About the Contributors

Hwee Ling Lim is an Associate Professor at the Petroleum Institute in Abu Dhabi, United Arab Emirates (UAE). She obtained her Bachelor and Master degrees from The National University of Singapore (Singapore) as well as a postgraduate Diploma in Education from The National Institute of Education (Nanyang Technological University, Singapore). She has a Ph.D. (Information Technology) from Murdoch University, Perth, Australia. Her areas of research include educational technology, computer-mediated communication, electronic discourse analysis and more recently, engineering education and human resource management. She has published over 40 works that included books, edited books, book chapters, journal papers and conference proceedings. She received an award for best research paper at the 2007 Computer Science and Information Technology Education Conference (CSITED). Lim is an Editorial Review Board member for the Journal of Information Technology Education: Research, and Journal of Information Technology Education: Innovations in Practice. She is a regular reviewer for annual international conferences. Lim has given invited talks on engineering education in international conferences held in Doha, Qatar (Material Science and Engineering Symposium 2012) and Abu Dhabi, UAE (Corrosion UAE 2013; ADNOC Research and Development Academic Conference 2013).

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Haider Al Abadi is a Lecturer at La Trobe University (Australia) where he teaches structural engineering. He has a Ph.D. in earthquake engineering and structural dynamics. In 2005, he was a recipient of the RNSA best paper award at the Sixth International Conference on Shock and Impact Loads on Structures, Perth-West Australia. His main research interests are in the areas of composite materials, timber engineering, earthquake engineering, and structural dynamics. He had participated in many international and national conferences.

Dana Abdeen received her undergraduate degree in Chemical Engineering from the University of Jordan in Amman, Jordan. After graduation, she moved to the US where she started working at HEBL Inc. as a laboratory technician in the quality control laboratory. Later she was appointed to the position of chemical engineer in the purchasing department of the company for five years. In 2011, she moved to the State of Qatar and joined Texas A&M University at Qatar, where she worked as a graduate teaching and research assistant with Dr. Bruce Palmer. She was also part of the corrosion research team headed by Dr. Palmer in Texas A&M University at Qatar. Dana Abdeen participated in many local forums and conferences in Qatar.
About the Contributors

Paschalis Alexandridis is a University at Buffalo Distinguished Professor and Director of Graduate Studies in the Department of Chemical and Biological Engineering, University at Buffalo (UB), the State University of New York (SUNY), where he also served as Acting Associate Dean for Research and Graduate Education in the School of Engineering, and Director of the Materials Science and Engineering program. Professor Alexandridis’ research utilizes molecular interactions and supramolecular assemblies to develop products with desired properties and function. His ongoing projects address ionic liquids for structuring, polymer electrolytes, cellulose dissolution, nanocomposites, and dispersants. He has authored over 145 journal articles and book chapters (cited over 9,500 times) and is co-inventor of 10 patents. Professor Alexandridis is a Fellow of the American Association for the Advancement of Science (2012), and the recipient of the American Chemical Society Schoellkopf Medal (2010); Bodosaki Foundation Prize in Applied Science (2005); and SUNY Chancellor’s Awards for Excellence in Scholarship and Creative Activity (2011) and in Teaching (2006).

Catherine G.P. Berdanier is a Ph.D. student in the School of Engineering Education at Purdue University. She earned her B.S. in Chemistry from The University of South Dakota and her M.S. in Aeronautical and Astronautical Engineering from Purdue University. Her research interests include graduate-level engineering education, including inter- and multidisciplinary graduate education, innovative and novel graduate education experiences, global learning, and preparation of engineering graduate students for future careers, especially studying academic writing proficiencies in engineering graduate students. She is currently involved in the Integrative Graduate Education Research and Traineeship on Magnetic and Nanomaterials (IGERT-MNM). She is involved in leadership roles in the Graduate Mentoring Program within Purdue’s Women in Engineering Program, as well as other outreach and service activities.

Ahmet Beycioğlu received his Ph.D. from Gazi University (Turkey) on October 2013. He received the promotion to Assistant Professor in January 2014 and he is also currently working as consultant at Spinteks Textile & Construction Industry and Trade Inc. In September 2007, he was appointed Research Assistant in Construction Education Department at Düzce University. His main research interests are in fiber reinforced concrete, self-compacting concrete, fiber reinforced polymer (FRP) reinforcing bars, bond in concrete, and applications of artificial intelligences in construction materials. He has more than 40 publications (peer-reviewed journals and conference proceedings) as author and co-author. He was a reviewer for many research articles in civil engineering area. Furthermore, he has worked on five research projects in the field of Civil Engineering. He has experience of being a thesis supervisor with 6 MSc students.

Suely M. Black is a Professor of Chemistry and a member of the Center for Materials Research at Norfolk State University, which she joined after completing doctoral training at Columbia University in 1996. Since then she has worked on the development and implementation of research, education and outreach programs for the students and communities served by the university to broaden participation of under-represented minorities in science and engineering, particularly in materials science. In 2010, with the assistance of collaborators at Cornell University and Purdue University, including co-author Cox, she secured the Integrative Graduate Education and Research Traineeship grant from the National Science Foundation. This multi-year funding has enabled the application of research-recommended
about the design of interdisciplinary graduate education experiences framed by design-based research methodology. She has made scholarly contributions in the areas of computational materials science and engineering education.

Andrew Bodratti is a Senior Development Engineer in the Automotive Emissions Control Group of Unifrax LLC, where he designs catalytic converter support mat systems for diesel and gasoline applications. His responsibilities include new product formulation, manufacturing scale-up, and market introduction, as part of a cross-functional team which comprises marketing, manufacturing, and applications engineering. His professional affiliations include TAPPI and SAE. Andrew is also a Ph.D. candidate in the Alexandridis research group in the Chemical and Biological Engineering Department at the University at Buffalo (SUNY), where he earned his M.S. degree in 2012. His dissertation research involves elucidating molecular interactions in polymer-nanoparticle dispersions and in emulsions, with a focus on developing guidelines for formulation of products with tunable properties. Andrew also served as a Teaching Assistant for the senior course Product Design and for the freshman course Engineering Solutions, and has mentored several undergraduate students in research.

Chong Cheng is an Associate Professor at the University at Buffalo, the State University of New York (USA) where he teaches Product Design, Introduction to Polymers, and Heat and Mass Transfer courses. He has a Ph.D. in Chemistry. He has received multiple research grants from the National Science Foundation and ACS Petroleum Research Fund to develop novel polymers and polymeric nanomaterials for various applications. His main research interests are polymer synthesis, nanomaterials via emulsion-based approaches, and polymeric therapeutic delivery systems. He is an editorial board member of the Journal of Drug Delivery Science and Technology. He has published over 50 articles in international journals.

Monica F. Cox, Ph.D., is an Associate Professor in the School of Engineering Education at Purdue University, the Inaugural Director of the College of Engineering’s Leadership Minor, and the Director of the International Institute of Engineering Education Assessment (i2e2a). In 2013, she became founder and owner of STEMinent LLC, a company focused on STEM education assessment and professional development for stakeholders in K-12 education, higher education, and Corporate America. Her research is focused upon the use of mixed methodologies to explore significant research questions in undergraduate, graduate, and professional engineering education, to integrate concepts from higher education and learning science into engineering education, and to develop and disseminate reliable and valid assessment tools for use across the engineering education continuum. Dr. Cox has led and collaborated on multidisciplinary projects totaling approximately $10 million, and she has authored over 90 publications.

Fugen Daver is a Senior Lecturer at RMIT University, Melbourne, Australia. Her main research interests are engineering education, and polymeric materials characterisation and processing. She is a strong advocate of Problem/Project-Based Learning and her passion for it was recognised with the 2007 RMIT University Teaching Award for Innovation in Curricula, Learning and Teaching. She was Director of the MEng Manufacturing Engineering by Coursework Program (2004 to 2010), and Education Leader in the Society of Plastics Engineering: Australia - New Zealand Section (SPE-A-NZ) 2005-2008.
About the Contributors

Tanju Deveci is an Assistant Professor at the Petroleum Institute of Abu Dhabi (UAE) where he teaches communication courses. He has a Ph.D. in Lifelong Learning and Adult Education. His main research interests are collaborative learning, learning styles, and language use. He is the associate editor of the Asian ESP Journal. He has participated in many international and national conferences and run teacher training courses. He has published articles in national and international journals.

Tahar El-Korchi is Head of the Department of Civil and Environmental Engineering, and interim head of the Department of Fire Protection at Worcester Polytechnic Institute. He received his B.S. from the University of New Hampshire in 1980, followed by an M.S. in 1982 and a Ph.D. from the same institution in 1987. He is the co-author of a textbook on roadway materials, Pavement Engineering: Principles and Practice. His research interests include high-performance concrete, fiber cement and structural composites, pavement engineering, and materials and structural testing. At Worcester Polytechnic Institute, he serves as the director of project sites in Morocco and Panama. He received the Presidential Young Investigator award in 1991.

Osman Gencel is an Associate Professor and currently Chair of the Department of Civil Engineering at Bartın University in Turkey. He completed his Ph.D. degree at Suleyman Demirel University in Isparta, Turkey and his postdoctoral fellowship at Department of Materials Science and Engineering, University of North Texas. Dr. Gencel has published extensively in the areas of nonlinear numerical simulation by different methods applied to different structural and coupled problems, as well as deterministic optimization methods. He had also published in the area of cement and concrete composites. His main research interests are in fiber reinforced concrete, radiation shielding concrete, and abrasive wear of concrete.

Myrto Georgakopoulou is a Lecturer of Archaeological Materials Science at University College London (UCL) Qatar, an academic unit of University College London based in Doha, Qatar. From 2005 to 2013, she worked at the Fitch Laboratory of the British School at Athens, first as the Archaeological Chemistry Fellow (2005 to 2010) and subsequently as the Scientific Research Officer (2010 to 2013). Her undergraduate degree was in Chemistry from Imperial College London (1998), while her Masters’ degree and Ph.D. (2005) were obtained from the Institute of Archaeology at UCL, where she specialized in the field of Archaeological Sciences and specifically in the technology of ancient metal production. Her current research interests focus on the study of production and circulation of ancient metals and ceramics, as well as the development of analytical protocols for analysis of ancient materials. She has published over 20 articles in academic journals and books.

Kyle Gipson is an Assistant Professor at James Madison University (United States) in the Department of Engineering (Madison Engineering) and the Center for Materials Science. He has taught courses pertaining to introduction to engineering, materials science and engineering, engineering design and systems thinking. He has a Ph.D. in Polymer, Fiber Science from Clemson University. His research background is in the synthesis of polymer nanocomposites and engineering education. He was trained as a Manufacturing Process Specialist within the textile industry, which was part of an eleven-year career that spanned textile manufacturing and product development. Dr. Gipson has co-taught the Materials & Mechanics course where he is directly responsible for the “materials” content, and Dr. Robert Prins is directly responsible for the “mechanics” content.
About the Contributors

Stavroula Golfomitsou is a Lecturer of Conservation at University College London (UCL) Qatar, an academic unit of University College London based in Doha, Qatar. From 2002 to 2005, she worked as a lecturer at the University of Malta. She has also worked in Greece, Turkey, Egypt, France and Peru as a lecturer and conservator. In 2009, she was seconded by the Greek Ministry of Culture to The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) as Laboratory Coordinator. She obtained her undergraduate degree in Conservation from the Technological Educational Institute of Athens in 1996. She obtained her Ph.D. in 2006 from the Institute of Archaeology at UCL, where she specialized in the field of Conservation Science and specifically in the corrosion inhibition of copper and copper alloys. Her current research interests focus on the conservation and analysis of metals, the use of statistical methods in experimental design, the quantification of errors in non-destructive analysis, risk assessment and decision-making processes in conservation. She has published over 15 articles in academic journals.

Nelly González-Rivas is a Professor at the College of Chemistry of Autonomous University of State of México (México) where she teaches Quantum and Computational Chemistry. She has a Ph.D. in 2010 from Metropolitan Autonomous University (México). Her main research interests are the applications density functional theory in chemistry and biochemistry, as well as, the application of computational science in several branches of chemistry. She had participated in many international and national research projects. Among the published works, she has more than 10 scientific papers and one book chapter.

Ebru Gunister is an Assistant Professor at the Mechanical Engineering Department in the Petroleum Institute (United Arab Emirates) where she has taught Materials Science, Polymer Science, Statics, Microbiology and Biocorrosion for Engineers, and Manufacturing courses since October 2008. She has a Ph.D. in Physics Engineering from Istanbul Technical University (ITU), 2008. Her main research interests are polymer / clay nanocomposites, characterization and testing of polymeric composites, rheological and electrokinetic behavior of clay dispersions. She has participated in many national and international projects and she had published 17 articles in national and international journals.

Roger Hadgraft is the Deputy Dean, Learning and Teaching, School of Engineering and Technology, CQ University, Melbourne, Australia. Professor Hadgraft is a civil engineer with more than 20 years involvement in leading curriculum change in engineering education, with a particular focus on problem/project-based learning (PBL) and sustainability at RMIT, Monash and Melbourne Universities. He is an Australian Learning and Teaching Council Discipline Scholar in Engineering and ICT, having co-developed the draft national academic standards for the discipline. He is a passionate advocate of national and international cooperation in engineering education, particularly the sharing of best-practices.

Virginia Infante is an Assistant Professor in the Mechanical Engineering Department at Instituto Superior Técnico (IST), University of Lisbon, Portugal. She has an MSc in 1998 and a Ph.D. in 2002 in Mechanical Engineering from IST. Since 1995, she has been working on the field of mechanical behavior of materials and has been involved in several national and international research projects. She has special expertise in experimental testing and has published over 30 journal and conference papers on the field of fatigue. She is a member of the editorial board of Engineering Failure Analysis Journal.
Daniela Ionescu is a Senior Lecturer in the Department of Civil Engineering and Physical Sciences at La Trobe University (Australia). She has a Ph.D. in Civil Engineering and her main areas of research are materials behaviour, use of waste, by-products and recycled materials in civil engineering applications and development of new technologies for varied civil engineering projects. Dr Ionescu has publications in peer reviewed international journals and has participated in many national and international conferences.

Mohammad Ismail obtained his B.Sc. (Hons) in Civil Engineering from the University of Strathclyde, Glasgow, UK, a M.Sc. (Eng) from the University of Liverpool in UK and a Ph.D. from Aston University, UK. He is a Professor at the Faculty of Civil Engineering, Universiti Teknologi Malaysia (UTM) in Malaysia. He teaches various Civil Engineering courses at undergraduate and postgraduate levels that focus on \textit{Concrete Technology, Design and Structural Assessment and Repair}. His research interests include concrete durability; corrosion of reinforcement; non-destructive testing and structural forensic engineering; sustainable construction materials and environmental engineering. He has published more than 80 works that included journal papers, conference proceedings and keynote addresses. The positions Dr. Ismail had held in UTM for the past 25 years includes Deputy Dean (Research and Innovation), Head of Department, Head of Laboratory and Chairman of Committees and International Conference. He is a member of ACI, BEM, MSSA, mSET, PERINTIS and PERKOM.

Nasser Al Jassem obtained a Master’s degree in Metallurgical and Materials Engineering from Colorado School of Mines in 2011. In 2010, he received his Bachelor’s degree in Chemical Engineering from Wyoming University, US. Nasser is currently a Research Associate at Texas A&M University at Qatar where he designs and performs experiments and helps graduate students in designing experiments. He has participated in many materials projects. Nasser has been a NACE member since 2011. He attended many national and international conferences with five posters and three conference presentations. He is pursuing his Ph.D. at Colorado School of Mines (US) and expected to complete this degree in December 2015.

Ramazan Kahraman is a Professor and the Head of the Department of Chemical Engineering at Qatar University, Doha, Qatar. He received his BS in Chemical Engineering from the Middle East Technical University, Turkey, in 1986. He received his MS in 1988 and Ph.D. in 1993 from Montana State University, USA, both in Chemical Engineering. He taught at King Fahd University of Petroleum & Minerals in Saudi Arabia from September 1993 until August 2007. He joined Qatar University in September 2007. He has taught many undergraduate and graduate courses at different levels and areas of specialization. He has extensive experience in developing and implementing international and national research projects in the areas of composite materials, corrosion and transport phenomena. He has over 95 journal and conference publications.

Krishnan Kannnopratti is an Associate Professor at Charles Darwin University (CDU), Australia. His background is in Materials Engineering, Corrosion and Welding Engineering. Prior to returning to academia, he was a consultant to the local industry for many years, advising on many aspects of welding engineering, failure analysis, and corrosion. He has carried out research in friction stir welding,
corrosion-erosion of hard-facing alloys, and mechanical properties of materials. Since his commencement with CDU, he has taught Materials Engineering, Systems Engineering and IT Systems Management. At the same time, he established and followed through with the NATA accreditation of a new laboratory dedicated to corrosion research. His current research revolves around microbial corrosion of aluminium and stainless steels and electrochemical impedance spectroscopy of coated samples.

**Walid Khalfaoui** is an Assistant Research Scientist at Texas A&M University at Qatar. He has a Ph.D. in Materials Sciences from Aix-Marseille University in France. In 2011, He joined Texas A&M University at Qatar as a Postdoctoral Research Associate to work on corrosion under sour gas environment which is a project granted by Qatar National Research Fund. His main research interests are corrosion, wear, and materials development.

**Eunkyung Lee** is a Ph.D graduate student in Metallurgical Materials and Engineering Department at the Colorado School of Mines (US). She participated in the National Priorities Research Program (NPRP) for Qatar which is intended to support the overarching goal of Qatar National Research Fund (QNRF). The NPRP project she is working on is the “Development and Characterization of High Strength Steel for Down-Hole Application in Sour Environment with Superior Corrosion and Wear Resistance”. She is working to develop a new class of stainless steel which is high interstitial stainless steel. In particular, she researched mechanical and corrosion properties of high interstitial stainless steel due to interstitial elements (carbon, nitrogen) in matrix.

**Elin Legland** is the Administration Manager and Project Coordinator at Hydro Aluminium office located in the Qatar Science and Technology Park (State of Qatar). Elin Legland has previous studied Business and Administration, and is currently pursuing her studies in Educational Science with Educational Counselling as main research interest. Elin Legland’s experience in the educational sector ranges from kindergarten, general education, adult education to higher education. She graduated in Norway in 1998 as both General Teacher and Speech and Language Specialist. She worked in the Pedagogical Psychological Specialist Services in Kvinnherad (Norway) before employment as a lecturer at Inverness College, University of Highlands and Islands in Scotland where she taught Education and Communication. She returned to Norway in 2006 where she started a private practice and a collaborative network named Logopednet. In 2010, she received a grant for producing educational material which was presented at several national conferences. Her engagement in the field of education has also led to several positions in political work and educational services in Norway.

**Miguel Lorenzo** received a Bachelor’s degree in Mechanical Engineering from the University of Salamanca (Spain), a Master’s degree in Materials Engineering and a Ph.D. in Materials Science and Engineering by the same university. He is currently a lecturer in the Department of Mechanical Engineering at the University of Salamanca. His research interests lie in virtual learning environments, self-learning techniques, collaborative learning, and information and communication technologies.
**About the Contributors**

**Ian Mabbett** manages a doctoral training centre (www.strip-project.co.uk) as part of Swansea University’s Materials Academy. He teaches postgraduate modules on energy storage and communication skills. He is a chartered engineer with IOM3, has an EngD in steel technology from the materials research centre (Swansea), which was sponsored by Tata Steel and BASF. He also has an MChem that incorporated a year in industry at 3M and almost completed the required programs with RSC for awards of CChem, CSci, and FHEA. He was a technology transfer fellow at Specific (www.specfic.eu) an academic-industry consortium led by Swansea University and Tata Steel. His research interests include fast radiative curing of organic coatings, solar selective coatings, thermoelectric effects, mesoporous supports for heterogeneous catalysis, production of coated photovoltaics, and altering microstructures of galvanised steels. He believes in the importance of public engagement in science and engineering, being co-investigator and former public engagement manager of national science academy @materials_live outreach project. He contributes to the ‘Ask a Scientist’ section of Future publishing’s ‘science uncovered’ magazine. He is a STEMNET ambassador and was instrumental in securing RSC spectroscopy in a suitcase coordination at Swansea University. He was Honorary Secretary of IOM3 South Wales Materials Associations and currently SWMA Outreach Officer (ORCiD ID is 0000-0003-2959-1716).

**Bandita Mainali** is a Lecturer in Department of Civil Engineering and Physical Sciences at La Trobe University (Australia). She has a Ph.D. in Environmental Engineering and her research interests are in the broad area of Environmental Engineering with particular emphasis on water and waste water management. She has publications in peer reviewed international journals and has participated in many national and international conferences.

**Gonzalo Martínez-Barrera** graduated from UNAM-Mexico and held a postdoctoral fellowship at the University of North Texas. He is involved in research at the Laboratory of Research and Development of Advanced Materials (LIDMA), Faculty of Chemistry of Autonomous University of the State of Mexico (UAEM). He has published more than 63 scientific papers, 2 books and 10 book chapters. He is reviewer of several journals (indexed in ISI), held membership in journal editorial boards and was lead editor of special issues. He had conducted research projects supported by Mexican and USA governments, and had experience of being student advisor to undergraduates and postgraduates (Ph.D.: 7; Master of Science: 9; Bachelor’s degree: 37). He teaches courses in polymeric materials and also teaches courses for local industries. Now he is developing research in ceramic and polymer composites and on the effects of gamma radiation on their physiochemical properties; with applications on construction materials such as Portland cement concrete and polymer concrete.

**Brajendra Mishra** is Professor and the Associate Director of Kroll Institute for Extractive Metallurgy in Metallurgical and Materials Engineering at the Colorado School of Mines. Dr. Mishra is the Co-Director of the National Science Foundation's Industry/University Collaborative Research Center on Resource Recovery and Recycling. Dr. Mishra received his Bachelor of Technology (1981) degree in Metallurgical Engineering from the Indian Institute of Technology in Kharagpur, India and his M.S. (1983) and Ph.D. (1986) in Materials Science from the University of Minnesota in Minneapolis. Dr. Mishra has over 25 years of research experience in molten salt pyrometallurgy and electrochemistry and made many contributions to the application of these technologies to nuclear waste processing. Dr.
Mishra has authored over 400 technical publications in refereed journals and conference proceedings. He holds ten patents and has authored/edited 20 books. Dr. Mishra is a Fellow of ASM (2001). Dr. Mishra received the Distinguished Service Award from the Minerals Metals & Materials Society (2010) and the highest award of Honorary Membership from the Indian Institute of Metals (2008). He served as the 2006 President of The Mineral, Metals & Materials Society (TMS) of AIME and the 2011 President of Amer. Institute of Mining, Metallurgical & Petroleum Engineers.

**David LeRoy Olson** received a Ph.D. in Materials Science from Cornell University in 1970. He joined Colorado School of Mines (CSM) in 1972. He held positions of Professor of Met. Engineering in 1978 and Visiting Senior Scientist at the Norwegian Institute of Technology in 1978. Dr. Olson also served as Head of the CSM Center for Welding Research (1981-1986). He was Vice President for Research and Development, and Dean of Research from 1986 to 1989. Dr. Olson was named the John H. Moore Distinguished Professor of Physical Metallurgy (1997 to 2012). He retired as University Emeritus Professor in 2012. Professor Olson is a Professional Engineer in Colorado. His areas of teaching and research include welding metallurgy; aqueous and high temperature corrosion; and advanced non-destructive evaluation. He has authored, co-authored, and edited over 19 books, 625 technical papers, 155 archived reports and holds nine patents. He has been recognized with over 20 international awards. He is a Fellow of ASM and AWS, and a Foreign Member of the National Academy of Science of Ukraine.

**Fahrettin Ozturk** is an Associate Professor at the Petroleum Institute (UAE). He received his Ph.D. in Mechanical Engineering from Rensselaer Polytechnic Institute. His research focuses on mechanical properties of materials, formability of sheet metals, warm and hot forming of metals, lightweight materials, and finite element simulations. He is also working on machine design area. He has published over 90 articles including conference proceedings.

**Bruce R. Palmer** graduated with honors from the Colorado School of Mines (US) and received his Ph.D. from the University of Utah. He taught at the South Dakota School of Mines and Technology where he attained the rank of Full Professor. In 1985, Dr. Palmer moved to the industry and joined the Kerr-McGee Technology Division. In 2004, he moved to the Petroleum Institute in Abu Dhabi, (United Arab Emirates) as Professor of Chemical Engineering and also served as Head of the Chemical Engineering Program in the Petroleum Institute. In 2009, Dr. Palmer joined Texas A&M University at Qatar as Professor and Chair of the Chemical Engineering Program. Dr. Palmer has published over 70 technical papers and given numerous presentations as well. He also holds a number of patents and received awards that included the prestigious Colorado School of Mines’ van Diest Gold Medal for distinguished engineers; the ASM Bradley Stoughton Award for outstanding professors; the AIME Arthur Taggart for an outstanding paper; and the AIME Publications Committee Award. He is a member of American Institute of Chemical Engineers, the American Chemical Society, the Society of Petroleum Engineers and the National Association of Corrosion Engineers.

**Joe Petrolito** is Professor of Civil Engineering and Head of the Department of Civil Engineering and Physical Sciences at the Bendigo campus of La Trobe University (Australia). He has a Ph.D. in Civil Engineering and his research interests are in the broad area of computational mechanics, with particular emphasis on finite element methods.
About the Contributors

Robert Prins is trained as a Mechanical Engineer. His background includes six years’ experience as a practicing engineer in the machine vision and automotive industries. Dr. Prins returned to academia after practicing as an engineer. He earned his Ph.D. in Mechanical Engineering from Virginia Polytechnic Institute and State University (Virginia Tech) based on his work with magnetic bearings. Since earning his Ph.D., Dr. Prins has focused on engineering education. After spending one year teaching in the Mechanical Engineering Technology program at Virginia State University, Dr. Prins became the first faculty hire of the School of Engineering at James Madison University. He has spent the last six years developing the program at multiple levels including curriculum, courses, and laboratory. Dr. Prins developed, teaches, and continues to be responsible for the “mechanics” content in the Materials & Mechanics course at James Madison University.

Pandian Bothi Raja is a Post – Doctorate Research Fellow in the Faculty of Civil Engineering, Universiti Teknologi Malaysia (UTM) in Malaysia. He completed his Ph.D. (Chemistry) in Gandhigram University, Tamil Nadu, India in 2009 and extended his research work as Post – Doctorate Research Fellow in the Universiti Sains Malaysia, Malaysia for three years. He has published over 25 research articles in international journals and one of his review articles, “Natural products as corrosion inhibitors for metals in corrosive media” was awarded the “Top cited article 2007 - 2011” by Materials Letters - Journal (Elsevier). He also received a Senior Research Fellowship award from the Council of Scientific and Industrial Research (CSIR), New Delhi, India in 2009. He worked as Assistant Professor of Chemistry in V.V. College of Engineering, Tisayanvilai, Tamil Nadu, India in 2010. His research interest includes the development of green corrosion inhibitors for metals in different corrosive media and metals in reinforcement concrete.

Thilo Rehren is the Head of Department (Director) of UCL Qatar, an academic unit of University College London in Doha, Qatar. The department focuses on postgraduate teaching and research in Cultural Heritage, including a two-year laboratory-based MSc in Conservation Studies, and hosts an Archaeological Materials Science Laboratory. From 1999 to 2011, he held the chair of Archaeological Materials and Technologies at the UCL Institute of Archaeology in London (UK). From 1990 to 1999 he worked as Senior Research Scientist at the German Mining Museum in Bochum (Germany). In 1988 he earned a Ph.D. in Earth Sciences from the Albert Ludwigs University in Freiburg (Germany) and in 1997 a Higher Doctorate (Dr.-Ing. Habil.) in Materials Science from the Technical University Mining Academy Freiberg (Germany). His main research interest is the study of primary production processes of high-temperature materials (ceramics, metals, glass) from 5,000 BC to AD 1900. He is one of the editors of the Journal of Archaeological Science and has published over 100 peer-reviewed papers.

Kenneth L. Roberts received his B.Ch.E. and M.S. degrees in Chemical Engineering from the Georgia Institute of Technology and a Ph.D. in Chemical Engineering from the University of South Carolina. Professor Roberts has received several professional awards that included the 3M Non-Tenured Faculty Research Award (2000-2003), HBCU/MI Oak Ridge National Laboratory Faculty Fellowship (2001), North Carolina–Louis Stokes Alliance for Minority Participation Outstanding Science, Mathematics, Engineering and Technology Faculty Mentor Award (1999), and the American Society for Engineer-
ing Education/MIND New Faculty Award (1998). Dr. Roberts maintains active memberships in the American Institute of Chemical Engineers, the Material Research Society, and the American Society for Engineering Education. Dr. Roberts’s research interests include nanoceramics processing, heterogeneous catalysis, and renewable energy systems. His research has been supported by the U.S. National Science Foundation, the U.S. Department of Energy, and the National Aeronautics and Space Administration.

John Robertson-Begg is a senior academic and has been at the University of Derby for 16 years. He is currently programme leader for two MSc programmes: Innovative Engineering Solutions and Professional Engineering. Dr. Robertson-Begg has taught both Materials and Management subjects to engineering students and has special interests in Ethics and the Environment. Dr. Robertson-Begg has industrial experience in the metals processing industry. His current research interests are in broadening the education of engineers. He has presented papers at international conferences in the field of cast metals, sustainable development, materials education and failure analysis. He is a Chartered Engineer and a Fellow of the Institute of Cast Metals Engineers.

Manuel Pablo Rubio has a Bachelor’s degree in Mechanical Engineering from the University of Salamanca (Spain), a Master’s degree in Materials Engineering. Currently, he is a Ph.D. student in Graphic Expression in Engineering at the same University. He is a lecturer in the Department of Construction Engineering of the University of Salamanca. His research interests lie in virtual learning environments, self-learning techniques, collaborative learning, and information and communication technologies.

John Russell is a Lecturer of Civil Engineering in the Department of Civil Engineering and Physical Sciences at the Bendigo campus of La Trobe University (Australia). He has a Ph.D. in Civil Engineering and his research interests are in the broad area of civil and environmental engineering with particular emphasis on low input sustainable agriculture (LISA), climate change, water and land management etc. Dr Russell is the author of many peer reviewed research papers and widely promulgates the research findings: particularly with northern Victorian farming organisations and community groupings.

Aaron Sakulich is an Assistant Professor in the Department of Civil and Environmental Engineering at Worcester Polytechnic Institute. He received his Ph.D. in Materials Science and Engineering from Drexel University in 2009, and held postdoctoral positions at the University of Michigan and the National Institute of Standards and Technology in Gaithersburg, MD. His research focuses on developing sustainable infrastructure materials with improved durabilities. He is the director of NSF-funded REU and IRES sites, and received a J. William Fulbright grant in 2007 to perform research on sustainable construction materials in Morocco. During this time he authored a textbook on Moroccan Arabic grammar.

Abdulrahman Asipita Salawu is a Senior Lecturer at the Federal University of Technology, Minna (Nigeria) where he teaches courses in Corrosion and Materials Engineering. He has a Ph.D in Civil Engineering. In 2013, he received the Pro-Chancellor’s Award at the Universiti Teknologi Malaysia, Malaysia, at the 50th Convocation ceremony as best graduating student. His main research interests are in the development of green composite materials; green inhibitors; and processing of engineering materials. He has published over 40 research articles in reputable flagship journals and he is an active reviewer of journal articles as well.
About the Contributors

**R. A. Shakoor** holds a Ph.D. degree in Materials Engineering. He is currently working as a Research Fellow at the Center of Advanced Materials (CAM), Qatar University. Prior to joining Qatar University, he was working as a Research Professor at Korea Advanced Institute of Science and Technology, South Korea to develop cathode materials for lithium/sodium ion batteries. He has also industrial experience in his professional discipline. He had received several academic and professional awards for his outstanding academic, industrial, teaching and research achievements. His areas of research cover synthesis and characterization of advanced materials for energy storage (lithium/sodium ion batteries), high wear and severe corrosion applications (alloy and nanocomposite coatings). His recent research work has been published in a number of prestigious international journals like Nature (Scientific reports), Journal of American Chemical Society, Nano letters, and Advanced Functional Materials.

**Arlindo Silva** has a Ph.D. in Mechanical Engineering and 20 years of experience as a Professor in the Department of Mechanical Engineering, University of Lisbon, Portugal, where he teaches Materials, Design and other Engineering related topics at all levels of higher education. He has written three books and co-edited two more, published over 100 articles in journals, conferences and book chapters, and filed over 50 patents with his students on innovative designs. His current research interests include product development, creativity, materials selection methodologies, and management of uncertainty in design. He received the MIT-Portugal Education Innovation Award in 2009. He is also a Senior Materials Education consultant at Granta Design Ltd, Cambridge, UK, and is an active member of PDMA, ASEE, DS and SPEE.

**Rodney J. Simmons** (Ph.D., CSP) has served as Associate Professor of Health, Safety and Environmental Engineering at The Petroleum Institute (United Arab Emirates) since 2010. From 1986, he has held faculty appointments at University of Cincinnati, Illinois State University, Texas A&M University (TAMU), Tunghai University (Taiwan), National Taiwan University of Science and Technology, and The Hong Kong Polytechnic University. He received his Ph.D. in Industrial Engineering (specialization in safety and industrial hygiene engineering) from TAMU, and also holds graduate degrees from Harvard University and California State University. As an elected Fellow of the System Safety Society, he has organized major conferences and authored more than 150 journal and conference papers, and co-authored An Engineering Approach to Occupational Safety and Health for Business and Industry (1988) and System Safety and Risk Management (1998). He is Associate Editor for the Journal of System Safety and the Journal of Safety, Health and Environmental Research.

**Richard D. Sisson, Jr.** is George F. Fuller Professor and director of Manufacturing and Materials Engineering at Worcester Polytechnic Institute. Professor Sisson has been with Worcester Polytechnic Institute for 30 years. In addition, he has taught at Virginia Polytechnic Institute and has been a research metallurgist with DuPont Savannah Laboratory and Exxon Chemical Company. Professor Sisson received his BS in metallurgical engineering from Virginia Polytechnic Institute in 1969, MS in 1971. In 1975, he earned a Ph.D. in Materials Science and Engineering from Purdue University. Professor Sisson’s main research interest is the application of the fundamentals of diffusion kinetics, modeling, and thermodynamics to the solution of materials problems. Professor Sisson has been recognized for his excellent teaching and research with the inaugural WPI Chairman’s Exemplary Faculty Prize; the Virginia Tech College of Engineering Academy of Engineering Excellence; and the Morgan Worcester Distinguished Instructorship. He was the Worcester Polytechnic Institute Trustees Award winner for Teacher of the Year in 1987.
Serkan Subaşı is an Associate Professor of Civil Engineering at the Technology Faculty of Duzce University. He has been Head of the Civil Engineering Department since 2010. Also, he has been Head of Composite Materials Technology Department since 2012. He has authored more than 80 peer-reviewed journals/conference proceedings and has carried out in 10 research projects in the field of Civil Engineering. He is thesis supervisor with 2 Ph.D. and 7 MSc students.

Daria Surovtseva is a Senior Lecturer at Charles Darwin University (CDU), Australia. She has an MSc in Physical Chemistry and a Ph.D. in Chemical Engineering. Since joining CDU, she undertook the responsibilities of the Deputy Director of the North Australian Centre for Oil and Gas. During this time, she established a new laboratory for multiphase flow analysis with particular focus on CO₂ capture and gas hydrates. In the last three years, she has been at the forefront of the development of the new Chemical Engineering course at CDU and became actively involved in research in Engineering Education.

Diego Vergara received a Bachelor’s degree in Civil Engineering from the University of Salamanca (Spain), a Master’s degree in Materials Engineering and a Ph.D. in Materials Science and Engineering by the same university. He is currently a lecturer at the Technological Department of University Catholic of Avila (Spain). His research interests lie in virtual learning environments, self-learning techniques, collaborative learning, and communication technologies.

Tasha Zephirin is a Ph.D. student in the School of Engineering Education at Purdue University. She is currently a participant in the National Science Foundation sponsored Integrative Graduate Education and Research Traineeship in Magnetic and Nanostructured Materials (IGERT-MNM) program—a collaborative effort between Purdue University, Cornell University, and Norfolk State University. Her research interests include the development, evaluation, and assessment of STEM institutional diversity efforts across the education continuum. She currently serves as the Graduate Student Representative on the Purdue Engineering Advisory Council and National Parliamentarian on the National Executive Board of the National Society of Black Engineers (NSBE).