

# Roger Williams University

## Blue Economy & Sustainability Interdisciplinary Virtual Seminars

April 22- 23, 2021

Design, Engineering, Waste Management, Transportation,  
Energy, & Healthy Communities



**In the Memory of Dean Bob Potter**  
School of Engineering, Computing & Construction Management



## Dean Bob Potter



On behalf of Roger Williams University, welcome to the 2021 Blue Economy and Sustainability Interdisciplinary Seminar Series. This year's series is dedicated to the memory of our beloved Dean Robert Potter. With 21 years of service to the University, 20 years as Dean of School of Engineering, Computing and Construction Management (SECCM), Bob Potter helped make RWU what it is today. He came to Roger Williams University following a distinguished 27-year U.S. military career, which took him throughout the United States, Turkey, and Germany, and culminated with 9 years teaching at West Point in the Engineering Department.

At RWU, Dean Potter's remarkable legacy reflects countless hours dedicated to our students and the entire campus community through his teaching, mentoring, and involvement with student clubs (especially our ice hockey team), and various boards. His inspirational leadership and service is honored with the naming of "Dean Potter's Path," a walkway and space overlooking the main entrance of our newly opened School of Engineering, Computing and Construction Management Labs building.

The main campus of RWU sits on the end of peninsula at the intersection of the land and sea and is a symbolic intersection of the Green and Blue economies that this year's seminars explore. We hope the spirit of RWU and the inspiration and memory of Dean Potter serve as guides for the learning you will all gain through this year's sessions. Thanks for being with us and thank you to the presenters for sharing your expertise with us all.

Brian G. Williams, DM, Chief of Staff, Roger Williams University



Thursday, April 22, 2021

8:30 AM

## Green Design

These presentations examine how to create green healthy living environments

8:30 am – 9: 00 am	<p><b>Welcoming Remarks</b> President Miaoulis, Provost Everett <i>Roger Williams University</i></p>
	<p><b>Moderator: Dr. Gokhan Çelik</b> <i>Roger Williams University</i></p>
9:00 am - 9:30 am	<p><b>The Role of the Building Sector for the Mitigation of Climate Change</b> <i>Dr. Peter Richner</i> <i>Department of Engineering Sciences</i> <i>EMPA, Switzerland</i></p>
9:30 am - 10:00 am	<p><b>Smart Buildings: Learning from an Historical Example, Jean Prouvé's 1956 School in Villejuif, France</b> <i>Professor Patrick Charles</i> <i>School of Architecture</i> <i>Roger Williams University, RI, USA</i></p>
10:00 am – 10:30 am	<p><b>Energy Performance and Environmental Impacts of Built Environments</b> <i>Dr. Rahman Azari</i> <i>Stuckeman School of Architecture &amp; Landscape Architecture</i> <i>Penn State University, PA, USA</i></p>
10:30 am – 11:00 am	<p><b>Zoom Break</b></p>
11:00 am – 11:30 am	<p><b>Decision-making: Water for Sustainability of Urban Areas</b> <i>Dr. Douglas Nelson, JD</i> <i>Law Office of Douglas C. Nelson, P.C., AZ, USA</i></p>
11:30 am – 12:00 am	<p><b>Application of Digital Twin in Sustainable Operations of Buildings</b> <i>Dr. Issa Ramaji</i> <i>School of Engineering, Computing &amp; Construction Management</i> <i>Roger Williams University, RI, USA</i></p>
12:00 pm – 12:45 pm	<p><b>Zoom Break</b></p>



Thursday, April 22, 2021

1:00 PM

## Sustainable Buildings

These presentations examine green buildings along different dimensions, materials, energy sources, & environmental impacts

<b>Moderator: Professor Patrick Charles</b> <i>Roger William University</i>	
<b>12:45 pm - 1:30 pm</b> <b>Plenary Speaker</b>	<b>Mr. Jean-Pol Mura</b> <i>CEO, Saudi Arabia Mobility Division</i> <i>Siemens Corporation Ltd</i> <i>Berlin, Germany</i>
<b>1:30 pm – 2:00 pm</b>	<b>GreenScenario, Software-based Collaboration Platform: Climate Adaptation &amp; Blue-Green Infrastructure</b> <i>Jeremy Karl Anterola, Landscape Architecture Team Lead</i> <i>Mariusz Hermansdorfer, Environmental Engineering</i> <i>GreenScenario, Ramboll Studio, Dreiseitl, Germany</i>
<b>2:00 pm – 2:30 pm</b>	<b>Regenerative Urban Housing</b> <i>Prof. Edgar Adams</i> <i>School of Architecture &amp; Urban Design</i> <i>Roger Williams University, RI, USA</i>
<b>2:30 pm – 3:00 pm</b>	<b>Zoom Break</b>
<b>3:00 pm – 3:30 pm</b>	<b>Developing a Green Building Index to Measure Sustainability of a Country's Built Environment</b> <i>Dr. Amine Ghanem &amp; Dr. Bilge Gokhan Çelik</i> <i>School of Engineering, Computing &amp; Construction Management</i> <i>Roger Williams University, RI, USA</i>
<b>3:30 pm – 4:00 pm</b>	<b>Exergy Concepts for Buildings</b> <i>Prof. Adrian Altenburger</i> <i>Institute of Building Technology &amp; Energy</i> <i>School of Engineering &amp; Architecture</i> <i>Lucerne University of Applied Sciences &amp; Art</i> <i>Luzern, Switzerland</i>
<b>4:00 pm – 4:30 pm</b>	<b>Net-Zero Carbon Emission Economy: Is It Possible?</b> <i>Dr. Minoo Tehrani</i> <i>Mario J. Gabelli School of Business</i> <i>Roger Williams University, RI, USA</i>
<b>4:30 pm – 5:00 pm</b>	<b>Discussion –Zoom Table</b>



**Friday, April 23, 2021**

**9:00 AM**

**Healthier Living**

**These presentations explore the sustainability practices for developing healthier living communities**

<b>Moderator: Dr. Issa Ramaji</b> <i>Roger Williams University</i>	
<b>9:00 am - 9:30 am</b>	<b>Improving Supply Chain Resilience through a perspective of System Architecture</b> <i>Dr. Yu Cui</i> <i>Graduate School of Business Administration &amp; Economics</i> <i>Deputy Director of the Center for Australian &amp; Asian Studies</i> <i>Otemon Gakuin University, Osaka, Japan</i>
<b>9:30 am - 10:15 am</b> <b>Plenary Speaker</b>	<b>Dr. Shahid Al-Balushi</b> <i>CEO, Sun Packaging Company</i>
<b>10:15 am – 10:45 am</b>	<b>Net-Zero Carbon Emission Economy: Germany &amp; Norway</b> <i>Tyler Cain &amp; Noah Van Handle Mario J. Gabelli</i> <i>School of Business Roger Williams University, RI, USA</i>
<b>10:45 am – 11:00 am</b>	<b>Zoom Break</b>
<b>11:00 am – 11:30 am</b>	<b>Rainwater Harvesting Design and Demand-Side Controls for Large Hospitals</b> <i>Dr. Lawrence Fulton, School of Health Administration</i> <i>Texas State University, TX, USA</i>
<b>11:30 am – 12:00 pm</b>	<b>Countering Fossil Fuel Industry Disinformation &amp; Policy Delay</b> <i>Dr. Benjamin Franta</i> <i>Stanford University, CA, USA</i>
<b>12:00 pm – 1:00 pm</b>	<b>Zoom Break</b>



**Friday, April 23, 2021**

**1:00 PM**

**Environmental Footprint**

**These presentations focus on the by-products of the operations of different industries that can be transformed to reduce the carbon footprint**

<b>Moderator: Dr. Amine Ghanem</b> <i>Roger Williams University</i>	
<b>1:00 pm - 1:30 pm</b>	<b>Resilient Supply Chains Are Going Green: Intentional Action or a Side Effect?</b> <i>Dr. Natalia Szozda</i> <i>Wroclaw University of Economics, Wroclaw, Poland</i> <i>Dr. Artur Swierczek, Department of Business Logistics</i> <i>University of Economics – Katowice</i> <i>Katowice, Poland</i>
<b>1:30 pm – 2:00 pm</b>	<b>How to Measure Resource Availability</b> <i>Dr. Andreas Rathgeber</i> <i>Institute for Materials Resource Management</i> <i>Mathematics &amp; Natural Sciences</i> <i>University of Augsburg, Germany</i>
<b>2:00 pm – 2:30 pm</b>	<b>Sustainability: The Case of the Coffee Industry</b> <i>Dr. George Joseph</i> <i>Manning School of Business, University of Massachusetts – Lowell, MA, USA</i> & <i>Dr. Richard Trubey</i> <i>Mesoamerican Development Institute, MA, USA</i>
<b>2:30 pm – 3:15 pm</b> <b>Plenary Speaker</b>	<b>Ms. Zeyneb Magavi</b> <i>Co-executive Director, HEET</i> <i>Boston, MA, USA</i>
<b>3:15 pm – 3:30 pm</b>	<b>Zoom Break</b>
<b>3:30 pm - 4:00 pm</b>	<b>Integration of Sustainability Metrics into a Bottom-up Approach for Sustainable Development</b> <i>Dr. Ellie Fini</i> <i>Director of the International Innovation Network for Construction Materials</i> & <i>Senior Sustainability Scientist</i> <i>Global Institute of Sustainability, College of Engineering</i> <i>Arizona State University, AZ, USA</i>
<b>4:00 pm - 4:30 pm</b>	<b>Emergent Technologies, Sustainable Supply Chains, and the Circular Economy: Synergies &amp; Concerns</b> <i>Dr. Joseph Sarkis</i> <i>Worcester Polytechnic Institute, Worcester, MA, USA</i>
<b>4:30 pm – 5:15 pm</b>	<b>Mr. Bob Ackley</b> <i>President, Gas Safety Inc. USA</i> <i>Cambridge, MA, USA</i>
<b>5:15 pm – 5:30 pm</b>	<b>Closing Remark</b>



## Presenters



**Professor Edgar Adams** has been a full-time faculty member at Roger Williams University School of Architecture since 1992 and is currently serving as Program Coordinator. His undergraduate degree in Architecture and graduate degree in Urban Design are from Cornell University. Before commencing his graduate studies, he received an Eidlitz Traveling Fellowship from Cornell to explore

housing and town planning in England and the Netherlands and worked in Philadelphia at the multi-disciplinary firm of Wallace, Roberts & Todd. Following his graduate studies in Urban Design, he worked on several award winning academic buildings and urban design projects at Koetter, Kim & Associates in Boston and consulted with Michael Dennis Associates on the Carnegie Mellon Student Center. Since joining the Roger Williams University, he has taught a range of courses at all levels, while also maintaining his focus on Urban Design. He has been a guest critic at: Cornell, Harvard, MIT, Yale, RISD, Northeastern, Wentworth, The BAC, Temple, Kent State, University of Michigan (Prague) and Waterloo University (Rome). His current focus is on the “Community Partnerships Initiative”. His research interests include: Housing, waterfront development, the impact of technology on urban form, Smart Growth strategies, and Transit Oriented Development.



**Professor Adrian Altenburger** is the Head of the Institute of Building Technology and Energy Lucerne University – School of Engineering and Architecture. He holds a Bachelor’s Degree in Building Technology Engineering (HSLU T&A) and a Master’s Degree in Architecture (ETH) as well as a Master’s Degree (1989) in Business Administration (HSLU W). From 1989-1999, he joined Electrowatt Engineering Ltd in Zurich/Switzerland and

Bangkok/Thailand as a project engineer and Head of the Department HVAC. From 1999-2015, he was Partner, COO, and a Member of the Board of Directors at Amstein+Walthert Ltd., an Engineering and Consulting company with 800 employees in Zurich, Switzerland. Since 2009, he is a Member of the Board of Directors and Vice President of the Swiss Society of Engineers and Architects (SIA) and since 2010 a Member of the Board of Directors and Vice President of the Swiss Association for Standardization (SNV). In 2013, he joined Swissnex Boston for a Sabbatical and was a guest lecturer at Harvard University – Graduate School of Design (GSD). It was during this time and related to the Watt d’Or Exhibition in 2014, that Adrian helped to develop the idea for the Swiss-US Energy Innovation Days Forum.





**Mr. Jeremy Karl Anterola** is an experienced landscape architect and urban planner with approximately twelve years of professional experience as part of the Ramboll Studio Dreiseitl team (Germany/Singapore/Beijing). Primarily involved in large-scale master planning, conceptual design development, and competition-based

projects, Jeremy has led international teams and managed projects based in Germany, Central and Western Europe, China, and Southeast Asia. Jeremy was also a member of the strategic development team that established Ramboll's Planning and Urban Design global market. Jeremy's specialization is in the application of Sustainability Rating Certification Systems, serving as the team leader on LEED and DGNB sustainable projects. Jeremy holds dual degrees, a Master and a Bachelor's of Landscape Architecture, MLA/BLA, from Kansas State University in addition to an MBA in International Management, Berlin School of Economics and Law, where he graduated with honors. Following initial research conducted in 2018 in light of the results of R&D projects focused on blue-green infrastructure, Jeremy together with Mariusz Hermansdorfer led the business development for GreenScenario, an innovative software-based collaboration platform for simplifying climate adaptation planning.



**Dr. Rahman Azari** is an architect, an associate professor, and the founding director of Resource and Energy Efficiency [RE2] Lab at Penn State Department of Architecture. Rahman is also a co-founder faculty at Penn State Institutes of Energy and the Environment. Prior to Penn State, Rahman served as an assistant professor (2017-2020) and the interim director (2018-2019) of the Architecture Ph.D. program at Illinois

Institute of Technology (IIT) in Chicago, and an assistant professor (2013-2017) at University of Texas, San Antonio. Rahman's research focuses on life cycle environmental impacts of built environments, innovative construction materials for energy production and carbon sequestration, building and urban energy and carbon efficiency, and data driven models for urban sustainability. He is a recipient of the American Institute of Architects' Upjohn Research Grant in 2018 and 2019 for his collaborative project on "Artificial Leaf-based Façade Cladding Systems for Energy Generation and Carbon Sequestration." Rahman has also sponsored winning entries to ACSA+AIA COTE Top Ten competitions in 2016 and 2017. In 2019, Rahman was recognized as a 'Researcher to Know' by the Illinois Science and Technology Coalition. In 2018, he co-edited the Energy and Buildings' Special Issue on Embodied Energy and Carbon Efficiency. Azari's research has been widely published in various journal venues such as Energy and Buildings, Building and Environment, and Applied Energy. With a background in Architecture, Rahman holds a PhD in Built Environment from the University of Washington in Seattle.



**Mr. Tyler Cain** is a current student at Roger Williams University majoring in Finance and International Business. Tyler is in his spring semester of his junior year. Tyler is a member of the Financial Management Association, Alpha Chi, and serves as a captain of the Men's Tennis team at Roger Williams University. He was also named to the Academic All-CCC Team. Tyler has co-authored a research on how to achieve net-zero carbon emission economy in some of the European countries that are heavily dependent on fossil fuel energy, which has been accepted for presentation at the Green Cities Conference, University of Augsburg, Germany, 2021.



**Dr. Bilge Gokhan Çelik** is a faculty of Construction Management at Roger Williams University. He earned his Engineering Ph.D. (2007) in Design, Construction, and Planning from University of Florida and his M.Sc. and B.Sc. degrees in Architecture from Anadolu University in Turkey. Gokhan research experience started within the area of sustainability, more specifically on the integration of photovoltaic modules into design and architecture.

His current interest is in the construction of green buildings, focusing on optimization of green building performance, occupants' perceptions, and marketing of green building as well as improving Construction Management education. His teaching experience includes courses in Sustainable Construction, Analysis and Decision Making in Sustainability, Project Management, Control, Estimating, and Scheduling as well as Construction Finance and Accounting at both graduate and undergraduate levels.



**Professor Patrick Charles** is an Associate Professor of Architecture at the School of Architecture, Art and Historic Preservation at Roger Williams University. Patrick received his Master of Science in Architecture Studies (SMArchS) from MIT (Massachusetts Institute of Technology) in Cambridge, Massachusetts and his Architecture Diploma (D.P.L.G.) from Ecole d'Architecture de Nancy, France. Prior to teaching at Roger Williams University, he also taught at

Illinois Institute of Technology in Chicago, Illinois. Patrick's current research agenda is on teaching methods conducive to the integration of sustainability and building envelope and construction detailing issues in both undergraduate and graduate architectural design education. His teaching and his consulting work both draw heavily from the highly formative experience he gained while working for seven and a half years at the Paris branch of the Renzo Piano Building Workshop (RPBW), the office of world-renowned Italian Architect Renzo Piano. While at the RPBW, he worked on various projects with different scales and scopes in addition to a continuous commitment to the large-scale Berlin's Potsdamer Platz project, the redevelopment of which became possible after the fall of the Berlin Wall. RPBW's emphasis on collaborative design and systems integration, sustainable design, and materiality and quality of detailing has played a key role in Patrick's subsequent teaching, consulting, and research endeavors.



**Dr. Yu Cui** is an Associate professor in Graduate School of Business Administration and Economics and the Deputy Director of the Center for Australian and Asian Studies at Otemon Gakuin University in Japan. He is participating actively in the Japanese Operations Management and Strategy Association (JOMSA) as a trustee and a member of the European Operations Management Association (EurOMA) for encouraging his research and academic exchange activities. His research focuses on Supply Chain Resilience with Decentralized System Architecture and Operations Management Improvement through IoT Innovation. Recent articles include Improving Green Supply Chain with Building Decentralized Cloud Platform (2019), and Improving the Robustness and Transparency of Supply Chain by IoT Innovation (2018) were published at proceedings of Green & Digital Cities Conference. Yu is currently working on a project, which entitled “International Empirical Research on System Architecture Building for Supply Chain Resilience Improvement” with a Grant-in-Aid for Scientific Research by Japan Society for the Promotion of Science (JSPS).



**Dr. Amine Ghanem** is a faculty of Construction Management Engineering at Roger Williams University. Amine has earned his Ph.D. (2007) in Civil Engineering from Florida State University and holds a Professional Engineer License from the State of California. Amine’s research interests are in the areas of Sustainability and Public Private Partnership programs that address energy and resource utilization with the intent of addressing the global climate change through energy conservation, building performance optimization, and infrastructure capital improvement. Aside from teaching, Amine has extensive experience in the field of Civil/Construction Management focusing on design, estimation, and scheduling of Pre-Engineered Steel Buildings.



**Dr. Ellie Fini** is an Associate Professor at the School of Sustainable Engineering and the Built Environment Transportation Engineering, Ira A. Fulton Schools of Engineering at Arizona State University. Dr. Fini received her Ph.D. (2008) from the University of Illinois at Urbana-Champaign concentrating on characterizing interfacial properties of adhesives and sealants. She has been research affiliate at MIT’s Center for Materials Science and Engineering since 2011. She is currently serving as the associate editor of ASCE Journal of Materials as well as the inventor and co-founder of a start-up company, Bio-Adhesive Alliance Inc. Ellie has been collaborating with multiple professional and scientific societies, federal agencies, and congressional offices, mainly as an academician. She has been an invited speaker at Kavli Frontiers of Science at the National Academy of Science. She also served as a program director for the National Science Foundation (NSF). To date, she has authored or coauthored 98 research papers and published a book and a book chapter in the area of materials. Ellie has been the recipient of multiple awards, including NSF CAREER award (2017), BEYA STEM Innovation award, and nomination for 2017 BioNight Entrepreneurial Excellence Award.



**Dr. Larry Fulton** is an Associate Professor at Texas State University. His doctorate (2005) is in Management Science and Information Systems. Larry has five other graduate degrees in various disciplines including statistics and health administration. Larry teaches both data science and health administration for Texas State, Northwestern, and Boston College. His research portfolio includes the application of advanced quantitative methods to sustainability and health care problems. One of his latest publications includes forecasting rainfall using time series with machine learning components as part of a simulation for evaluating hospital rainwater harvesting designs. He has articles associated with both healthcare and sustainability in high impact-factor journals such as *Sustainability*.



**Mr. Mariusz Hermansdorfer** has more than 8 years of professional experience as an environmental engineer specialized in hydrological design. Mariusz applies ecological water management in concepts and built projects spread from Europe to Asia, such as his most recent built work in Xiong'an, China. The focus of his work is the application of biomimicry and cross-discipline work that integrates new technological in innovative measures. He manages the technical-digital design team for the Ramboll Studio Dreiseitl (RSD) focusing on hydraulic modelling, digital sandboxes, AR/VR in landscape architecture, BIM, computational design and in particular, the GreenScenario software development team. Mariusz has a M.Sc. in Environmental Engineering from the University of Environmental and Life Sciences, Poland, and a Bachelor's degree in Industrial Archaeology and German Literature, Technical University of Wroclaw, Poland. He is a doctoral candidate at the University of Copenhagen, Denmark in computational design.



**Dr. Douglas Nelson, J.D.** is a natural resource economist and attorney in Phoenix, Az. His practice focuses on agricultural, energy, environmental, water, and other transactional and regulatory matters. His interest in energy began in 1974 when he directed installation of the first solar powered lift pump for the irrigation of farmland in the United States. He has actively participated in the deregulation of electricity in Arizona and the western states of the U.S. He formed the Electric Competition Coalition, which was comprised of power generators, retail distributors, industries and business, as well as municipalities and local consumers. This effort included the drafting of legislation and regulations for open competition and renewable energy. Furthermore, Doug appeared before the state and federal governmental bodies and officials on numerous occasions. Doug has a Jurist Doctorate and a Ph.D. (1981) in Resource Economics from University of Nebraska-Lincoln. He was admitted to the Bars of Nebraska and Arizona, and the U.S. District Courts for the States of Arizona and Nebraska. He is the founder and Executive Vice-President of the Arizona Rural Water Association (1984-present).



**Dr. Andreas Rathgeber** holds a W2-Professorship of Finance and Information Management at the Institute for Materials Resource Management at the Faculty of Mathematics and Natural Sciences, University of Augsburg, Germany. His research focuses primarily on resource management and finance and in particular, the interface between these two disciplines. Andreas has published in *Nature Materials*, the *Journal of Credit Risk*, the *Journal of Business Economics*, and the *Journal of Cleaner Production* among others.

Andreas graduated in Economics from the University of Hohenheim in Stuttgart and then studied Mathematics at the University of Augsburg from 1997 to 2001. In 1997, he also began to work on his dissertation (*Multi price processes and exercise conditions for option pricing*) with Dr. Manfred Steiner as advisor, which he finished in 2004. Between 2005 and 2008, he completed his habilitation thesis (*Determining discount factors – A theoretical and empirical approach to improve the quality of term structure estimation*). From 2009 to 2010, he was a Professor of Financial Management and Taxation at UMIT in Austria, and since September 2010, he is the Chair of Finance and Information Management at the University of Augsburg. Andreas was honored with the Science Award of the Kurt and Felicitas Viermetz Foundation in 2009. In addition, he received both the RMA Risk Management Award (2006) and the Bavarian Science Award (2006) for his doctoral thesis.



**Dr. Issa Ramaji** received his Ph.D. in Architectural Engineering from Penn State University in 2016 and his M.S. in Structural Engineering and his B.S. in Civil Engineering were granted from Sharif University of Technology. He worked for two years as an assistant professor at the University of North Florida before joining Roger Williams University in 2018. Issa is a licensed Professional Engineer (PE), and has five years of work experience in the construction industry -- both in design and construction firms. Issa is very active in scientific communities and is an associate editor of ASCE journal of Architectural Engineering. Issa is a committee member of the U.S. National BIM Standard and has been working with National Institute of Building Sciences (NIBS) on developing standards and guidelines for execution of BIM in the building industry. Issa is also a committee member of the Construction Research Council (CRC) and ASCE Data Sensing and Analysis (DSA) committee. His research interest is on application of advance information technologies in the AEC/FM industry, Building Information Modeling (BIM), application of Artificial Intelligence (AI) in construction projects, building energy efficiency, Indoor Air Quality (IAQ), Internet of Things (IoT), and building Digital Twin.



**Dr. Peter Richner** is the head of the Department of Engineering Sciences at EMPA (Swiss Federal Laboratories for Materials Science and Technology) where he also acts as the Deputy Director. Peter graduated in chemistry from ETH Zurich (1989). After a postdoc in the US, he built up a new research group at EMPA in the area of ultra-trace analysis. Later on, he became the head of the Laboratory

for Corrosion and Surface Protection. Peter initiated the NEST project ([nest.empa.ch](http://nest.empa.ch)). In addition, he led the Swiss Competence Center in Energy Research “Future Energy Efficient Buildings, and Districts” ([www.sccerfeebd.ch](http://www.sccerfeebd.ch)) in phase I, from 2014-2016. His main research interests are in the area of the sustainable built environment and technology transfer in the construction sector.



**Dr. Joseph Sarkis** has been a faculty member at Worcester Polytechnic Institute (WPI) since July 2013. Joseph has a B.S. in Civil Engineering, MBA in Management, and a Ph.D. in Management Sciences that were completed at SUNY- Buffalo, New York. Joseph previously served as a faculty member at Clark University and the University of Texas at Arlington. His teaching and research interests are in the fields of operations, supply chain management, and

sustainability. Joseph is the author or co-author of over 400 publications. Joseph has been also noted as the most productive researcher in the field of supply chain management from the years 1995-2015. Joseph is the Editor-in-Chief of IEEE's Engineering Management Review and Associate Editor of Sustainable Supply Chains for Resources, Conservation and Recycling. He is also Co- Editor of the Greening of Industry Networks Springer-Nature Book Series. He has served as a visiting scholar in different universities throughout the world.



**Dr. Artur Swierczek** is an Associate Professor of Supply Chain Management at the University of Economics in Katowice, Poland. He was also a visiting scholar at the Department of Supply Chain Management, Arizona State University in the academic year 2014/15. He received his Ph.D. (2006) in Supply Chain Management and his MS in Management and Business Logistics from the University of Economics - Katowice, Poland. His scientific research covers

competitive advantages of supply chain, strategic role of relationships, and risk management in supply chain. Artur has presented numerous research papers in more than fifty conferences, symposiums, and scientific meetings in the U.S., U.K., France, Japan, Indonesia, Korea, Hong Kong, Hungary, Ireland, Turkey, Sweden, Czech Republic, Slovakia, and Romania. He has also taught courses in a number of universities in Europe and Asia.



**Dr. Natalia Szozda** is an Assistant Professor at Logistics Department, Institute of Applied Mathematics, Wroclaw University of Economics, Wroclaw, Poland, and a manager in REC Global, a software engineering company. Natalia has a Ph.D. (2008) in Logistics and Supply Chain Management. Her dissertation was in the field of demand planning of the short life cycle products. She has presented research papers in more than 40 conferences, symposiums, and scientific meetings in the U.S., Indonesia, Japan, Hong Kong, and many countries in Europe. Currently, her research focuses on models of cooperation and demand in supply chain management, resilient supply chain, and marketing and sales management in IT industry.



**Mr. Richard Trubey** is a Co-founder of the Mesoamerican Development Institute (MDI), an organization collaborating with the US and Honduran Forest Services, University of Massachusetts and the National Autonomous University of Honduras in the establishment of the Yoro Biological Corridor in Honduras. MDI is introducing innovation in coffee production and processing to address coffee's impact on deforestation and contribution to climate change. Richard is the Co- Manager of Pico Pijol National Park and he is introducing carbon-neutral processing technology and a forest- friendly coffee cultivation method to develop sustainable supply chains for coffee. MDI has managed international collaborative research and development projects for such organizations as: The World Bank and Global Environment Facility, Sandia National Laboratory, the National Renewable Energy Laboratory, US Fish & Wildlife Service, US Forest Service International Programs, HIVOS, AVINA Foundation, American Bird Conservancy, University of Massachusetts, Tulane University, Fair Trade International, and Republic of Ireland. Richard received a Bachelor of Arts in Environmental Science and Chemistry (1985) from the University of Massachusetts - Lowell.



**Dr. Minoo Tehrani** is a professor of management and international business and the Director of the International Programs at the Gabelli School of Business, Roger Williams University. Her Ph.D. is from Arizona State University in Business Administration with specialization in Strategy and International Management. She has attended schools in several cities across four continents. Her undergraduate degree is in petroleum geology and her Master's degree is from the College of Engineering, Arizona State University. She has been the program chair, president, and co-organizers of several academic conferences such as, International Decision Sciences Institute Conference 2009 (IDSI) in Nancy, France, Northeast Decision Sciences Institute Conference 2011 (NEDSI) in Montreal, Canada, IDSI Conference 2013 in Bali, Indonesia, IDSI 2015 in Hong Kong, NEDSI Conference 2016 in Alexandria, VA, NEDSI Conference 2017 in Springfield, MA, International Advisory Committee member of POMS International Conference, Sydney, Australia, 2017. The recent conferences that she has been the co-organizer are about Green Cities and Sustainability and include the conferences in Nancy, France, 2018, Wroclaw, Poland, 2019, and Augsburg, Germany, 2021. Minoo is an invited member of the Swiss-US Energy Innovation Days Forum, Switzerland (2016-present). In 2020, Minoo was selected as a member of the Energy & Sustainability Committee of the town of Longmeadow, MA. Her recent publications are in the areas of green cities and sustainability practices in the restaurant industry, Dow Jones Sustainability Indices, and economic disparity and the relationship with the health of the communities.



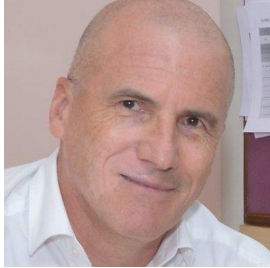
**Mr. Noah Van Handel** is currently a junior student at Roger Williams University, majoring in International Business with a minor in Management and a Core Concentration in Spanish. Noah is a repeated Dean's list member and a Dean's Scholarship recipient. Noah has co-authored a research on how to achieve net-zero carbon emission economy in some of the European countries that are heavily dependent on fossil fuel energy, which has been accepted for presentation at the Green Cities Conference, University of Augsburg, Germany, 2021.



## Plenary Speakers



SIEMENS



**Mr. Jean-Pol Mura** is the Siemens Corporation CEO Mobility Division, Saudi Arabia. Jean- Pol has over 25 years of experience in electronic and data processing technology. He is a qualified electronics and electrical engineer, with extensive multi-disciplinary and international experience in real time software application development, project management, sales, marketing and general management.

Jean-Pol began his career with Schlumberger as a software engineer, subsequently appointed project manager and then R&D Manager. He then moved to Germany and gave his career an international sales & marketing orientation working for the Thales electronics and defense group. Moving back to France, he was appointed Marketing Director in another Thales group division. He then moved to ABB as a Regional Unit Manager. Jean- Pol joined Siemens Corporation in 2003 based in France and Germany where he occupied several managerial positions including Sales and Marketing Senior Vice President at Siemens France with a responsibility of 250 million Euros of sales. In 2012, Jean-Pol was based in Mumbai, India, as the General Manager of the Business Unit Rail Automation of Siemens Limited India and CEO of Siemens Rail Automation Pvt Ltd (ex Invensys Rail). He oversaw a team of 2000 employees with revenues of 35 million Euros. He has been intensively involved with railway and metro signaling projects and made several conference appearances over the past 10 years. Since 2016, he has been based in Al-Khobar, Saudi Arabia, where he is the CEO of the division of Siemens Mobility supervising 200 employees for a turnover of 100 million Euros. Siemens is the premier corporation in Saudi Arabia where Jean-pol Mura oversees installation of signs and Telecom (ERTMS) of the Dammam- Riyadh, the Haramain high-speed train, and the electrification of the Mecca Maschaer metro line. Siemens also delivers the turnkey system for lines 1 & 2 of the Metro of Riaydh.



**Dr. Shahid Al-Balushi** is the CEO of Sun Packaging Company S.A.O.C., Muscat, Oman. Sun Packaging Company was established in 1998 in the Sultanate of Oman and two manufacturing Units – one in Rusayl near Muscat and other one in Mer Rouge, Port Louis at Mauritius. The Company was nominated for the “Flame of Excellence” Award twice in past four years, an Award instituted by the Omani Industry. It has also been nominated for the “Exporter of

the year” Award in recognition of its export performance. Shahid was previously a professor at the College of Economics and Political Sciences, Sultan Qaboos University, Oman. As an academician, Shahid has held many administrative positions, including Assistant Dean for Postgraduate Studies and Research and an expert in International Cooperation Office at Sultan Qaboos University. Shahid holds a Ph.D. in Management with specialization in Supply Chain Management from the University of Melbourne in Australia and an MBA in Operation Management as well as conducting research in the operations management area, with a focus on topics within Logistics and Supply Chain Management, Lean Management, Quality and Project Management, Business-to-Business E-Commerce, and Operations Strategy. Shahid has several publications in international journals and has been awarded several grants including strategic grant on improving healthcare services in Oman. Some of the projects that Shahid has worked on include: Oman’s logistics strategy and determinant of collaboration within GCC member countries.



**Ms. Zeyneb Magavi** is the Co-Executive Director of HEET (Home Energy Efficiency Team). In 2008, a handful of local people, concerned by climate change, organized work parties on weekends to cut emissions and energy bills by making their homes more energy efficient. The Home Energy Efficiency Team (HEET) was born. HEET's drive to cut emissions expanded to methane emissions reduction in 2014. Zeyneb joined the group in 2017 to

help lead HEET's Large Volume Leak Study, which developed a method to rapidly cut methane emission from leaking gas pipes in half. That method is now enacted as a State Regulation in Massachusetts. Today, HEET is focused on transitioning the natural gas distribution system to a geothermal energy distribution system using the GeoMicroDistrict concept that Zeyneb developed. Massachusetts' gas utilities are on board and two pilot projects have been approved and funded, with more proposals developing for the States of New England. Zeyneb studied physics at Brown University, followed by Population Health graduate studies at Harvard School of Public Health. Most recently, she has completed an M.S. in Sustainability from Harvard Extension. Zeyneb is committed to creating solutions to the urgent challenges of the climate change through multi-disciplinary problem solving, co-creation, and innovation.



## Gas Safety Inc. USA



**Mr. Bob Ackley** is the president of Gas Safety Inc. and a nationally recognized gas safety expert. After 30 years in the gas industry, Bob provided information on extensive environmental damage to trees caused by unattended natural gas leaks. Bob, collaborating with Professor Nathan Phillips of Boston University and Professor Rob Jackson of Stanford University, conducted the first comprehensive pipeline leakage surveys using cavity ringdown spectrometer

technology that allows for mapping gas leaks across entire cities. Bob also conducted extensive methane “Baseline” surveys on the Marcellus shale play in PA, NY, and OH detecting mapping methane levels and detecting methane anomalies caused by fracking. Ongoing research is now focusing on contaminants present in natural gas where preliminary findings indicate the presence of cancer causing toxins benzene, toluene and xylene. Using the spectrometer technology, methane gas levels in homes are measured with preliminary results indicating that almost every house serviced with gas has an elevated methane level caused by small leaks and/or incomplete burning at appliances. Bob also does litigation support/expert witness testimony on gas explosions and fugitive gas related legal cases.

