systems and Humans, DOI:10.1109/TSMCA.2004.826282,Vol. 34, No. 4, pp. 507-520, 2004.

Preference Robustness

1. Ben-Haim, Y., and Hipel, K.W., "The Graph Model for Conflict Resolution with Information-Gap Uncertainty in Preferences", Applied Mathematics and Computation, DOI: 10.1016/S0096-3003(00)00161-2, Vol. 126, Issues 2-3, pp. 319-340, 2002.

Strength of Preference

1. Yu, J., Hipel, K.W., Kilgour, D.M., and Fang, L., "Fuzzy Levels of Preference Strength in a Graph Model with Multiple Decision Makers", Fuzzy Sets and Systems, DOI: 10.1016/j.fss.2018.12.016, 14 pp., accepted for publication on December 13, 2018.
2. Xu, H., Hipel, K.W., Kilgour, D.M., and Chen, Y., "Combining Strength and Uncertainty for Preferences in the Graph Model for Conflict Resolution with Multiple Decision Makers", Theory and Decision, DOI 10.1007/s11238-009-9134-6, Vol. 69, No. 4, pp. 497-521, 2010.

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EXPERT PANEL REPORT

Council of Canadian Academies (CCA), "*Technology and Policy Options for a Low-Emission Energy System in Canada*". Report of the Expert Panel on Energy Use and Climate Change, Report released on October 27, 2015, by the CCA, Ottawa, Ontario, Canada K2P 2K3, 2015. The Expert Panel consisted of a multidisciplinary group of eight experts, for which K.W. Hipel and P.R. Portney were the Co-Chairs, as well as an Assessment Team from the CCA. Magna International Inc. kindly funded the project. This report can be downloaded free of charge at http://www.scienceadvice.ca.

RESEARCH SUPERVISION

To date, K.W. Hipel has supervised or co-supervised 37 PhD and 49 Master's students who have successfully completed their graduate degrees and now hold meaningful employment in industry, academia and government. Usually, Hipel is mentoring about a dozen researchers consisting of PhD and Master's students as well as a Post-Doctoral Fellow and Visiting Scholars. Additionally, he has supervised over 100 Japanese graduate exchange students from three universities in Japan; 78 Visiting Scholars and Graduate Students from China, Brazil and elsewhere; and 21 Post-Doctoral Fellows. He is the recipient of the **Award of Excellence in Graduate Supervision** from the University of Waterloo.

RESEARCH FUNDING

Since 1976, K.W. Hipel has continuously held a Natural Sciences and Engineering Research Council (NSERC) of Canada Discovery Grant including the current one entitled "Creativity in Environmental Systems Conflict Resolution" for the five-year period from April 1st, 2018 to March 31st, 2023. Hipel was the Principal Investigator for the NSERC Strategic Project Grant entitled "Systems Engineering Approaches for Brownfield Redevelopment" (2006-2009); Recipient of the Faculty of Engineering (FOE) Research Grant to carry out interdisciplinary research in the area of "Multiple Participant – Multiple Objective Decision Making in International Governance from a System of Systems Engineering Perspective" (May 1, 2013 until December 31, 2019); Project Leader for Centre for International Governance (CIGI)/Faculty of Engineering (FOE) Research Grant to carry out interdisciplinary research in the area of "Multiple Participant – Multiple Objective Decision Making in International Governance" (2005 to April 30, 2013); Project Leader for a research topic within a Canadian Water Network Grant (2001-2005); Co-Investigator of two Aquanet research grants within the Networks of Centres of Excellence in Canada, dealing with risk management in aquaculture (2002-2004); Team Leader for a Tri-Council Eco-Research Grant (1993-1996); and holder of many other types of research grants and contracts.

EXTERNAL EXAMINER

External Examiner for PhD and Master's theses for universities in the Australia, Brazil, Canada, France, Hong Kong, India, Macau, South Africa, The Netherlands, and the United States.

TEACHING

Basic engineering, mathematics, optimization, conflict analysis and workshop courses at the undergraduate level. Time series modelling and conflict resolution at the graduate level. Courses were well received and consistently were given high ratings by the students. In recognition of the high quality of his teaching, Hipel is recipient of the **Distinguished Teacher Award** and the **Faculty of Engineering Teaching Excellence Award** from the University of Waterloo, as well as the 2011 **Outstanding Engineering Educator Award** from IEEE Canada.

KEYNOTE AND OTHER MAJOR ADDRESSES

K.W. Hipel has presented 37 keynote addresses at international conferences held in Brazil, Canada, China, Germany, Hungary, India, Japan, Macau, Mexico, Portugal, Slovakia, South Korea, Spain, Sweden, Tunisia, the United Kingdom and the USA. In conjunction with being the recipient of the **Japan Society for the Promotion of Science (JSPS) Eminent Scientist Award** (which is bestowed upon "foreign researchers such as Nobel laureates, who possess a record of excellent research achievements and who are mentors and leaders in their respective fields"), in 2013 and 2014 Hipel delivered invited research seminars at many universities in Japan ("for the purpose of associating directly with younger Japanese researchers so as to mentor, stimulate and inspire them to greater attainments"). Hipel delivered Convocation Addresses when he received **Honorary Doctorate Degrees** from universities in France (2007), Hungary (2013) and Canada (2017). Hipel is holder of the 2017 **Miroslaw Romanowski Medal** from the Royal Society of Canada, which is Canada's highest recognition for environmental research. As the **Miroslaw Romanowski Lecturer**, he delivered invited lectures across Canada in 2018 and 2019. As **Distinguished Lecturer** within the Distinguished Lecturer Program of the IEEE Systems, Man and Cybernetics Society for many years, Hipel delivered many invited lectures around the globe. In total, Hipel has delivered over 500 research papers at well-regarded international conferences as well as presented numerous research seminars at universities and research institutions around the globe.

CONFERENCE ORGANIZATION

K.W. Hipel has been the *Chair* or *Co-Chair* and main organizer of four international conferences (1978, 1992, 1993, and 2006) and been an active *Member* of the scientific planning committee of more than 50 other conferences, many of which involved the planning and chairing of special tracks of sessions. For example, in 1993, he organized and chaired the international conference on "Stochastic and Statistical Methods in Hydrology and Environmental Engineering: An International Conference in Honour of Professor T.E. Unny", which was held at the University of Waterloo from June 21st to 23rd, 1993. This constituted the first of a sequence of conferences subsequently held in Kyoto (1996), Brisbane (1999), Dresden (2002), Adelaide (2008), Quebec City (2010), Koblenz (2013) and Kyoto (2016). These ongoing conferences are now called the International Conferences on Water and Environment Research (ICWRER), for which Hipel is *Chair* of the ICWRER Steering Committee. The next ICWRER conference will be held at Hohai University in Nanjing from June 14th to 18th, 2019, for which Hipel is a General Chair, along with President Hui Xu of Hohai University. Hipel is the recipient of the **Water 2010 Lifetime Achievement Award** which he was presented at ICWRER 2010 in Quebec City. Since 1991, Hipel has helped to organize and chair special tracks of sessions on "Conflict Resolution" at the annual international conferences of the IEEE Systems, Man, and Cybernetics Society.

INTERNATIONAL ACADEMIC PROJECTS

K.W. Hipel has been extremely busy in organizing and participating in numerous international activities. For example, Hipel is the *Co-founder* and *Director* of the Exchange Programs between the University of Waterloo and the Tokyo Institute of Technology in Japan (December 2006 to present), Kyoto University in Japan (November 26, 1992 to present), Tottori University in Japan (November 16, 1987 to September 2015), and Nanjing University of Aeronautics and Astronautics in China (December 2009 to present). More than 210 Canadian and foreign students have participated in these exchange programs. He organized and edited 10 special issues of journals on a range of different topics and was the *Honourary Theme Editor* for "Conflict Resolution" which is part of the "Encyclopedia of Life Support Systems (EOLSS): Water, Energy, Environment, and Food and Agriculture". He has been an *Associate Editor* with 22 journals and been highly active in many professional organizations such as the American Water Resources Association and IEEE. In 2004, Hipel was the *External Examiner* of the academic activities of the Disaster Prevention Research Institute (DPRI) of Kyoto University, Japan, while during the fall of 1996 he carried out an academic review of the Faculty of Engineering, Tottori University, Tottori, Japan. Hipel is recipient of the **Japan Society for the Promotion of Science (JSPS) Eminent Scientist Award** (2012) and the **DPRI Award** from Kyoto University. Over a 12-year period, Hipel participated in the China/Canada Management Program via the supervision of Chinese PhD students and delivering short course and seminars in China. He is holder of the **Jiangsu Friendship Award** from Jiangsu Province in China (2016) and **Honorary Professor** at five Chinese universities including the Nanjing University of Aeronautics and Astronautics (NUAA) and Hohai University. Throughout his career, Hipel has regularly presented leading-edge research seminars and short courses around the globe with a focus on Japan and China, which he has visited 17 and 15 times, respectively, since 1982. In Asia, he has also paid professional visits to Hong Kong, Macau, Taiwan and Singapore on 7, 4, 5 and 3 occasions, respectively.

CONSULTING

Carried out consulting activities on behalf of organizations that include the International Joint Commission (mandated by the 1909 Boundary Waters Treaty between Canada and the United States), Environment Canada, Japan Institute of Construction Engineering, United States Air Force, a US intelligence agency, Ontario Ministry of the Environment and Energy, Department of National Defense (Canada), Acres International Limited, and electrical utilities that include Southern California Edison in the US, Eletrobras in Brazil and Ontario Hydro in Canada. Hipel was an active member of the energy task force within the Canadian Academy of Engineering.

ROYAL SOCIETY OF CANADA

Since being elected **Fellow** of the Royal Society of Canada (RSC) in 1998, K.W. Hipel has been highly involved in RSC activities. Currently, he is *Distinguished Member* of the Past Presidents' Council (PPC) of the Academy of Science, Royal Society of Canada (November 19, 2016 onwards). Within the Academy of Science, Hipel served as *Past-President* (November 28, 2015-November 19, 2016), *President* (November 15, 2013 to November 28, 2015) and President-*Elect* (November 17, 2012 to November 15, 2013). As President of the Academy of Science, Hipel was in a leadership position to enhance Canadian society by assisting the RSC in meeting its mission of recognizing Canada's leading academics (Recognize, Reconnâitre), mobilizing them to advance knowledge (Promote, Promouvoir) and purposefully utilize Canada's best experts in tackling tough issues that are of great import to Canadians (Advise, Conseiller). To accomplish this, Hipel participated in a range of specified activities such as being Chair of the Executive Committee of the Academy of Science, Chair of the Council of the Academy of Science, Vice President of the Council of the RSC, and Member of the Executive Committee of the Council of the RSC. During 2015 and 2013, he was *Chair* of the Academy of Science Awards Committee. Hipel served as *Vice President* of the Academy of Science (Academy III) for two years (2007-2009) and was *Member* of the Nominations Committee of Academy III (2004-

2007), Committee for the Selection of New Fellows in the Applied Science and Engineering Division (2010), Academy III Committee for the Selection of New Fellows (2007-2009), Academy III Executive (2007-2009), Royal Society of Canada Council (2007-2009), and many other committees. Hipel organized and chaired with Bruce Mitchell a one-day Southwest Ontario Regional Symposium of the Royal Society of Canada on the topics "Collaborative Partnerships and Connecting Research with the Community", which took place in Waterloo on Thursday, April 27, 2006 at the Centre for International Governance and the Perimeter Institute for Theoretical Physics for the morning and afternoon sessions, respectively. From 2005 to 2010, K.W. Hipel represented the Royal Society of Canada at activities of the Focal Points of National Water Programmes of the Inter American Network of Academies of Science (IANAS) at meetings held in Bogota (2005), Santa Domingo (2008), Managua (2009) and Buenos Aires (2010). He wrote with Andrew Miall and Dan Smith a white paper on water entitled "Water Resources in Canada: A Strategic Viewpoint" for the IANAS project (2011). Hipel has been *Member* of the Program Committee for three annual one-day symposia of the RSC: "Water in Canada and the World: Rising Tensions in the 21st Century: Issues and Solutions" (2006); "The Universe and our Place in It", to celebrate the International Year of Astronomy (2009); "Canadian Marine Biodiversity: Indispensable Resource, Unprecedented Opportunities, Unequivocal Responsibilities" Program Committee (2015) and the associated "Canadian Marine Biodiversity: Resources, Opportunities, Responsibilities" one-day symposium (held on November 26th, 2015, at the Fairmont Empress Hotel in Victoria, British Columbia; Hipel's welcoming message as the Academy of Science President appeared in the conference program). At the 2006 yearly symposium, Hipel presented the invited paper "Conflict Management". From the RSC, Hipel is the recipient of three medals: the **Sir John William Dawson Medal** (2012) for his interdisciplinary research, **Centenary Medal** (2015) for serving as President of the Academy of Science (2013-2015), and **Miroslaw Romanowski Medal** (2017) for his leading-edge environmental research, which includes delivering invited seminars at Canadian universities. During the 2018 Fall and 2019 Winter Terms, Hipel delivered **Miroslaw Romanowski Lectures** at locations across Canada.

IEEE ACITVITIES

Hipel was granted the status of **Life Fellow** of IEEE as of January 1, 2019, for his many years of service. Hipel has served members of the IEEE Systems, Man and Cybernetics (SMC) Society through activities such as being an elected member of the Board of Governors for a total of fifteen years since 1990, Vice President of Publications (1998-1999), Associate Editor of the IEEE SMC Transactions since 1990, Chair of the Strategic Opportunities and Initiatives Committee (2004-2005), member of the Strategic Planning Task Force (2004-2005), member of the Executive Committee (2004-2005, 1998-1999), member of the International Program Committee for all annual IEEE SMC Conferences since 1991, organizer of sessions on Conflict Resolution at all of the annual IEEE SMC Conferences since 1991, General Co-Chair of the 2009 IEEE International Conference on SMC held in San Antonio, Texas, member of the IEEE SMC Fellow Selection Committee (2018, 2017, 2016, 2013, 2012, 2011, 2010, 2008, 2007, 1998, 1997), and, since 2005, Co-Chair of the Technical Committee on Conflict Resolution for which he jointly received the **Most Active SMC Technical Committee Award** (2007). On October 8, 2007, Hipel delivered the opening keynote address entitled "Competition and Cooperation in Societal and Technological Systems of Systems", at the 2007 IEEE International Conference on Systems, Man and Cybernetics held at the Delta Centre-Ville, Montreal, Quebec, Canada. In collaboration with highly regarded IEEE SMC colleagues, Hipel was a co-author of the paper: Hipel, K.W., Jamshidi, M.M., Tien, J.J., and White III, C.C., "The Future of Systems, Man and Cybernetics: Application Domains and Research Methods", IEEE Transactions on Systems, Man, and Cybernetics, Part C, Applications and Reviews, Vol. 37, No. 5, pp. 726-743, 2007. The four authors of this paper also participated in two panel sessions on this topic held at the 2006 and 2007 Annual IEEE SMC Conferences. Hipel was a member of the Norbert Wiener Panel Session which was held on Monday, October 6th, 2014 from 1 to 3:30 pm as part of the 2014 IEEE International Conference on

Systems, Man, and Cybernetics, held at the Paradise Point Resort and Spa, San Diego, California, USA, October 5th to 8th, 2014. He was a member of the Panel Discussion on "Are the Fields of Systems, Man, and Cybernetics Mature Enough for the Challenges of the Cyber World" which was held on October 15, 2013 as part of the 2013 IEEE International Conference on Systems, Man, and Cybernetics, held at the Midland Hotel, Manchester, United Kingdom, October 13 to 16, 2013. Hipel was a member of the Panel Session called "The 2012 Norbert Wiener Summit", which was held on October 16, 2012 as part of the 2012 IEEE International Conference on Systems, Man, and Cybernetics, held in Seoul, Korea, October 14 to 17, 2012. He was a member and organizer of the panel discussions on "Systems, Man and Cybernetics Methods: A Review and Discussion" held on October 11, 2011 as part of the 2011 IEEE International Conference on Systems, Man and Cybernetics, held at the Hilton Anchorage Hotel in Anchorage, Alaska, from October 9 to 12, 2011. Additionally, Hipel was a member and organizer of the panel discussion "Infrastructure System of Systems: Opportunities for Renewal and Growth" which took place on Wednesday October 14, 2009, at the 2009 IEEE International Conference on Systems, Man and Cybernetics held at the Hyatt Regency Riverwalk, San Antonio, Texas, USA, from October 11 to14, 2009 Finally, Hipel presented lectures around the globe within the Distinguished Lecturer Program of the IEEE SMC Society (2008 to 2011 and 2014 to 2017) and continues to do so as an IEEE Fellow. Hipel was elected **Fellow** of IEEE in 1996 and is the recipient of the **Joseph G. Wohl Outstanding Career Award** (2012) and **Norbert Wiener Award** (2000) from the IEEE SMC Society. Currently, Hipel is an elected Member of the Board of Governors of the SMC Society (2016 to 2018), Member of the Publications Committee, and Associate Editor of the IEEE Transactions on Systems, Man and Cybernetics: Systems.

GROUP DECISION AND NEGOTIATION

K.W. Hipel has been an active participant in activities of a society called Group Decision and Negotiation (GDN) since it was founded by Professor Mel Shakun of the Stern School of Business at New York University in the early 1990s. In fact, Dr. Shakun discussed the idea of having a journal called GDN with Hipel at the IFORS (International Federation of Operational Research Societies) 90, 12th Triennial Conference on Operations Research, held in Athens, Greece, from June 25 to 29, 1990. GDN is now a Section of INFORMS (Institute for Operations Research and the Management Sciences) within which the journal called GDN is published by Springer. Hipel has been an *Associate Editor* with the journal GDN since it was launched in January 1992; written many *papers* for publication in GDN and encouraged both experts and students to do likewise; been a *Member* of the Organizing Committee and helped to organize and chair special sessions for many GDN Conferences [2002 (Perth, Australia), 2005 (Vienna, Austria), 2006 (Karlsruhe, Germany), 2007 (Mont Tremblant, Quebec, Canada), 2008 (Coimbra, Portugal), 2009 (Toronto, Ontario, Canada), 2012 (Recife, Brazil), 2013 (Stockholm, Sweden), 2014 (Toulouse, France), 2015 (Warsaw, Poland) and 2016 (Bellingham, Washington, USA), 2017 (Hohenheim, Stuttgart, Germany) and 2018 (Nanjing, China)]; been a *Guest Editor* of three issues of GDN (2009, 2005, 1994); Member of three *Panel Sessions* at GDN conferences (2008, 2007, 2006); delivered *Keynote Addresses* on "Strategic Investigations of Water Conflicts in the Middle East" at GDN 2012 in Brazil, and "Tackling Climate Change: A System of Systems Engineering Perspective" at GDN 2013 in Sweden; been an *Advisor* at Doctoral Consortiums at GDN 2008, GDN 2013, GDN 2014 and also GDN 2015 in which he provided research guidance to PhD students from around the globe who present their research as special sessions of GDN conferences. Hipel was the recipient of the **2013 Group Decision and Negotiation Section Award** for "outstanding contributions to research in the field of Group Decision and Negotiation (GDN) and/or outstanding contributions to the GDN Section."

INSTITUTE AND GROUP MEMBERSHIPS AT THE UNIVERSITY OF WATERLOO

K.W. Hipel is *Coordinator* of the Conflict Analysis Group which he founded in 1976 and a *Member* of The Water Institute (since 2009), Waterloo Institute for Complexity and Innovation (*Founding Member, Member* of the Executive Committee since October, 2011), Waterloo Institute for Sustainable Energy (since 2008, Member of the Internal Board of Management since 2016), and Social Innovation Generation (Associate Faculty Member since April, 2010).

ADMINISTRATIVE DUTIES, UNIVERSITY OF WATERLOO

For almost four decades, K.W. Hipel has served his colleagues in numerous capacities at the departmental, faculty and university levels. For instance, he served as *Chair* of the Department of Systems Design Engineering for two terms, *Chair* of Faculty Council and Assembly, *Senator* for 18 years, *Governor* for 9 years, and *Chair* of the Compensation and Salary Steering Committee. He has been a *Member* of numerous committees such as the Promotion and Tenure Committees at the both the Departmental and Faculty levels, Presidential Nominating Committee (2010-2011), and Senate Nominating Committee for Honorary Degrees for 11 years. He is currently Member of the Waterloo Awards Committee (since 2009) at the university level and the Faculty of Engineering Awards Nomination Committee (since 2005).

RENISON UNIVERSITY COLLEGE

K.W. Hipel was *Chair* of the Board of Governors at Renison University College for a two-year period (May 1, 2011 to May 14, 2013), was *Vice Chair* for four years (May 1, 2007 to April 30, 2011) and a *Member* of the Board since 1996. He served as *Past Chair* on the Board of Governors (May 14, 2014 to December 31, 2015). Other posts which Hipel held include being *Chair* (May 1, 2011 to May 14, 2013), *Vice Chair* (May 1, 2007 to April 30, 2011), and *Member* of the Executive Committee of the Board of Governors (May 1, 2005 to April 14, 2007); *Chair* (May 1, 2005 to April 30, 2011), and previously a *Member,* of the Board of Governors Personnel Committee (2000 to April 30, 2005); and *Member* (ex officio, May 1, 2007 to May 14, 2013) of the Finance Committee of the Board of Governors. Furthermore, he has been a *Member* of the East Asian Festival Planning Committee since the festival was founded in 1994 and held on a yearly basis until the present time. Since, the festival has been called One Sky over All. Presently, Hipel is a *Member* and *Secretary* of the Board of Governors. Hipel was inducted as **Honorary Senior Fellow** of Renison University College on Saturday, May 7, 2016, at the Founders' Day celebration where he gave the keynote address entitled "Helping Others".

Dated April 5, 2019